Presentism is the doctrine that only the present is real. Since ordinary talk and thought are full of quantification over non-present objects, presentists are in a familiar predicament: in their unreflective moments they apparently commit themselves to far more than their ontological scruples allow.

A familiar response is to begin a project of paraphrase. Truths appearing to quantify over problematic entities are shown, on analysis, to not involve quantification over those entities after all. But I think that we might be better off abandoning paraphrase altogether. I suggest a project of discovering “underlying truths” rather than paraphrases. I will explore this strategy as applied to defending presentism, but my hope is that lovers of desert landscapes everywhere will herein find words of comfort.¹

¹I would like to thank John G. Bennett, David Braun, Rich Feldman, Tamar Szabó Gendler, John Hawthorne, Europa Malynicz and Dean Zimmerman for their help with this paper. I would also like to thank Earl Conee; much of what I say here about ontological commitment has been influenced by hearing his thoughts on the topic. Finally, I would like to acknowledge a special debt to Ned Markosian: this paper began as a commentary on his presentation to the 1998 Philosophy of Time Society meeting in Los Angeles, CA.

¹In fact, the general project has more importance to me than the special case, since I do not myself endorse presentism. In particular, I make no effort to defend presentism from the objections that it is inconsistent with i) contemporary physical geometry (Putnam claims that presentism is incompatible with special relativity in “Time and Physical Geometry”, this journal lxiv (1967): 240–247; and see also page below), or ii) the claim that truth is supervenient on being (see David Lewis, review of D. M. Armstrong’s A Combinatorial Theory of Possibility, Australasian Journal of Philosophy lxx (1992): 218–219).

Desert lovers should also consult Joseph Melia, “On What There’s Not”, Analysis lv (1995): 223–229, and Stephen Yablo’s forthcoming “A Paradox of Existence”, in Anthony Everett and Thomas Hofweber, eds., Empty Names, Fiction and the Puzzles of Non-Existence, CSLI Publications, 1999; many of their conclusions mesh well with the present approach. In particular, there is much in common between Yablo’s approach and my own, of which I became aware only after writing this paper; I cannot undertake a comparison in the present paper.
1. Presentism

A presentist thinks that everything is present; more generally, that, necessarily, it is always true that everything is (then) present.\(^2\)

Presentism is the temporal analog of the modal doctrine of actualism, according to which everything is actual. The opposite view in the philosophy of modality is possibilism, according to which non-actual things exist; its temporal analog is eternalism, according to which there are such things as merely past and merely future entities.

Where possibilists and eternalists speak with quantification, actualists and presentists must make do with irreducible sentence operators. The operators are modal operators for the actualist — \(\downharpoonright \text{NECESSARILY}(\phi)\)\(^\uparrow\) and \(\downharpoonright \text{POSSIBLY}(\phi)\)\(^\uparrow\) — and tense operators for the presentist: \(\downharpoonright \text{WAS}(\phi)\)\(^\uparrow\) and \(\downharpoonright \text{WILL}(\phi)\)\(^\uparrow\), among others. Whereas an eternalist can say ‘there exists, located in the past, a dinosaur with a 50 foot long tail’, a presentist must say ‘WAS(there exists a dinosaur with a 50 foot long tail)’. The truth of this sentence is consistent with presentism because the existential quantification occurs within the scope of the tense operator, and thus does not carry a commitment to the existence of a dinosaur, just as ‘POSSIBLY(there exists a unicorn)’ is taken by the actualist not to imply the existence of a non-actual unicorn.

Given the presentist’s acceptance of the tenses, some have wondered whether the dispute over presentism is merely verbal. The presentist says while the eternalist denies that everything is present; but is it clear that each side means the same thing by ‘everything’? The eternalist might view the presentist’s quantifiers as being quantifiers restricted to present entities; likewise, it might be argued, when the eternalist says ‘there is a dinosaur’, this may be translated into the presentist’s language as ‘there is, was, or will be a dinosaur’. But the translation scheme implicit in this argument is not in general truth preserving. For example, the eternalist will allow that there exists a set containing a dinosaur and a computer; but the proposed presentist’s translation of this assertion is the disjunction:

(There is a set containing a dinosaur and a computer) or WAS(there is a set containing a dinosaur and a computer) or WILL(there is a set containing a dinosaur and a computer)

which is presumably false since at no time does there exist both a dinosaur and a computer.\(^3\)

Moreover, if the dispute between presentists and eternalists is merely verbal, then the same ought to be true for the dispute between actualists and possibilists; but surely this is not the case.\(^4\) The dispute between the presentist and eternalist, then, is genuine. Each uses the unrestricted quantifier ‘everything’ in the same way, as applying to absolutely everything; one thinks this includes merely past and future objects; the other does not.

2. Problems for presentism

I turn now to certain problems that face a presentist, which arise from the fact that we often appear to quantify over merely past things:

\[(D) \text{ Dinosaurs are animals that once walked the earth}\]

The case of (D) is quite unproblematic; a presentist can provide a translation of (D) that eliminates the apparent quantification over dinosaurs:

\[(D_p) \text{ WAS(there are some animals that are dinosaurs and walk the earth)}\]

It might be plausible for a presentist to argue that (D\(_p\)) is what we actually mean when we utter (D), or at least that a charitable semantics would associate the proposition expressed by (D\(_p\)) with (D). The apparent quantification in (D) over past dinosaurs could be attributed to the fact that ordinary speakers are often careless about the order of quantifiers and sentential operators, particularly when the difference only matters if an esoteric metaphysical doctrine like presentism is true. A large class of sentences about the past and future can be handled in this way.

\(^3\)I am assuming that the presentist assumes that it is always the case that sets exist only if all their members do.

\(^4\)Yet another reason to think the dispute is genuine is the apparent conflict between presentism and certain empirical theories — see note 1.
But some apparently cannot be. (D) is a special case in a couple of ways. One is that it is purely qualitative; there are no proper names, demonstratives or indexicals referring to particular entities. Another is that (D) talks about the past, as it were, one time at a time; there are no ascriptions of cross-time relations. Departing from either of these features of (D) raises problems for the presentist.

Take, for example,

(L) Lincoln was tall.

The only way to translate (L) into a presentist truth would seem to be to replace ‘Lincoln’ with some description. A. N. Prior takes this route; (L) might thereby be paraphrased as:\(^5\)

\[(L_P) \text{ WAS}(\text{there is someone who is called ‘Lincoln’, who is honest,} \\
\text{….and who is tall})\]

For a translation of (L) to be true, it must express a true proposition. But the proposition cannot be a singular proposition containing Lincoln as a constituent, since Lincoln does not exist. The only remaining possibility seems to be to say that the translation of (L) expresses a purely qualitative proposition, containing just qualitative properties and relations as constituents. (L\(_P\)) expresses such a proposition. But now the problem is that Kripke and other antidescriptivists have argued powerfully that names do not abbreviate descriptions.\(^6\) (L\(_P\)) is therefore not synonymous with (L).

Cross-time relations present a quite different problem, which arises from a limitation on the sorts of fact that can be expressed in the tensed language used by the presentist. Speaking heuristically, one may think of the sentence WAS(\(\phi\)) as being true with respect to a time, \(t\), iff sentence \(\phi\) is true with respect to some time before \(t\). And, still speaking heuristically, a sentence \(\phi\) (that lacks tense operators) is true with respect to some time iff it is true when the quantifiers in \(\phi\) range over objects that exist at that time, and atomic formulas are evaluated with respect to that time. Of course, the presentist cannot accept this explanation of


the tense operator, for the explanation quantifies over non-present times and objects; for the presentist, the tenses are primitive. Nevertheless, the heuristic device gives the idea, much in the same way that the idea of possible worlds clarifies modal talk, even if in the final analysis possible worlds are analyzed in terms of modality rather than the other way around.

The problem, then, is the following.

\[(A)\] David Lewis admires Frank Ramsey

\[(A)\] seems true, but what is the presentist’s translation? Even waiving objections to descriptivism about names, \((A)\) is still problematic. The following attempted paraphrase fails to be true because, according to the presentist, the description ‘the inventor of the best system analysis of lawhood’ is (currently) non-referring:

\[(A_p1)\] The inventor of modal realism admires the inventor of the best-system analysis of lawhood.

Adding a past tense operator does not help:

\[(A_p2)\] WAS(The inventor of modal realism admires the inventor of the best-system analysis of lawhood)

This is false because Ramsey and Lewis never existed at the same time. \((A_p2)\) is true only if the component sentence ‘The inventor of modal realism admires the inventor of the best-system analysis of lawhood’ is true at some past time, and that component sentence is true at a time only if both definite descriptions refer to objects then. Each of the following attempts is better:

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7 A presentist might construct surrogates for past times out of materials existing in the present, for example from propositions. (See, for example, Prior’s “Quasi-propositions and Quasi-individuals”, p. 138.) But the tenses will be used in constructing these surrogate times; hence the time surrogates will not be available for use in analyzing the tenses. The issues here are parallel to those that arise for actualists who construct possible world surrogates from actually existing abstract entities (see Robert Merrihew Adams, “Theories of Actuality”, *Noûs* viii (1974): 211–231; Alvin Plantinga, “Actualism and Possible Worlds”, *Theoria* xlii (1976): 139–160; Robert Stalnaker, “Possible Worlds”, *Noûs* x (1976): 65–75; and chapter 3 of David Lewis, *On the Plurality of Worlds* (Oxford and New York: Blackwell, 1986.).

8 The problem need not be stated with names; consider, for example, ‘Some current philosophers admire ancient Greek astronomers’. For a recent discussion of this problem see Bigelow *op. cit.*
(A₃) The person, x, that is the inventor of modal realism is such that WAS(x admires the inventor of the best-system analysis of lawhood)

(A₄) WAS(The person, x, that is the inventor of the best-system analysis of lawhood is such that NOW(the inventor of modal realism admires x))

(‘NOW’ is another tense operator, analogous to the modal operator ‘ACTUALLY’.) In neither case is there a problem with the descriptions referring, since the time of evaluation shifts, in each case, between the occurrence of the description for Lewis and the description for Ramsey. But a problem remains: the atomic formulas ascribing the admiration relation seem false (with respect to the times in question). Roughly, in (A₃) it is asserted that at some past time at which Ramsey existed, Lewis admired him, even though Lewis did not exist then; and in (A₄) the assertion is that it is now true that Lewis and Ramsey stand in the admiration relation, despite Ramsey’s current non-existence.⁹

Notice that presentism does not on its own rule out the truth of (A₃) and (A₄); for that we need a stronger claim that might be called “serious presentism”, by analogy with Alvin Plantinga’s term ‘serious actualism’ (“Replies to My Colleagues”, in James Tomberlin and Peter van Inwagen (eds.), Alvin Plantinga (Dordrecht: Reidel, 1985), pp. 316–323 and 345–349.) Since presentists should accept the truth of ‘WAS(there is an x such that NOW(x does not exist)’, presentism does not on its own rule out the truth of the parallel ‘WAS(there exists an x such that x is a dinosaur, and NOW(x is a dinosaur))’; for that, we need serious presentism, which may be formulated as the conjunction of presentism and the additional claim that “positive” atomic formulas, like ‘x is a dinosaur’ and ‘x admires y’, can never be true with respect to times at which the referents of the names and variables contained do not exist (more carefully: for every positive atomic formula φ with variables x₁, …, xₙ free, the following is true: ‘ALWAYS, for all x₁, …, ALWAYS, for all xₙ, ALWAYS: if φ then x₁, …, xₙ all (currently) exist’.) I will assume that the presentism to be defended is serious presentism.

I will also assume the unacceptability of two other views which, if true, could help with some of the difficulties in the text: i) using temporal analogs of “actually” operators that can be indexed to occurrences of tense operators and occurrences of variables and names within atomic formulas (see Graham Forbes, The Metaphysics of Modality (Oxford: Clarendon Press, 1985), pp. 90–93); ii) accepting the current existence of uninstatiated individual essences of merely past individuals (for the modal analog of this view see Alvin Plantinga, “Actualism and Possible Worlds”, section 5; for criticism see section 2 of Robert M. Adams, “Actualism and Thisness”, Synthese xliv (1981): 3–41, and sections 2 and 3 of Kit Fine’s “Plantinga on the Reduction of Possibilist Discourse”, in van Inwagen and Tomberlin (op. cit.), pp. 145–186.
3. Underlying truths

My defense of presentism against the objections of the previous section will be subject to the following constraint: the presentist should not completely reject ordinary talk and thought. The presentist should salvage something from what we commonly say. Not just because we say it; we should take everyday talk seriously because we typically have decent evidence for what we say. A presentist who completely rejected masses of ordinary talk as just being confused would be a quite radical skeptic.

But I do not assume that the presentist needs to demonstrate that ordinary talk is true. I follow the lead of Ned Markosian, who in a recent paper (op. cit.) suggests biting the bullet and admitting that sentences naming merely past individuals or ascribing cross-time relations are not true. Markosian’s suggestion is that while such sentences are not true, we can explain their appeal by noting that there are related truths with which they are commonly confused.

In light of Kripkean considerations, the qualitative sentence \( (L_p) \) is not synonymous with \( (L) \). However, \( (L_p) \) is semantically close enough to \( (L) \) that it could plausibly be said to be confuseable with \( (L) \). \( (L) \) seems true to us, Markosian would say, because we do not adequately distinguish it from \( (L_p) \), which is true. Consider next the case of cross-time relations. Markosian’s example is:

\[ \text{(G) There was a great grandfather of Ned} \]

A truth with which (G) might be confused is:

\[ \text{(G_M) WAS \{there is an x that is a father of Ned & WAS \{there is a y that is a father of x & WAS(there is a z that is a father of y)\}\}\} \]

The strategy here is to find sequences of temporally overlapping objects underlying ascriptions of cross-time relations. And for cases like (A), Markosian’s suggestion would be the following:

\[ \text{(A_M) There are various properties, p_1-p_n, such that (i) Lewis associates p_1-p_n with the name ‘Ramsey’, (ii) WAS(there is an object that has p_1-p_n and is called ‘Ramsey’), and (iii) if there were an object that had p_1-p_n, Lewis would admire it} \]

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I believe that the general idea of giving up on paraphrasing problematic sentences is a fruitful one. The core claim here is that even if we deny that the problematic sentences are true, we can still accord them some positive status, and thus not saddle ourselves with implausible skepticism. However, I do not follow Markosian in identifying this positive status with confuseability with a truth. I will seek “underlying” truths for claims like (G), (A) and (L), but I will not claim that speakers confuse those underlying truths with the propositions they assert.

The problem with confuseability as the status for the underliers is that the underliers are going to need to get pretty elaborate, to the point of its being implausible that we confuse them with anything. (G) needs to be complicated, for example, since Ned’s great grandfather might have died and been cremated before having children, Ned’s grandfather being created using the great-grandfather’s frozen sperm cells. This sort of possibility would only be accounted for by a complicated tensed sentence mentioning sperm and egg cells, which no one would confuse with (G). In the case of (A), the problem is that an implausible descriptivism about admiring is presupposed. The properties Lewis associates with ‘Ramsey’ may not have been had by Ramsey; or, there might be someone else who also had the same properties that Lewis attributes to Ramsey, and who was named ‘Ramsey’, who Lewis does not admire. What attaches Lewis’s admiration to Ramsey himself is at least in part, I think, some kind of causal connection between Lewis and Ramsey, and not a matter of properties that Lewis attributes to Ramsey. But filling in the details properly here will, I suspect, require a quite complicated underlier, unlikely to be confused with (A). My suspicion is that these sorts of complications will quite generally need to be made in Markosian’s underlying truths.

In place of seeking underliers that are confuseable with the originals, I suggest a more modest goal of seeking truths that suffice for the claim in question to be, if not true, then at least quasi-true, as I will say. I will introduce the notion of quasi-truth informally at first, and then give a more precise characterization. The working idea of a quasi-true sentence is one that, philosophical niceties aside, is true. Put a second way, a sentence is quasi-true if the world is similar enough to the way it would have to be for the sentence to be genuinely true. A third characterization specifies quasi-truth by the role I want it to play in my defense of presentism. To remain plausible, presentism should not require us to drastically alter our beliefs about the past; giving up on our ordinary beliefs being true, but retaining belief in their quasi-truth, is intended to be sufficiently non-drastic alteration.
Let us look at an example in some detail. Ordinary folks say ‘Abraham Lincoln was tall’. The presentist’s reconstruction of the past renders this sentence almost, but not quite true. There are no true singular propositions about Lincoln since such propositions do not exist; what is true instead is a network of tensed propositions. In this network are included various descriptive facts, such as the fact that there was someone named ‘Abraham Lincoln’, who was president of the United States, signed the Emancipation Proclamation, etc., and who was tall. Anti-descriptivist reasons for thinking that such facts are not sufficient for the truth of the sentence in question are familiar. But the presentist can get much closer. For consider other facts that the anti-descriptivist thinks are relevant to the truth of the sentence, such as facts about the causal chain connecting Lincoln to current uses of ‘Lincoln’. Such facts have their presentist analogs: the network will include a variety of tensed facts specifying an initial baptism of ‘Lincoln’, subsequent utterances of that name, and so on.

In the network, in fact, can be included everything one could say in the presentist’s tensed language about the relevant bit of the world at a subatomic level. Thus, the presentist can provide a sort of supervenience base for the sentence ‘Abraham Lincoln was tall’. Not in the usual sense, for according to usual understandings of supervenience, the existence of a supervenience base for a sentence renders that sentence true. But the presentist can provide what would be a supervenience base if presentism were false — or better, if eternalism were true. If there is such a “quasi-supervenience base” for a sentence, S — to a first approximation, a true proposition, P, that would have been true and entailed the truth of S, if eternalism were true — then I will call that proposition P an *underlying truth* for S, and will call S *quasi-true*. And finally, I say that the presentist sufficiently discharges her obligation to “common sense” if she can show that ordinary utterances about the past are quasi-true.

This characterization of quasi-truth, I believe, fits my initial gloss of quasi-truth as “truth, philosophical niceties aside”, and “similar enough to the truth”. Moreover, I also think the notion of quasi-truth can play the role I have prepared...

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11 Worries about the definition of quasi-truth, including the worry that conditionals of this sort are invariably vacuously true, are addressed in section 4 below.
for it. I said earlier that a presentist who completely rejected ordinary talk about the past would be committed to an implausible skepticism, because we typically have good evidence for our claims about the past. But if the presentist can maintain that ordinary talk about the past is quasi-true, then this skepticism is avoided. Surely, ordinary empirical evidence does not favor the truth of ‘Lincoln was tall’ over its quasi-truth. The reason is that ordinary empirical evidence seems qualitative.\(^{12}\) Ordinary empirical inquiry will justify a belief that there was an object with certain qualitative features. One needs philosophical argument, which goes beyond ordinary empirical justification, to support the further claim that a singular proposition about a particular past object exists and is true. Thus, my presentist attributes to sentences about the past a status that is supported by ordinary evidence. Moreover, my presentist says that the past is quite similar to what would be required for the truth of our utterances about it. Objectionable skepticism is thereby avoided.

Once we give up confuseability as the mark of an underlier, we need an alternate psychological explanation of why sentences like (G) appear true. But an explanation is readily found: in the ontologically unscrupulous nature of natural language. In ordinary life we do not speak as if presentism is true: we quantify freely over merely past objects, and we are taught to talk as if such objects exist. Similarly, in ordinary life we quantify freely over non-actual objects, and over abstracta, without thinking very hard about whether such objects exist; we say that there are many ways to skin a cat, without worrying about what, exactly, a way is. This is psychological explanation enough.

It is no accident that ordinary language quantifies so readily. It is convenient to quantify over things you do not really believe in, if there is a way to pass back and forth between quasi-truths and real truths. Even if individual speakers cannot perform these conversions, it is easy to see how a group of people could evolve a practice of free-wheeling quantification: the talk would be useful, whether or not anyone is capable of actually doing the conversions. Suppose that in fact there are no such things as propositions, by which I mean that there are no entities that are capable of playing the role propositions are supposed to play. (This might be so if a very strong form of nominalism held.)

\(^{12}\)In saying that ordinary empirical evidence is qualitative, I do not mean to deny that ordinary empirical inquiry typically results in justified belief in singular propositions. I grant that in typical cases, given good evidence, a justified belief results in a proposition about a particular individual, if that proposition exists. It does not follow that the evidence justifies the conclusion that the proposition exists; it could simply be the case that if the proposition exists, it is justified.
Sentences involving apparent quantification over propositions, for example ‘Starbuck believes everything Boomer says’, would nevertheless be quasi-true (provided we refine our definition of quasi-truth to eliminate the assumption of propositions — see section 4 below). The underlying truths might be facts about Starbuck’s brain, and his causal relations to Boomer’s utterances. Despite the fact that no one thinks about these underlying truths, and no one can “translate” sentences about Starbuck’s beliefs into sentences about these underliers, it will be useful to talk about Starbuck’s beliefs in this way in virtue of the truth of the underliers. Since the underlying truth would be a supervenience base for the sentence ‘Starbuck believes everything Boomer says’ if propositions existed, the quasi-truth of this sentence will have the same implications for other matters, such as Starbuck’s behavior, as would the truth of the sentence. The sentence will be just as useful for explaining behavior and other matters as it would be if it were genuinely true (more on this example below).

The strategy, then, of seeking non-synonymous underliers for truths about the past requires only that the underliers suffice for quasi-truth, and not truth; and moreover, there is no requirement that ordinary people have thought of the underliers. I like this strategy for dealing with ontological commitment, and not just in the case of presentism. I discuss other applications of the strategy below; for the remainder of this section I would like to explore just how far the method will take us in the defense of presentism.

First, once we give up on synonymy, we need no general paraphrase technique that will give “non-ad-hoc paraphrases” for truths about the past. For the objection that a proposed underlier is too complicated, or is ad hoc, seems to be based on the assumption that the underlier is intended to be synonymous with the original.

Secondly, given the way I have “lowered the bar” and required of ordinary utterances mere quasi-supervenience on presentist facts, the presentist can answer many challenges all at once. For example: in the case of cross-time relations, all internal relations are immediately rendered unproblematic. Internal relations are those that supervene on the intrinsic properties of the relata. But intrinsic properties of objects at times may be captured in the tensed language of the presentist; cross-time internal relations thus quasi-supervene on facts acceptable to the presentist. Consider, for example, the assertion that there is someone who is exactly as tall as some ancient Greek philosopher. As-tall-as is an internal relation, the holding of which supervenes on the heights of the relata. The non-presentist will agree that the truth of any cross-time ascription of this relation will be entailed by a true tensed proposition asserting the heights
of the involved objects; in the present case such a proposition might be the proposition that **there is a person who is 5 feet tall exactly, and it was the case over 2000 years ago that there exists a Greek philosopher who is exactly 5 feet tall.** Given presentism, this proposition does not entail the truth of ‘there is someone who is exactly as tall as some ancient Greek philosopher’; but it counts as an underlying truth for this sentence since the entailment holds if eternalism is true. Therefore, the sentence is quasi-true.

External relations, for example spatiotemporal relations, do not supervene on the intrinsic natures of their relata. A presentist, therefore, will need to find a quasi-supervenience basis for all cross-time external relations (and also cross-time relations that are neither internal nor external). But it is a reasonable hypothesis that, as the non-presentist would put it, all relations supervene (globally) on the totality of facts about i) where and when intrinsic properties are instantiated, and ii) nomological matters, including causal relations and laws of nature. Indeed, it is a reasonable hypothesis that all facts whatsoever supervene on this basis. So if a presentist can find a quasi-supervenience basis for nomological and spatiotemporal facts, then she will have found a quasi-supervenience basis for all facts, and hence will have solved, in one fell swoop, all ontological problems for presentism of the sort considered in this paper: any utterance deemed true by the non-presentist will turn out quasi-true. I consider classes i) and ii) of facts in turn.

Using tensed sentences of the form ‘It WAS/WILL BE the case \(n\) units of time ago/hence that there is an object with intrinsic property \(F\)’, the presentist can provide a quasi-supervenience basis for many claims regarding the instantiation of intrinsic properties at past and future times. What is less clear is that the full range of claims of spatiotemporal property instantiation in science and everyday life can be given a quasi-supervenience basis. As mentioned in note 1, I am ignoring the well-known apparent conflict between presentism and special relativity. But even setting this aside, there is a question about how a presentist will ground claims that specify both that a property was (or will be) instantiated, and also, roughly, *where* that property was instantiated. The problem would be manageable if we were willing to accept a Newtonian

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13 See Lewis’s *On the Plurality of Worlds*, p. 62, for this taxonomy of relations.
14 Haecceitists will disagree here. At this point, I think the presentist needs to take a stand and reject haecceitism, at least about non-present objects; e.g., a presentist must deny that, if eternalism were true, ‘Lincoln was tall’ could differ in truth value between possible worlds that are alike with respect to qualitative tensed facts and with respect to singular propositions about present objects.
conception of substantival space persisting through time, together with its associated notion of absolute rest and position, for then tensed claims of the following form could serve as underlying truths: ‘It WAS/WILL BE the case \( n \) units of time ago/hence that there is an object at place \( p \) with intrinsic property \( F \)’. But without this assumption, it is at least prima facie difficult to see how a presentist could provide underlying truths for certain statements involving the comparison of positions at different times, for example the claim that a certain particle has been in a state of inertial motion throughout a certain period of time.\(^{15}\) I will say no more about this matter here, save that it is a challenge that, to my knowledge, presentists have not yet adequately faced.

If the spatiotemporal pattern of instantiation of intrinsic properties can be given a quasi-supervenience basis, the defense of presentism then reduces to the problem of showing that causation and laws of nature quasi-supervene on the totality of tensed facts that the presentist accepts. First note that if Humean Supervenience\(^ {16}\) is true, this problem can indeed be solved. According to Humean Supervenience, as a non-presentist would put it, anyway, the totality of facts about the instantiation of local qualities throughout spacetime settles all other facts, including nomological facts.\(^ {17}\) If the difficulty of the previous paragraph can be answered, every case that a non-presentist would describe as the instantiation of a local quality at a spacetime point has a presentist analog: a tensed fact about the instantiation of a local quality. Hence, if Humean Supervenience is true, these tensed facts will form a quasi-supervenience basis for facts about everything, and so for facts about laws.

Suppose, on the other hand, that Humean Supervenience is false. The leading non-Humean view of laws of nature is the view that laws of nature are relations between universals, defended by Fred Dretske, D. M. Armstrong,\(^ {15}\) Note that we do not need to make sense of absolute rest in order to make sense of inertial motion — in both Minkowski and neo-Newtonian spacetimes, the latter but not the former is well-defined.


\(^ {17}\) Theories of lawhood that are consistent with Humean supervenience include Lewis’s version of Ramsey’s best-system theory of laws (the most recent exposition is in “Humean Supervenience Debugged”), and the traditional regularity theory. (See David Armstrong, *What is a Law of Nature?* (Cambridge: Cambridge University Press, 1983), part 1, for a critical discussion of the regularity theory.) Theories of causation that explain causation in terms of laws will be consistent with Humean supervenience if one of these Humean accounts of lawhood is true.
and Michael Tooley. On this view, we have a law that Fs are Gs iff the “necessitation” relation holds between the universals F and G. Laws would be unproblematic for presentists on this view if the relevant universals all currently exist, for then statements of lawhood could be straightforwardly true — quasi-truth would not be needed. But on Armstrong’s version of the theory, universals do not exist unless they are instantiated; for the presentist this formula becomes: a universal exists only if it is currently instantiated. This means trouble if some universals involved in the laws used to be instantiated but are no longer. Imagine that a certain sort of subatomic particle comes into existence only under very extreme conditions, and imagine that these conditions were only created once, in the past. A presentist might try appealing to descriptive propositions about these merely past universals, but this works only if universals have essences that can be captured by such descriptive means.

Turning next to causation: on many views, facts about causation supervene on facts about laws plus the instantiation of qualitative properties and single-time relations. If this is true, then attributions of causation will be quasi-true for the presentist provided that attributions of laws are (since instantiation of qualitative properties and single-time relations can be captured by the presentist’s tensed claims). But problems will arise if “singularism” about causation is true; if, that is, causal relations hold independently of facts about laws. The problem is particularly acute if the causal relation can hold between temporally distant events. What would be the underlying truths for this sort of causation at a temporal distance?

One might provide the underlying truths by accepting a “sentence operator” account of causation. The fundamental locution on this view is not ‘event e₁ causes event e₂’, but rather involves a two-place tense operator \( \Box \text{BECAUSE } \phi, \text{it WILL be the case } n \text{ units of time hence that } \psi, \) where \( \phi \) and \( \psi \) are filled in with sentences. Thus, if someone’s current happiness is caused by someone’s

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19 For Tooley, universals are transcendent, and hence can exist uninstantiated; the problem discussed in the text would therefore not arise. See Tooley, *ibid.*, pp. 72–75 and section 3.2.

20 Compare Tooley, *ibid.*, pp. 72–73, who discusses the parallel case of a universal that never is actually instantiated, but might have been if certain conditions had arisen.

21 If causally related entities were always connected by a chain of temporally overlapping causally related events, then the presentist might be able to utilize tensed claims describing these chains to provide a quasi-supervenience basis for attributions of causation.

22 For similar proposals about presentist causation (without the present reservations) compare Robert M. Adams, “Time and Thisness”, in P. French, T. Uehling, and H. Wettstein, eds.,
eating dinner an hour ago, the underlier is the following:

ONE HOUR AGO (BECAUSE someone is eating dinner, it WILL be the case in an hour that someone is happy)

This seems to be the best the presentist can do here, though the approach places some limits on possibilities for causation. Imagine a world where objects pop out of existence, causing distinct objects to pop into existence an hour later, and suppose that balls A and B disappear, and an hour later, balls C and D appear. Which of the two balls appearing were caused by which of the first two balls? It seems that there are two distinct possibilities; A could cause C while B causes D, or, on the other hand, A could cause D while B causes C. To account for these two possibilities, the presentist must come up with underlying facts that distinguish them; but there appears to be only a single underlying tensed fact:

ONE HOUR AGO (BECAUSE a ball disappears, one hour hence, a ball WILL appear; and BECAUSE a ball disappears, one hour hence, a ball WILL appear)

The presentist can distinguish these possibilities if there are qualitative differences between the balls in virtue of which the causal relations hold; if balls A and C are red and B and D are blue, then in one world we can say that a red ball’s disappearing causes a red ball’s appearing, whereas in the other world a red ball’s disappearing causes a blue ball’s appearing. But one would have thought that this sort of scenario could have occurred with duplicate balls, or, more exotically, with balls that, by virtue of symmetry in their worlds, have exactly the same qualitative features, both relational and intrinsic. Moreover,


23We might try to make the caused state of affairs in the underlying fact de re:

There currently exist two balls, C and D, and ONE HOUR AGO (there exists an x and a y, and BECAUSE x disappears, one hour hence, C WILL appear; and BECAUSE y disappears, one hour hence, D WILL appear)

But for this to be true would require the falsity of serious presentism, a move we are currently trying to avoid; see note 9.
one would have thought that causal differences of this sort could obtain *without* obtaining in virtue of the qualitative differences of the involved objects. These are possibilities that can only be admitted by a non-presentist.

This discussion of spatiotemporal property instantiation, laws, and causation shows that the present method for defending presentism is not a blank check. My claim has been that presentism remains plausible if, or to the extent that, ordinary statements about the past can be shown to be quasi-true. Establishing quasi-truth in effect amounts to showing that intuitively distinct possibilities can be distinguished on the presentist’s terms, i.e., using the presentist’s tensed language and assuming the non-existence of non-present things. And it is an open question to what extent this can be done. Indeed, given certain assumptions about laws, causation, and related matters, the presentist cannot show that all ordinary beliefs about causation are quasi-true. The price to pay for presentism, therefore, is rejecting these assumptions; the price for the assumptions is rejecting presentism.

4. More on the notion of quasi-truth

I said in the previous section that a sentence is quasi-true iff there’s some true proposition that, if eternalism were true, would be true, and would entail the truth of that sentence. There are several questions to be asked about how this definition is to be understood. First, since eternalism seems to be the sort of proposition that is metaphysically necessarily false if actually false, the conditional beginning with ‘if eternalism were true’ cannot be understood in such a way that it is vacuously true just in virtue of having a metaphysically impossible antecedent. I do not regard this as a great obstacle to understanding the conditional. Even if the denial of presentism is metaphysically impossible, in some broader sense it is not impossible; it is not impossible in the way that ‘it is raining and also it is not raining’, and ‘some bachelors are married’ are impossible. For lack of a better term, I will call this broader sense of possibility “logical possibility”. I think it is plain that we do make non-vacuous sense of counterfactual conditionals with metaphysically impossible but logically possible antecedents, and I propose to make sense of one myself in giving my

\[24\] It is important that the definition require that, if eternalism were true, the underlier would be *true*, as well as that it would entail S; for otherwise, every sentence, S, would turn out quasi-true: the underlier would be the proposition that *either eternalism is false or S is true*. Thanks to John Hawthorne for a helpful discussion of this matter.
definition.  
Secondly we must ask about the strength of ‘entails’. The underliers I have in mind do not logically entail the target sentences, since, the presentist supposes, presentism is actually true but the target sentence is not. The right strength seems to be that of metaphysical entailment, by which I mean that in no world that would have been metaphysically possible (if eternalism were true) is the underlier true and the sentence false. Thus, the definition reads: S is quasi-true iff there is some true proposition that would have been true and metaphysically entailed S’s truth, if eternalism had been true.

There is finally the question of the ontology and ideology required by my definition of quasi-truth. The commitment to modal talk via supervenience is at the heart of my proposal, and presumably ineliminable, though it should be noted that this need not require a commitment to unactualized possibilia; one could take modal notions as primitive, or reduce modality in some way that does not require possibilia. A more worrisome feature of the definition is its assumption that underlying truths are propositions. This assumption might be unwelcome, most notably if the method of quasi-truth is to be used to eliminate commitment to propositions themselves. One remedy would be to utilize sentences rather than propositions. This could succeed even if sentences are unsuited to generally replace propositions, for many of the familiar limitations of sentences do not affect my use of underliers (for example, the underliers do not need to be objects of belief or semantic values of “that-clauses”). But a worry persists: we do not want underlying truths to be limited to those expressible in human languages. There are various fixes, none perfectly satisfactory; here

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25See on this topic Jeffrey Goodman, “Extended Ersatz Realism” (unpublished); William Lycan, Modality and Meaning (Dordrecht: Kluwer Academic Publishers, 1994), 38–39; and Takashi Yagasawa, “Beyond Possible Worlds”, Philosophical Studies 111 (1987): 175–204. The counterfactual conditional may not be required; the conditional could perhaps be one of entailment where the modality is more strict than metaphysical necessity, but not so strict as purely syntactic or model-theoretic entailment.

A skeptic might allow some counterpossible conditionals but balk at the rich array of counterpossibles I need — conditionals expressing complex supervenience relations that would hold if certain metaphysically impossible theses were true. While I cannot give a theory of the truth conditions of the counterpossibles I need, I think it can be seen that the worry is unfounded. Whatever one thinks these truth conditions are, exactly — perhaps conditions referring to conventions, or causal or logical facts — the truth-makers required for the modal statements I need are presumably available whether or not presentism is true. Thus, the present case is quite different from well-known problematic uses of counterfactuals where the truth-makers appear to be missing — counterfactuals that “float” on nothing (see for example Armstrong op. cit., p. 31).
are two. 1. Let underliers be sentences in a “Lagadonian” language, in which sparse universals, whether or not humans know of them, are used as predicates denoting (expressing) themselves.\textsuperscript{26} Cost: commitment to sparse universals. 2. Since we have no need for false underliers, let the underlying truths be facts, rather than propositions. Cost: commitment to facts.

5. Truth after all?

I have said that a presentist can reconcile a restrictive ontology with freely quantifying natural language and belief by retreating to quasi-truth. But might quasi-truth actually suffice for truth?

“Objects are in contact only if there is absolutely no space between them.” That is what we would have said before the conception of matter given to us by classical physics; indeed, we would have regarded this as being definitional of contact. We know now that nothing satisfies the definition; must we conclude that earlier folk never truly ascribed the predicate ‘contact’? A common response is that since the world was \textit{near enough} to the folk’s definition of ‘contact’, their ascriptions of contact were true. Despite the fact that the folk would have vehemently adhered to their original “definition”, their word ‘contact’ expressed a relation that held in paradigm cases of contact, a relation that perhaps involves lack of visible separation, resistance to further smashing together, etc. David Lewis describes this view about content as follows:\textsuperscript{27}

\begin{quote}
It’s an old story. Maybe nothing could perfectly deserve the name “sensation” unless it were infallibly introspective; or the name “simultaneity” unless it were a frame-independent equivalence relation; or the name “value” unless it couldn’t possibly fail to attract anyone who was well acquainted with it. If so, then there are no perfect deservers of these names to be had. But it would be silly to lose our Moorings and deny that there existed any such things as sensations, simultaneity, and values. In each case, an imperfect candidate may deserve the name quite well enough.
\end{quote}

If a sentence is quasi-true, then the world is fairly similar to the way it would need to be for the sentence to be true, since there is a true proposition that would be true and would suffice for the sentence’s truth, if eternalism were true.

\textsuperscript{26}See Lewis’s \textit{On the Plurality of Worlds}, section 3.2.
\textsuperscript{27}“Humean Supervenience Debugged”, p. 489.
On the view of content in question, would this make the sentence in question true after all?

The question may not have a definite answer. Surely there is no sharp line dividing “imperfect candidates” from near-misses. Nevertheless, I think there is reason to doubt that quasi-truths are truths. We should distinguish between candidates for being expressed by sentences and candidates for being expressed by sub-sentential expressions. If there is an imperfect but good enough candidate for being referred to by the predicate ‘contact’, it is plausible to say that the sentence ‘some things come into contact with others’ is true. This is less plausible when there is no candidate for the predicate, and only a candidate for the whole sentence; the reason is that there is some pressure, admittedly defeasible, to respect the structure of a sentence in assigning it content. The sentence is, syntactically, a quantified sentence saying that there are objects of a certain type. It seems right to say that this sentence is true only if there really are two objects that stand in the relation of contact.

Call an interpretation of a language “weakly devious” if it respects the logical structure of the language (in other words gives a conjunctive semantics for syntactic conjunctions, a quantificational semantics for syntactic quantificational sentences, and so on), but “reinterprets” (along the lines of ‘contact’) some sub-sentential expressions such as predicates, names, functors, etc. And call an interpretation “strongly devious” if, and to the extent that, it does not respect the syntactic structure of the language in this way. I am suggesting that, other things being equal, strongly devious interpretations provide worse candidates for reference and meaning than do weakly devious interpretations. The truth of this principle (defeasibly) counts against the truth of the presentist’s quasi-truths, since the underlying truths I have imagined do not structurally match the sentences in question. The sentence ‘there was a Greek philosopher who is exactly the same height as someone currently existing’ is, syntactically, the result of applying existential quantifiers to an atomic formula; but the proposed underlying truth is expressed by the conjunction of two tensed existentially quantified sentences: ‘there is someone who is exactly five feet tall’, and ‘WAS(there is someone who is a Greek philosopher, and who is exactly five feet tall)’.

There is a further reason why this underlying truth should not count as a devious meaning for the sentence ‘there was a Greek philosopher who is exactly the same height as someone currently existing’: it would only be plausible as a sufficient condition for the truth of the sentence in question. One could, of course, utilize instead a disjunction of all the underlies, which would itself
count as an underlying truth for the sentence, and would be a more plausible candidate for being the devious meaning of the sentence. But there is a further obstacle: I think there is reason to prefer *simple* strongly devious interpretations over extremely complex ones. This principle, if granted, would provide more reason to claim that the presentist’s quasi-truths are *merely* quasi-true.28

6. Other desert landscapes

Presentists are not the only ones who face the dilemma with which we began. Non-present objects are not the only dubious things over which natural language and thought quantify. In the present section I will explore the quasi-truth defense of some restrictive ontologies other than presentism.29 But first let me point out that the defense will not work for eliminating commitment to theoretical entities in science, electrons for example. No one who believes in electrons thinks that facts about electrons supervene on other facts, observable facts for example. Our evidence for claims about electrons admittedly comes from observation, but the familiar fact that theory is underdetermined by data

28 In a forthcoming paper, “The Ersatz Pluriverse”, I provide a strongly devious reinterpretation of sentences apparently quantifying over possibilia, but it is a simple strongly devious reinterpretation, and it is not *too* strongly devious, and so, I think, is still plausible as preserving the truth of such talk. But if I am wrong about this, I would not mind accepting that talk about possibilia is merely quasi-true. Note that we would then need an account of quasi-truth for non-contingent subject matter; see note 29.

29 I do not pretend that the present approach provides a completely general haven from commitment to unwanted entities. One case I will not discuss here is that of mathematical entities. Under the present modal definition of quasi-truth, my approach is unsuitable for defense of nominalism about pure mathematics, and in general for cases involving non-contingent truth. Any proposition trivially counts as an underlying truth for sentences of pure mathematics simply because of the fact that if mathematical entities existed then any true proposition would be metaphysically necessarily sufficient for all mathematical propositions. Defending desert landscapes isn’t *that* easy! The presence of such “underlying truths” would not make the world similar to how it would have to have been for the mathematical sentences to be true; and their presence would not make platonistic assertions “true, philosophical niceties aside”. As for applied mathematics, the quasi-truth defense may well be appropriate, but it seems glib to appeal to quasi-truth and leave it at that, for it is not immediately obvious that there are indeed nominalistic underlying truths for the statements of applied mathematics. Indeed, one could regard Hartry Field’s *Science Without Numbers* (Princeton: Princeton University Press, 1980) as putatively establishing that applied mathematical claims are quasi-true: the representation and uniqueness theorems that Field discusses in chapters 4 and 6–8 would hold if Platonism were true, and thus in that case, the facts captured by the nominalistic axiomatizations Field discusses would be a quasi-supervenience base for Platonistic scientific claims.
shows that it would be possible for the same observational data to be caused by many possible micro-configurations. Observable facts, therefore, do not form a quasi-supervenience base for claims about electrons, and so if there are in fact no electrons, claims about them will not be quasi-true. This is, I take it, a desirable feature of the quasi-truth defense, that it brings out an asymmetry between scientific and “philosophical” ontological commitment.\textsuperscript{30}

A case other than presentism where the defense might be employed was noted above: someone who disbelieved in propositions could hold that statements that appear to quantify over propositions, for example ‘Starbuck believes everything Boomer says’, are quasi-true; the underlying truths would be facts about Starbuck and Boomer on which the truth of the sentence would supervene if propositions existed. As I have been arguing, it is not implausible to deny that this sort of sentence is true, provided one can show that it is at least quasi-true.

One sort of argument for the existence of propositions has therefore been answered, an argument premised on the apparent truth of sentences that appear to quantify over propositions. Another sort of argument, based on considerations of logical form, remains, however.\textsuperscript{31} Argument A1 seems plainly valid:

\begin{quote}
Argument A1:

Starbuck believes everything Boomer says

Boomer says that \textit{The Galactica} is under attack

Therefore, Starbuck believes that \textit{The Galactica} is under attack.
\end{quote}

\textsuperscript{30}These considerations also undermine what otherwise might have seemed a promising solution to the problem at the end of section 4 of eliminating the commitment to propositions in the definition of quasi-truth. The seemingly promising solution is an alternate definition of quasi-truth: S is quasi-true iff, had eternalism been true, S would have been true. (This would bring my proposal closer to a certain kind of fictionalism, for example the fictionalism about possibilia defended in Gideon Rosen’s “Modal Fictionalism”, \textit{Mind} xcix (1990): 327–354.) The problem is that this definition cheapens quasi-truth by not requiring the \textit{actual} existence of underlying truths. Granted, the conditional ‘had eternalism been true, S would have been true’, when true, will hold in virtue of the nature of the actual world; but in some cases a sentence might turn out quasi-true despite insufficient grounding in actual fact. It would be bogus for someone who disbelieved in subatomic particles, for example, to say that ‘there exist carbon atoms’ is quasi-true, and yet, the conditional ‘if there had existed subatomic particles, then there would have existed carbon atoms’ is presumably true.

But this could only be true if i) the first premise is interpreted as quantifying over propositions, ii) the second premise attributes a relation between Boomer and a proposition, and iii) the conclusion attributes a (different) relation between Starbuck and that same proposition. But if these facts about the logical form of the contained sentences are correct, then, since sentences like the ones in the argument are often true, in particular ones like the second premise which express relations between persons and propositions, there must exist propositions.

It is always open to a nominalist about propositions to try her hand at paraphrase; and perhaps she can paraphrase the sentences in the argument in a way that preserves its quantificational structure, but in which the entities quantified over are deemed less objectionable than propositions. But I will proceed on the assumption that this way out will not succeed. In particular, I will assume that no nominalistically acceptable paraphrase of the first premise can be obtained.

Nominalists might divide about what to say about the second premise and conclusion, however. Unlike the first premise, they contain no overt quantification over propositions. A nominalist might regard these simple propositional attitude sentences as being true, and as not attributing relations between persons and propositions. In this case, the argument would be regarded as invalid, and so unsound. On the other hand, the nominalist might insist that the second premise and conclusion concern propositions, and are therefore false (or lacking in truth value). In this case, the argument would be regarded as valid but unsound. In each case, then, the argument is unsound; but this generates a serious problem for the nominalist. We clearly enjoy inferential success, make useful predictions, and so on, using quantificational language; if we did not, we would have given up using such language long ago. How can this success be explained if arguments like A1 are invariably unsound?

Notice first that the existence of speakers’ intuitions that A1 is valid does not provide a strong reason for thinking that it is indeed valid. The nominalist would be perfectly reasonable in claiming that the argument only seems valid because it shares surface form with arguments that are valid, for example:

Joe loves every friend of Frank
Chet is a friend of Frank
Therefore, Joe loves Chet

If analytic philosophy has succeeded in anything, it has been in showing the
dangers of being misled by the appearances of language (think of ‘the round square’, ‘the average family’, and so on.)

What the nominalist must do is explain how we could enjoy inferential success in employing arguments like A₁, if such arguments are invariably unsound. The answer lies in the fact that if a sentence is quasi-true, this typically will have many of the same entailments as would its truth. The first premise of the argument, that Starbuck believes everything that Boomer says, is quasi-true. It therefore has a true underlier, which concerns facts about Starbuck vis a vis Boomer, and which would be true and suffice for the truth of the sentence, if propositions existed. There is likewise an underlier for the claim that Boomer says that The Galactica is under attack (nominalists divide, recall, on whether or not this underlier actually suffices for the second premise’s truth).

Now, surely, these underlying truths stand in logical relations that match the logical relations that hold between the premises and conclusion in the argument, or would have held if propositions had existed. That is, the truths underlying the premises surely imply a truth underlying the conclusion — if the world at the microscopic level is sufficient, but for the non-existence of propositions, for Starbuck believing everything that Boomer says, and for Boomer saying that The Galactica is under attack, then the world will be sufficient at a microscopic level (but for the non-existence of propositions) for Starbuck believing that The Galactica is under attack. Thus, the argument has the feature of quasi-validity: if the premises are quasi-true or true, then so will be the conclusion. Since for ordinary purposes quasi-truth is as good as truth, it follows that quasi-validity is as good for our inferential purposes as validity, and moreover, that quasi-soundness (quasi-validity plus true or quasi-true premises) is just as good for our inferential purposes as is soundness. Thus, even if arguments of the kind considered here are invariably unsound, they are in many cases quasi-sound, and this sufficiently explains the success of our inferential practices. (Notice that I am not saying that ordinary speakers know any of this. The explanation of our inferential success did not depend on our appreciation of any of the above.)

A similar account of other sorts of quantification over dubious entities can be given. We utter sentences that appear true and which quantify over ways:

How might logical relations vary from world to world? Suppose the nominalist says that in the actual world, simple propositional attitude sentences are true, and so do not concern propositions. A₁ is therefore invalid. But if there had existed propositions, surely simple propositional attitude sentences would have then concerned them; A₁ would then have been valid.
There are many ways in which I could win this chess match and we utilize arguments that appear sound, and whose soundness appears to depend on quantification over ways:

Joe has tried every possible way to outsmart Frank
Wearing a false mustache is a possible way for Joe to outsmart Frank
Therefore, Joe has tried wearing a false mustache

Sentences that quantify over ways are quasi-true despite being false, for if there were such things as ways, facts about ways of winning chess matches would supervene on facts about chess and chess players; such facts are therefore, in this wayless world, underlying truths for sentences quantifying over ways. By according sentences quantifying over ways the status of quasi-truth, we avoid being absurd skeptics. And in virtue of these underlying truths, arguments of the kind displayed can be useful despite being unsound, for they are often quasi-sound.

7. Conclusion

Quine said that the ontological commitments of a theory are the values of the bound variables in a first-order rendition of that theory. Ordinary language and thought quantifies over all manner of implausibilia. When first-order paraphrases of everyday locutions were available, Quine took that route, but where paraphrase was not forthcoming, Quine was only too ready to simply jettison ordinary thinking, and adopt new, scientific, theories and ways of talking.

Since then, many have concluded that Quine’s willingness to quine vast realms of ordinary discourse was over-zealous, and I agree. But this has led too many contemporary philosophers to postulate abstracta to preserve ordinary talk. We can yearn with Quine for desert landscapes, yet avoid the Quinean mangling of ordinary talk and thought, if we reject Quine’s conception of ontological commitment. Ordinary talk and thought, while not our best theory, is a good theory, and should be respected. It is respected well enough if we regard its sentences as being quasi-true.

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