



The monotonicity of essence

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Accepted: 26 July 2024
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Abstract

Kit Fine's logic of essence and his reduction of modality crucially rely on a principle called the 'monotonicity of essence'. This principle says that for all pluralities, xx and yy , if some xx belong to some yy , then if it is essential to xx that p , it is also essential to yy that p . I argue that on the constitutive notion of essence, this principle is false. In particular, I show that this principle is false because it says that some propositions are essential to yy even though those propositions are only about some of its members. I then consider modifications to the principle appealing to consequential essence and argue that such a modification is inconsistent with a central desideratum of Fine's approach to metaphysics, what I call his neutrality condition.

Keywords Essence · Modality · Plurals · Propositions · Logical consequence

1 Introduction

To say 'Socrates and the Eiffel Tower have an essence' is to speak ambiguously. For one might imagine that while it is surely the case that taken individually Socrates has an essence and the Eiffel Tower has an essence, it is less obvious whether Socrates and the Eiffel Tower taken together have an essence.

Nevertheless, in discussions of the logic of essence and of the reduction of modality, the latter claim has featured prominently.

We refer to some individuals taken together as a plurality. The 'some' means 'at least one'. Hence, a single individual counts as a plurality. Moreover, I assume that every individual has exactly itself as a member.

Thus, to suppose that Socrates and the Eiffel Tower taken together have an essence is to suppose that some plurality with more than one member has an essence. Whereas to suppose that taken individually Socrates has an essence and the Eiffel Tower has an essence is not to suppose that a plurality with more than one

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member has an essence. Rather, it is to suppose just that Socrates has his individual essence and the Eiffel Tower has its individual essence.

Not all pluralities are sets.¹ For a set is a single individual. The set of Socrates and the Eiffel Tower, {Socrates, the Eiffel Tower}, is one object. But Socrates and the Eiffel Tower are two objects. Hence, Socrates and the Eiffel Tower are not {Socrates, the Eiffel Tower}.

Some may believe that whenever there is a plurality, there is also a corresponding set. My purpose is not to dispute this claim. All I require is that this plurality is not a set nor any single individual.

A collective essence is the essence of several individuals taken together. It is not the essence of any single individual nor is it several essences of several individuals: it is a single essence of several individuals (at least two).

I will use ‘*xx*’, ‘*yy*’, and so forth as variables whose values take pluralities. Moreover, I will assume that the essence of a plurality, *xx*, is just all of *xx*’s essential properties.

Kit Fine’s logic of essence crucially makes use of a principle appealing to the notion of collective essence, often called the monotonicity of essence. Justin Zylstra states the principle as follows: ‘if some *xx* belong to some *yy*, then it is essential to *xx* that *p* only if it’s essential to *yy* that *p*.’ (Zylstra, 2019a, p. 1088)²

Zylstra’s summarizes the significance of this principle in Fine’s logic of essence as follows:

In the logic of essence—the system E5 as the essentialist counterpart of S5 modal logic—Monotonicity is included among what Fine calls “Modal Axioms and Rules” but is under the label “Subsumption”.³ Although explanations and justifications are provided for various axioms, no justification is provided for Monotonicity. Yet Monotonicity is integral to the system. For it is used approximately 40 times in proving various theorems. (Zylstra, 2019a, p. 1091)

Fine’s system E5 is, moreover, central to his reduction of modality. For supposing that the correct modal logic is the system S5 (or more exactly, a version of S5 in quantified modal logic), it must be that the theorems of S5 are also theorems of the logic of essence. Thus, one of Fine’s most important results is just this: any theorem of S5 is also a theorem of E5. Thus, Fine secures that the logic of modality is a special case of the logic of essence (Fine, 1995b, p. 267).⁴

An evaluation of the adequacy of Fine’s logic of essence requires an evaluation of the principle of the monotonicity of essence. I will argue that this crucial principle is on one interpretation false and that on another interpretation it undermines

¹ See the arguments of (Boolos, 1984, p. 449), (Boolos, 1985, pp. 328–329), (Lewis, 1991, pp. 62–71), and (Oliver and Smiley, 2016, pp. 33–72).

² I have made Zylstra’s variables correspond to my own. Monotonicity is also discussed by (Correia, 2012, p. 640), (Michels, 2018), (Teitel, 2019, p. 45), and (Correia, 2020).

³ See (Fine, 1995b, p. 247).

⁴ (Correia, 2000, p. 304) notes the same result for the propositional case. A useful summary is in (Romero, 2019, p. 131).

a desideratum of Fine's logic. Hence, as of its current formulation, Fine's logic of essence rests on fractured foundations.

2 The principle

My criticism requires further clarification of the principle of the monotonicity of essence. In particular, I will define the terms 'belong to' and 'it is essential to xx that p '.

For all xx and yy , xx belong to yy , just in case every member of xx is a member of yy . Thus, for example, every member of the single-member plurality Socrates is also a member of the plurality of Socrates and the Eiffel Tower. Thus, Socrates belongs to Socrates and the Eiffel Tower. Similarly, Socrates and the Eiffel Tower belong to Socrates, the Eiffel Tower, and Aristotle, since every member of the former plurality is also a member of the latter.

The most familiar kinds of statements appealing to essence are attributions of an essential property, for example, the statement that Socrates is essentially rational.

By contrast, statements of the form 'it is essential to xx that p ' and 'it is true in virtue of the essence of xx that p ' do not directly attribute essential properties to individuals. Nevertheless, they are derived from such statements. So to understand the less direct statements, we must understand more clearly the notion of an 'essential property', in Fine's sense of that term.

Many, probably most, agree that an essential property, in Fine's sense, is somehow related to a thing's real definition.⁵ For consider what Fine himself says

It has been supposed that the notion of definition has application to both words and objects—that just as we may define a word, or say what it means, so we may define an object, or say what it is. The concept of essence has then taken to reside in the “real” or objectual cases of definition, as opposed to the “nominal” or verbal cases. (Fine, 1994, p. 2)

Thus, I will say that Fine accepts, what I call, the definitional conception of essence. On the definitional conception of essence, a property P is essential to xx just in case

⁵ (Gorman, 2005, p. 288), (Oderberg, 2011, p. 98), (Koslicki, 2012, p. 196), (Lowe, 2012, p. 935), (Hale, 2013, p. 151), (Lowe, 2013, pp. 201–202), (Torza, 2015, p. 766), (Dasgupta, 2016, p. 385), (Glazier, 2017, p. 2887), (Romero, 2019, p. 122), (Zylstra, 2019b, p. 342), (Wallner and Vaidya, 2020, p. 423), (Kment, 2021, p. 1964), (Passinsky, 2021, pp. 944–945), (Raven, 2021, p. 1048), and (Vetter, 2021, p. 833).

There is another tradition which takes 'real definitions' as statements of generalized identity. So far as I can tell this begins with (Dorr, 2007, pp. 44–45) and is further developed in (Rosen, 2015), (Dorr, 2016, p. 72), (Correia, 2017), and (Correia and Skiles, 2019). (Rosen, 2015, p. 194) denies that essence is connected to 'real definition' in his sense, but (Correia and Skiles, 2019, pp. 652–654) and (Glazier, 2022, pp. 16–19) defend the claim that it is somehow related to essence.

It is my belief that 'real definition' in the sense used in the generalized identity literature is a homonym of my term 'real definition'. I say this for two reasons: parties to that literature assume that (i) real definitions are sentences and (ii) that real definitions must be expressible in the form 'to be F is to be G '. In my sense, a 'real definition' is not a sentence, nor must it be expressible in the form 'to be F is to be G ', since the paradigmatic real definitions are neither definitions of properties nor sentences nor something else expressible only in a higher-order language but rather of individuals and kinds.

P is mentioned in the real definition of xx . A real definition is not a definition of our term for or concept of xx . It is instead a definition of xx themselves.

Thus, for example, consider the singleton set of Socrates. Some might think that it is essential to the singleton set of Socrates that it have Socrates as a member. This is so if, for example, the real definition of the singleton set of Socrates is *the singleton set of Socrates is the set whose sole member is Socrates*.

The use of statements like ‘it is essential to xx that p ’ (sometimes called ‘sentential expressions of essence’) dates back to Fine who claimed that they were, in some sense, corresponding to attributions of essential properties:

[W]e may identify the being or essence of x with the collection of propositions that are true in virtue of its identity (or with the corresponding collection of essential properties). (Fine, 1995b, p. 275)

The notions correspond in virtue of the fact that a sentence of the form ‘ xx are essentially F ’ can always be translated into an equivalent sentential expression:

[T]o express the claim that Socrates essentially thinks [in sentential form], we would first form the sentence of ‘Socrates thinks’. . . We would then prefix the operator ‘It is true in virtue of the identity of Socrates that’ to obtain the sentence ‘It is true in virtue of the identity of Socrates that Socrates thinks’. (Fine, 1995c).

So it would seem then that a proposition ‘true in virtue of the nature of xx ’ is one which ascribes to a plurality some essential property of that plurality, that is, a property mentioned in its real definition.

Thus, to use Fine’s example, suppose thinking is a property mentioned in the real definition of Socrates. Hence, the proposition ‘Socrates thinks’ satisfies ‘it is true in virtue of the identity of Socrates that p ’.⁶

To be more exact, let us say that an essence-affirming proposition of xx , is a proposition which can be expressed by a sentence of the form ‘ xx are F ’, where ‘ F ’ designates a property mentioned in the real definition of xx .

Because ‘ F ’ designates a property mentioned in the real definition of xx , it designates an essential property of xx . So propositions that can be expressed in this way correspond to properties mentioned in real definitions, that is, to essential properties.

Given that the propositions which satisfy ‘ p ’ in a statement of the form ‘it is essential to xx that p ’ are xx ’s essence-affirming propositions, we may restate the principle of the monotonicity of essence as follows:

(ME) For all xx and yy and all propositions p , if xx belong to yy and p is an essence-affirming proposition of xx , then p is an essence-affirming proposition of yy .

Or put more succinctly: when xx belong to yy , every essence-affirming proposition of xx is an essence-affirming proposition of yy .

⁶ The phrase ‘it is true in virtue of the identity of xx that’ is Fine’s preferred sentential expression of essence, and Zylstra seems to intend his sentential operator ‘it is essential to xx that’ to have this meaning. In the remainder, I will follow Zylstra’s usage.

Thus, given (ME), if *Socrates thinks* is an essence-affirming proposition of the plurality consisting solely of Socrates, then *Socrates thinks* is an essence-affirming proposition of Socrates and the Eiffel Tower.

3 (ME) is false

One's evaluation of (ME) will at least depend on what one thinks the real definition of the plurality of Socrates and the Eiffel Tower is. Thus, consider the real definition *Socrates and the Eiffel Tower are the plurality whose sole members are Socrates and the Eiffel Tower*.

This real definition only talks about properties of Socrates and the Eiffel Tower, not properties of Socrates. Hence, the proposition *Socrates thinks* is not an essence-affirming proposition of Socrates and the Eiffel Tower, assuming that that is its real definition.

Thus, some may reject (ME) because of their views about what the real definitions of pluralities look like. This itself is a significant result, for reasons I will discuss in section 5. But there is a still more important result: (ME) is simply false. Indeed, its falsity can be established without relying on any particular account of the real definition of Socrates and the Eiffel Tower. (ME) is false given what I have already said about the notion of an essence-affirming proposition and an uncontroversial claim about what it takes for a proposition to be about some thing or things.

Every essence-affirming proposition of some *xx* is partially about *xx*. When Fine discusses the individuals that propositions represent, he does this by appealing to the idea that propositions have constituents (Fine, 1995a, pp. 245–246), (Fine, 1995b, p. 276). Nevertheless, the claim that propositions have constituents is controversial.⁷ But for my argument, we will need to discuss such individuals.

Let us say, then, that a proposition is partially about an individual, *x*, just in case supposing propositions have constituents in Fine's sense, *x* is a constituent of that proposition.

Thus, Fine would say that the proposition *the singleton set of Socrates has Socrates as its sole member* has the singleton set of Socrates as a constituent. And I would say that this proposition is partially about the singleton set of Socrates.

Every essence-affirming proposition of some *xx* can be expressed by a sentence of the form '*xx* are *F*' where '*F*' designates a property mentioned in the real definition of *xx*. Since '*xx*' stands for some individuals, only propositions partially about those individuals can be expressed by sentences of this form.

In saying this, I am assuming that there is a link between the individuals a proposition is partially about and the individuals a sentence expressing that proposition is partially about. To express a proposition partially about this or that

⁷ See, e.g., (Merricks, 2015, pp. 121–156). I favor 'is partially about *x*' instead of 'has *x* as a constituent' because, although I think the intended meanings are equivalent (assuming propositions have constituents in Fine's sense), I think it makes sense to say that a proposition is partially about an individual even if propositions do not have constituents.

individual, the sentence needs also to be partially about this or that individual.⁸ In the case of simple, attributive sentences, such as those I am considering, the relation between the individuals the sentence is about and the individuals the proposition is about is straightforward.

Consider again the proposition *Socrates thinks*. This proposition isn't even partially about Socrates and the Eiffel Tower. It is true that it is partially about Socrates. But it is not partially about Socrates *and* the Eiffel Tower. For if it were partially about Socrates and the Eiffel Tower, it would be partially about the Eiffel Tower. But this sentence is not even partially about the Eiffel Tower.

Hence, *Socrates thinks* is not partially about Socrates and the Eiffel Tower. So *Socrates thinks* cannot be expressed by a sentence which is partially about Socrates *and* the Eiffel Tower. Therefore, *Socrates thinks* cannot be an essence-affirming proposition of Socrates and the Eiffel Tower.

Therefore, granted that Socrates belongs to Socrates and the Eiffel Tower and *Socrates thinks* is an essence-affirming proposition of Socrates, it is false that *Socrates thinks* is an essence-affirming proposition of Socrates and the Eiffel Tower.

Here is the argument in summary:

- 1 The only individual which the proposition *Socrates thinks* is about is Socrates.
- 2 If a proposition is identical to an essence-affirming proposition of Socrates and the Eiffel Tower, then that proposition is partially about Socrates and partially about the Eiffel Tower.
- 3 *Socrates thinks* is not partially about the Eiffel Tower. [(1)]
- 4 *Socrates thinks* is not identical to an essence-affirming proposition of Socrates and the Eiffel Tower. [(2) and (3)]

(4) is inconsistent with (ME) given that Socrates belongs to Socrates and the Eiffel Tower and given that *Socrates thinks* is an essence-affirming proposition of Socrates. So given the truth of (4), (ME) is false.

However, I am skeptical of the claim that *Socrates thinks* is an essence-affirming proposition of Socrates. Even so, we could just as easily have used as our example *Socrates is an animal*, *Socrates is a person*, or even *Socrates is a soul*. All we need assume is that Socrates has some essence-affirming proposition which is only about one individual (Socrates). And since I think it is this last claim which is true, I think there is an argument *analogous* to the one above which shows that (ME) is false.

My premise (2) says that if a proposition is identical to an essence-affirming proposition of Socrates and the Eiffel Tower, then that proposition is partially about Socrates and partially about the Eiffel Tower.

To see why I accept (2), start by considering the following sentence:

(S1) Fido and Lassie count as two in number.

⁸ A sentence is partially about an individual, *x*, (has that individual as a constituent in Fine's sense) just in case *x* is named in that sentence and it logically follows that *x* is identical to something, given the truth of that sentence. This is related to (Fine, 1995a, pp. 245–246).

The predicate in this sentence ‘count as two in number’ does not distribute. Thus, it is false that Fido counts as two in number, and it is false that Lassie counts as two in number. By contrast, the predicate in the following sentence does distribute:

(S2) Fido and Lassie are dogs.

This is because Fido is a dog and Lassie is a dog.

Fido and Lassie’ occurs in (S1). So Fido is named in (S1). So assuming propositions have constituents, Fido is a constituent of the proposition expressed by (S1). Likewise, Lassie is named in (S1). So Lassie is a constituent of the proposition expressed by (S1) too.

On my definition of ‘partially about’, it follows that the proposition expressed by (S1) is partially about Fido and partially about Lassie. Clearly, these same remarks apply to (S2). So regardless of whether ‘*F*’ distributes, Fido and Lassie are constituents of a proposition expressed by sentences of the form ‘Fido and Lassie are *F*’.

One way of picking out the plurality of *a* and *b* is by making a list: ‘*a* and *b*’. When the names are available, the variable ‘*xx*’ in a sentence of the form ‘*xx* are *F*’ can be replaced with such a list.

When the list ‘*a* and *b*’ occurs in a sentence of the form ‘*a* and *b* are *F*’, *a* is named in that sentence and *b* is named in that sentence. Thus, supposing ‘*a* and *b*’ occur in a sentence of the form ‘*a* and *b* are *F*’, *a* is a constituent of the proposition expressed by that sentence and *b* is a constituent of the proposition expressed by that sentence, supposing propositions have constituents in Fine’s sense.⁹

With this in mind, (2) could be translated like this: A sentence expressing a proposition which affirms an essential property of Socrates and the Eiffel Tower looks like this:

(2*)Every essence-affirming proposition of Socrates and the Eiffel Tower, supposing propositions have constituents in Fine’s sense, has Socrates as a constituent and has the Eiffel Tower as a constituent.

(S3) Socrates and the Eiffel Tower are *F*.

Here we have the list ‘Socrates and the Eiffel Tower’, which occurs in any sentence of the form (S3).

So ‘Socrates’ is named in any such sentence and ‘the Eiffel Tower’ is named in any such sentence. Thus, Socrates is a constituent of any propositions expressed by such sentences, and the Eiffel Tower is a constituent of any propositions expressed by such sentences.

Thus, (2*) is true. And since (2) is equivalent to (2*), (2) is true. That is, every such proposition is partially about Socrates and partially about the Eiffel Tower.

Since I think that (1) is, also, clearly true, it follows that (4) is true. Thus, (ME) is false.

⁹ I think this principle can be inferred from Fine’s account of constituency in (Fine, 1995a, pp. 245–246), although establishing this would require a more technical discussion of Fine’s logic of essence than I aim to provide in this paper.

4 Consequential essence

So far, I have assumed Fine's principle of the monotonicity of essence to be about essential properties in the following sense: properties mentioned in something's (or things') real definition. This sense is closest to what Fine calls the 'constitutive notion of essence'. This is the way Zylstra understands Fine's principle (Zylstra, 2019a, p. 1090).

But Fine often employs what he calls the 'consequential notion of essence' (Fine, 1995a, p. 276), (Fine, 1995c, p. 57), (Fine, 2020a, p. 466).

The discussion in this section and the next does not extend the argument of the previous section. That argument only shows that the monotonicity of essence is false on the constitutive notion of essence. Moreover, I will not argue that a version of the monotonicity of essence which appeals to consequential essence is false. Rather, my argument is that if such a principle is not false, its truth undermines one of Fine's desiderata in giving a logic of essence.

Fine describes the notion of consequential essence as follows:

[It is] a conception under which the essence of an object or of some objects [is] closed under logical consequence (subject only to the constraint that the consequences not concern objects upon which the given object or objects did not depend). (Fine, 2020a, p. 466)

More exactly, notice that the set of essence-affirming propositions is not closed under logical consequence. An essence-affirming proposition of xx is a proposition which can be expressed by a sentence of the form ' xx are F ', where ' F ' designates a property mentioned in xx 's real definition.

Now consider the proposition *the singleton set of Socrates has one member*. Plausibly, this statement is an essence-affirming proposition of the singleton set of Socrates. For plausibly, the real definition of the singleton set of Socrates is as follows: *the singleton set of Socrates is the set whose sole member is Socrates*.

Now it logically follows from 'the singleton set of Socrates has one member' that the law of non-contradiction is true. But the law of non-contradiction is not mentioned in the singleton set of Socrates's real definition. Since an essence-affirming proposition of xx can only affirm of xx properties mentioned in xx 's real definition, it follows that *the law of non-contradiction is true* does not express an essence-affirming proposition of the singleton set of Socrates, even though it logically follows from an essence-affirming proposition of the singleton set of Socrates.

So the consequential essence of xx does not merely pick out xx 's essence-affirming propositions. Rather, it picks out all the propositions that logically follow from xx 's essence-affirming propositions subject to Fine's further constraint.¹⁰

¹⁰ Fine's formulation of the notion of consequential essence assumes that one proposition logically follows from another. (Merricks, 2015, pp. 34–81) argues against the claim that propositions have logical form. Hence, on that view, it is strictly false that one proposition logically follows from another. However, I believe that this issue is only a matter of formulation, and so I will assume, like Fine, that there are logical relations among propositions.

Fine's further constraint is intended to exclude from the consequential essence of the singleton set of Socrates propositions like *the singleton set of Socrates has one member or Wittgenstein's left foot is a foot*. While it is true that 'the singleton set of Socrates has one member or Wittgenstein's left foot is a foot' logically follows from a statement expressing an essence-affirming proposition of the singleton set of Socrates, it is not included in the singleton set of Socrates's consequential essence because it does not meet Fine's further constraint.

This is because the singleton set of Socrates does not ontologically depend on Wittgenstein's left foot. Rather, the singleton set of Socrates ontologically depends on Socrates. All propositions about objects on which the singleton set of Socrates do not ontologically depend fail to be included in the singleton's consequential essence, given Fine's further constraint. Hence, no proposition which is partially about Wittgenstein's left foot can be included in the consequential essence of the singleton set of Socrates.

Note that it is consistent with Fine's further constraint that *the law of non-contradiction is true* is a member of the singleton's consequential essence. For it is natural to suppose that the proposition *the law of non-contradiction is true* is not about any objects at all. It would plausibly be an example of what Fine calls a 'pure logical validity'. Of such propositions, Fine says the following: 'a pure logical validity (one involving no objects). . . [for example] $\forall x(x = x)$ will belong to the consequential essence of any object whatever.' (Fine, 2020a, p. 266)

In general, then, I will call the propositions that are included in some xx 's consequential essence, xx 's L-essence-affirming propositions. That is, the L-essence-affirming propositions of xx are all and only the propositions (subject to Fine's further constraint) that logically follow from xx 's essence-affirming propositions.

Every essence-affirming proposition of xx is an L-essence-affirming proposition of xx (assuming, as I do, that the former meet Fine's further constraint). This is because every proposition logically follows from itself, and every proposition (subject to Fine's further constraint) which logically follows from an essence-affirming proposition of xx is an L-essence-affirming proposition of xx .

But not every L-essence-affirming proposition of xx is an essence-affirming proposition of xx . For example, as noted above, the proposition *the law of non-contradiction is true* is an L-essence-affirming proposition of the singleton set of Socrates, even though it is not an essence-affirming proposition of that singleton.

Just the same, the L-essence-affirming propositions are not formed solely from the properties mentioned in the real definition of xx . Rather, they are formed from properties whose possession logically follows from the possession of properties mentioned in the real definition of xx (that formation being subject to Fine's further constraint).

So understood, the consequential essence of xx does not directly bear on xx 's real definition. However, it does bear on it indirectly. This is because the members of xx 's consequential essence all logically follow from xx 's essence-affirming propositions, these latter propositions being made up solely of properties mentioned in xx 's real definition.

This fits with Fine's own remarks on the notion of consequential essence. Hence, he says, 'The constitutive essence is directly definitive of the object, but the

consequential essence is only definitive through its connection with other properties.’ (Fine, 1995c, p. 57)

Consider now a version of the monotonicity of essence, formulated in terms of the notion of consequential essence:

(ME-L) For all xx and yy and all propositions p , if xx belong to yy and p is an L-essence-affirming proposition of xx , then p is an L-essence-affirming proposition of yy .

Note well the following consequence of (ME-L): every proposition that logically follows from some essence-affirming propositions of Socrates must also logically follow from some essence-affirming propositions of Socrates and the Eiffel Tower.

Hence, if there is a single proposition that logically follows from an essence-affirming proposition of Socrates but does not logically follow from the essence-affirming propositions of Socrates and the Eiffel Tower, (ME-L) is false.

Suppose *Socrates thinks* is an essence-affirming proposition of Socrates. Thus, *Socrates thinks* is an L-essence-affirming proposition of Socrates.

Thus, given (ME-L), *Socrates thinks* must logically follow from some essence-affirming propositions of Socrates and the Eiffel Tower, since Socrates belongs to Socrates and the Eiffel Tower.

But for *Socrates thinks* to follow from an essence-affirming proposition of Socrates and the Eiffel Tower, it cannot be that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality whose sole members are Socrates and the Eiffel Tower*, since it is clear that *Socrates thinks* does not logically follow from any essence-affirming proposition which can be formed from this real definition.

So again, as with (ME), if you believe that that is the correct real definition of Socrates and the Eiffel Tower, you should reject (ME-L).

Thus, (ME-L) is false assuming that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality whose sole members are Socrates and the Eiffel Tower* and assuming that *Socrates thinks* is an essence-affirming proposition of Socrates.

As with the argument of section 3, we could just as easily have replaced the example of *Socrates thinks* with another, such as *Socrates is an animal*, *Socrates is a person*, or even *Socrates is a soul*. So again, I take it that the problematic assumption is not strictly that *Socrates thinks* is an essence-affirming proposition of Socrates but the assumption that *Socrates thinks* or a proposition like this is an essence-affirming proposition of Socrates.

I think that these claims about the real definition of Socrates and the Eiffel Tower and the real definition of Socrates are not obviously false. On the contrary, given that there are collective essences, they are rather plausible. For example, the proposed real definition of Socrates and the Eiffel Tower is not much different than a parallel real definition that Fine seems to think holds for sets. That is, Fine would presumably think the real definition of the set of Socrates, the Eiffel Tower is something like

*the set of Socrates and the Eiffel Tower is the set whose sole members are Socrates and the Eiffel Tower.*¹¹

5 Fine's neutrality condition

In the previous section, I showed that for *Socrates thinks* to follow from an essence-affirming proposition of Socrates and the Eiffel Tower, it cannot be that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality whose sole members are Socrates and the Eiffel Tower*.

Some might take that as reason to believe (ME-L) is false. I, however, will not assume that this shows (ME-L) is false.

Instead, I will show that assuming (ME-L) is true and assuming that *Socrates thinks* (or a proposition like this) is an L-essence-affirming proposition of Socrates, it follows that a crucial principle of Fine's account of metaphysical inquiry is false.

That principle is false because it says that in the course of a certain kind of metaphysical inquiry we ought not deny an intelligible truth about what something's real definition is. For example, we ought not deny that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality whose sole members are Socrates and the Eiffel Tower*, nor ought we deny that *Socrates thinks* (or a proposition like this) is an essence-affirming proposition of Socrates.

Fine introduced the notion of consequential essence for the purposes of avoiding controversies over how to define entities. Thus, Fine says,

[T]he aims of LE [the logic of essence] would appear to require a consequentialist conception. In developing an essentialist account of sets, for example, we do not want to be concerned with the difference between logically equivalent formulations. We should not have to bother with whether the nature of singleton Socrates is best formulated by means of the propositions that Socrates is a member and that any other object is not a member or by the propositions that Socrates is a member and that any two members are the same or by the proposition that any object is a member iff it is identical to Socrates; and so on for all the other equivalent formulations that might be given. For the purposes at hand, the differences between these formulations is irrelevant and the task of formulating a theory of sets would become mired in unnecessary difficulty and controversy if we had to decide which of these various equivalent formulations were genuinely constitutive of the nature of sets and which were not. (Fine, 2020a, pp. 466–467)

Fine's aim here is not restricted merely to the avoidance of unnecessary controversy in equivalent formulations of a proposition expressing some *xx*'s real

¹¹ I say 'something like' not 'exactly like' because Fine might not believe this is exactly how we should formulate the real definition of {Socrates, the Eiffel Tower}. Nevertheless, what is important is that this real definition does not contain a proposition which implies *Socrates thinks* or a proposition like this. These same remarks I mean also to apply with respect to the real definition of Socrates and the Eiffel Tower.

definition. Rather, as stated in the last sentence, Fine's reason for that narrower concern is a desire to avoid controversy in making claims about the essence of this or that individual.

Thus, one of Fine's desiderata in providing a logic of essence is to state principles of reasoning which do not invite controversy.

This part of Fine's project is not unique to his work on the logic of essence. Consider, for example, Jessica's Wilson summary of Fine's general approach to metaphysics:

Though Fine is perhaps known for providing good reasons to think that essence is not apparently reducible to merely correlational modal notions. . . a closer look at Fine's work on essence and other topics of general metaphysical significance, including dependence, ground, and part, indicates that he is not engaging in the usual project of defending a specific metaphysical framework. Fine's work typically transcends such local disputes, aiming rather to provide resources suited to characterize and accommodate any intelligible application of the metaphysical notion at issue, through the identification of key distinctions, and associated general principles reasonably seen as underlying the task at issue. (Wilson, 2020, p. 283)

And Fine would not seem to disagree with Wilson on this description. For he calls Wilson's remarks a 'wonderfully sympathetic account of my general approach to metaphysics'. (Fine, 2020b, p. 471)

This view is controversial. Hence, Martin Glazier says 'contemporary metaphysicians are divided over the question of the methodological importance of neutrality' (Glazier, 2022, p. 41), and he provides several examples of prominent metaphysicians who have rejected such claims, such as David Lewis (Lewis, 1986, p. 105, fn. 2) and Theodore Sider (Sider, 2011, p. 136). Nevertheless, he agrees that neutrality is distinctive of Fine's methodology.

I would describe Fine's desideratum in the following terms: avoid metaphysical claims that invite controversy from proponents of intelligible views (at least with respect to issues of general metaphysical significance). I will call this Fine's neutrality condition.

The neutrality condition, as I have stated it, includes some qualifications that are worth keeping in mind. First, I have stated the neutrality condition as a prescription to avoid 'inviting controversy' as opposed to a prescription simply to 'avoid controversy'. Consider, for example, that it might be that no one has explicitly said that every proposition is false (and only false). Hence, no one has ever controverted the claim that every proposition is false (and only false). Hence, there is no controversy that one enters into if one says that every proposition is false (and only false).

If the neutrality condition were formulated simply to avoid controversy, it would be consistent with that formulation to hold that every proposition is false (and only false). Nevertheless, I take it as obvious that if one's view about issues of general metaphysical significance implied that every proposition is false (and only false), that one would violate the neutrality condition. And indeed, it would violate the neutrality condition in virtue of the fact that while there is no one now who controverts such a view, the view would be controverted if it were seriously proposed.

Second, the neutrality condition does not say that we should not invite controversy from a proponent of any view, whatsoever. Thus, for example, suppose someone, as a matter of fact, affirms a view that no one could reasonably believe. I think, for example, no one could reasonably believe that every proposition is false (and only false). If some metaphysician decided to adopt such a view, Fine's principle would not then require us all to abandon the claim that there are some truths about issues of general metaphysical significance. For the view that all propositions are false (and only false) is surely not intelligible, at least in the sense that no one could reasonably believe it.

Finally, the neutrality condition, as I have formulated, is not a principle governing every metaphysical inquiry. Rather, it only governs what might be called 'second-order' metaphysical inquiry. That is, Fine's principle tells us to avoid inviting controversy from proponents of intelligible views when we are proposing theories about notions that can be employed in a broad range of metaphysical disputes. These notions include things such as essence, dependence, ground, and perhaps parthood. By contrast, one would not violate Fine's desideratum if one were to make a controversial claim about free will.

Thus, with Wilson's remarks in mind, we can understand why Fine seeks to avoid saying that, for example, the real definition of the singleton set of Socrates is *the singleton set of Socrates is the set of which Socrates is a member and of which any other object is not a member*. On Fine's view of propositions, to say that that is the real definition of the singleton set of Socrates would invite controversy from proponents of views that find an alternative formulation of that singleton's real definition more plausible.

But if that is so, then, similarly to say that *Socrates and the Eiffel Tower are the plurality which has Socrates and the Eiffel Tower as members* cannot be the real definition of Socrates and the Eiffel Tower surely invites controversy from proponents of an intelligible view of essence. For it is surely intelligible to say that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality which has Socrates and the Eiffel Tower as members*, regardless of whether such a claim is true.

Since I have shown that if (ME-L) is true and *Socrates thinks* (or a proposition like it) is an essence-affirming proposition of Socrates, *Socrates and the Eiffel Tower are the plurality which has Socrates and the Eiffel Tower as members* cannot be the real definition of Socrates and the Eiffel Tower. Thus, it follows that if (ME-L) is true and *Socrates thinks* (or a proposition like it) is an essence-affirming proposition of Socrates, Fine's logic of essence cannot meet his own neutrality condition. That is, Fine's neutrality condition is inconsistent with (ME-L). And so it would seem that given (ME-L), Fine's logic of essence fails by his own standard.

Thus, Fine and proponents of Fine's logic of essence must choose between abandoning the neutrality condition or abandoning (ME-L) in conjunction with the claim that *Socrates thinks* (or a proposition like it) is an essence-affirming proposition of Socrates.

But since it is intelligible that *Socrates thinks* (or a proposition like it) is an essence-affirming proposition of Socrates and since this claim about the essence-affirming propositions of Socrates bears on issues of general metaphysical

significance, Fine and proponents of the neutrality condition should not abandon that claim either.

Thus, it must be that proponents of the neutrality condition must abandon (ME-L), since the acceptance of (ME-L) is inconsistent with the acceptance of the claim that *Socrates thinks* (or a proposition like it) in conjunction with the acceptance of the claim that the real definition of Socrates and the Eiffel Tower is *Socrates and the Eiffel Tower are the plurality which has Socrates and the Eiffel Tower as members*.

Thus, I conclude that Fine's logic of essence cannot assume (ME-L) and also fulfill the neutrality condition as a desideratum.¹²

Declarations

Conflict of interest All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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¹² Thanks to Trenton Merricks for recommending that I expand upon these ideas as a stand-alone paper, as well as for comments on an early draft. Thanks also to my reviewers for suggestions on how to clarify the main arguments of this paper.

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