

# Non-Persistent Truths and Alethic Charity

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## *Abstract*

In his fascinating paper on non-persistent truths, Andrea Bonomi makes the case that the truth value of propositions may shift over time, and he takes issue with Gareth Evans' criticism of such a view. Some of the linguistic evidence provided by Bonomi may strike philosophers as suspect, but I build a case for the legitimacy of such evidence under a principle that I call "alethic charity," which governs folk truth attributions. I also speculate that some of Bonomi's judgments may reflect the hidden presence of epistemic modality.

*Keywords:* Tense, Semantics, Truth, Modality, Alethic charity.

## 1. Introduction

Many years ago, when I was a junior professor visiting Italy, I was introduced to the work of Andrea Bonomi. At the time I was very interested in the semantics of natural language, and I was also interested in metaphysics and the philosophy of time. It never occurred to me that I would run into a person with similar interests, and I certainly never expected to see the metaphysics of natural language project carried out with such acumen in both linguistics and in philosophy. Bonomi's work was an inspiration to me then and it remains an inspiration to this day.

In this paper I want to use "Non-Persistent Truths" as a springboard for some speculative reflections. To do this, I am going to accept the critical data and some of the central claims that Bonomi makes in his paper, although, as we will see, there are points where I will put a different spin on matters and other points where I will resist his conclusions. The key central claim I am interested in involves his idea that future tensed propositions do not have stable truth values. That is, a future tense proposition might be true at one time, yet false at another time. We can illustrate this idea with an example from Bonomi, which I will call "Careless Sandro" (hereafter, I will refer to the first person in this example as "Andrea").

## 2. Careless Sandro

Sandro (a good friend of mine) asks me whether it is *true* that I will leave tomorrow morning with the 6.45 train. My answer is that it is *true* (after all, I've

already bought the ticket, made a reservation, packed my stuff, and so on). So, since he *knows* that I'm leaving with the 6.45 train, and since he is a generous man, Sandro promises to take me to the station. Unfortunately, when he sets the alarm-clock, he makes a mistake. Conclusion: I miss the train. My comment is

- (1) You knew that I would leave with the 6.45 train (you should have been more careful).

The problem, in this case, is that, intuitively speaking, (2) is true at time  $t$  if there is a time  $t'$  such that  $t' > t$  and the following statement is true at  $t'$ :

- (2) Sandro knows that I will leave with the 6.45 train.

On the other hand, it is an uncontroversial assumption that 'know' is a factive verb which entails the truth of the propositional complement. So, what Sandro knows at  $t'$  cannot be *false*... But how is this possible, considering the fact that I did not leave with the 6.45 train?

The most obvious question to raise here is whether Sandro really ever knew that Andrea was leaving on the 6:45 train. Most philosophers will say no, because, after all, it was not true and what was not true can't have been known, full stop.

Philosophers are thus apt to agree with Gareth Evans, who Bonomi uses as a foil here. According to Evans, the problem with allowing the truth of a proposition to change over time, is that it does not provide for a "stable evaluation of [an assertion] as correct or incorrect" (Evans 1985b: 349). Instead, all the utterances of a given sentence express the same proposition, and the evaluation of an utterance is not fixed once and for all, because the proposition it expresses can have different truth-values at different times.

In Evan's view (as Bonomi notes) this brand of temporalism "is such a strange position that it is difficult to believe that anyone has ever held it" (Evans 1985b: 348). Of course, Evans certainly knew that A.N. Prior (and everyone doing his version of tense logic) held some version of such a view—one in which the evaluation of a proposition is not anchored, but it shifts as conditions change. So, for example, if I say "the stoplight is red", the proposition I express is not anchored but will change in truth value as the stop light cycles between red, green, and yellow.

Bonomi formalized Evans position with the following "stability principle (SP)" (whether his formalization is faithful to Evans' position I set aside for now):

- (SP) Let  $u$  be an utterance of a sentence  $S$  and  $t_u$  the utterance time:
- (i)  $u$  must be evaluated as correct or incorrect at  $t_u$ ;
  - (ii) if  $u$  is evaluated as correct (incorrect) at  $t_u$ , then  $u$  must be evaluated as correct (incorrect) at any moment  $t \geq t_u$  (Bonomi 2023: 120).

Of course, this view is not owned by Evans. Evans himself draws on the following passage from Frege:

A thought is not true at one time and false at another, but it is either true or false *tertium non datur*. The false appearance that a thought can be true at one time and false at another arises from an incomplete expression. A complete proposition or expression of a thought must also contain the time datum (Frege 1967: 338).

Bonomi is having none of this stability principle. Drawing on examples like the Careless Sandro case discussed above, he argues that “there are linguistic data showing that the stability principle (SP) is not always applicable and that a flexible notion of propositional content can help to account for the cases in which it fails” (Bonomi 2023: 120).

Since Bonomi wants to advance the thesis that the truth values of these claims can flip over time (or at least people judge that they can). I am going to grant that assumption and see if we can account for both the robust judgments that many philosophers have against this thesis while at the same time accommodating judgments, like Bonomi’s, that swing in the other direction.

Parenthetically, there are objections to be made that I am setting aside here. For example, one might say that there is an unspoken *ceteris paribus* clause in these statements. Perhaps what Sandro knew was that Bonomi would leave on the 6:45 train “Lord willing”. Perhaps no one bothers voicing such disclaimers these days because there isn’t any point in it—everyone knows that plans can get wrecked. Why bother mentioning it?

But setting aside invisible *ceteris paribus* clauses and capricious deities, there is another concern with Bonomi’s Careless Sandro example. Arguably, examples like (1) sound ok in English because the English future tense is constructed with some version of the modal verb ‘will’ (in this case ‘would’), which, thanks to its etymology, possibly carries the residue of its earlier meaning—akin to that of ‘wishes’. In other words, what Sandro knew was not a pure future tense proposition but some sort of modal proposition in which Andrea’s 6:45 departure was either known to be highly probable or wished for by Andrea. (Here I am using the term ‘modal’ very loosely to rope in any linguistic phenomena that might induce intensionality or even hyperintensionality; I have no objections if you prefer to describe these environments in other ways).

You might think that linguistic facts are more helpful to Bonomi’s thesis in the case of Italian, because in Italian one apparently does not need the modal to form the construction (a simple future tense is supposed to be sufficient). However, I’ve never been convinced that the Italian future tense was really modal free, and I even argued against the thesis in Ludlow 1999.

There, I suggested that because the Italian future tense is constructed from the infinitive plus the relevant declination of ‘avere’ (to have), one cannot dismiss the idea that there is some form of modality at work in these constructions. ‘Have’ can do a lot of work in natural language. For example, in English it clearly has use as deontic modal (“I have to go at 6:45”), and I remain to be convinced that something like this is not what is going on in Bonomi’s story. To see the issue, consider an English construction in which ‘have’ is combined with an infinitive: “You knew I had to go to the train station at 6:45 or earlier”. In this case, ‘have’ + infinitive does not express future tense so much as a future-oriented obligation. The issue is that if you decompose the Italian future tense you get an infinitive plus an auxiliary like ‘have’, which could well indicate obligation or some other modal property. This is true for all Romance languages, as far as I know. We can see this in Spanish, for example. In (3) we have the future tense forms of “to speak”.

- (3) hablaré  
hablarás  
hablará

hablarémos  
 hablaréis  
 hablarán

And we are taught that the future tense morphemes are the following,

(4) -aré  
 -arás  
 -ará  
 -arémos  
 -aréis  
 -arán

Or sometimes we are taught that the future ending is attached to an infinitive stem, so that what the actual morphemes are the following.

(5) -é  
 -ás  
 -á  
 -émos  
 -éis  
 -án

Either way, one cannot help but notice the near identity between these morphemes and the Spanish auxiliary 'haber' ('have'), which conjugates as follows (the 'h' is unpronounced):

(6) he  
 has  
 ha  
 hemos  
 habéis  
 han

Alternatively we might say that rather than a single unbroken future tense morpheme we have a modal element and an irrealis marker 'ar', so that the actual structure is something like the following:

(7) habl - ar - é  
 habl - ar - ás  
 habl - ar - á  
 habl - ar - émos  
 habl - ar - éis  
 habl - ar - án

Some version of this paradigm holds in all the Romance languages which have an apparent future tense.<sup>1</sup>

Now it might be argued that while this story tells us something about the origin of the future tense, it does not say much about how tense is actually represented in the logical form of these languages today. That is, it may be that the structure proposed in (7) has long since vanished, and we now express the future

<sup>1</sup> For a very interesting discussion of the origin of future tense in Romance languages, see Fleischman 1982.

using a single unstructured morpheme. However, there is good reason to suppose that this sort of multiple morpheme representation persists to this day.

One piece of evidence for this idea comes from European Portuguese, in which clitic pronouns can be inserted between what I have characterized as the modal element and the irrealis element. That suggests that these two elements are in fact distinct representations and are not merely part of a single unbroken future tense representation. What's more, in other Romance dialects the very same elements (e.g. the auxiliary 'have') do not appear attached to the verb stem at all—as in certain southern Italian and Sardinian dialects in which, e.g., "I will speak" can be expressed as "Ho a parlare", utilizing the auxiliary 'avere' (have) followed by a preposition and only then an infinitive. Here we lose even the illusion of a genuine unbroken future tense morpheme.

If we want, following this general strategy, we can proceed apace with, as far as I know, all the Indo-European languages. All of the future tense forms appear to be somewhat modal in origin. I would merely suggest that perhaps they remain modals (or something very much like modals). This is certainly consistent with the interpretations commonly given to these elements in spoken language. Indeed, when I lived in Italy and was taking courses in Italian, I was taught that in spoken standard Italian, present tense is often what one uses to express the future. So, for example, if one wants to say "I am going to the theater tomorrow", one says the following:

- (8) Vado                    al teatro domani  
       (go-1SG-PRES to the theater tomorrow)  
       (I go                 to the theater tomorrow)

and not:

- (9) Andrò                 al teatro domani  
       (go-1SG-FUT to the theater tomorrow)  
       (I will go            to the theater tomorrow).

When the future tense *is* used, it is quite often used to express possibility or uncertainty, as when one says:

- (10) Saranno            le otto  
       (be-3PL-Fut eight)  
       (they will maybe be at 8:00).

As long as I am deconstructing the Romance future tense here, I might as well say something about past tense as well. A good case can be made that it might not be a logically "pure" tense either. We can see this already with our use of past tense as a kind of modal of possibility as in (11):

- (11) If I had a million dollars...

This has led Isard (1974) to speculate that the PAST morpheme does not strictly temporal but has a more general sense of "remote" (in the above example, the sense would be "remote from reality"). A somewhat similar idea is pursued by Iatridou (1996), who develops a general notion of "exclusion" which covers both possible worlds and temporal intervals.

I should also say something about so-called "evidentials". In many languages (which range from Native American languages to Bulgarian), there are morphemes which have the function of indicating something about the source of the information that we have for our claim. So, for example, a particular morpheme

might indicate that we have firsthand evidence for our claim. Another morpheme might indicate that our evidence is based on secondhand testimony. It is interesting to note that in some cases these morphemes are found in complementary distribution with whatever resources these languages have for expressing the past, suggesting that tense is redundant when you have an evidential, and in turn that what we are taking to be tense morphemes or aspectual markers might actually be kinds of evidentials.

This idea is certainly consistent with work on both tense and evidentiality. Izvorski (1997), for example, has argued that the present perfect in many languages (ranging from Turkish to Norwegian to Bulgarian) in fact expresses what she calls the “perfect of evidentiality”. So, for example, the following examples all express a meaning akin to “I apparently/evidently arrived”.

- (12) gel -mis<sup>o</sup> -im Turkish  
 come PERF 1SG  
 Az saflm dos`afl Bulgarian  
 I be-1sg, PRES come-P.PART  
 Jeg har kommet Norwegian  
 I have-1SG, PRES come-P.PART

This whole discussion of tense and modals and evidentials is in the service of suggesting that, even in the case of the Italian tense system, the tense is not so innocent. There may be elements of irrealis and modality and who knows what else hiding in those constructions. Elements that are merely less well hidden in English.

If we stipulate that Bonomi’s example reflects a pure future tense claim, as I noted earlier, most philosophers are going to resist the idea that the truth value of future tense claims like those in Bonomi’s example can actually shift their truth value at different times of evaluation. But philosophers are not always so stingy. There is a recent body of literature in which many philosophers are more than happy to have truth values shift with the time of evaluation of a proposition, at least so long as epistemic modality is involved.

In this work, which includes Egan, Hawthorne, and Weatherson (2005), Egan (2007), Stephanson (2007) and McFarlane (2011) set the claim up with examples like the following, which I will call “Missing Keys”.

### 3. Missing Keys

Sandro and Andrea are about to leave for the train station but they cannot find the keys to Sandro’s car. Sandro says “the missing keys might be in the desk”. Given the evidence they have available to them in the moment, that certainly seems to be true. Sandro and Andrea then look in the drawer and find out keys are not there. Andrea says “the missing keys were not there”. It follows that it is not the case that the keys *might* have been there, because given what they know now it was never possible that they were there (barring some magical transfer of the keys). Still, at the time, given available evidence, it was not foolish of Sandro to *say* the keys might be there. But Sandro is not allowed to keep insisting now that they might have been there.

As noted in our discussion of Careless Sandro, philosophers are stingy about assigning truth, but we can construct the case so that we might let Sandro off the hook if he sticks to his guns under certain circumstances. von Fintel and Gillies

(2008) provide such an example. Let's suppose Andrea uncharacteristically scolds Sandro for having said the keys were in the drawer: "Why did you say that they keys were in the drawer? They are not so they could not have been!". Sandro now replies thus: "Why are you giving me a hard time? I said they might have been, and given what we knew at the time, they *might* have been!".

von Fintel and Gilles call these cases CIA leaks, where the name 'CIA' stands for Context, Index, and Assessment, and the idea is that there are exceptions to the idea that the truth of an epistemic modal claim is always tied to the time of assessment. Sometimes, we are charitable and evaluate it with respect to the original time of utterance. Other times we are stingy and stick to the evaluation of the claim with respect to the current time. So let's bookmark those two terms for future reference. "Charity" is when we cut some slack for the earlier time evaluation. "Stinginess" is when we stick to the current evaluation time.

Let's now return to example (1) and the case of Careless Sandro and examine them through this lens, supposing that through the modality hidden within natural language tense, we have an effect that is at least similar to epistemic modality and/or evidentiality. In this case, we can say that the initial knowledge claim was relativized to an earlier time, when Sandro was informed of when Andrea would attend his meeting. That knowledge claim, evaluated later, sounds false, because the stingy evaluator wants to evaluate it with respect to the current time. But if one is being charitable (in this case to Andrea, who wants to lean on the earlier time of utterance), one evaluates it with respect to the earlier time, when the plans were made.

In a way, Bonomi needs this play of charity and stinginess to even get his argument rolling. He needs to rely on stinginess to ensure that these claims keep shifting in truth value over time, but he also needs some charity in his Careless Sandro case in order to provide some evidence that the earlier claim was in fact once true. There is a kind of alethic pluralism at work here, and an equivocation in the argument—one necessary to get the position up and rolling. One needs alethic stinginess to make sense of the position, but one needs alethic charity to provide evidence in support of the position (evidence like the judged truth of example (1)).

We will return to this issue in a bit, but first I want to take up the issue of whether there is actually an asymmetry in the future and past tense cases. I am inclined to think not—I see past/future tense symmetry here. To get this ball rolling, let's assume that Bonomi is correct about the future tense cases. We are then going to ask whether it is so obvious that the same cannot be said for the past tense cases. Let's start with the following thought experiment, which I will call "Procrastinating Ernesto".

#### 4. Procrastinating Ernesto

Suppose that Gennaro is organizing the event in which Andrea is to speak. Before the talk, but after the 6:45 train departed, someone asks Gennaro "when is Andrea arriving?" Supposing (falsely) that Andrea successfully boarded his train, Gennaro looks at his watch, and utters (13):

(13) Andrea boarded train 30 minutes ago. He will be here shortly.

Let's now suppose that Ernesto is charged with arranging the paperwork for Andrea's visit. Around 7:00, Gennaro checks to see that the paperwork is in order but finds that Ernesto has not done it yet. Irritated, Gennaro says:

- (14) “Why didn’t you prepare the paperwork for Andrea? You knew Andrea he left at 6:45”.

Now of course most philosophers are going to say that the second sentence in (14) is not true. It was false when Gennaro uttered it, but these are the same kind of judgments that led them to say that it was false when Andrea said, “You knew that I would leave with the 6.45 train”. On the philosopher’s view, neither was true. How could they be? But if we are going to exercise alethic charity here (14) is no worse than (1).

Here is a similar past tense example; let’s call it “Tardy Sandro”.

### 5. Tardy Sandro

Sandro is supposed to meet Andrea at the train station, where Andrea is scheduled to arrive at 3:00. The train is late, arriving at 3:15, but Sandro doesn't get to the station until 4:00. Andrea, angrily addresses Sandro, thus:

“You knew train arrived at 3:00 so why are you only picking me up at 4:00?”

Now, again, you may be thinking that this is not really talking about when the train arrived but only about when it was supposed to arrive or when it was scheduled to arrive, and I feel that too. But is this really any different than the future tense case in (1) when Andrea says to Sandro that he “knew that I would leave with the 6.45 train?”.

I said that I felt the pull to be alethically stingy and say these utterances are false, but that is the well-trained philosopher in me. And despite this training, I have to confess that it makes some sense to be alethically charitable. The history of science is full of (in their time) very sensible knowledge claims that we now know to be false. Newtonian physics is, at the end of the day, false, but it is a bit uncharitable to say that Newton and classical physicists did not know anything. This sort of charity is also evident in much of our ordinary language statements about knowledge. It seems every week I read an article entitled “Everything we knew about *X* is wrong”. This hurts the ears of the philosopher in me, but the charitable approach to knowledge here seems to be taking knowledge to be something like justified belief (truth is no longer part of the definition).

Once we go down this road, the natural line of reasoning is to say that the truth criterion in definitions of knowledge is based on an illusion, and that illusion is grounded in the fact that epistemic modality is ubiquitous in natural language (sometimes hiding in its tense systems) and thus we are mistaking the effects of evaluation at the current time for evidence of a truth criterion in knowledge. It is an honest mistake. How could your judgments about knowledge in individual cases even tease apart these two theories?

Here is why the symmetry is hard to dismiss. By unhooking the truth value of the propositions from the time of utterance and concerns about what really happened, we end up with evaluations that are grounded not on time of utterance and facts about the world, but on the time of evaluation plus the preponderance of available evidence at that time. So, for example, before Sandro forgot about his obligation, Andrea had good reason to think he would catch his train on time and would give his talk at 9:00. That is why his utterance was true (charity true, not stingy true). As he gathers more information about the future, Andrea learns that he will not be giving his talk at 9:00. So, the proposition that he will give his talk at 9:00 flips from true to false.

Here we can see the symmetry in the past and future tense cases. In the case of the future tensed sentences, their “truth” seems to vary with our understanding of the likelihood that they will come true. Since our evidence of that likelihood shifts, so too the evaluation shifts. But the same can be said for past tense statements. They shift in truth value over time as well, depending on the available evidence.

To be sure there is a surface difference in the future and past tense cases, but if you have propositions that shift in truth value, the principal difference is between predictive evidence and reconstructive evidence. In each case the truth value shifts as evidence is gathered or lost, moving forward or backward in time, and it is far from clear exactly how different these forms of evidence are. Our evidence supporting what Sandro will do is not so very different from our evidence of what he has done. Both are based in our changing understanding of Sandro’s psychology and the conditions in which he was or will be operating.

I originally presented the material about hidden modals as a kind of worry or reservation about Bonomi’s project—I was using it to shade his case for future tense admitting changes in truth value over time. But we can take all that information about modals and evidentials and fashion it into something that can give us a new version of Bonomi’s core thesis. You see, one way to take those linguistic facts is as presenting the case that natural language is larded with all sorts of modality and evidentiality—they are everywhere! And this means that almost everything we say will have a propensity to behave as evidential modals behave in formal logics—evaluated with respect to the time of evaluation. The idea is that in natural language there is no modal-free or perhaps no evidential-free content, and to the extent such things exist they are the product of philosophical abstraction.

You may be inclined to argue that we are not really talking about truth or falsity at this point—that we are really talking about credal probability, or some such thing. I’m not going to die on a hill trying to dispute that argument. Still, I do want to say some things about why one might buy the thesis. I do not think there is any disputing that there is a casual, what I have called “charitable” conception of knowledge and truth in which knowledge claims are more akin to notions of endorsement based on available evidence.

The best evidence *against* this charity thesis is that we do not stick to our guns when we turn out to be wrong at a later time. If, based on available evidence we no longer endorse proposition like “there are seven planets”, we do not like to say, “but it was true when I said it”. This is even true when we put the original utterance in quotes and then say, “it was true when I said it”. That just sounds wrong.

But here we are asked to suppose that once the original utterance is placed in quotation marks it is inert with respect to the current context of evaluation, but how fair is that? We know that putting racial slurs in quotation marks does not necessarily dull their harm—their slur meaning leaks out of the quotes. So too, we might think that even though the utterance is now placed in quotes or quoted in some other way, and we cannot avoid interpreting it with respect to current evidence, so that we cannot help thinking that an endorsement with “it was true at the time” has to be evaluated with respect to the evidence available now, and not the evidence available then. No doubt there are exceptions to this rule—the CIA cases that Gilles and von Fintel spoke of, and I would group the Careless Sandro case into those cases. We just need to keep in mind that CIA leaks are not all that easy to come by; alethic stinginess is more common than alethic charity.

Alethic stinginess is particularly strong when we consider ethical claims. There are many propositions that were not long ago considered truisms, but which today are considered cringeworthy or offensive falsehoods. The problem with saying that those propositions were once true is that we have no handy way to expunge currently available evidence from the evaluation of the utterance then, at the original time of utterance. There is just no way to do it, even though we might try—even if we say, “it was true then, in their mouths, given the available evidence”, we cannot help but evaluate the claim given currently available evidence. As with epistemic modals, we might give such a person a pass—“they were wrong, but they did not know better at the time” or we might not. The point is that “true given the available evidence at  $t$ ” just breaks the ears of philosophers. Why is this so?

To get at this, I think we need to consider the deeper point that Evans was making in his paper on tense logic (Evans 1985b). It was not just a point about shifting truth values. It was really a point about the true-at- $t$  predicate. He thought it just did not make sense. The funny thing is that Evans had no issue with the predicate true-at- $w$ , where  $w$  is a possible world, and thus he felt that modal logic was fine but that tense logic rested on a mistake. What is funny is that Williamson (1999) had issues with the true-in- $w$  predicate. On Williamson’s view, if you think that contingency is variation in truth value relative to varying assignments to world variables you are betraying a failure to understand what contingency is. Hawthorne (2015) then riffing off of Williamson’s argument, extended this point to tense, thus rediscovering Evans’ point. To wit: if you think that change in truth value (e.g. future to present) can be characterized as truth values indexed to times, you do not have a handle on what change is. If this is right, then genuine tense cannot be indexed in this way.

I am sympathetic to this line of reasoning, but I believe that Evans was wrong in supposing that this sinks the idea of non-persistent truth values. Why would it? Some things were true but are no longer. You only get in trouble if you try to articulate the content of those formerly true things and say they were true-at-time- $t$ . And Evans, of all people should have seen that you could avoid doing this.

His paper “Understanding Demonstratives” (Evans 1985a) appeared before the tense paper, and in it he defended a Fregean account of indexicals by arguing that in order to express the same indexical content at different times and places one must express that content in different ways. So, for example, a belief that I express today with “I am hungry today” might be expressed tomorrow using the words “I was hungry yesterday”. As Evans remarked, regarding indexicals “we must run to stay still”. Here, Evans was referencing the Red Queen from Lewis Carroll’s *Through the Looking Glass*—a character who had to keep running just to stay in place. It is an apt metaphor for a project that I have called *Red Queen Semantics*. The idea is that semantic theory cannot deliver up static objects as meanings but must provide a theory of how we use diverse expressions at diverse times and places to say the same thing.

It should have occurred to Evans that if this strategy made sense for indexicals it would certainly make sense for tense, and perhaps that was what he fundamentally had in mind as an analysis for tense. You can express the same proposition at different times by using different expressions—for example “‘The light is red’ is true”, but also “‘the light is red’ is no longer true”. A Red Queen Semantist should have no trouble making sense of this—describing the proposition in different ways at different times. But notice that you do not need to build true-at-

*t* into such an account. Likewise, there is no reason to think that this requires you to know the truth of the proposition at every time. Nor is it my understanding that A.N. Prior wished to do such a thing. At least not according to my reconstruction of the project in *Semantics, Tense and Time*.

I want to close by making a key point about Bonomi's core project, which is about making sense of tense and knowledge claims as they are deployed in natural language. Natural language is clearly a much more complicated animal than formal languages are. But there is not any reason to assume, a priori, that unpacking knowledge claims in natural language (tensed or otherwise) would require deploying a truth criterion. Justified belief is enough if you have ways to account for our alethic stinginess. And what I like most about Bonomi's project is the idea that we cannot ignore judgments that break from those of the philosophers, and that we can re-engineer the tools of the philosophers to better understand these alternative judgments. In this case, alethic charity is not something to be ignored; it is something to be investigated using all the logical tools at our disposal.

#### References

- Bonomi, A., 2023. Non-persistent truths [Target Article]. *Argumenta*, 9 (1), 119–156.
- Egan, A., 2007. Epistemic modals, relativism, and assertion. *Philosophical Studies*, 133 (1), 1–22.
- Egan, A., Hawthorne, J. and Weatherson, B., 2005. Epistemic modals in context. In: G. Preyer and G. Peter, eds. *Contextualism in philosophy*. New York: Oxford University Press, 131–169.
- Evans, G., 1985a. Understanding demonstratives. In: Evans, G., *Collected Papers*. Oxford: Oxford University Press, 291–321.
- Evans, G., 1985b. Does tense logic rest on a mistake? In: Evans, G., *Collected Papers*. Oxford: Clarendon Press, 341–363.
- Fleischman, S., 1982. *The future in thought and language*. Cambridge: Cambridge University Press.
- Frege, G., 1967. *Kleine Schriften*. I. Angelelli, ed. Hildesheim: George Olms, 338.
- Hawthorne, J., 2015. Comments on *transient truths: an essay in the metaphysics of propositions* (Berit Brogaard). *Inquiry*, 58 (6), 619–626.
- Isard, S., 1974. What would you have done if...? *Theoretical Linguistics*, 1 (1–3), 233–255.
- Ludlow, P., 1999. *Semantics, tense, and time: an essay in the metaphysics of natural language*. Cambridge, MA: MIT Press.
- MacFarlane, J., 2011. Epistemic modals are assessment-sensitive. In: A. Egan and B. Weatherson, eds. *Epistemic modals*. Oxford: Oxford University Press, 144–178.
- Roberts, I., 1985. Agreement parameters and the development of English modal auxiliaries. *Natural language and linguistic theory*, 3 (1): 21–58.
- Stephenson, T., 2007. Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and philosophy*, 30 (4): 487–525.

- von Fintel, K. and Gillies, A.S., 2008. CIA leaks. *Philosophical Review*, 117 (1), 77–98.
- von Fintel, K., and Gillies, A.S., 2011. Might made right. In: A. Egan and B. Weatherson, eds. *Epistemic modals*. Oxford: Oxford University Press, 108–130.
- Warner, A., 1993. *English auxiliaries: structure and history*. Cambridge: Cambridge University Press.
- Williamson, T., 1999. Existence and contingency. *Proceedings of the Aristotelian society*, Suppl. Vol. 73, 181–203.