Unconditionals and Free Choice Unified

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- **The problem.** Rawlins (2013: 160) observes that both unconditionals and more classical free choice "can be meta-characterized using orthogonality," but does not actually unify the two. One reason may be that in English, different expressions serve in NPIs/FCIs and in unconditional adjuncts. By contrast, in Hungarian, the same expressions serve in all three roles:

NPI	I don't think that **anyone** called.	Nem hiszem, hogy **akárki** telefonált.
	(I don't think that **either K or M** called.)	Nem hiszem, hogy **akár K, akár M** telefonált.
FCI	**Anyone** may call.	**Akárki** telefonálhat.
	(**Either K or M** may call.)	**Akár K, akár M** telefonálhat.
UNC	**Whoever** called, we chatted.	**Akárki** telefonált, elbeszélgettünk.
ADJ	**Whether K or M** called, we chatted.	**Akár K, akár M** telefonált, elbeszélgettünk.

In fact, AKÁR-items are unacceptable outside the above three types of context:

* **Akárki** telefonált. ***Akár K, akár M** telefonált. cf. * Anyone called.

Rawlins 2013 capitalizes on a similarity between unconditional adjuncts and interrogatives/free relatives in English. However, the particle AKÁR does not occur in interrogative pronouns (ki `who') or relative pronouns (aki `who'), and UNC.ADJ clauses do not have a life as questions or as free-relative noun phrases.

Rawlins recognizes three flavors of unconditionals: (A) **Multiple events, circumstantial** modal base, relational indifference; (B) **Single event, epistemic** modal base, speaker ignorance; (C) **Material unconditional** (or, totally realistic modal base, empty ordering source) with multiple events but no indifference or ignorance. AKÁR provides for the exact same flavors, so the data are directly comparable. AKÁR-based UNC.ADJ clauses exhibit subtle differences depending on flavor, which helps with tracking the flavors and also guides analysis. Detailed examples on **p.3**.

- **The plan.** It is always interesting to find that the same meanings can be composed in multiple distinct ways, each morpho-syntactically motivated. The **three roles of AKÁR** specifically suggest an analysis where **UNC.ADJs are a special case of ∀-FCIs**, and **∀-FCIs in turn are relatives of NPIs**. Such an analysis can be framed in terms of Chierchia 2013 [=**C13**]. It would not seem possible in terms of Rawlins 2013 or Alonso-Ovalle 2004.

For the NPI and ∀-FCI uses of AKÁR-items, we presuppose and only briefly recap C13. NPIs and FCIs have active sub-domain alternatives and must be exhaustified by O(nly). Let the AKÁR clause be $p \vee q$. Then $O(p \vee q) = (p \vee q) \wedge \neg p \wedge \neg q$; a contradiction. The AKÁR-item as an **NPI** is saved if a decreasing operator intervenes between O and $p \vee q$ and averts contradiction (C13: Ch 1).

A **∀-FCI** starts out as $\exists > \Diamond$, and sub-domain alternatives are pre-exhaustified. Universal force is an implicature due to a second round of exhaustification: $(\Diamond p \vee \Diamond q) \wedge \neg O\Diamond p \wedge \neg O\Diamond q = \Diamond p \wedge \Diamond q$. A critical last step is to ensure **Fluctuation.** In (C13: Ch 6), $\Diamond p \wedge \Diamond q$ and the negated scalar alternative $\neg(\Diamond p \wedge \Diamond q)$ hold in different modal bases, SC⊂FC. Dayal 2013 revises this as a presuppositional Viability constraint, dispensing with scalarity: Each exhaustified sub-domain alternative holds in certain worlds. We slightly modify her Viability, and recycle the old name Fluctuation:

Fluctuation: Each **bare** AKÁR-clause is true at **some but not all** worlds (or <w,e> pairs).
A bare AKÁR-clause is one that does not yet contain a modal (or a conditional, for UNC. ADJs).

We are now ready to **present UNC.ADJs as a special case of ∀-FCIs.** UNC.ADJs differ from ∀-FCIs in that they scope right above "if" instead of ◊. Comments follow the derivation.

- **A derivation:** Akár Kati (telefonált), akár Mari telefonált, elbeszélgettünk.
  Whether Kate (called) or Mary called, we chatted.

(1) akár K akár M telefonált => { λw,e. K call(w,e) , λw,e. M call(w,e) } =
λp [p=λw,e. K call(w,e) ∨ p=λw,e. M call (w,e)]

(2) *Check Fluctuation for the bare conditional in (1):*
∀q [q ∈ λp[p=λw,e. K call(w,e) ∨ p=λw,e. M call (w,e)]] [∃w,e. q(w,e) ∧ ∃w,e.¬q(w,e)]

(3) ∃*-lift (1) to* λP[P(λw,e. K call(w,e)) ∨ P(λw,e. M call(w,e))]

(4) elbeszélgettünk prepped => λr[if (r) (λw,e. chat(w,e))] = λr[∀w,e[r(w,e)] [chat(w,e)]]

(5) *Quantify (3) into (4)*: λP[P(λw,e. K call(w,e)) ∨ P(λw,e. M call(w,e))] (λr[∀w,e[r(w,e)] [chat(w,e)]]) = ∀w,e [K call(w,e)] [chat(w,e)] ∨ ∀w,e [M call(w,e)] [chat(w,e)]

(6) *Universal free choice implicature by strengthening (5) to*
∀w,e [K call(w,e)] [chat(w,e)] ∧ ∀w,e [M call(w,e)] [chat(w,e)]

Each semantic ingredient of Rawlins's (2013: 172) analysis has a counterpart, as follows.

(1) AKÁR overtly takes widest scope inside the adjunct: free-standing *akár* is merged high, and *akárki* moves overtly, as is characteristic of Hungarian quantifiers (Szabolcsi 1997, 2018). We conjecture that this is why AKÁR, in contrast to *any*, is capable of building UNC.ADJs. The alternatives in bare AKÁR-clauses are composed by scoping à la Karttunen, not à la Hamblin.

(2) Each conditional antecedent is presupposed to be true somewhere; a hallmark of unconditionals, in contrast to vanilla conditionals with disjunctive antecedents. This follows from Fluctuation, which carries over from ∀-FC. Our novel use of <w,e> pairs accounts for Rawlins's observation that presupposed speaker ignorance arises iff we have a single event, without reference to different modal bases. Fluctuation requires multiple <w,e> pairs. When the event-component of <w,e> varies, we get multiple event readings; when the event-component is fixed, the world-component must vary, yielding "epistemic flavor."

(3)-(4) Bare AKÁR clauses are disjunctions that are going to be quantified in right above "if", i.e. into the restriction of ∀w,e. **(5)** executes this à la Charlow 2018.

(6) The alternatives introduced by AKÁR items are the same as in Rawlins, but come as sub-domain alternatives. The fact that each antedecent-consequent pair is true is derived as a Universal Free Choice Implicature exactly as in C13, by exhaustifying pre-exhaustified sub-domain alternatives. No phonetically null ∀ that collects alternatives is needed. The effect is not conditional-specific, as it would be if the analysis were modeled on simplification of disjunctive antecedents.

Note that on this proposal, Fluctuation pertains to the bare AKÁR clause, whereas the ∀-FC implicature is computed for the whole sentence, as in the literature.

Rawlins postulates a Q operator with partition semantics. Hungarian unconditionals only exhibit mutual exclusivity effects in the (A)-(B) flavors. But in those, the UNC.ADJ invariably involves identificational focus with an exclusive semantics; see **p.3**. It is plausible that any partition effects are due to focus plus contextual domain restriction, not to a separate partitional operator.

- **Unconditional flavors, English and Hungarian (after Rawlins 2013, examples are ours)**

(A) Multiple events, circumstantial modal base, at-issue relational indifference
Obtains when Hung. UNC.ADJ has identificational focus, indicated by Verb Prefix order jött be.

{ Whoever / whether K or M } entered, we chatted.
{ Akárki / akár K akár M } jött be, elbeszélgettünk.

(B) Single event, epistemic modal base, presupposed speaker ignorance
Obtains when Hung. UNC.ADJ has identificational focus, indicated by Verb Prefix order jött be.
This flavor has an optional is particle for akár-wh.

{ Whoever / whether K or M } entered a minute ago, I didn't recognize her.
{ Akárki (is) / akár K akár M } jött be az imént, nem ismertem meg.

(C) Material unconditional [≈ totally realistic modal base, empty ordering source],
multiple events, no ignorance or indifference effects.
Obtains when Hung. UNC. ADJ has no identificational focus. Prefix Verb order: be jött.

{ Whoever / whether K or M } entered, the floor squeaked.
{ Akárki / akár K akár M } be jött, nyikorgott a padló.

- **AKÁR-expressions in NPI/FCI roles** have no identificational focus: only Prefix Verb order.

Nem hiszem, hogy akárki be jött / *jött be. `I don't think that anyone entered'
Akárki be jöhet / *jöhet be. `Anyone may enter'

- **The +/- identificational focus distinction** is always there, but only verbs with separable prefixes or similar accompaniments make it visible in written sentences. Identificational focus relies on intonational focus, but goes beyond it both in form and in content.

Syntax $[_{EI\text{-}P}$ [EI-Op MARI $[EI^0$ $[_{TP}$ come+T_{past} [~~MARI~~ ~~come~~ in]]]]] (Horvath 2010)

Semantics $\iota x[\text{entered}(x) \ \& \ \forall y[\text{entered}(y) \rightarrow y \leq x]] = m$ (Szabolcsi 1994)
ca. `It was Mari who entered (among a contextually salient set of people)'

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