Now is the Time

Takashi Yagisawa

I would like to sketch what may be called *temporal perspectivalism*. It is a metaphysical outlook which results from applying a broad stance in philosophical theorizing to the particular area of theorizing about matters of temporality. I endorse this broad stance, which may be called *general perspectivalism*, but shall focus just on temporal perspectivalism in this paper. I will make the best of the fruits of the so-called two-dimensional formal semantics in tense logic but part company with this popular orthodoxy on the treatment of the present tense. I shall argue that the correct treatment of the present tense points to the essentially perspectival nature of our metaphysical theoretical position and sheds new light on an important theoretical issue in temporal metaphysics.

1. What is Thought, What is Said

We begin by reminding ourselves of some important basic points of formal semantics in indexical logic. Suppose that Jill and Jack are sitting at a table by a window in a café. Jill looks out the window and says something to Jack by uttering the sentence,

(1) It is raining.

Three key things are involved in this little episode: *what Jill thinks, what Jill utters*, and *what Jill says*. Jill comes to think what she thinks as a result of perceiving what is transpiring outside, and what she thinks concerns the meteorological condition of the vicinity of the café at the time. She then outwardly expresses what she thinks by making a linguistic utterance. What she utters is the sentence (1), and she says something to Jack by uttering it. What Jill says is not identical with what she thinks; the latter is what she tries to convey to Jack. Despite this non-identity, Jack understands her utterance correctly. He gets what she says, and on the basis of that he grasps what she thinks. What Jill utters, as I have already said, is the sentence (1). What Jill says is specifiable by means of a "that"-clause, namely, that it is raining. Do not confuse this with the sentence (1). The sentence (1) is an English sentence, whereas that it is raining is not, but is something Jill says by uttering an English sentence; she could easily say the same thing by uttering a different sentence, English or not. What Jill thinks is also specifiable by means of a "that"-clause but with the help of additional

locutions. What she thinks is about the meteorological condition in the vicinity of the café at the time of her conversation with Jack (more specifically, at the time of her perception of the outside scene through the café window) at the actual world. Let us call the place, the time, and the actual world p_0 , t_0 , and w_0 , respectively.

Let us assume that t_0 is also the time of my writing this paper, Jill's conversation with Jack and my writing occur at the same time, which is t_0 (The significance of this assumption will become clear later.) Then, we may specify what Jill thinks by the following: Concerning p_0 , t_0 , and w_0 , Jill thinks that it is raining in the first (p_0) at the second (t_0) at the third (w_0) . That is, what she thinks is that it is raining in that place at that time at that world, where the place, the time, and the world are specified outside the "that"-clause. We should take care to keep this separate from what Jill says. What Jill says may be said by her or by someone else concerning other places or other worlds. If someone utters (1) in a different place or uttered (1) at a different world, that person will be saving or would be saving the same thing as what Jill savs in the current scenario. Normally, a speaker says what s/he says because s/he thinks something and wants to express that something externally. If Jill is in a different café in a different city at t_0 and utters (1) at t_0 looking out through the café window there, then she says the same thing as what she says in the original scenario where she is in p_{0} but she says what she says because she thinks a different thought, namely that it is raining in that other place (instead of p_0). If Jill were at a different world and uttered (1) at t_0 , looking out through the café window there, then she would say the same thing as what she says in the original scenario where she is at the actual world w_0 , but she would say what she said because she thought a different thought, namely that it was raining at that other world (instead of w_0).

Jill may convey different things (what she thinks, that is, her thoughts) by linguistically articulating the same thing (what she says). In the original scenario, just by listening to her, Jack gets what she says. At the same time, he knows what place she is looking at, when she is looking at it, and at what world she is looking at it. He puts all these pieces of information together and grasps what she thinks. This "putting together" is achieved in two stages. First, Jack receives the sentence (1) from Jill and processes it linguistically (phonologically, syntactically, and semantically). This delivers him what she says. This thing, what she says, is subjected to parametric enrichment, which is the second stage. The parameters are a place, a time, and a world. (There are potentially additional parameters, but we shall ignore them for our purposes.) Call these parameters a *place-index*, a *time-index*, and a *world-index*, respectively. Jack is well aware which place, time, and world are the indices relevant to the enrichment of what Jill says; p_0 , t_0 , and w_0 are the relevant indices and he knows of them that they are the relevant indices. Using this knowledge, he enriches what she says, by means of the indices. The result of this enrichment is his grasping of what she thinks. When this is accomplished, successful linguistic communication has taken place.

Some philosophers call the result of enrichment by means of a place-index and a time-index a *proposition*. They also identify a proposition with what is said. According to me, this has two problems. The first problem is that it artificially treats the two indices in question differently from the third, world-index. Why should these two and only these two indices be used to enrich what is said to produce something deserving the label "proposition"? Why not a place-index and a world-index, or a time-index and a world-index, or just one of these indices, or all three? The second problem is that it conflates what Jill thinks and what Jill says. When she utters (1) to Jack in the original scenario, what she says is that it is raining, not that it is raining in p_0 at t_0 . What she says does not concern any specific place or time (or world, for that matter). What she thinks does. By saying what she says in order to communicate to Jack what she thinks, Jill relies on parametric enrichment by Jack, who she knows knows the relevant indices for successful enrichment.

The result of (full) enrichment, Jill's thought, is something that is true or false. What Jill says itself without enrichment and the result of partial enrichment are also true or false. Unlike the result of full enrichment, however, they are true or false not absolutely but only relative to the index or indices left out in the (full or partial) enrichment. What Jill says is true relative to a place-index, a time-index, and a world-index. The result of enriching what Jill says by p_0 alone is true relative to a time-index and a world-index; the result of enriching what Jill says by w_0 alone is true relative to a place-index and a time-index; and the result of enriching what Jill says by w_0 alone is true relative to a place-index and a time-index; and the result of enriching what Jill says by t_0 alone is true relative to a place-index and a time-index; and the result of enriching what Jill says by t_0 alone is true relative to a place-index and a time-index index is said toward a thought, whereas the former determines the truth-value of what is said or the truth-value of the result of partial enrichment of what is said.

Jill can constrain enrichment by uttering some appropriate word(s) to point to a specific index or specific indices. For example, she can do so by uttering (2) or (3):

- (2) It is raining here.
- (3) It is actually raining.

Assuming that everything else is as it is in the original scenario, in this alternative scenario, any satisfactory enrichment of what she says by uttering (2) has to be done by means of p_0 rather than any other place, and any satisfactory enrichment of what she says by uttering (3) has to be done by means of w_0 rather than any other world.

2. The Present Tense

A careful reader might have noticed my somewhat asymmetrical treatment of the place- and worldindices on one hand and the time-index on the other. What Jill says by uttering (1) is subject to enrichment without constraint on the place-index or on the world-index or both. What Jill says by uttering (2) is subject to enrichment without constraint on the world-index. And what Jill would say by uttering (3) is subject to enrichment without constraint on the place-index. But how about the time-index? Unlike the place- and world-indices, the time-index to be used in any satisfactory enrichment of what Jill says by uttering (1) is already constrained; it has to be t_0 , the time of her utterance. This constraint is already codified in (1), and remains in (2) and (3). The codification is done by a specific marker in English (and in most natural languages): the present tense. Sentences in ordinary English must have their main verb tensed, and the present tense typically has the effect of building the time of utterance into what is said.⁽¹⁾ There is no comparable mechanism in English grammar for constraining enrichment of what is said so that the place index must be the place of utterance. If the speaker wishes to ensure that what s/he says be enriched to include the place of utterance, s/he needs to resort to explicit lexicalization by using the word "here" or some such phrase as "this place." The case of the world of utterance is exactly analogous. If the speaker wishes to ensure that what s/he says be enriched to include the world of utterance, s/he needs to utter "actually" or "at the actual world" or some other cognate expression explicitly.

But is there not a parallel lexicalization for the time of utterance? Yes, there is. It is the word "now."

(4) It is raining now.

If Jill says something by uttering (4) in p_0 at t_0 at w_0 , what she says (without enrichment) is true relative to p_0 , any time x, and w_0 if and only if it is raining in p_0 at t_0 at w_0 ; the relativizing time x is irrelevant. But these are the same truth conditions for what she says (without enrichment) by uttering (1) in p_0 at t_0 at w_0 in the original scenario. The addition of the word "now" dramatizes the special status of the time of utterance as the time to figure in the truth conditions, preempting the time of relativization, but achieves little else. In particular, it puts no additional constraint on satisfactory enrichment. The time-index to be used for any satisfactory enrichment of what Jill says by uttering (1) is already heavily constrained, to be the time of her utterance, by the present tense of the verb "is" in (1). The orthodox formal semantics of tense logic is usually presented in a way that obliterates this point. As a result, the present tense is misunderstood and distorted, which contributes to creating philosophical confusion.

To see how the usual way of exposition of formal semantics of tense logic misleads, let us assume the sentential operator view of tense. This view is inessential to the misleadingness of the usual way of

exposition but is the simplest to work with.

- (5) It was raining.
- (6) Past-(It is raining).

The past tense of the verb in (5) is rendered as a sentential operator, *Past-()*. What it operates on is the sentence occurring in the parentheses. Suppose that (5) is uttered at t_0 . The orthodox formal semantics regards (5) as having the logical structure of (6). Thus, the truth conditions of what is said by the utterance of (5) at t_0 are the truth conditions of what is said by the utterance at t_0 of the sentence whose logical structure is (6).⁽²⁾ We need to note an important technical detail here. The orthodoxy speaks of truth of a sentence relative to a context of utterance and a circumstance of evaluation, whereas we have been speaking of truth of what is said by an utterance of a sentence (or an enrichment thereof) relative to indices. Let us play along with the orthodoxy here and say that the truth conditions of (5) are the truth conditions of (6), and that (6) is true relative to the context of utterance C_{u_5} whose time is t_0 , and a circumstance of evaluation C_e whose time is x, if and only if the sentence in the parentheses is true relative to C_u and some circumstance of evaluation whose time is earlier than x.⁽³⁾ But the sentence in the parentheses is (1). So, (5) is true relative to C_u and C_e if and only if (1) is true relative to C_u and some circumstance of evaluation whose time is earlier than x.

Let us now return to our own way of putting things and reformulate this as truth of what is said: What is said by uttering (5) at t_0 is true relative to x if and only if what is said by uttering (1) at t_0 is true relative to some time earlier than x. This gets the truth conditions wrong. Suppose that you say something by uttering (5) at t_0 (which I have been assuming is the time of my writing this paper, namely now). The truth conditions of what you say by uttering (5) is to be analyzed by resorting to the truth conditions of what you say by uttering (1); remember that according to the orthodoxy, (1) is part of the logical structure of (5), so in an important sense whenever you utter (5), you thereby utter (1). What you say by uttering (1) at t_0 is that it is raining. That it is raining is true relative to any given time if and only if it is raining, and it is raining if and only if it is raining, that is, it is raining now, namely at t_0 . No other time, including any time earlier than x, is relevant, unless it happens to be t_0 .

The objector on behalf of the orthodoxy would surely protest that this is a cheap trick; it is so cheap that it is transparent. The trick, the objector would continue, consists in treating "that it is raining is true relative to any given time" and "it is raining" as equivalent. They are clearly not equivalent. What should be said instead is this: That it is raining is true relative to any given time if and only if it is raining at that given time. If we say

this, the truth conditions will be in accordance with the orthodoxy: What you say by uttering (5) at t_0 is true relative to x if and only if it is raining at some time earlier than x.

Such a response from the defender of the orthodoxy would clearly reveal what I believe is a fundamental misconception. The restricted variable "x" ranges over times. Let x be the time preceding t_0 by a month; x is a month earlier than t_0 . Since t_0 is (assumed to be) now, I may well say that x is a month *ago*. Under this assumption, the last sentence in the above paragraph (the sentence after the colon) is semantically ill formed, for it says that what you say by uttering (5) now is true a month ago if and only if it is raining sometime more than a month ago. The two occurrences of the present-tensed verb "to be" are mismatched by the accompanying adverbial phrases, "a month ago" and "sometime more than a month ago," respectively. The first mismatch might possibly be excusable, as the notion of being true might possibly be understood atemporally. But the second mismatch is inexcusable; rainy conditions are certainly temporal conditions. When speaking of meteorological conditions in the past, we need to use the past tense: "It was raining sometime more than a month ago"; "It was not raining sometime more than a month ago." "It is raining sometime more than a month ago" and "It is not raining sometime more than a month ago." "It is raining sometime more than a month ago" and "It is not raining sometime more than a month ago" are simply semantically grotesque.⁽⁴⁾

The defender of the orthodoxy might mount a systematic response at this point. The starting point of the orthodoxy is the basic theoretical assumption that bearers of truth-values are sentences. We have been speaking as if bearers of truth-values are what is said and the results of its enrichment. We tried to reconcile these two different assumptions piecemeal in the last section. The response on behalf of the orthodoxy, however, might be that this will not do and that we need to stop speaking as if what is said or the results of its enrichment are bearers of truth-values, and instead stick to regarding sentences as the sole bearers of truth-values (relative to contexts of utterance and circumstances of evaluation). So when we evaluate the sentence (1) relative to C_e for truth-value, we need to understand the present tense as pointing to the time of C_e ; how else would the time of the circumstance of evaluation become relevant?

There are two things wrong with this response. First, it forgets the fact that (1) is evaluated relative not just to C_e but also to C_u . Second, it ignores an obvious alternative way to make the time of the circumstance of evaluation relevant.

Let us take up the first point first. The orthodoxy is renowned for its two-dimensional setup, in which the extensions of all indexical elements are determined relative to the context of utterance, and the extensions of all non-indexical elements are determined relative to the circumstance of evaluation. The present tense in (1) is an indexical element, so its extension should be determined relative to C_{u_b} that is, the present tense points to the time of C_{u_b} namely t_{0_b} and not to the time of C_{e_b} whatever it may be (unless it happens to be t_0). The sentence should not be imagined as being used in the circumstance of evaluation. The English sentence "Water is H_2O ," as we use it here on Earth, is true even relative to the circumstance of evaluation on Twin Earth, where Twin-Earthlings speak an English-like language except that in it "water" refers to XYZ, not H_2O . Assuming that the word "water" is appropriately indexical, linguistic usage in the circumstance of evaluation is irrelevant to the evaluation of the truth-value of the given sentence relative to the circumstance.⁽⁵⁾ Similarly, the time of C_e is irrelevant to the determination of the time indicated by the present tense of the given sentence.

Next, the second point. There is an alternative to analyzing (5) as (6). Instead of using the present tense, use a tense-free form of the verb. After all, the idea is to analyze tense as a sentential operator, so that the sentence operated on should be free of tense (unless the operator is iterated, which is not the case with (5)). This means, of course, that the present tense should also be analyzed in exactly the same general manner. (5) should be analyzed as (7), and (1) as (8), where *Pres-()* is the present-tense operator:

- (7) Past-(It be raining).
- (8) Pres-(It be raining).

There may be a lingering worry: If the embedded sentence "It be raining" is genuinely tense-free, how does it manage to point to any time at all, whether or not it is the time of the circumstance of evaluation? This worry is easily allayed by adopting the system-wide stipulation to the effect that any tense-free main verb should point to the time of the circumstance of evaluation. This stipulation is in harmony with the already-noted characteristic feature of two-dimensional semantics, namely, that circumstances of evaluation determine the extensions of non-indexicals.

Assume that Jill says something now (at t_0) to Jack by uttering the tenseless sentence "It be raining" instead of (1). The truth conditions for what Jill says in this new scenario is as follows:

For any time x, what Jill says is true relative to x if and only if (i) x is past and it was raining at x, (ii) x is present and it is raining (at x), or (iii) x is future and it will be raining at x.

Remember that Jill's utterance is assumed to be being made now, at t_0 . So, (i) applies if x is earlier than t_0 , (ii) applies if x is t_0 , and (iii) applies if t_0 is earlier than x.

Next assume that Jill says something now (at t_0) to Jack by uttering (5), viz., (7). The truth conditions for what Jill says in this scenario is as follows:

For any time x, what Jill says is true relative to x if and only if (i) x is past and it was raining sometime earlier than x, (ii) x is present and it was raining, or (iii) x is future and it was, is, or will be raining sometime earlier than x.

No explicit adverbial modifier of the verb phrase "was raining" is included in (ii), for the tense of the verb "was" is sufficient for pointing to the past (earlier than t_0). The disjunctive form of the verb "was, is, or will be" is needed in (iii), for the "Past-()" operator may take us from a given future time (*x*) either to a past time, to the present time, or to a future time.

3. Perspective and Objectivity

The orthodox theory of tense divorces the present tense from the presentness of the use of the verb that is so tensed. This is just a particular manifestation in the area of theorizing about the phenomenon of tense of a much more general attitude toward philosophical theorizing. It is the attitude which demands that philosophical theorizing be *objective*, where this objectivity is understood to be freedom from localized perspectives. It is demanded that the results of philosophical theorizing be presented in a way which does not rely essentially on any particular local perspective, spatial or temporal.⁽⁶⁾ The result is that the present tense, which is routinely used in predication of properties and relations in any theory, has come to be understood without its original proper meaning and as affording the theorist an appearance of achieving acts of predication from outside time. This unfortunate attitude toward philosophical theorizing is continuous with the same attitude toward scientific theorizing. Laws of nature, for example, are supposed to be described from the "God's eye" point of view. Objectivity of scientific and philosophical theorizing is presumed to require that scientists and philosophers pretend that they are writing down their theories while located in no particular time.⁽⁷⁾

It is a mistake to think that way. It is not a mistake to regard philosophical theorizing as continuous with scientific theorizing or to value objectivity in either type of theorizing. But it is a mistake to think that objectivity is impossible without abandoning, or pretending to abandon, our confinement to particular spatiotemporal regions. Our existence is inevitably confined to fairly limited spatiotemporal regions. Our thought and imagination might be able to transcend such limitations, but when we write down our scientific or philosophical theories, we do so while confined to particular spatiotemporal regions. When we thereby use the present tense, we do so at a particular temporal point, and the present tense, in its straightforward function, indicates that point or an appropriately narrow temporal period inclusive of that point. To force an

artificial function onto the present tense in search of objectivity is ill-advised and futile. It is futile because we cannot get out of time any more than we can get out of our skin. It is ill-advised because we need not get out of time to attain objectivity. To think otherwise is akin to thinking that no philosopher could possibly achieve objectivity because each philosopher is a particular individual with all the idiosyncrasies unique to her/him. Objectivity is a matter of what we say rather than how we say it. When it rained one day earlier than the current time, we may report it by uttering the sentence "It rained yesterday." Our report will then be a correct objective report of an event after its occurrence. If someone uttered the sentence "It is raining" during the rain yesterday, s/he was making an equally correct equally objective report of the same event as it was occurring. The difference in tense between the two reports has no bearing on the objectivity of either report. We need not reductively eliminate tense from our object-language or insist on using a tenseless meta-language in tense logic to achieve objectivity.

Note that we may sometimes legitimately use the present tense to describe a past (or future) individual, event, or state of affairs. "Socrates is widely admired," "The discovery of Russell's paradox strikes us as momentous in the history of set theory," and "Dinosaurs' dominance in the Jurassic Period fascinates children" are all perfectly good sentences, using the present tense as it should be used. Socrates, who lived in the fifth century BCE, is admired now. Russell discovered his paradox in 1901, but his discovery strikes us as momentous now. The Jurassic Period lasted approximately from 200 million years ago through 145 million years ago, but dinosaurs' dominance then fascinates children now.

To some uses of the present tense in describing trans-temporal relations, there correspond equally legitimate uses of the past (or future) tense. "You are taller than Socrates" and "Socrates was shorter than you" are equally fine. They are really short for "You are taller than Socrates was" and "Socrates was shorter than you are."

How about uses of the present tense which appear to cover all times, not just the time of utterance, such as "Whales are mammals" and "Bats echolocate"? Two different approaches are possible. The first approach is to observe that the present tense may point to any period of time containing the time of utterance and to say that since the entire stretch of time, from remote past through remote future, contains the time of utterance, the present tense of the main verb in such sentences as the two example sentences may point to the entire stretch of time. The second approach is to regard the use of the present tense in such sentences as the *present tense of laziness*, as it were, and claim that it is intended as being short for the conjunctions "are, were, and will be" and "echolocated, echolocate, and will echolocate," respectively in the two examples.

Temporal points and periods have temporal locations themselves. So, "1962 was an important year in the cold war history" is correct and "1962 is an important year in the cold war history" is not, even though

"1962 strikes us as an important year in the cold war history" is correct. But how about the first sentence of this paragraph, "Temporal points and periods have temporal locations themselves"? Its verb is present-tensed despite the fact that an overwhelming majority of temporal points and periods spoken of are in the past or in the future. It seems to me that either of the two ideas mentioned in the previous paragraph is applicable here as well: We may locate temporal points and periods somewhere in the entire stretch of time, or use the present tense of laziness and mean that temporal points and periods had, have, or will have temporal locations.

Atemporal abstract objects appear to be describable by means of present-tensed verbs: e.g., "The positive square root of 4 is a prime," "The Russell set is paradoxical." Unlike "Jack is calculating the positive square root of 4" and "Jill is able to prove the Russell set to be paradoxical," which can be treated *à la* "Jack admires Socrates," these sentences ascribe inherent properties to atemporal abstract objects, rather than relations they bear to us. If numbers and sets are genuinely atemporal, then since English does not naturally contain a tense-like verbal modifier which is a marker of atemporality as opposed to presentness, pastness, or futurity, we need to invent it. Mathematicians have already done it, and it is indistinguishable from the present tense. Thus in "The square root of 4 is a prime," the verb "is" appears to indicate the present tense but it does not, and instead marks atemporality. Do not confuse atemporality with temporal neutrality. Atemporality pertains to atemporal beings, their inherent properties, and mutual relations, whereas temporal neutrality is what the orthodox tense logical theory requires for signaling the time of evaluation.

4. A-Theory and B-Theory

Being present, being past, and being future⁽⁸⁾ are *A-properties*. Being simultaneous with and being earlier than⁽⁹⁾—as well as the converse of the latter, being later than—are *B-relations*. The *A-theory* regards A-properties as essential to time, whereas the *B-theory* regards B-relations as essential to time. The two theories are presumed to be incompatible, but their characterizations just given appear not to support such a presumption, and the appearance is not illusory; A-properties and B-relations may both be essential to time. One usual way to point out their presumed incompatibility is to claim that the A-theorist takes tense seriously but the B-theorist not only fails to take tense seriously but insists on eliminating tense. This is a mistake. Since we must do all our theorizing from a particular temporal perspective, we cannot eliminate tense in our theorizing. This does not make the B-theory impossible for us. B-theorists among us can do justice to the B-theory without tense-free predication and without downgrading the A-properties.

B-theorists can ascribe B-relations by means of tensed verbs. "Jack's gum-chewing and Jack's walking were simultaneous," "The Battle of Salamis was earlier than the Battle of Tsushima," and "The year 3053

will be earlier than the year 4053" are perfectly fine ascriptions of B-relations. If the *relata* straddle the present time, B-theorists can use the past tense sometimes, the future tense sometimes, and the present tense sometimes: "The year 1953 was earlier than the year 3053"; "The year 3053 will be later than the year 1953"; "The earlier-than relation holds between 1953 and 3053 (in that order)."

B-theorists can analyze A-properties in terms of B-relations: "x is past" as "x was earlier than now" (or "Now is later than x"); "x is present" as "x is simultaneous with now"; "x is future" as "x will be later than now" (or "Now is earlier than x"). This has the following consequences:

"*x* was future" is analyzed as "*x* was going to be later than now";⁽¹⁰⁾ "*x* will be past" is analyzed as "*x* was going to be earlier than now."

Someone might utter "The Second World War was future" now (at t_0) and intend to mean this: For some past time *y* and some time *z* later than *y*, it was true at *y* that the Second World War was going to be at *z*. But this is not what the uttered sentence means. No matter how much later the Second World War may be than *y*, the Second World War was not future, i.e., it was not going to be later than now; it was earlier than now. One might miss this point by failing to distinguish some speaker's use of the word "future" at a past time and our use of the same word now (at t_0). This is the same kind of failure as the one committed by somebody who fails to distinguish what is to her right and what is to my right, where I stand five meters to her right. The cat sitting on the mat between us is to her right but not to my right.

Someone might utter "Mars' colonization will be past" now (at t_0) and intend to mean this: For some future time *y* and some time *z* earlier than *y*, it will be true at *y* that Mars' colonization was at *z*. But this is not what the uttered sentence means. No matter how much earlier than *y* Mars' colonization may be, Mars' colonization is not past, i.e., it was not earlier than now (t_0), so *z* (the time of Mars' colonization) will be later than now. Thus, it is not true to say of *z*, using the past tense, that Mars' colonization *was* at that time.

It is often said that denial of the flow of time is part of the B-theory. Can we deny temporal flow while taking tense seriously? Yes, we can. To deny that time flows is to accept that temporal reality is somehow static. The reason why this picture of temporal reality is perfectly describable in a tensed language is that any description we give is given from a particular temporal point, namely, now, and that every part of temporal reality, even if it is static, is past (earlier than now), present (simultaneous with now), or future (later than now). We can describe any part of static temporal reality in a tensed language.

5. The Status of Now

But does *now* itself not shift? Was the year 1953 not *now* at one time in the past but no longer? Will the year 2053 not be *now* at some point in the future but not yet? No, no, and no. *Now* does not "shift" in the way suggested. 1953 was never *now*, and 2053 will never be *now*. Even if there might be *some* sense in which time "flows," there is no sense in which *now* shifts with it in the way suggested. 1953 was once designated by the word "now" as people used it in 1953, and 2053 will someday be designated by the word "now," as people will use it in 2053. But being *now* is not the same as being designated by the word "now," any more than being water is the same as being designated by the word "Water"; XYZ is designated by the word "I"; you are designated by the word "I" as you use it but are not me.

6. Not Pretense

This paper began with the pretense that Jill is making her utterance of (1) at t_0 and that t_0 is the time of my writing this paper, namely *now*. This pretense legitimized (in accordance with the claim I defend in this paper) my use of the present tense when discussing Jill's linguistic behavior, truth conditions of what she says, and related matters. But of course, Jill is just a made-up figure and her utterance and what she says by it are all part of the made-up story, theoretically useful pretense. But if such pretense is available for my purposes, it appears equally available for the purpose of using the present tense to describe past or future situations without claiming that we step outside time when we do so. Simply pretend that, e.g., Socrates and Plato live at the time of this writing, namely *now*, and write, "Socrates teaches Plato."

Use of the historical present is justified for dramatic or emphatic purposes, but not in serious philosophical or scientific reasoning. We are not pretending when engaged in serious theoretical discourse, despite what so-called fictionalists claim. In particular we have little use for pretending that the time of the obtainment of the situation under discussion is the time of the theoretical utterance (or writing or formulating). Our pretense about Jill, on the other hand, is a harmless and useful way to deploy the well-established philosophical device of thought experiment.

Notes

⁽¹⁾ Typically, but not always. The present tense in English is complicated, and we have no choice but to ignore all uses except for what I am calling "typical" here.

⁽²⁾ See Prior (1968).

⁽³⁾ This presupposes a rather simplistic understanding of the past tense in English, but it will do for our purposes. The future tense is treated parallelly. All indices other than the time are ignored for simplicity's sake here. See Kamp (1971).

^{(4) &}quot;It is not the case that it is raining sometime more than a month ago" might possibly be understood as being used to express the thought that the sentence "It is raining sometime more than a month ago" does not express a truth. When so understood, its use might be excused.

Hugh Mellor writes, "On 1 June, today *is* 1 June, tomorrow *is* 2 June, last month *is* May, and so on" (Mellor, 1998, p. 14, emphasis his). Unless writing on 1 June, Mellor's use of the present tense (emphasized or not) is inappropriate; so is the use of the words "today," "tomorrow," and "last month."

(5) See Putnam (1975).

(6) Many philosophers sympathetic to the orthodoxy would not demand that we avoid a local *modal* perspective. They think that a particular world, viz., the actual world, is special among all worlds and the perspective of the actual world should be privileged. I think that the actual-world perspective is just another local perspective and as such it should be respected, but do not think that this means that the metaphysical stance known as "modal realism" cannot be sustained in any form. See Yagisawa (2010).
(7) See Moore (1997). Bertrand Russell expresses his view in a characteristically flamboyant way:

The occurrence of tense in verbs is an exceedingly annoying vulgarity due to our preoccupation with practical affairs (Russell, 1956, Section VI, p. 248).

(8) And their measured versions like being one day past, being three centuries future, etc.

(9) And their measured versions like being one day earlier than, being three centuries earlier than, etc.

(10) I am using "was going to" as the past-tense form of "will." I avoid "would" for its connotation of subjunctiveness.

(11) Some might say that "water" used on Earth and "water" used on Twin-Earth are not the same word (see Kaplan, 1990), whereas "now" used in the past or in the future is the same word as "now" used now. I believe that there is theoretical room for maintaining the relevant parity between "now" and "water," but the issue is too extensive to handle here.

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[Professor, Department of Philosophy, California State University, Northridge, U. S. A.]