

Presentism and the Problem of Singular Propositions about Non-Present Objects – Limitations of a Proposed Solution

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Abstract. In “A Defense of Presentism”, Ned Markosian addresses the problem of singular propositions about non-present objects. The proposed solution uses a paraphrasing strategy that differentiates between two kinds of meaning in declarative sentences, and also distinguishes between two truth-conditions for singular propositions. The solution, however, is unsatisfactory. I demonstrate that the both truth-conditions suffer from the same problems in spite of the examples used to support the claim that one is a proper treatment for singular propositions. Part of the difficulty is in the limited expressivity of logical formalisms, a limitation not unique to the philosophy of time, but which calls for greater attention.

Keywords. Presentism, philosophy of time, metaphysics, singular propositions, truth-conditions, non-present objects, expressivity, logical formalisms

1. Introduction

In “A Defense of Presentism”, Ned Markosian defends Presentism—the account of time according to which only the present is real—against some problems. While taking a neutral stance with regard to Presentism, I address his approach to the problem of singular propositions about non-present objects. My aim is to demonstrate that the proposed solution is unsatisfactory, and I do so by bringing to light some oddities in the account. More specifically, both his “Searchy” and “Grabby” truth conditions suffer from the same problems. Part of the problem is in the limited expressivity of the symbolic/logical formalism, a limitation not unique to the philosophy of time, but which should be kept in mind. The paper is divided thusly: section 2 discusses Presentism; section 3 explains the problem thereof, introduces Markosian’s proposed solution, and my objections; and section 4 provides closing thoughts.

2. Presentism

Presentism is the view that only present entities exist. This means that dinosaurs, a meal you ate last year, and next week's conference do not literally exist. They are not present before us, nor are they occurring. They are non-present. Markosian defines Presentism as "[...] the view that, necessarily, it is always true that only present objects exist." (Markosian, 47) According to this theory of time, there are no non-present objects, and the past and the future do not exist. Only the present moment and its "contents" (objects, people, occurrences, etc.) exist. To speak of temporal moments or instants is empty because there is, in reality, only one moment, one time: the present moment. No time except the present time exists (Markosian, 51).

Unlike other versions of an A-theoryⁱ of time where only the past and present exist (the Growing Universe/Block view), only the present and future exist (the Shrinking Universe), and unlike a B-theoryⁱⁱ in which the past, present and future all exist on equal ontological footing (Eternalism, Four-Dimensionalism, etc.), the Presentist universe does not consist of past or future temporal moments or intervals. Any talk of past or future times is simply a *façon de parler*. We cannot hold that past persons, such as Socrates, exist *in the past*, nor can we hold that future events such as next week's conference exist *in the future*, because (i) they do not exist at all (since only the present exists), and (ii) there is nothing in or through which they are to exist, such as a temporal instants, intervals, regions, or otherwise. The past, the future, and the entities said to be, occur, exist in, or persist through, them, do not have any mode of existence.ⁱⁱⁱ As a consequence, there are no propositions about non-present objects or times. It is this consequence Markosian does not accept.

The Presentist must therefore make sense of our *tensed* communication and mental temporal experiences: we communicate tensed expressions; we have memories; we anticipate,

intend, aspire, and predict. Using tensed operators in a tensed symbolic logic, the Presentist does not say that past entities exist *now*, but that they *did* exist. The Presentist wants to treat past times in an analogous way as treatments of possible worlds—even if we do not believe in the literal/actual existence of possible worlds or the past. In short, it is held that the Presentist needs operators, such as the past-tense operator, **P** (or alternatively, **WAS**), the present-tense operator **N**, and the future-tense operator, **F**. Otherwise she cannot explain our talk of past or future things and occurrences.

In terms of standard first-order predicate logic (FOL), the Presentist holds that the most unrestricted quantifiers do not range over past or future entities. The expression “ $\exists x$ Socrates(x)”, read as “There exists an x, such that x is Socrates” is incorrect. It is incorrect, says Markosian, because Socrates is a non-present object, and thus does not fall within the domain of the existential quantifier. The existential quantifier is not able to “pick out” Socrates because according to the account Socrates does not exist. To clarify the relation between present, non-present entities and the existential quantifier, Markosian distinguishes two senses of ‘x exists now’:

- 1) **The Temporal Location Sense:** ‘x exists now’ means ‘x is present’.

This assumes the typical representation of time as consisting of past, present, and future.

- 2) **The Ontological Sense:** ‘x exists now’ means that x is in the domain of the most unrestricted quantifiers. (Markosian, 48)

The first is accepted by Non-Presentists, such as Eternalists, who would agree that Socrates does not exist now, but does exist *in the past*. They accept it because they believe the temporal attributions are all equally real, which means that Socrates is real or exists at *some* temporal moment or period. In other words, ‘in the past’ is meaningful and refers to something. (1) also

reflects our commonsense intuitions about time, but does not necessarily mirror an Eternalist viewpoint. For example, when pushed to explain an answer to the question “Does Socrates exist?”, one might say: (a) “He doesn’t exist *now*: he is not alive here and now, but he *was* alive and *did* exist.”, or perhaps (b) “Socrates doesn’t exist (as in bodily), but he exists through his works, his legacy, his spirit, and/or his (causal) influence on humanity.”, or (c) “He doesn’t exist *now*, but in the past he does.”

When we say (a) we mean that it is true of the world that Socrates, the living, breathing human being, was alive and part of it. It was the case that Socrates existed just as you and I exist now, but the living, breathing Socrates is not presently with us. (c) is not as clear because in saying that Socrates exists *in the past* the speaker may be suggesting that the past exists in some sense (as an Eternalist would). Alternatively, and more likely for everyday statements, (c) does not have any intended connotation, implication or suggestion about the ontology of time. If the former is the case, then the Non-Presentist would accept it, and would therefore, accept the temporal location sense. We seem to be attributing some form of existence to Socrates in (c), but not in (a). In this way, the Presentist accepts (a) because no non-present entity exists. In short, in saying “Socrates once existed but no longer does.”, we can ask the question: “Socrates does not literally (as in flesh-and-blood, walking about) exist *now*, fine, but is there a sense or mode in which Socrates exists in the past?” The Presentist answers in the negative, the Non-Presentist in the affirmative.

Our intuitions and common expressions about time generally do not make fine distinctions about modes of existence or temporal considerations. These considerations only enter the picture in philosophical and scientific inquiry. Markosian believes that Presentism reflects the commonsense view of time, and as such has an advantage over other temporal

accounts. He also recognizes a number of problems facing Presentism, and attempts to solve them. I focus on one of these problems and the proposed solution.

3. The Problem of Singular Propositions about Non-present Objects

We often communicate using past- and future-tense expressions. We talk about past objects, people, and events (*entity* for short); and make future predictions of events. We “[...] take there to be true past-tensed statements” (Bourne, 41). This is a problem for Presentism because if past and future do not exist, then how do we explain the truth of these tensed expressions?^{iv} How does the Presentist explain the fact that dinosaurs existed, or that the Earth will continue to rotate tomorrow? If sentences express propositions and if there are no non-present entities (and thus no propositions about them), then a sentence about some non-present entity will not express a corresponding proposition. Yet we believe many past-tensed sentences (and their supposed propositions) are true, such as the singular expression “Socrates was a philosopher”. This is *The Problem of Singular Propositions about Non-present Objects*. We should note in passing that the assumed account of the nature and ontological status of propositions, themselves, may contribute to this (and other) problem(s).

A singular proposition is a proposition that is existentially dependent on the objects the proposition is about: a singular proposition about individual *x* is a proposition that involves or refers to *x* directly (Markosian, 49). In what sense does the proposition refer *directly* to *x*, however? We can ask a similar question for “involves *x* directly”.

Ordinarily, “directly” would imply that there is no intermediary. As such, perhaps here it means that nothing in the proposition “involves or refers to” something else that in turn refers to *x*. Or perhaps “directly”, for the Presentist, means that the proposition refers to a present entity,

x. If the latter, then *indirectly* referring to x would mean that x is a non-present (past or future) entity. For a Presentist, however, this would seem to be tantamount to saying that x does not exist. Assuming a different account of time, however, *indirect reference* has more substance if we formulate it along these lines: proposition p *indirectly* refers to x if x is non-present (x exists in another temporal modality—past or future), and *directly refers* to x if x is present.

Returning to the problem for Presentism at hand, Markosian rejects all but one solution to the problem of singular propositions and non-present objects, including one solution that denies the existence of singular propositions. He is ultimately in favor of preserving the belief that singular propositions exist.

Markosian argues that the appropriate solution involves a variation of a paraphrasing strategy. More precisely, to preserve the existence of singular propositions in a Presentist world, the solution involves making a distinction between the *propositional content meaning* and the *linguistic meaning* of a declarative expression. Markosian believes this distinction allows us to hold that some sentences appearing to express singular propositions, sentences such as “Socrates was a philosopher”, do not express propositions, but nonetheless have meaning.

3.1 Markosian’s proposed solution

A declarative sentence, it is said, can have two different kinds of meaning. The **propositional content** of such a sentence is *the proposition* expressed by that sentence (Markosian, 66). The **linguistic meaning** of a declarative sentence is the meaning associated with the truth and falsity conditions for the sentence. This distinction allows us to say that a sentence about a fiction has linguistic, but not propositional, meaning. Consider the non-fictional example Markosian provides (I have changed the label).

(S) Socrates was a philosopher.

According to the Presentist, (S) has no propositional content—there is no corresponding proposition—for the following reasons. The past does not exist, and therefore neither does the entity asserted to exist in the past. (S) is a past-tensed expression supposedly denoting a singular proposition about the ancient Greek philosopher Socrates, but while Socrates *did* once exist (in the past), Socrates does not exist now (in the present). Since Socrates does not presently exist, (S) does not denote any present object. There is no present referent to which it, or “Socrates” in (S), refers. Therefore, there is no present proposition denoted by (S). Thus, (S) has no propositional content.

Markosian may not have avoided the elimination of singular propositions, however. Eliminating the propositional content for past-tensed expressions (at least those with names that do not denote present existents) eliminates the singular proposition of the expression in question, for what else is a proposition but its content? However, this question may depend in part on the nature of propositions.

(S) certainly remains meaningful. Not only do we believe (S) to be true, but it is perfectly comprehensible independent of analysis. The meaning of (S) is its *linguistic meaning*, characterized by truth-conditions, and this is to save Presentism from the problem of singular propositions. The meaning of declarative sentences is thus divided into propositional content and linguistic meaning. The truth-condition for (S), says Markosian, are what he calls a **Grabby Truth-condition** (GTC in what follows). A grabby truth condition is one that picks out or grabs the referent of the singular term (here, ‘Socrates’) *now*, in the present, and then looks back into the past to see whether that referent satisfies the predicate (‘being a philosopher’).

He contrasts the grabby truth-condition with the **Searchy Truth-condition (STC)**: we are to search *the past* for the referent of ‘Socrates’ and determine whether that referent is a philosopher *in the past*. In essence, we are to take different temporal perspectives when evaluating the expression: one from the perspective of the present, the other from the perspective of (being in) the past. Each version of the truth conditions for (S) is as follows, where ‘GTC-1’ means ‘Grabby truth-condition for expression 1’, and ‘STC-1’ means ‘Searchy truth-condition for expression 1’. ‘P’ is the past-tensed temporal operator, and can be read as ‘It was the case that...’ or ‘In the past...’.

GTC-1 ‘Socrates was a philosopher’ is true if and only if
 $\exists x$ [x is the referent of ‘Socrates’ and P(x is a philosopher)]

STC-1 ‘Socrates was a philosopher’ is true if and only if
 $P(\exists x)(x \text{ is the referent of ‘Socrates’ and } x \text{ is a philosopher})$

Consider the actions one would take in determining whether either truth-condition is satisfied. For the GTC we look to the present for information, evidence, facts, and then try to find a connection to the past. For the STC we look for information in, or about, the past that is about something present. If STC is about searching the past, does that (and past-tensed operators for that matter), in some sense presuppose an existent past, or is it *façon de parler*? If the former, it would present the Presentist with another problem.

These truth-conditions characterizing the linguistic meaning of an expression mirror part of how we generally go about assessing or determining the truth of an expression or proposition. We do, in fact, look to the world, to reality, to see if it is true. For past-tensed expressions we consult what we remember, experience, or otherwise know about the present world. That is, when determining the truth of a past-tensed expression, we must consider both the past and the

present. For future-tensed expressions we also look to reality, including laws of nature, their predictive character, and to reason. Introducing GTC and STC appears, in part, to make explicit what is implicit in the (determination of the) truth of a proposition.

For the Presentist, (S) is not true because of the above-mentioned reasons: it seemingly makes reference to the past and therefore has no propositional content. The left-hand side, constituted by (S), is false. The right-hand side appears to be false as well because the most unrestricted quantifier — the existential quantifier, \exists — of the Presentist does not range over past entities, and thus, does not capture or range over Socrates himself. Assuming a classical understanding of the biconditional, GTC-1 may be true in a logical sense because both sides of the biconditional are false, which makes the entire statement true. GTC-1 may be true in a logical sense, but it is not ontologically true to the Presentist. The referents of ‘x’ and ‘Socrates’ is a past entity. The presentist would therefore not give ontological weight to that referent. If, however, the referent of ‘Socrates’ is understood as a presently existing conceptual/mental or social entity related to past entities, then it may work.

Since Presentists use temporal operators to make sense of past and future-tensed expressions, STC-1, says Markosian, may be true for the Presentist: “[...] there was a person who was the referent of ‘Socrates’ and who was a philosopher” (Markosian, 70). In emphasizing “was”, Markosian is pointing out that Socrates is not a present entity. We may read his statement (and STC-1) as saying: In the past, some person was referred to by the (then used) name ‘Socrates’.

Alternatively, we may read STC-1 as: In the past there is a person that is the referent of the presently used name ‘Socrates’ and that person is a philosopher in the past. This interpretation is closer to what we mean when we utter “Socrates was a philosopher” (S),

certainly more so than meaning that ‘Socrates’—as used in the past—refers to a specific person in the past. After all, a present-day name may not be the name used during the time in question.

The problem with this interpretation of STC-1 is that the scope of the past-tensed operator covers the name ‘Socrates’. Strictly speaking, we may not be able to say that our present-day use of the name is referring to a pastly existent person. What is more likely the case is that the intended meaning of (S), if only in a commonsense fashion, is a combination of both: we are identifying the referent of a presently used name that *may* also have been used in the past to refer to the same person.

This is an ambiguity demonstrative of a mismatch between the *intended meaning* of a singular expression and the logical translation or truth-conditions for it. Furthermore, GTC-1 and STC-1 explicitly use the string ‘Socrates’, and nowhere is it indicated that we have in mind the possibility that Socrates was referred to by a different name or a different string. It assumes and appeals to implicit knowledge, including our common understanding of who Socrates—the great philosopher—was, and that the name ‘Socrates’ refers to him.

It seems clear to me that the grabby truth-condition for (S), the right-hand side of GTC-1 more specifically, is not true. If we understand it as asking the question “Is there currently a living flesh-and-blood human being that is the referent of ‘Socrates’, the famous ancient Greek philosopher?”, then the answer is “no”. There is no entity, *x*, that satisfies the expression because Socrates is not literally alive today.

What we can say, however, is something like (b) in section 2 and the conceptual, mental, social entities mentioned above. The ideas Socrates conveyed, and the ideas (or Forms if I may) that come to mind when we read Plato’s works, as well as his effects on humanity are very much with us (in thought and practice). In an indirect way, so is Socrates, the person.^v Markosian,

himself, says (S) “[...] turns out not to be true (which means that it is either false or without a truth value).” (Markosian, 71) Yet expressions such as (S) are ubiquitous in natural language and thought, and we would be hard-pressed to believe they are not true. In spite of this, Markosian supports GTC-1 over STC-1.

Between GTC-1 and STC-1, Markosian believes the former—the grabby truth-condition—is the correct analysis of past-tense expressions. He gives the following example to support the claim that GTC-1 is the proper truth-condition. The example, itself, suffers from some problems.

JM	Joe Montana was a quarterback.
GTC-JM	‘Joe Montana was a quarterback’ is true if and only if $\exists x$ [x is the referent of ‘Joe Montana’ and P(x is a quarterback)]
STC-JM	‘Joe Montana was a quarterback’ is true if and only if $P(\exists x)(x$ is the referent of ‘Joe Montana’ and x is a quarterback)

Markosian says that the truth of JM depends on aspects about Joe Montana, himself, “[...] how things have been with the guy”, and that a searchy truth-condition would be true even if “someone else was formerly both the referent of ‘Joe Montana’ and a quarterback” (Markosian, 71). This, he says, is unacceptable and, thus, rejects STC-JM in favor of GTC-JM. If it is to be rejected, then so should GTC-JM. I explain below.

I understand Markosian as disagreeing with STC-JM because it permits us to pick out a completely different person who happens to have the same name and professional role. However, it appears that Markosian overlooks a crucial point that he, himself, makes.

He says the truth of JM depends on “[...] how things have gone with the guy”. Surely, in saying this he has in mind a particular person, not just anyone. It is reasonable to assume that JM

is not intended to be a general expression encompassing every person with the same name and same job, regardless of whether the logical formalization/representation permits it, and regardless of whether names *can be* used as predicates. The symbolic representation, then, does not correspond to the intended meaning of the expression. This shortcoming gives us reason to question the approach to solving the problem of singular propositions referring to non-present objects. Let us examine each conjunct in the truth-conditions (Table 1).

	Conjunct 1 (with truth value)	Conjunct 2
GTC-JM $\exists x...$	x is the referent of 'Joe Montana' (True)	P(x is a quarterback) (True)
STC-JM $P(\exists x)...$	x is the referent of 'Joe Montana' (True)	x is a quarterback (True)

Table 1: Grabby and Searchy truth-conditions for JM

As we can see, if we assume that 'Joe Montana' in JM does, in fact, mean the famous quarterback (as it would typically mean in conversation today. Call him 'famous Joe'), then contrary to (S) in which the grabby truth-condition is false, both GTC-JM and STC-JM are true. For GTC-JM: *in the present* there exists a person that is the referent of 'Joe Montana', and in the past, that person is a quarterback. That is, for the present-day person referred to by the name 'Joe Montana' it was the case that they, in the past, are a quarterback. This is true for famous Joe. For STC-JM, *in the past* there is a person that is the referent of the name 'Joe Montana', and in the past that person is a quarterback. This is true for famous Joe as well. Both GTC-JM and STC-JM are true because Joe Montana is alive, and therefore present, today.

If famous Joe were not alive, however, then we would be in a similar situation as that of (S), with a person who is no longer living (and thus physically non-present), such as Socrates. In this case, according to Presentism, the first conjunct of GTC-JM would be false, and we could not use GTC as the truth-condition for JM. The subject in (S) is not present, but the subject in JM is present. I therefore contend that JM used to support the claim that the GTC is a correct

treatment of past-tensed singular propositions does not, in fact, provide support. Markosian ultimately holds GTC-1 and GTC-JM are the correct treatments for (S) and (JM), respectively (Markosian, 71).

If Markosian is correct about the failings of the STC, namely being satisfied by unintended referents, then it is, indeed, unsatisfactory. In saying that someone else could satisfy the STC for JM, we understand the following. If we do not specify the *intended* referent of the name 'Joe Montana', then another person (call them 'non-famous Joe')—whether alive or dead—sharing the same name and professional role as famous Joe would satisfy STC-JM. In this case, the STC would be the incorrect choice. Non-famous Joe as well as famous Joe would satisfy STC-JM. STC-JM does not capture the intended meaning of JM. The logical formalism, then, is an incomplete translation because it does not express the intended meaning of the original sentence, and therefore cannot purport to reflect the proposition expressed by the sentence. This problem expressivity (or expressive power) is a concern for any subject in which logical formalisms are employed.

In spite of the above details, Markosian considers the GTC as the proper solution to the problem of singular propositions. While the STC can be satisfied in unintended ways, it is my contention that so can the GTC (as we will see below). Again, this problem is at least partly a result of the expressive limitations of the formal language and, therefore, the conceptualizations required to implement it. The formalization omits the proper semantics and the inherent vagueness/fuzziness involved. Both truth-conditions, then, are unsatisfactory as solutions.

3.2 Both truth-conditions are equally problematic

Both the STC and the GTC proposed by Markosian suffer from the same problems. The former is satisfied in unintended ways, but so is the latter. Consider GTC-JM from Table 1, reproduced below.

	Conjunct 1 (with truth value)	Conjunct 2
GTC-JM $\exists x...$	x is the referent of 'Joe Montana' (True)	P(x is a quarterback) (True)

Table 2: Grabby truth-condition for JM from table 1

Also consider two scenarios similar to those for the STC: In one, we have *famous Joe*, and in the second we have *non-famous Joe*. In the first scenario, famous Joe is certainly the referent of 'Joe Montana', and can replace 'x' in conjunct 1. Famous Joe was also a quarterback in the past, meaning that this individual satisfies the second conjunct. Thus, GTC-JM is true in the first scenario.

We have a similar situation in scenario two with non-famous Joe. Non-famous Joe also satisfies conjunct 1: he can be the referent of 'Joe Montana', and it happens to be true that he was also a quarterback (say in another country). Hence, GTC-JM, like STC-JM, is true for *someone else* with the same name and job as the famous quarterback. Markosian's claim that GTC-JM is the proper solution is incorrect. Even if we consider only presently alive human beings, GTC-JM can be incorrectly satisfied^{vi}. Given the formalization, there is no way to single-out one from the other. The intended person is not specified beyond a name and role predicate. Both the STC and the GTC are not sufficient to capture the meaning of JM.

If the truth-conditions are to be symbolically represented, then greater precision is needed in order to avoid cases where it is satisfied in unintended or plainly false ways. The **intended meaning** needs to be communicated more clearly and explicitly. After all, we would have a *specific* person in mind, which means we would not want to create a situation where the

translation ends up picking out the wrong one. In ambiguous scenarios we would likely need to consult the speaker of the utterance in question to determine the intended meaning. Did (s)he mean famous Joe, any person named 'Joe Montana', or a specific non-famous Joe? The beauty of natural communication/language and our comprehension thereof is that context (in part) allows us to typically and immediately grasp the intended meaning. If logical formalisms are employed, then more expressive ones are in order; and their use should arguably be dictated by the degree to which they are helpful, e.g., the degree to which they can provide knowledge or insights into the phenomena under study.

Now, both (S) and JM include names. In "Names as Predicates", Delia Fara of Princeton University argues as the title suggests. This contrasts with the view that names are *referring expressions*, or sometimes *rigid designators*. It is certainly true that many people can have the name 'Socrates' or 'Joe Montana'. However, whether a name in a sentence token is general (predicable) or particular (referring to one individual) depends, in part, on the intended meaning. Fara mentions a problem (noted above) for the referential view of names: since names have multiple-applicability, how do you pick out the particular individual you mean? We need to look to context or something about the situation, she says. Indeed, the context—including the conceptual/mental context of the speaker—does matter. Names in sentences can either be *intended as* predicates or as referential, but we need to understand which.

Markosian assumes we have a specific meaning or person in mind regardless of whether there are present-day people named "Socrates", and regardless of whether the name in the expression is a predicate. The (implicit) intended interpretation is that 'Socrates' means the famous ancient Greek philosopher. Yet he does not make this assumption for STC.

It would be odd to hold that singular names, such as ‘Socrates’ and ‘Joe Montana’, in themselves and divorced from the speaker and context, objectively express particular individuals. If this were true, then we could say that every token of the type *Joe Montana* would be denoting, say, the famous football player—a pity for non-famous Joe.

Markosian says that the typical English speaker will say that “Socrates was a philosopher” is true because of the STC, i.e., because there was a person called ‘Socrates’ who was a philosopher (Markosian, 72). Yes, one would say it is true because there *was* a person called ‘Socrates’ who *was* a philosopher, but the person would *not* say that (S) is true because the STC is true. Aside from the fact that the average person would not be thinking in terms of first-order predicate logic, these formalizations are, as we have seen, lacking. Markosian seems to think similarly; however, as he mentions that there are subtleties and confusions in the truth-conditions (Markosian, 28).

Even if the sentences “There was a person called ‘Socrates’” and “Socrates was a philosopher.” are represented in first-order logic form or STC-1, it does not necessarily mean the representation is complete, let alone correct. It also does not mean that we are anywhere closer to understanding time (to the degree that this was a goal). It is important to keep in mind that exclusively use of symbolic approaches is inadequate not only because of the limitations, but because inquiry into time is in part scientific. Logical representations are missing something both in terms of the ontological aspect of inquiry into time and in terms of reflecting intended semantics.

If we do not consider which ‘Socrates’ or which ‘Joe Montana’ the expression was intended to refer to, knowing full well that many people may have (had) the same name, then it

cannot be expected to provide a sufficient truth-condition and formal translation. The GTC and STC are not adequate solutions to the problem of singular propositions for Presentism.

4. Closing Remarks

This paper discussed Presentism and Ned Markosian's approach to the problem of singular propositions about non-present objects. I demonstrated that the proposed solution is inadequate, citing at least two difficulties:

- Both Grabby and Searchy truth-conditions for a singular expression suffer from the same problem: they can be satisfied in unintended and false ways
- The logical formalization is inadequate to capture the intended meaning

The proposition a complex expression or singular term expresses partly depends on: the intentions of the speaker, including the intended meanings of expressions; and the context, including the relations that obtain between the speaker, that context, and mind-external realities. Both truth-conditions do not capture this complexity.

Logical formalisms introduce the problem of not being expressive or representative enough to capture the richness of our world (including our ideas of it). These imitations can obviously make the study in question unnecessarily more difficult. This should give us pause with regard to the perceived utility and purpose of these methods/approaches toward time and other subjects. It should direct us to be clear on a number of meta-theoretic questions, the pursuit of which should be informed by the relevant scientific inquiry^{vii}. Some include: What are the goals of the inquiry? For example, is the goal to understand commonsense conceptions of time, temporal cognition, temporal language, temporal inference and reasoning therein, time as a mind-independent phenomena, etc.? What is the role of formalisms (or the chosen logic) in the inquiry, and (how) can they help achieve the goals? For example, to what degree (if any) can

they expand our knowledge of the reality or ontological status of time? Does their utility extend only to temporal inference mechanisms in linguistic and computational applications?^{viii} What is the given account of propositions; what are the effects of focusing on them as such, as opposed to sentences (or other entities); and how do they relate to (the given concept of) time? It is clear that to the extent that formalisms are used, or even helpful, they need to be more expressive.

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References

Bourne, Craig. (2006). *A Future for Presentism*. Oxford: Oxford University Press.

Fara, Delia Graff. (2011). "Names as Predicates". Unpublished manuscript.
Online at: <http://www.princeton.edu/~dfara/papers/fara-namesaspreds.pdf>

Keller, Simon. (2004). "Presentism and Truthmaking." *Oxford Studies in Metaphysics*, 1, 83-104.

Markosian, Ned. (2004). "A Defense of Presentism." *Oxford Studies in Metaphysics*, 1, (3):47-82.

ⁱ A-theories of time (also called *tensed* theories) posit a corresponding mind-independent reality of tense. There is an objective distinction between the temporal modalities/attributions of past, present, and future, where the present has a privileged status.

ⁱⁱ B-theories of time are called *tenseless* theories, because they posit that the past, present, and future are ontologically on par with one another: they are all equally real. There is no objective distinction between the temporal modalities, and they do not change. The present has no privileged ontological status.

ⁱⁱⁱ Presentist Craig Bourne (Bourne, 10) has said that the existential quantifier (\exists) should be tenseless to avoid triviality. However, it is possible to take a pluralistic ontological view in which three existential quantifiers range over the past, present and future.

^{iv} What makes expressions referring to non-present entities true is a question asked in the Truthmaker Problem for Presentism. This problem is similar to that of singular propositions in that both are related to the existential status of the past and the future.

^v Markosian assumes persons are identical with their bodies (Markosian, 2) and knows it is an arguable assumption. The topic of personhood—which is related to that of the mind, self, etc.—is significant enough to warrant emphasizing that the assumption (a likely false one) is indeed quite arguable and contentious, and that different accounts/assumptions may impact the inquiry.

^{vi} To be *incorrectly satisfied* is to be satisfied by an individual not part of the intended meaning of the expression.

^{vii} For example, a common interpretation of Relativity is that neither space nor time objectively exists as distinct. If true, then the task of the philosophy of time is presumably not to understand time in itself, but to understand temporal cognition, language, reasoning, and our various concepts/conceptualizations of time, tasks that overlap with psychological and historical inquiry of time. Additional considerations include being clear on the presumed account of *presence* and *reference*.

^{viii} A minimal function of temporal logics, for example, is to explicitly represent temporal inference.