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THE NEW TENSELESS THEORY OF TIME:
A REPLY TO SMITH

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In a recent article in this journal Quentin Smith has argued that the two extant versions of the new tenseless theory of time (the "token-reflexive version" and the "date-version") are open to insurmountable difficulties and so must be either radically reworked or abandoned in favor of the tensed theory.¹ The purpose of this paper is to defend the new tenseless theory against Smith's objections. I shall argue that Smith's central arguments raise irrelevant objections because they rest upon assumptions that are accepted by the old tenseless theory of time, but are rejected by the new tenseless theory.

Recent defenders of the tenseless view have come to embrace the thesis that tensed sentences cannot be translated by tenseless ones without loss of meaning. Nevertheless, they have denied that the ineliminability of tensed language and thought entails the reality of temporal properties. According to the new tenseless theory of time, tensed discourse is indeed necessary for timely action, but tensed facts are not since the truth conditions of tensed sentences can be expressed in a tenseless metalanguage that describes unchanging temporal relations between and among events.

On the token-reflexive version of the new tenseless theory the temporal relation between a tensed sentence token and the event or date that such a judgment is about provides an objective basis for the truth value of any tensed sentence. For example, any token *S* of "It is now 1980" is true if and only if *S* occurs in 1980; any token *R* of "It was 1980" is true if and only if *R* is later than 1980, and so on. Thus, on the token-reflexive account the truth conditions of tensed sentence and judgment tokens are tenseless facts.

Smith begins his argument against the token-reflexive account of the truth conditions of tensed sentences by noting that

(1) It is now 1980

entails the sentence

(2) 1980 is present.

In the language of facts this means that there cannot be a fact statable by any token *S* of (1) unless there is a fact statable by any token *V* of (2). In other words, a fact statable by *S* implies a fact statable by *V*, and consequently a fact statable by *V* is among the truth conditions of *S*. (p. 379)

As this passage makes apparent, Smith assumes that a logical entailment among sentences in ordinary language must be represented by a "logical entailment" among the facts that make those sentences true. That is, he assumes that since (1) entails (2), the truth conditions of (1) must entail the truth conditions of (2). He then argues that since the tenseless truth conditions (or the fact statable by any token *S*) of (1), namely, *S* occurs in 1980, does not entail the tenseless truth conditions (or the fact statable by any token *V*) of (2) namely, *V* occurs in 1980, he concludes that in addition to tenseless truth conditions, (1) and (2) must also have tensed truth conditions. As Smith puts it, the token-reflexive version of the new tenseless theory fails to establish that

tenseless facts are the *only* truth conditions of tensed sentence-tokens; tensed facts need to be assumed to account for the entailment-relations between tensed sentences. . . . [Token-reflexive] tenseless truth conditions could not explain the logical equivalence of "It is now 1980" and "1980 is present", since *S* occurs in 1980 neither implies nor is implied by *V* occurs in 1980. (p. 384)

We may agree that tenseless truth conditions cannot explain the logical equivalence of (1) and (2), but that constitutes an objection to the tenseless view only if we presuppose a conception of analysis that is shared by proponents of the old tenseless theory of time, but is rejected by proponents of the new theory.²

To begin to see what is involved in this last point note that the early defenders of the tenseless view believed that a complete description or analysis of time could be symbolically represented in a non-indexical tenseless language. To give a complete description or analysis involves constructing a single language that performs two functions. First, in its "logical" function, this perspicuous or ideal language (IL) is a symbolic device for representing or transcribing the logic of sentences contained in ordinary language. For example, in ordinary language arguments are

given that involve the entailment of one sentence by another, and in its logical function the IL represents the correct logical form that all sentences and all entailments in a natural language can take. The second function of the IL, call it the "ontological" function, is to provide a representation of the kinds of entities that there are as well as the facts that exist. One might conceive of the IL in its ontological function as containing expressions that are neither true nor false, but are ontological explanations for (some) true sentences in ordinary language, or "stand-ins" for the facts represented by them. By assuming that both these functions could be performed by a single IL the old tenseless theory drew ontological conclusions from logical considerations. Specifically, they argued that since the logic of ordinary temporal discourse could be represented in a tenseless language, the ontological nature of time consisted of unchanging temporal relations between terms that did not have tensed properties.

Given the assumptions concerning analysis implicit in the old tenseless theory, Smith's argument against the token-reflexive account is very strong. For in order to perform its logical function the analysis of tensed discourse must be able to explain the inference from (1) "It is now 1980" to (2) "1980 is present." However, in order to perform its ontological function the analysis of tensed discourse must represent those sentences as tenselessly expressing temporal relations between a sentence token and the time at which it occurs. The problem, then, is that the ontological description expressible in a tenseless language cannot explain the logical entailment of (2) by (1). Thus, on the tenseless view, the logical representation of tensed discourse is inadequate, and given that the logical and ontological representations are to be performed by a single language, it follows that the ontological representation is also inadequate and that, therefore, there must be temporal properties and tensed facts.

Thus, Smith does indeed have a point. He has shown that the token-reflexive account of tense cannot be a complete description or analysis of time insofar as it purports to represent, within a single language, both the logical form of ordinary temporal discourse and the metaphysical nature of time. But that is not an argument against the new tenseless theory of time because in rejecting the criterion of translatability as a method for determining the metaphysical nature of time proponents of

the new tenseless theory are, or should be, rejecting the conception of analysis upon which Smith's argument rests.

The new tenseless theory accepts the tensor's claim that tensed discourse and thought are ineliminable. It therefore agrees that any logically adequate representation of temporal language, that is, any language capable of representing the meaning and logical implications of our ordinary talk about time, must be tensed. The detenser denies, however, that from an ontological point of view, a perspective that attempts to represent the nature of time, that tense is ineliminable. Smith understands very well that recent detensers maintain that tenseless sentences cannot be replaced by tenseless ones without loss of meaning. What he fails to appreciate is that in accepting the irreducible nature of tensed discourse, the new tenseless theory is abandoning the analytic ideal of arriving at a single language that is adequate for both ontological and logical investigations. Once these two functions of language are separated and kept distinct, it is open to the defender of the tenseless view to maintain that logical connections among sentences in ordinary language do not represent ontological connections between facts in the world. Thus, though (1) and (2) mean the same thing and entail each other, it does not follow that there must be a necessary connection between the facts that provide the basis for their truth. Nor does it follow that tensed facts must be introduced to explain their logical equivalence. According to the new token-reflexive account of time not only can two sentences, such as "It is now 1980" and "S occurs in 1980," with different meanings correspond to the same fact, but two sentences, such as (1) and (2), with the same meaning can correspond to different facts. These are the consequences of rejecting the conception of analysis upon which Smith's criticism is based. By failing to acknowledge them Smith's argument, while applicable to the old token-reflexive version of the tenseless theory, is inapplicable to the new theory.

Smith's main argument against the "date-version" of the new tenseless theory of time also raises an irrelevant objection and for the same reason. On the date-analysis temporal indexicals like "now," "this time" and "the present," as used on a given occasion, and proper names such as dates, are referring terms which rigidly designate a time. Thus, the truth conditions of the tensed sentence, "It is now 1980" uttered in

1980, are expressible by the use of the necessary truth "1980 is at 1980" uttered at any time. And this is just the point. The metaphysical implications of tensed discourse are nil. An event or time being now is nothing more than its occurring at the time at which it occurs.

Smith attempts to avoid that conclusion by arguing that a 1980 token of "It is now 1980" is logically contingent and for that reason must impart the tensed information that 1980 has the property of presentness. He begins his argument by claiming that "the date '1980' in its normal use expresses the sense that is also expressible by an attributive use of the definite description 'the 12-month period that is 1979 years later than the birth of Christ'" (p. 387). He then argues that

a 1980 token of "now" refers to the set of all and only those events that, in fact, possesses the property of being the 12-month period that is 1979 years later than the birth of Christ. If we call this set "A", we can say that the 1980 token of "It is now 1980" directly refers to A and asserts the identity of A with the 12-month period that is 1979 years later than the birth of Christ. But this identity is contingent! For there are possible worlds in which A is not the 12-month period that is 1979 years later than the birth of Christ. (p. 387)

Smith's reasoning is valid, but his conclusion, that "the 1980 token of 'It is now 1980' is only contingently true" constitutes an objection to the new tenseless theory only if he confounds the two functions of language that the new theory insists must be distinguished.

To see why this is so consider that in ordinary language the date-expression "1980" has the same meaning as "the 12-month period that is 1979 years later than the birth of Christ." Thus, if the representation of "It is now 1980" is to preserve its informational content and capture its meaning, then we cannot transcribe it as the necessary truth "1980 is at 1980." In other words, in a logically adequate language — a language that represents the meanings and entailments of sentences in a natural language — "1980" cannot be a rigid designator of the time referred to by a 1980 use of "now" since if it was, then the transcription would not convey the information that we ordinarily associate with a tensed sentence like "It is now 1980." On the other hand, in an ontologically adequate language — a language used to represent the metaphysical nature of time — "1980" cannot be replaced by the description that captures its meaning since if it was then the transcription would no longer be a perspicuous representation of the tenseless theory of time.

If, however, we keep the logical and ontological functions of language distinct, then detensers can agree that in a language constructed to represent the logical form of sentences in ordinary language, "It is now 1980" is contingent, while also maintaining that in a language constructed to represent the metaphysical nature of time it is a trivial truth perspicuously represented as "1980 is at 1980."

Smith's central arguments against both versions of the new tenseless theory of time result from a fusing of logical and ontological considerations. He thereby presupposes a methodological framework or conception of analysis that is shared by proponents of the old tenseless theory, but rejected by defenders of the new tenseless theory. Although Smith is not alone in assuming this framework I believe that recent detensers are correct in abandoning it. Since it is beyond the scope of this paper to give a general argument in support of that point I shall conclude with the more modest claim to have defended the new tenseless theory of time against Smith's central objections.

NOTES

¹ Quentin Smith, 'Problems with the New Tenseless Theory of Time', *Philosophical Studies*, Vol. 52 (1987), pp. 371–392. All page references in the text are to this article. See Smith's article for references of proponents of the new and old tenseless theories of time. Contrary to what he says, I do subscribe to a version of the new tenseless theory in my book, *Temporal Relations and Temporal Becoming: A Defense of a Russellian Theory of Time* (Lanham, Md.: University Press of America, 1984).

² The conception of analysis that I shall discuss has its roots in the philosophy of logical atomism. Those roots are examined in L. N. Oaklander and S. Miracchi, 'Russell, Negative Facts, and Ontology', *Philosophy of Science*, Vol. 47 (1980), pp. 434–455. See also, E. B. Allaire, 'Relations and Recreational Remarks', *Philosophical Studies*, Vol. 34 (1978), pp. 81–90.

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