

Habituality in Basque

- Two ways: (i) imperfective aspect or the dedicated “habitual” particle *ohi*.

(1) *Jonek egunkaria {a. irakur-tzen / b. irakur-i ohi} du*
Jone newspaper read-IPFV read-PFV HAB AUX
‘Jone reads the newspaper (as a matter of habit)’

QUESTIONS

What are the main semantic and pragmatic properties of habitual *ohi* in Basque?

INTUITION

- The key factor to understand the distinction between marked (*ohi*) and unmarked (*ohi*-less) habituals is essentially modal (epistemic): they signal speaker’s commitment to a plurality of events with (the obligatory possibility of) exceptions.

PROPOSAL

- Semantics:** Habitual *ohi* rests on event iteration (cf. Vlach 1993, Doron & Boneh 2013): *ohi* holds of a plural eventuality e that is equal to the supremum of its proper parts e' (Kratzer 2008).
- Pragmatics:** Competitions with other forms requires that the events are actualized and are obligatorily compatible with exceptions.

Restrictions on OHI

- It is always generalizing: it cannot apply to ongoing events
- It cannot apply to once-only predicates: **ohi(hil) / die.HAB*
- It may only refer to eventualities that have already been realized, it does not have a dispositional it’s infelicitous with dispositions

(2) *Makina honek kafe goxoa {a. egi-ten / b. egi-n ohi} du*
machine this coffee delicious make-IPFV make-PFV HAB AUX
‘This machine {makes / make.HAB} good coffee’

- Generalizations lacking exceptions, including those stating norms, rules, dispositions, uninterrupted states (e.g. *be a bachelor*, *ILPs*), etc. are not describable by means of *ohi*.

(3) *Eguzkia sortaldetik {a. atera-tzen / b. #atera ohi} da*
sun east-from come.out-IPFV come-out.PFV HAB AUX
‘The sun {rises / #rises.HAB} in the East’

Baseline: IPFV

- Tense heads are assignment dependent temporal pronouns directly denoting time intervals.
- Habitual interpretations of bare imperfective sentences are modal statements (Deo 2010, Arregi et al. 2014, Ferreira 2016).
- The modal base is a function from world-time pairs to a set of (ordered) worlds (Kratzer 1981, 1991)—here constituted by a set of gnomic alternatives to world w at time t , where the “dispositions”, “propensities” and “habits” are as in w at t (Boneh & Doron 2013).
- The IPFV morpheme *-t(z)en* states that every accessible world w' is s.t. the plurality of eventualities $*P$ contains t' , the time of the eventualities at w' :

(4) $\llbracket \text{IPFV}_{\text{HAB}} \rrbracket^{w,t,g} = \lambda P_{\langle s, \langle \epsilon, t \rangle \rangle}. \lambda t'. \forall w' \in MB_w^t. \exists e [*P(w', e) \wedge t' \subseteq T(e)]$

- For (1a), the evaluation world need not be one where e holds, and thus the non-actualization of (2a) is successfully accounted for; whether e holds in w is simply contingent (like (1a)).

(5) $\llbracket (1a) \rrbracket = \text{T iff } \forall w' \in MB_w^{g(i)}. \exists e [g(i) \subseteq T(e) \wedge \text{read}'_{w'}(e) \wedge \text{Ag}_{w'}(e) = \text{Jone}' \wedge \text{Th}_{w'}(e) = \text{paper}']$

Semantics of OHI

- In Western/Central Basque *ohi* combines with perfective aspect. Assume perfective mode in Basque locates eventualities denoted by the verb in the past of a topical time:

(6) $\llbracket \text{PFV} \rrbracket^{w,t,g} = \lambda P_{\langle \epsilon, t \rangle}. \lambda t'. \exists e [P(e) \wedge T(e) \subset t']$

- The semantic contribution of *ohi* amounts to **event iteration** (cf. Vlach 1993, Boneh & Doron 2012):

- ohi* holds of a plural eventuality e that is equal to the supremum of its proper parts e' (Kratzer 2008).
- Via Link’s (1983) σ -operator we introduce the required existence of a plurality of such e' sub-eventualities, effectively banning once-only predicates.

- Lacking any modal quantification, events must be checked wrt. the evaluation world, accounting for *ohi*’s restriction to realized eventualities.

(7) $\llbracket \text{V-PFV } ohi \rrbracket^{w,g,t} = \lambda t'. \exists e [P_w(e) \wedge T(e) \subset t' \wedge e = \sigma e' [P_w(e') \wedge e' < e]]$

- ohi* together with perfective aspect requires iterative eventualities within a topical time.

- ohi* habituals are quantificationally dependent:

- They must be bound by a quantificational expression (overt or covert; cf. Chierchia 1995)

- Quantificational adverbs quantify strictly over times in the actual world (Cable 2022).

- These quantifiers determine how often and during what time spans (via contextual restriction) *ohi* habitualities occur.

(8) *Igandero joan ohi dira futbolera*
every.Sunday go.PFV HAB AUX soccer.to
‘They go to a soccer game every Sunday’

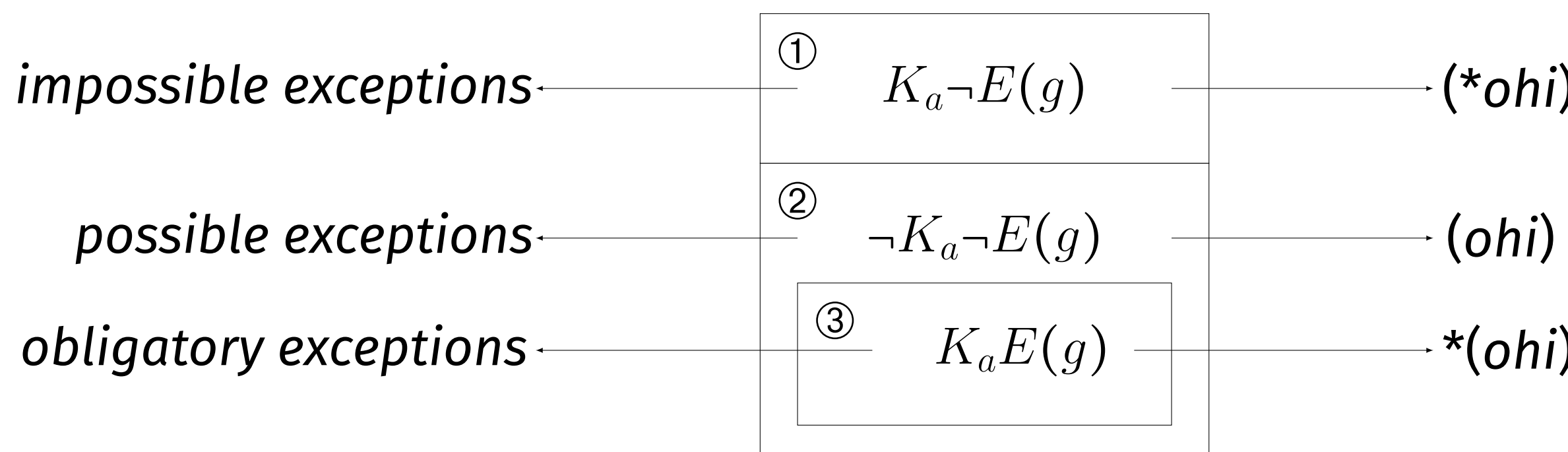
(9) a. $\llbracket \text{every Sunday} \rrbracket^{w,t,g} = \lambda P_{\langle i, t \rangle}. \forall t' [\text{Sunday}'(t') \wedge t' \in C_t \rightarrow P(t')]$
b. $\forall t' [\text{Sunday}'(t') \wedge t' \in C_t \rightarrow \exists e [T(e) \subset t' \wedge \text{they-go-to-soccer}'_w(e) \wedge e = \sigma e' [\text{they-go-to-soccer}'_w(e') \wedge e' < e]]]$

Pragmatics of OHI

- For some generalization g , either there are exceptions to g , or there aren’t; E (“has exceptions”) induces a bipartition of the space of all g .

- An agent a may:

- know that g has exceptions: $K_a E(g)$
- know that g has no exceptions: $K_a \neg E(g)$
- be ignorant about exceptions in g : $\neg K_a \neg E(g)$



- ohi* tracks **weak generalizations** (Mendia & Filip 2021)

- EITHER a is committed the knowledge of exceptions
- OR ELSE a is signaling ignorance wrt. the absence/presence of exceptions.

Selected References

Arregi, A. et al. 2014 *Cross-linguistic variation in imperfectivity* ◦ Cable, S. 2020. *Two paths to habituality*. ◦ Chierchia, G. 1995. *Individual-level predicates as inherent generics*. ◦ Deo, A. *Unifying the imperfective and the progressive* ◦ Doron, N. & Boneh, E. *Hab and Gen in the expression of habituality* ◦ Ferreira, M. *The semantic ingredients of imperfectivity in progressives, habituals, and counterfactuals* ◦ Kratzer, A. 1981. *The notional category of modality*. ◦ Kratzer, A. 2008. *On the plurality of verbs*. ◦ Link, G. 1983. *The logical analysis of plurals and mass terms*. ◦ Mendia, J.A. & Filip, H. *Characterizing genericity and epistemic commitments*. ◦ Vlach, F. *Temporal adverbials, tenses and the perfect*.