Unifying NPIs, FCIs, and Unconditionals in Dravidian

**Contributions:** The Dravidian concessive morphemes (we focus mainly on Malayalam *engil-um* and Telugu *(aii)-nāa* here) build NPIs, FCIs and unconditionals (UNC). We find striking evidence in Dravidian that UNCs are built of the same elements that form NPI/FCIs. We provide a Polarity Item (PI) account of Dravidian UNCs to explain this, along with an unconditional structure for NPI/FCIs. Thus our analysis unifies the NPI/FCI/UNC domain of Dravidian, tracking the concessive particles that form all three constructions, as even-if unconditionals. We also propose a nuanced account of universal vs. existential FCI interpretations in Dravidian based on the exhaustifying operator(s) involved.

**Morphology of Dravidian UNC:** It is made up of a *wh*-item with clause-final concessive conditional morphology in the antecedent clause *-aal*-um in Tamiḷ (1), *-ar-uu* in Kannada (2), *aal*-um or *engil-um* in Malayalam (6), *-nāa* in Telugu (6). *-aal/-engil/-ar*- are the conditional suffix, & *-um/-uu* are scalar conjunctive particles. Telugu *-nāa* is not so transparent, though *-aa* is most likely the conditional suffix.

1. yār-a kūpT-aal-um nān partī-kkku vara-Num (2) eSTu hēLid-ar-uu kēLal-ee illa who-ACC call-IF-UM I party-to come-MUST how.much told-IF-UU listen-EMP not ‘Whoever (you) call, I must come to the party.’ ‘However much (he) was told, (he) didn’t listen.’

**Prominent Analysis of UNC = question semantics:** Rawlins (2008, 2013) analyses the antecedent of English UNC as a question. The English construction lacks explicit marking of a conditional antecedent (*if*), but is given the interpretation of a Lewis-Kratzer-Heim conditional. Pointwise application of the conditional to each member of the antecedent question set, followed by a generalized conjunction of all the conditional statements on the top derives the UNC meaning and relational indifference.

**Prior Analysis of Dravidian UNC:** Concessive conditionals in Malayalam are briefly mentioned in Jayaseelan (2001, 2018), but their syntax/semantics not explored. Iyer (2017) applies Rawlins (2013) semantics to the Tamil UNC, and equates the *-aad* with the *if* operator, and the *-um* as the morphological realization of universal closure on top, thus transparently realizing the semantics of Rawlins. We show that the larger distribution of these concessive morphemes in Dravidian points to a different analysis.

**The Bigger Picture: Distribution of *engil-um*, *(aad)-ar-uu* & *(aii)-nāa*:** But curiously, the conditional plus scalar particle also appear as NPI/FCIs in combination with *wh*-items, (3) from Kannada, and as concessive scalar additive particles (CSAP); Lahiri (2009). We summarize their distribution in (4).

(3) Ravi ellig-aad-ar-uu hōdānu (4) *engil-um/-ar-uu/-nāa* is →
Ravi where-be-IF-UU go.may ‘Ravi may go somewhere or other.’

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<td>α...β</td>
<td>EXCL</td>
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**Our Analysis:** We conclude from (4) that Dravidian UNCs are in the cross-hairs of two axes: concessives and polarity. Our analysis will build on these two pieces. We remove [Q] from the structure, since there is no evidence for it in the Dravidian UNC. We instead add even, a morphologically transparent move. We also add fluctuate, a tool from the FC literature, which is needed because of the *wh* and even combination. We start with the concessive conditional, (5a), from Malayalam (Mal) and Telugu (Tel).

(5) a. ravi param-iill-engil-um njaan poog-um (MAL) ravi ceppi-nāa neenu vell-anu (TEL) Ravi tell-not-IF-Even I go-will Ravi tell-IF-EVEN I go-not ‘Even if Ravi doesn’t tell, I will go.’ ‘Even if Ravi tells, I won’t go’

b. LF: even [ if [Ravi]F tells → I won’t go] Assertion: if Ravi tells → I won’t go

c. Presup: [ if Ravi tells → I won’t go] ∀x ∈ ALT. x # Ravi [ if x tells → I won’t go]

d. Implicature: ∀f ∈ ALT. x # Ravi [ if x tells → I won’t go]

The implicature, (5d), falls out from the universal entailment of conditionals and the monotonic nature of the ordering, μ (Guerzoni & Lim 2007). The combination of even and if is necessary. Either alone does not produce this implicature. We propose that in the Dravidian UNC, (6), alternatives introduced by the *wh*-item compose pointwise with the rest of the clause, and these alternative propositions (that are also built up in the Alternative-UNC) further pointwise compose with the conditional, *-aal/-engil/-ar/-aa*, and are exhaustified by the even operator *-um/-uu*, (6b), along with a fluctuation condition.

(6) a. endo waangi-(y)-aal-um discount var-um. (MAL) eedi kon-nāa discount vas-tundi (TEL) what buy-IF-EVEN discount come-will which buy-NAVAR discount come-will ‘Whatever you buy, you will get a discount.’ ‘Whatever you buy, you will get a discount.’
b. $\forall p \in C \forall w \text{ even } [\text{ if you buy } p \rightarrow \text{ you get a discount}] = [\text{ if you buy } p \in w \rightarrow \text{ you get a discount}] \land [\text{ if you buy } p \in w \rightarrow \text{ you get a discount}] <_p \forall q.q \neq p [\text{ if you buy } q \in w \rightarrow \text{ you get a discount}].$ (this includes a fluctuation/viability constraint like Dayal 2013)

c. Implicature: $\forall q.q \neq p [\text{ if you buy } q \in w \rightarrow \text{ you get a discount}]

The universal Free Relative (FR) (Condoravdi 2005) is also built out of the unconditional, (7), and we adapt the multi-dominance structure of Hirsch (2016) to the Dravidian even-FR, (9a). Similarly, we propose that the universal-FCI, (8), is also built out of the unconditional structure, (9b), only crucially it involves the light verb be. Kannada and Telugu transparently show the copula, 

But universal-FRs are fine in episodic contexts, while universal-FCIs are not. How do we explain this difference? We propose that it is because of the nature of the verb that forms the even-FR: main verb vs. light verb be. The domain of other verbs is naturally restricted by the event they encode. The domain of be is not restricted this way. But when the domain does get restricted, by sub-trigging, or by building a context (i.e. covertly sub-trigging), the episodic use becomes acceptable. Next, we extend this analysis to the CSAP function of these morphemes, (10)-(11), with the analysis for the ‘even’ meaning in (12).

(7) *eedi icci-naa* tin-Taunu (TEL) what give-if-even eat-will

‘I will eat whatever you give me.’

(8) *eedi-aai-naa* tin-Taantu (TEL) what-be-if-even eat-will

‘I will eat anything/whatever it be.’

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(10) **Context:** Boasting about eating ability: (11) **Context:** Fasting, but very hungry:

\[ \text{idii-ai-naa} \text{ tin-Taunu (TEL) this-be-if-even eat-will} \]

‘I will eat this.’

\[ \text{idii-ai-naa} \text{ tin-Taunu (TEL) this-be-if-even eat-will} \]

‘I will eat at least this.’

But how do we derive the ‘at least’ reading? We propose that exhaustification of the CSAP (with a covert exh; Krifka 1995, Fox 2007) between even and if delivers the at least reading, (13a). Interestingly, the wh-version of the copular-unconditional/FR also has an 3-FCI interpretation, ‘some x or other’. We propose that exhaustification of the wh-be-unconditional with covert exh makes an 3-FCI, (13b).

(13a) a. [even [exh [if [CP what it be]]] I will eat [FR what it be]]

‘at least’

b. [even [exh [if [CP who it be]]]] this will fit [FR who it be] 3-FCI

Division of labour in Malayalam: The even-FR, *wh-engil-um*, is relegated to the 3-FCI space, whereas another FCI/NPI, *wh-um*, occupies the $\forall$-FCI space, (14). Why? *wh-um* shows the exact distribution of English any. It is a even based polarity-item, again like any (Ćrnčić 2018, Lahiri 1998). *wh-um* blocks *wh-engil-um* from the $\forall$-FCI reading. Where *wh-um* cannot occur, there *wh-engil-um* is free to get a $\forall$ reading. In Telugu on the other hand, as *wh-aai-naa* is the only PI in the FCI space, it freely gets exhaustified by even if or even exh if, and can therefore get a $\forall$-FCI and an 3-FCI interpretation, (15).

(14) *aar-um/aar-engil-um* var-um (MAL) (15) *evaa-ai-naa* vastaaaru (TEL)

‘Anybody/somebody or other will come.’

‘Anybody/somebody or other will come.’

**Conclusions:** Dravidian UNCs are even-conditional, with a fluctuation constraint. Dravidian universal FRs are even-FRs built out of these unconditionals. One kind of Dravidian FCIs are even-FRs built with the copular verb: *wh-engil-um/wh-aai-naa/wh-aad-ar-uu = wh-be + if + even*. They can be $\forall$-FCI or 3-FCI. The $\forall$-FCI is a result of the plain even if unconditional. The 3-FCI is a result of exhaustification in the even if-conditional. Another kind of FCIs (wh-um) don’t have this unconditional structure. They are like any –even based, and show the exact same distribution as any (in the FCI space). There is a division of labour between these two players in the free choice space in Malayalam. The copular-concessive (be+if+even) also forms CSAPS when attached to non-wh-items. They again can be interpreted ‘plain’ or exhaustified, giving rise to ‘even’ and ‘at least’ interpretations, respectively.