

The argument for propositions from modal validity

EPHRAIM GLICK

1. Introduction

One of the central goals of *Propositions* is to argue that propositions exist. My plan for the following is to explore the options for Merricks' opponents (let's just call them 'nominalists'). I'm not sure whether, in the end, they have any entirely satisfactory strategy, but the discussion will still be of some interest. At least I hope to achieve some clarification of the initial arguments of the book and to prompt Merricks to elaborate on a few issues. Before continuing, I should say that I found many other challenging arguments throughout the book as well as much to agree with. I focus on the first chapter due to its foundational status with respect to the rest of the book, but every chapter is well worth careful thought and discussion.

2. Reconstructing the argument

Merricks argues for the existence of propositions by appealing to modally valid arguments, where 'an argument is modally valid just in case, necessarily, if its premises are true, then its conclusion is true.' (2015: 1) His reasoning is this:

There are modally valid arguments. So there are the premises and conclusions of modally valid arguments. This chapter argues that those

premises and conclusions have certain features. For example, they exist necessarily, have their truth conditions essentially, and are the fundamental bearers of truth and falsity. I shall, with good reason, call them 'propositions'. So there are propositions. (2015: 1)

Despite this presentation of the argument, it seems that Merricks does not ultimately want to rely on the first premise in the passage. He writes:

[T]his chapter will build on the claim that there are premises whose truth necessitates the truth of certain conclusions. I do not make the added assumption that those premises and conclusion compose some further entity, which further entity is a modally valid argument. (2015: 4, fn. 1)

So Merricks' premise is really that there are premises such that, necessarily, if they are true, then certain conclusions are true. Referring to something as a 'premise' or 'conclusion' still suggests that one is thinking of that thing as a part of an argument, but what's really important for Merricks' purposes is that we have some thing or some things that have the relevant modal relationship. By calling the former things 'premises' and the latter thing a 'conclusion', we can conveniently distinguish the things on the two sides of the relationship, but since the terminology doesn't seem essential to Merricks' argument, I'll try to state the argument without it.

Let's use the plural quantifiers ' $\exists xx$ ' and ' $\forall xx$ ' to regiment 'some things' and 'any things'. So now a first pass at Merricks' first premise would be: $\exists xx \exists y \Box (xx \text{ are true} \rightarrow y \text{ is true})$. It's worth noting that that Merricks does explicitly consider

arguments with a single premise and identical conclusion (e.g. at p. 41). If trivial arguments of that sort were adequate for Merricks' purposes, we could try taking the following as the first premise: $\exists x \Box(x \text{ is true} \rightarrow x \text{ is true})$. But trivial arguments are not adequate for Merricks' purposes. For example, to show that the premises and conclusions of modally valid arguments are not sentences, Merricks argues roughly as follows (2015: 4-6).

Consider the argument: *All men are mortal. Socrates is a man. Therefore, Socrates is mortal.* If the premises and conclusion of this argument were sentences, then, since it is contingent that sentences have the truth-conditions they have, it would be possible for the premises to be true while the conclusion were false. Thus the argument would not be modally valid. But it is. So its premises and conclusion are not sentences.

This line of thought obviously wouldn't apply to an argument whose premise and conclusion were identical. In fact, it wouldn't apply to any argument whose conclusion were among its premises. For even if it is contingent that sentences have the truth-conditions they have, it is not possible for a sentence to be both true and false. So let's make a slight revision to our regimentation of Merrick's initial premise. To express that y is one of the xx , we write: $y < xx$. Then the premise is: $\exists xx \exists y (\sim(y < xx) \ \& \ \Box(xx \text{ are true} \rightarrow y \text{ is true}))$. To help fill in the rest of the argument, let's use 'is F' to abbreviate 'has its truth conditions essentially, exists necessarily, ...', where this captures whatever features Merricks takes to be distinctive of propositions. Here's what we get:

(M1) $\exists xx \exists y (\sim(y < xx) \ \& \ \Box(xx \text{ are true} \rightarrow y \text{ is true}))$.

(M2) $\forall xx \forall y ((\sim(y < xx) \ \& \ \Box(xx \text{ are true} \rightarrow y \text{ is true})) \rightarrow xx \text{ and } y \text{ are F})$.

(M3) $\forall x (x \text{ is } F \rightarrow x \text{ is a proposition}).$

(M4) $\exists x (x \text{ is a proposition}).$

In the discussion below, I will sometimes follow Merricks in speaking as if there are arguments composed of premises and conclusions, but (M1) illustrates how such talk should really be understood.

3. The support for the first premise

Let me distinguish two sorts of moves that a nominalist could make in response to the argument (M1)-(M4). First, she could attempt to fully show how to explain modal validity without propositions. Second, she could attempt to reduce Merricks' challenge to some more familiar challenge, showing that *if* she can deal with the latter, there will no independent force left behind the modal validity considerations. The latter sort of response is obviously more feasible, so that is what I will focus on here.

There doesn't seem to me to be much interest in trying to deny the validity of the argument, nor in trying to deny premise (M3). If there are modally valid arguments whose premises and conclusions have their truth-conditions essentially, exist necessarily, and so on, then those premises and conclusions have a good claim to be called 'propositions'. As illustrated by the Socrates-argument above, Merricks' discussion is predominately concerned with premise (M2). Merricks might, then, expect the nominalist to object there and attempt to undermine the support for, e.g., the claim that premises and conclusions are entities that exist necessarily. I'll explore this strategy below in connection with

the notion of truth at a world, but at this point I want to focus instead on premise (M1). I think the hardcore nominalist will attempt to deflate the argument at the very beginning.

It may seem crazy to deny that there are modally valid arguments, or rather to deny that there are premises such that necessarily if they are true then certain conclusions are true. But this is par for the course in ontology. If Merricks wants to build his argument on an existential claim (as he puts it on page one, 'there are the premises and conclusions of modally valid arguments'), it's only fair for him to explain his support for that claim. He writes:

I endorse the venerable and widespread view that some arguments are modally valid. This is partly because of my deference to the wisdom of the past and of the crowd. And it is also because certain arguments seem to me to be obviously modally valid.¹ (2015: 3)

While I'm sure that many other theorists are similarly deferential, the appeal to common opinion is of limited use in the dialectical situation of Merricks' first chapter. Nominalism about propositions is fairly radical, requiring rejection of very widespread assumptions in philosophy of language and mind. And like other theorists with controversial views in ontology, Merricks' opponent presumably has little deference toward the crowd. Compare an even more radical view that Merricks himself accepts: nihilism about composite objects.

¹ Related comments occur earlier (2015: 1): "This book's starting point is that there are some modally valid arguments. As we shall see, this starting point has an impressive pedigree. Moreover, it is obvious that certain arguments are modally valid. Or so it seems to me."

Despite the wisdom of the past and of the crowd, Merricks would say that if the realist about tables wants to take metaphysics seriously, she needs an *argument* that tables exist. It is not enough for her to say that it's obvious and that nearly everyone believes it. So it seems to me that we certainly deserve an argument for the substantially more theoretical claim that there are premises and conclusions of modally valid arguments.

Let's turn to the second point – certain arguments seem to Merricks to be obviously modally valid. I don't think Merricks is taking the existential claim (M1) itself as a datum here. He's not saying that it is obvious that there exist premises such that necessarily, if they're true then certain conclusions are true. Rather, he is reporting a judgment about particular examples. Immediately following his report that certain arguments seem to him to be obviously modally valid, he continues: 'For example: (1) All men are mortal. (2) Socrates is a man. Therefore, (3) Socrates is mortal.' The premises and the conclusion seem to Merricks to be obviously such that necessarily if the former are true then the latter is true.

The nominalist can't plausibly respond by simply rejecting Merricks' judgment without further comment. There is indeed something obvious there. The question is, what exactly is obvious? Necessarily, if all men are mortal and Socrates is a man, then Socrates is mortal. Obviously. The nominalist will agree. But on the face of it, propositions haven't yet gotten into the picture at all, and we have yet to connect the obvious datum to Merricks' premise (M1).

There are two (related) respects in which (M1) goes beyond what the nominalist has so far agreed to. First, (M1) involves truth – if the *xx are true*, then

y is true. Second, (M1) involves objectual quantification over things that we informally describe as premises and conclusions.

To ease discussion, let's name the thesis that everyone agrees is obvious:

(a) Necessarily, if all men are mortal and Socrates is a man, then Socrates is mortal.

I think the nominalist would press the following thoughts: While (a) is obvious, (M1) is not. Rather, (M1) requires support. And it does not follow from (a). So granting (a) does not immediately require granting (M1).

The nominalist is right at least in that Merricks' premise (M1) is significantly less obvious than (a). And (a) doesn't appear to have any singular terms over which one could existentially generalize to get (M1) (or a natural-language version of M1), so it also seems fair to press the question of how Merricks would propose to get (M1) from (a). I imagine that the answer would involve (b) or (c) below.

(b) Necessarily, if it is true that all men are mortal and it is true that Socrates is a man, then it is true that Socrates is mortal.

(c) Necessarily, if that all men are mortal is true and that Socrates is a man is true, then that Socrates is mortal is true.

Perhaps (b) and (c) seem as obvious as (a), although I'm not sure about this. (Actually, to my ear, (c) is barely English.) Regardless of whether they are obvious, (b)/(c) look like perfect intermediaries for reaching (M1) from (a). The

obvious problem with (a) was that it didn't appear to have any singular terms over which one could existentially generalize. The problem appears rectified by (c). The trick is the introduction of 'true'. Since singular terms, when they occur, must occur as arguments of predicates, one needs to introduce some predicates to turn (a) into a claim that appears to have such singular terms. Hence, 'true' in (b)/(c).

What then, should the nominalist say about (b)/(c) and their relationship to (a) and (M1)? In the next section I will make some suggestions, but for now, notice that the apparent entailment of (M1) by (b)/(c) is an example of a familiar problem for nominalism. There are English sentences in which that-clauses appear to be terms over which one can existentially generalize. For instance, here is a very familiar sort of argument: *John believes that cats meow. That cats meow is true. So, John believes something true.* I don't have anything new to say about such arguments.² What I want to point out is just that adjudicating the dispute between Merricks and the nominalist ultimately requires evaluating various possible responses to the existential generalization employed in Merricks argument, just like in the belief-argument and in similar arguments concerning various other putative abstracta. So *if* the nominalist has a decent strategy for responding to these more familiar arguments for the existence of propositions, then she already has a decent strategy for responding to Merricks without even tackling (M2) or (M3).

4. Strategies for the nominalist

² For recent discussion, see the opening chapters of King, Soames, and Speaks (2014).

Having argued that the challenge posed by Merricks' argument is a challenge of a familiar sort, I now want to sketch some ways in which the nominalist might respond to that sort of challenge. I hope this will prompt Merricks to offer his views on some issues about quantification and ontology that don't get discussed in the book.

We can begin by noting that a familiar response to anti-nominalist arguments involving existential generalization is to question the ontological import of the introduced quantifier. A nominalist could say that while 'There are modally valid arguments' or 'There are premises...' is correct, it is correct only in a noncommittal sense of 'there are'. Merricks, I assume, wants to establish a substantive ontological conclusion, but if, say, a substitutional quantifier were the correct tool for interpreting 'There are premises...', then Merricks' starting point would be unhelpful. There are of course worries about the limitations of substitutional quantification, but the general strategy of deflating the significance of the existential quantifier is a strategy which a nominalist is likely to pursue, but which is not discussed in *Propositions*.

To make things a bit more concrete, consider a contemporary nominalistic strategy developed in detail by Hofweber (e.g. in his 2005). He argues that English quantifiers have both a *domain-conditions* reading and an *inferential-role* reading. On the former reading, quantifiers are ontologically significant, expressing constraints on the domain. On the latter reading, quantifiers don't express anything ontologically significant, as they have a purely inferential role. The inferential role of 'something' is simply this, schematically: 't is F' implies 'something is F', where 't' is any expression of an appropriate

syntactic category. Similarly for the inferential role of 'everything': 'everything is F' implies 't is F'. (Whether 't is F' is ontologically significant may still require investigation, of course.)

Hofweber's idea applies to the sentences Merricks uses to argue for the existence of propositions. Take the inference from (b)/(c) to (M1) or its English version. The nominalist needn't deny that this is a good inference in order to defend nominalism. Instead, she can say: On an inferential role reading, 'There are premises...' really is implied by (b)/(c). But if Merricks wants an ontologically weighty premise, that isn't it. The ontologically weighty premise would involve a domain-conditions reading of the quantified claim, and that reading is *not* implied by (b)/(c). Merricks hasn't provided an adequate reason to think that his initial data support the premise he really needs. This, anyway, is the line that Hofweber's work would suggest.

A related strategy for responding to (M1) is to appeal to some notion of fundamentality and say that what really matters to ontology is not what exists, but what is fundamental. Even if the existence of propositions follows from (a) and (b)/(c), this isn't a metaphysically heavyweight conclusion. For it is compatible with saying that propositions 'are not part of the ultimate furniture of reality' (Dorr 2008: 34). The way Dorr pursues this line, it looks like a version of the nominalistic strategy of deflating the significance of the quantifier. He distinguishes superficial from fundamental uses of 'exists' and 'there are', arguing that while there are numbers, properties, etc. in a superficial sense, 'in the final analysis, [there are] no such things' (2008: 34). The same would apply to the premises and conclusions of modally valid arguments. Alongside Dorr's approach, there are other ways of explaining the general

strategy: One could say that while such premises and conclusions exist, they don't *really* exist, or say that their existence is *grounded* in nominalistically acceptable materials, or say that sentences like 'There are premises ...' have *metaphysical truth-conditions* that only concern non-propositions.

Any fundamentality-based response to Merricks of the sort just sketched would need to be filled out in greater detail, obviously, and this would be difficult. (How might the existence of propositions be grounded in materials friendly to nominalists? What exactly are the metaphysical truth-conditions of proposition-involving talk? And so on.) But given the contemporary influence of these approaches to ontology and given the (to my mind) even more nominalistically-friendly approach from Hofweber, I think a pressing question for Merricks is how he wants to convince his opponents that he is entitled to an ontologically heavyweight interpretation of his first premise, (M1). The initial data such as (a) don't immediately support such a premise. But more generally, I'd be interested in hearing Merricks' take on some of these approaches and how they relate to his argument.

Here is one further, vaguely related idea about (b)/(c). If one has a deflationary attitude toward propositional truth, one might take the introduction of 'true' and nominalisation of the premises and conclusion to be little help in supporting (M1). Suppose, for instance, that one adopted the redundancy theory of propositional truth, holding that for the proposition that Socrates is mortal to be true is just for Socrates to be mortal. This isn't a very popular view these days (although David Lewis (2001a, 2001b) seems to be sympathetic³), but let's

³ According to Lewis (2001a: 602), 'The truth about truth, so far as propositions are concerned, is a long but simple story,' involving no more than a pattern of

consider it briefly to make a point. According to the redundancy theory, (b)/(c) don't say anything more than (a). They all simply say that necessarily, if Socrates is a man and all men are mortal, then Socrates is mortal. It is very hard to see why that would directly entitle us to (M1), for as noted earlier, (a) looks like it doesn't concern truth-bearers at all. It just constrains the possibilities concerning mortality, men, and Socrates. So again, for his argument to defeat nominalism, Merricks would need to fill in the gap between (a) and (M1).

While Merricks could reply that he has independent reasons to reject a redundancy theory of truth, the above point is still of interest. First, it at least illustrates another commitment needed to get to (M1) from the initial intuitive data such as (a). And second, it thereby illustrates a contrast between Merricks' argument and other arguments for the existence of propositions. Take this argument: *John believes that cats meow. So, there is something John believes.* (Further argument would then be used to establish a premise analogous to Merricks' (M2) – things that are believed must have certain properties making them deserving of being called 'propositions'.) What can the nominalist say in reply? Well, no one thinks that John's believing that cats meow consists in its being the case that cats meow. (One might still, of course, try some other strategy for rejecting a relational analysis of attitude attributions.) So perhaps the belief argument can avoid a challenge that could be pressed against the modal validity argument. A third and final, more tentative idea is that even if the redundancy theory is wrong, other deflationary accounts of truth might raise similar challenges. For inspiration, here is a suggestion Horwich makes in passing:

trivial, necessary, and *a priori* biconditionals such as: *The proposition that pigs fly is true iff pigs fly.* In Lewis 2001b these are called 'redundancy biconditionals'. For discussion, see Bricker (2015: 168).

'[O]ne might take the fact that *The proposition that dogs bark is true* to consist in the fact that *Dogs bark*.' (Meaning 178) If (eliminating the fact-talk) the proposition *that dogs bark* being true just *consists* in dogs barking, Merricks faces a question similar to the question raised by the redundancy theorist: Why would the existential (M1) follow from something that just consisted in dogs barking? That would be puzzling, the nominalist would urge. If Merricks wants (M1), then even if his deflationary opponent grants the datum (a), more would need to be said about how dogs barking could already ensure that there are truth-bearers that are modally related in a certain way.

5. The second premise and truth at a world

So far I've been exploring how someone might deny that there are premises such that necessarily if they're true then certain conclusions are true. At this point I want to move on to (M2), the claim that any such premises and conclusions would have various features that would preclude their being sentences. It is here that Merricks anticipates the strongest objection. The central challenge he considers is the following: Once we distinguish between truth *in* a world and truth *at* a world, we can see a way to maintain that sentences are the premises and conclusions of modally valid arguments. Basically, an argument is modally valid iff for any world w , if its premises are true at w , then its conclusion is true at w . Merricks' reply is that this explanation of modal validity fails to capture a desired modal connection – 'the claim that an argument's conclusion is true at all possible worlds at which its premises are true does not imply that

there is any modal connection between the truth of its conclusion and the truth of its premises' (p. 16).

But what is the desired modal connection and why does truth-at not supply it? Let S_1 , S_2 , and S_3 respectively be the sentences 'All men are mortal', 'Socrates is a man', and 'Socrates is mortal'. Merricks notes that while, for any w , S_3 is true at w iff Socrates is mortal in w , ' S_3 's having the same truth conditions at all possible worlds does not imply that S_3 has its truth conditions essentially. [...] Indeed, S_3 has the same truth conditions *at* all possible worlds regardless of the modal status of S_3 's having those truth conditions.' (p. 15) Extending the point to the relationship between premises and conclusions, we see that even if S_3 is true at every world at which S_1 and S_2 are true, we're nevertheless not able to conclude that S_3 is essentially such that it's true if S_1 and S_2 are true (p. 16).

Why the use of 'essentially'? As Merricks is no doubt aware, it's widely accepted these days that necessary properties of a thing needn't be essential properties of it. And from page one modal validity has been explained in terms of what's necessary. Recall that 'an argument is modally valid just in case, necessarily, if its premises are true, then its conclusion is true.' (p. 1) So let's set aside questions about the essential properties of sentences. The real issue is whether S_1 and S_2 can be such that necessarily, if they're true then S_3 is true. Merricks opponent says that they are, provided we understand truth properly. So what's the problem?

Merricks elaborates after his claim about essentiality:

More generally, S_3 is true at all possible worlds at which S_1 and S_2 are true regardless of what—if any—modal connection there is between, on

the one hand, S3's being true and, on the other, S1's being true and S2's being true. All of this shows—perhaps surprisingly—that the claim that S3 is true at all possible worlds at which S1 and S2 are true is not a claim about any modal connection between the truth of S3 and the truth of S1 and S2. (p. 16)

But it's still not clear what the objection is to the truth-at analysis of modal validity. The proponent of the latter has two key ideas: Modal talk can be analyzed in terms of quantification over worlds, and truth can be understood as either truth-in-a-world or truth-at-a-world. With these tools, the theorist claims to be able to give a true analysis of the claim that necessarily, if S1 and S2 are true then S3 is true. And that she does, since she analyzes this as meaning that for any world w , if S1 and S2 are true at w , then S3 is true at w , and that claim is correct. She can similarly give a false analysis of the claim that possibly, S1 and S2 are true while S3 is false: There is some world w such that S1 and S2 are true at w while S3 is false at w . The truth-at theorist has accommodated (M1), showing how sentences can be the witnesses for the quantifiers, without committing herself to (M2) – sentences don't have their conditions essentially or exist necessarily.

Merricks wants to insist that on the truth-at analysis, no modal connection between premises and conclusions has been captured. But the truth-at theorist should simply say that the following *is* a modal connection: Necessarily, if the premises are true, then the conclusion is true. It looks to me like Merricks must either reject the analysis of modals in terms of quantifiers over worlds, reject the claim that 'true' can be interpreted as true-at, or reject

what he previously offered as an explanation of modal validity (the argument from premises to conclusion is modally valid iff necessarily, if the premises are true, then the conclusion is true). Neither of the first two strategies seems to be what Merricks attempts in the passages cited above, although later (2015: 115) he indicates that he does want to avoid any talk of possible worlds in explaining modal validity (this is for reasons related to temporalism about propositions, which I don't have space to discuss here). The third strategy would be unexpected in light of the opening of the book, especially given Merricks' deference to the wisdom of the crowd – the crowd tells us that modal validity is precisely what Merricks says it is on page one. So I am puzzled and hope Merricks could offer a clarification of his objection to the truth-at analysis of modal validity.

The book's other main discussion of truth-at occurs during Merricks' argument that the premises and conclusions of modally valid arguments exist necessarily. His reasoning is simply this: Some arguments have premises or conclusions that are necessarily true (or necessarily false). And 'Necessarily, if a premise (conclusion) is true, then it exists.' (2015: 18) So some premises or conclusions exist necessarily. The point of the argument is that, since sentences exist contingently, we would have another reason to deny that sentences are the premises of modally valid arguments.

I think Merricks is right to expect another objection from the truth-at theorist. He imagines her responding that necessary truth is truth *at* every possible world, and something that exists only in some worlds can be true at every world. Here is his reply to this line:

[L]et S be a sentence whose truth conditions are satisfied in all possible worlds. Then S is true at all possible worlds. S could have had different truth conditions. So S could have been false. So the claim that necessary truth is truth at all possible worlds yields the result that some necessary truths could have been false. I think that result is mistaken. So I deny that necessary truth is truth at all possible worlds. (2015: 18)

Here Merricks reasons that since 'All dogs are dogs' could have had different truth-conditions (say, by meaning that no dogs are dogs), it could have been false. The truth-at theorist can agree, offering the following interpretation of the reasoning:⁴ Since there is some world w such that 'All dogs are dogs' has different truth-conditions *in* w than it does in the actual world, there is some world w such that 'All dogs are dogs' is false *in* w . But then Merricks wants to force his opponent to combine this conclusion with the claim that 'All dogs are dogs' is necessarily true. The acceptable interpretation of the latter is, on his opponent's proposal, that for every possible world w , 'All dogs are dogs' is true *at* w . On neither the true-in nor true-at interpretation of possible truth would his opponent grant the conjunction that 'All dogs are dogs' is necessarily true and could have been false. Of course, the conjunction is correct if one uses different notions of truth in the two conjuncts. But why would we do that? One of the truth-at theorist's points is that there is a danger of equivocation when we talk about possible truth or falsity. If we avoid equivocation, the combined claim Merricks rejects is rejected by his opponents as well. But both conjuncts can

⁴ Let's ignore the reification of truth-conditions for the moment to focus on other matters. See below.

separately be given true analyses. So the truth-at theorist seems to me safe from Merricks objection.

I conclude that the distinction between truth in a world and truth at a world offers more powerful responses to Merricks' arguments than he admits. But the overall viability of the truth-at strategy for the nominalist is not obvious to me. I'm not sure, for instance, how exactly truth-at should be explained. Merricks (2015: 14) glosses it by saying that 'a premise or conclusion is true *at* a possible world just in case that premise or conclusion actually has truth conditions and, necessarily, if that possible world were actual, then those truth conditions would be satisfied.' But someone who rejects the existence of propositions might well be unhappy with the reification of truth-conditions here. Is there some way to eliminate that feature of the explanation of truth-at? I'm not sure. But other explanations in the literature are even more unhelpful to the nominalist. It would be a disaster dialectically, for instance, if she followed Plantinga, who says that 'a sentence token *t* is true at a world *W* if and only if *t* expresses a proposition true in *W*' (p. 325).

An alternative way to explain truth-at would be by using some sort of schema. Take the following, for example (let 'S' be replaced with an assertoric sentence): 'S' is true at *w* iff in *w*, S. This obviously would need refinement due to context-sensitivity and so on, but it points in a better direction insofar as it lets the nominalist avoid referring to or quantifying over propositions or truth-conditions. I don't know whether in the end such a schema could be refined in a

totally satisfactory way, but I will have to leave exploration of that issue for others.⁵

University of St Andrews

The Scores, St Andrews, KY16 9AL, UK

eg35@st-andrews.ac.uk

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⁵ For comments and discussion, thanks to Matt McGrath, Bryan Pickel, and Jennifer Wang.

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