

The Greek possessive modal *eho* as a special agentive modality

In Greek, the root necessity modal *eho* (έχω) comes from a verb for possession, similar in form to the English modal *have to*, but its use is far more restricted, in ways interestingly unlike those applicable to better studied modals. *Eho* is remarkable in the inferences it gives rise to and its unusual felicity restrictions, neither of which the modal semantics literature has yet contended with. *Eho* can express that its prejacent is a scheduled activity of the agent that is the referent of the subject, but its uses go well beyond that. To begin with, as seen in (1), the prejacent need not be tied to any particular time. In any case, the notion of a scheduled activity of an agent is itself in need of theoretical explication. In this work, we lay out the peculiarities of the modality of *eho* and propose an analysis of *eho* as a priority modal requiring a particular kind of preferential ordering source.

We observe four salient ways in which *eho* differs from other obligation modals, using *prepi* for concrete comparisons:

Planning interval *Eho* is felicitous only if the interval from its temporal perspective (e.g., time of utterance) to the time of realization of the prejacent can be construed as what we call a ‘planning interval’: an interval during which the agent brings about the prejacent, or more generally, is aware that their action options are restricted to those that do not conflict with the eventual realization of the prejacent. For instance, an utterance of (2a) is infelicitous if made many months in advance, since voting typically neither unfolds nor restricts an agent’s actions over an extended period of time. However, in a context where an earlier action which might prevent voting is made salient, as in (2b) (on the assumption that voting has to be done in person), the relevant interval can be construed as a planning interval and the utterance becomes felicitous many months in advance. In (3), *eho* has to be in the future tense, since an interval starting at the time of utterance cannot be a planning interval, given that the agent is unaware of the obligation at that time and can only become aware of it and plan for it later on.

Onset of obligation Unlike *prepi*, *eho* cannot be used for general deontic obligations, or with a teleological construal, or for an obligation that the agent does not plan to fulfill, as seen by the infelicity of (4a), (4b), (4c). Rather, *eho* requires particular types of event to trigger the obligation, such as a commitment made by the agent. We can compare the felicity of *prepi* and *eho* in (5) relative to pre- and post- commitment contexts. The moment I realize that a book would be useful to my collaborator Maria, it would be felicitous to use (5) with *prepi*, but infelicitous to use *eho*, as this obligation is only in my head and there has been no commitment. Once Maria and I have had a meeting where I promise to give her the book, it becomes felicitous to use either *prepi* or *eho*. At the end of a party, one can use (6) with *prepi* if they feel it is correct or polite to entice everyone to stay behind and help. However, saying (6) with *eho* is only felicitous if this arrangement has been discussed beforehand with the host.

Disjunction Disjunction in the prejacent of *eho* does not give rise to a free choice or an uncertainty implication, the run-of-the-mill implications of disjunction in the prejacent of *prepi*. Rather, the disjunction conveys a dependence between each disjunct and the facts, as yet unsettled, being a certain way. (8a) is infelicitous as it more immediately implies choice, unless the speaker’s uncertainty is due to a memory lapse or there is a dependence of cooking or cleaning on how the facts turn out. (8b) makes the dependence on the facts of the world overt and is, therefore, felicitous.

Social aspect *Eho* is infelicitous with obligations based on purely self-motivated preferences. (7) gives rise to the inference that relaxing is an assignment of some sort, perhaps set by a therapist, rather than a desire or a need, and is infelicitous in a context incompatible with this inference (note how both *must* and *have to* are felicitous in similar cases of desire or need). Similarly, the obligation in (3) derives from social rules regarding hospitality and one’s superiors.

Priority modal analysis for *eho* The basic idea of our proposal is that *eho* expresses obligations based on the relevant agent’s ‘intentions structured into plans’ at a given time. This is a concept introduced by Bratman et al. (1988) to characterize those intentions that the agent is in the process of realizing following a plan. In order to link this concept to Kratzer-style modal semantics, we use the notion of ‘effective preferences’ motivated by Condoravdi and Lauer (2016) and the analysis of intention reports by Grano (2017) in terms of a *RESP(ONSIBILITY)* relation between agents and propositions (Farkas 1988). *RESP(a, p)* amounts to: *a* intentionally brings it about that *p*.

We propose that *eho* is a priority modal which requires its ordering source to be a function *g* from worlds *w* to sets of propositions *p* such that: (i) $RESP(A, p) \in \max(EP(A, w))$, where *A* is the agent that is the referent of the subject of *eho*, and (ii) there is a salient agent *X* and $p \in \max(EP(X, w))$. Condition (ii) is meant to capture the social aspect of *eho*: the preferences in the ordering source are not purely *A*’s self-motivated preferences but must align with the effective preferences of another agent *X*. The fact that the preferences in the ordering source are of a particular kind, namely intentions structured as plans, encoded in condition (i), accounts for the other three properties.

Apart from describing this unexplored modal, we believe that the analysis of *eho* can be of more general interest. Firstly, we demonstrate how a modal with complex restrictions on its use can still be seen as a priority modal once certain independently motivated philosophical concepts are brought into semantic analysis. Furthermore, there are ways in which *have to* (also a possession modal) differs from *must* which broadly align with how *eho* differs from *prepi*, and analyzing the more extreme case in Greek could help with our understanding of the semantics and evolution of *have to* and possession modals cross-linguistically.

Examples

- (1) Eho na paro isitirio gia Elada kapia stigmi.
have.1SG SUBJ take.1SG ticket for Greece some point
'I have to buy a ticket for Greece at some point.'
- (2) a. # Eho na psifiso ton Noemvrio.
have.1SG SUBJ vote.1SG the November
'I have to vote in November.'
- b. Den ginete na metakomiso sto eksoteriko akoma, eho na psifiso ton Noemvrio
NEG possible SUBJ move.1SG to-the exterior yet have.1SG SUBJ vote.1SG the November
'I can't move out of the country yet, I have to vote in November.'
- (3) Ehoun erthi ta afentika tou sto horio. Den to xeri akoma alla **tha ehi** na tous
have.3PL come the bosses his to-the village, NEG it know.3SG yet but FUT have.3SG SUBJ them
trapezosi apopse.
host.3SG tonight
'His bosses have come to the village. He doesn't know it yet, but he'll have to take them out to dinner tonight.'
- (4) a. # Enas kalos politis **ehi** na niazete gia ton sinanthropo tou
one good citizen have.3SG SUBJ care.3SG for the co-human his
'A good citizen has to care for their fellow humans.' (intended)
- b. # Gia na pas sto San Francisco, ehis na paris to Caltrain
For SUBJ go.2SG to-the San Francisco, have.2SG SUBJ take the Caltrain
'To go to San Francisco, you have to take the Caltrain.' (intended)
- c. # Eho na ton paro telefono, alla den tha to kano pote!
have.1SG SUBJ him take.1SG phone, but NEG FUT it do.1SG never
I have to call him, but I will never do it! (intended) (can be made felicitous in a context of bemoaning that I never get to do all the things that I've planned)
- (5) **Prepi/Eho** na doso afto to vivlio stin Maria.
must/have.1SG SUBJ give.1sg this the book to-the Maria
'I have to give this book to Maria.'
- (6) **Prepi/Ehoume** na boithisoume me to katharisma meta to parti.
must/have.1PL SUBJ help.1PL with the cleaning after the party
(Appeal vs. Reminder) 'We have to help with the cleaning after the party.'
- (7) ?? Den boro na vgo apopse, **eho** na halaroso.
Neg can.1SG SUBJ go.1SG-out tonight, have.1SG SUBJ relax.1SG
I can't go out tonight, I have to relax
- (8) a. ?? Simera, eho i na magirepso i na kathariso.
today have.1SG or SUBJ cook.1SG or SUBJ clean.1SG
'Today, I have to cook or to clean.'
- b. Eho na vgalo tin obrela i tin soba, exartate apo ton kero,
eho.1sg SUBJ take-out.1SG the umbrella or the heater depend.3SG from the weather
'Depending on the weather, I have to take out the sun umbrella or the heater.'

References

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