

The Dual Role of PAST: A Hybrid Referential Selection Semantics for Counterfactuals

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Tense in counterfactual conditionals exhibits puzzling behavior. In sentences such as “If Mary were taller, she would see the match”, the past morphology does not seem to fulfill its traditional role of shifting the evaluation of the proposition to a time preceding the utterance. Instead, it appears to signal a modal distance from the actual world. This is known as the puzzle of “fake tense” [3]. The literature is divided on how to make sense of this phenomenon. On one hand, the “past-as-past” [10] theorists argue that the past tense always maintains a temporal meaning by shifting the evaluation to a past time in history; on the other, the “past-as-modal” [10] theorists suggest that the past tense can act as a modal operator directly affecting the utterance’s modal base. This paper seeks to bridge this divide by proposing a hybrid referential selection semantics that interprets the PAST operator as a dual shifter of both evaluation time and the modal base, following Mackay [5] who holds that the PAST operator should receive a double interpretation.

The point of departure for this inquiry is the recent selection semantics for modals like “will” and “would” developed by Cariani and Santorio [2] and furthered by Schultheis [9]. In the account provided by Schultheis [9], counterfactuals are evaluated using a historical modal base m , defined as the set of worlds that are identical to an input world w up to a specific time t . Under this view, a “would” counterfactual is interpreted as a “woll” modal under the scope of a PAST operator. The role of PAST is to shift the time t to a point in the past where the antecedent was still a historical possibility. While this approach is compositionally elegant and preserves the temporal essence of the past tense, it encounters significant hurdles when faced with counterfactuals concerning static or biologically determined traits. Consider the case of Mary’s height. If we accept the temporal shift as the primary mechanism, we are forced into a “temporal regress problem”. To find a world where Mary is taller, the semantics must look back to a time when her height was not yet fixed — perhaps to her early childhood, her conception, or even the genetic makeup of her parents. This search for a historical branching point not only complicates the evaluation process but also fails to reflect the cognitive reality of how agents process such statements. When we say “If Mary were taller” we are not usually

contemplating a different historical trajectory starting from her infancy; rather, we are performing a “minimal edit” on the present state of the world.

Furthermore, the reliance on historical modal bases renders the semantics incapable of handling counterpossibles, namely counterfactuals with impossible antecedents. Since a historical modal base consists of worlds branching from the actual timeline, it is by definition restricted to the realm of physical and logical possibility. If we attempt to evaluate a sentence like “If 2+2 had been 5”, the updated modal base becomes an empty set, as there is no point in history where such a logical impossibility was a viable alternative. In traditional Lewisian semantics [4], this leads to vacuous truth, where all counterpossibles are considered true regardless of their content. However, linguistic intuitions [8] and experimental evidence [6, 7] suggest that counterpossibles are non-trivial. For instance, “If Hobbes had squared the circle, his friends would have been amazed” sounds non-trivially true [8] and its converse “If Hobbes had squared the circle, his friends would not have been amazed” seems false.

In light of these issues, I propose a new semantics for the PAST operator that shifts the modal base from a set of historical alternatives to a “relaxed” similarity-based modal base m_{sim} . This base includes not just worlds identical to the input world w up to time t , but all worlds—possible or impossible—that are most similar to the actual world at that time, following the literature on Impossible Worlds [1]. Crucially, I argue that the reference time t provided by the PAST operator should be treated as a pragmatic contextual parameter that can either precede or intersect with the time of utterance. This hybrid move allows the operator to maintain its temporal character in cases where a past-oriented reading is salient (such as in many “had-had” counterfactuals) while allowing it to “collapse” into a present-intersecting reading for “were” counterfactuals. By redefining the PAST operator as a shifter of the modal base’s nature rather than just its temporal anchor, I provide a unified framework that avoids the absurdity of the temporal regress. I argue that this semantics can accommodate all the desiderata of temporal accounts while also solving the problem raised by those who hold a modal interpretation of the past tense.

References

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