

LINGUISTICS

PERFECT POSSIBILITIES AND EXISTENTIAL CONSTRAINTS

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There is a large set of predicates which require that the existential tense of their nominal arguments be either 'present' or in agreement with their own tense value. Thus, whereas (1) conforms to this constraint:

(1) *Einstein visited Princeton.*

in that *Einstein* is 'past' and *Princeton* 'present', and both are therefore compatible with the 'past' verb, a sentence like (2):

(2) **Einstein visits Princeton.*

contains an argument, *Einstein*, incompatible with the 'present' verb. We might formulate the Existential Tensing Constraint (henceforth ETC) as in (3):

(3) ETC: if a N is 'past' or 'future', the V to which it is most immediately subordinate is also 'past' or 'future' respectively.

On some of the classes of predicate that are exceptions to ETC, see, e.g., Anderson (1973).

There, too, I claim that such a formulation as (3) accounts for the apparent discrepancy between active and passive perfect pairs like (4):

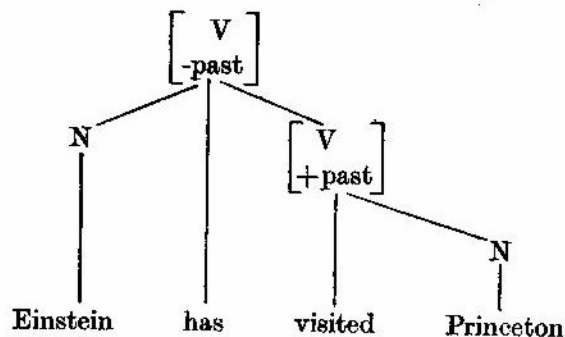
(4) **Einstein has visited Princeton.*

and (5):

(5) *Princeton has been visited by Einstein.*

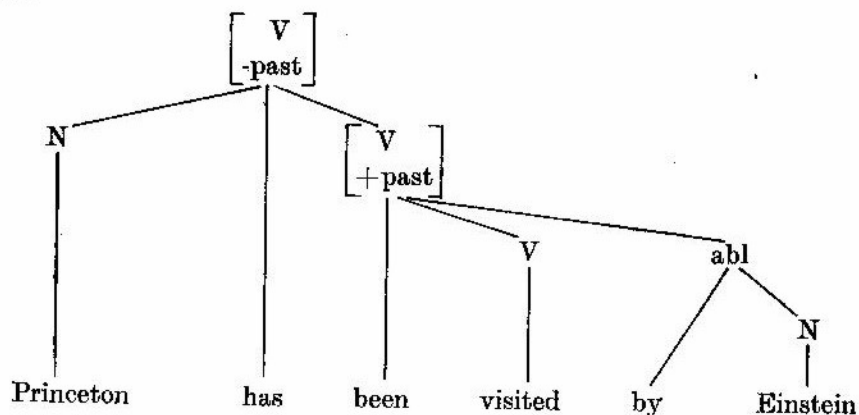
(4) displays the deviance we would expect of a 'present' tense form like the perfect, but (5) is nevertheless well-formed. I proposed that this situation is explicable with respect to an analysis of perfects which includes (whatever else may be involved) a subordinate 'past' tense, such that something like the surface structures in (6):

(6)



and (7):

(7)



are appropriate for (4) and (5) respectively. Once again, (4) is deviant on account of an infringement of ETC: the 'past' argument *Einstein* is immediately subordinate to a 'present' V. In (5), as shown in (7), *Einstein* is most immediately subordinate to the lower, 'past' V, and the sentence is accordingly well-formed¹.

¹ Of course, the situation is rather more complex than this (as Marilyn Jessen has not allowed me to forget), in that, for instance, such sentences as (5), with a [+past] non-subjective argument to a perfect configuration, appear to be acceptable only if the argument contains a 'first order nominal' (Lyons 1968: §8.1.10): compare *Fred has visited Einstein* and *Fred has visited the Monet exhibition*, where the latter is viable only if the Monet exhibition is still in progress at the moment of locution; otherwise, we get *Fred visited the Monet exhibition*. (On this and other refinements, see, e. g., Leech 1969: § 7.6.3., McCawley 1971: particularly 107 - 109). But such a constraint is again relatable to the perfect configuration: second order nominals are sensitive to the [-past] specification which governs the [+past] they are dependent on.

What these examples do not make clear is whether ETC is simply a surface structure constraint or is relevant at earlier stages in a derivation. The sentences we have looked at thus far can be allowed for if the constraint is stated either only at surface structure or also at earlier stages, indeed initially in the derivation — provided that the passive is not given a purely simplex and transformational account and, in particular, *Einstein* does not go through a stage at which it is an argument of the highest V in (7).

Consider now the sentence in (8):

(8) *Einstein may have visited Princeton.*

This suggests, in the first place, that *may* in (8) is not 'present' (cf. (4)/(6)) but rather tenseless (as argued on other grounds in Anderson 1972: §§ VIII, X, XVI)². We must then modify ETC to allow any argument to be immediately subordinate to a tenseless verb, as, say, in (9):

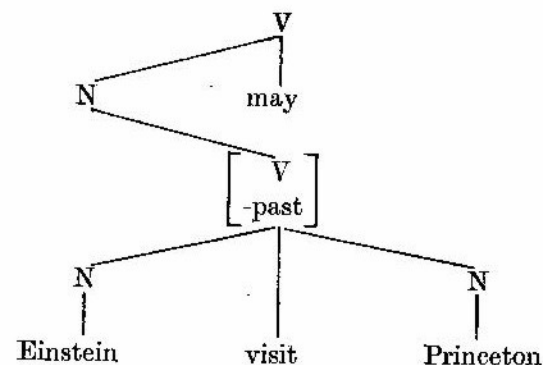
(9) ETC': if a N is 'past' or 'future', the tensed V to which it is most immediately subordinate is also 'past' or 'future' respectively.

But even ETC', if interpreted as a surface structure constraint, will not allow for the anomalous character of (10) as compared with (8):

(10) **Einstein may visit Princeton.*

If ETC' is to be retained in its most general form, then (10) must be excluded by an infringement at a stage at which *Einstein* is an argument of *visit*, as represented in (11):

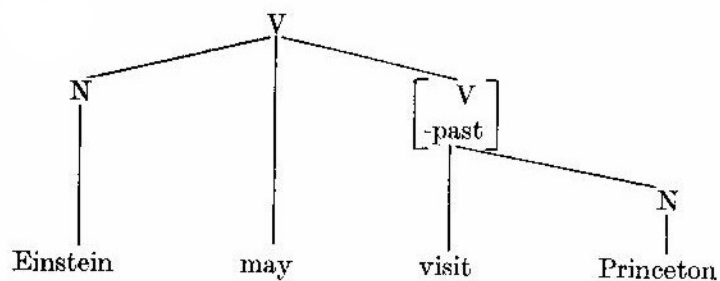
(11)



² I have assumed (a) that 'perfect *have*' is associated with a 'past' tense verb form (however tense is derived) that is immediately subordinate to another V, and (b) that epistemic modals are (tenseless) V's that take a sentential complement. Without these assumptions, ETC' is simply not stateable in the general, uniform fashion sketched out in (9).

i.e., before the operation of 'subject-raising', which results in (12):

(12)



thus prior to surface structure.

Observe too that a 'perfect' rather than 'past' interpretation for (8) is excluded, since this would involve a stage in the derivation at which *Einstein* would be immediately subordinate to a 'present' V (rather than simply 'past' or untensed V's); whereas the corresponding passive is well-formed - for precisely the same reason as (5) is. However, in this case the active must once more be anomalous by virtue of a violation of ETC' prior to surface structure.

Accordingly, we have at least one class of instances where ETC' must apply to an earlier stage in a derivation. On the other hand, in the case of (4), an infringement of ETC' arises only when *Einstein* is moved into surface subject position (cf. (6)). Can the stronger claim that ETC' is applicable at all stages in a derivation also be maintained?

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