

# ADVERBIAL COMPARATIVES: EVIDENCE FROM MALAYALAM\*

MYTHILI MENON

*University of Southern California*

## 1 Introduction

There are two ways of forming comparatives in Malayalam as shown in (1)- the *kaa[-um]* comparative and the *il-um* comparative. On the surface, the *kaa[-um]/ kaa[-il-um]*<sup>1</sup> comparative takes a DP complement [*enn-e* ‘me-ACC’]. However, *kaa[-]* does not occur anywhere as a postposition. In the *il-um* comparative, the DP standard of comparison is marked locative<sup>2</sup>.

- (1) a. *nina-kkə*      *enn-e*    **kaa[-il-um]/(kaa[-um])**(*kuu[-uttal]*)    *pokkam*      *uŋ[-ə]*    (**kaa[-um]**)  
you-DAT      me-ACC    than-LOC-UM/than-UM    more      tall      COP  
‘You are taller than me’
- b. *nina-kkə*      *enn-**il-um***      \*(*kuu[-uttal]*)    *pokkam*      *uŋ[-ə]*      (**il-um**)  
you-DAT      me-LOC-UM      more      tall      COP  
‘You are taller than me’

The difference between (1a) and (1b) can be seen in the case marker on the standard. In (1a) the standard is marked accusative whereas in (1b) the standard is marked locative. Crucially, (1b) requires an overt ‘more’, which appears optional with the *kaa[-um]* construction. The two-way distinction in marking standards in comparatives is usually seen as a difference between a phrasal versus clausal comparative. This syntactic distinction is often argued to reflect a semantic

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<sup>1</sup> *kaa[-il-um]* is a colloquial variant of *kaa[-um]*, the latter being a phonologically reduced form.

<sup>2</sup> *il* is a locative marker.

difference in the ‘mode of comparison’ (Kennedy 2007), i.e., whether comparison is between individuals or degrees. In this paper, I will show that the two types of comparatives in (1) do not correspond to a difference between phrasal and clausal comparatives. In fact each of the two Malayalam comparatives may be phrasal or clausal. Rather, I argue that one of the comparatives is strictly an adverbial comparative, even when it seemingly appears to be an adjectival or nominal comparative. To arrive at this, In 1.1 I will begin by looking at the distribution of the two comparative constructions.

## 1.1 The distribution of *kaal-um* and *il-um* comparatives

### 1.1.1 Adjectival comparatives

The *kaal-um* comparative and the *il-um* comparative can appear in both predicative positions (1a,b) and attributive positions (2a,b):

- (2) a. *nii enn-e kaal-um*(*kuuṭuttal*) *pokkam u[[-a manuṣyan aaṇə (kaal-um)*  
 you me-ACC than-UM more tall COP-REL person COP  
 ‘You are a taller person than me’
- b. *nii enn-il-um \*(kuuṭuttal) pokkam u[[-a manuṣyan aaṇə (il-um)*  
 you me-LOC-UM more tall COP-REL person COP  
 ‘You are a taller person than me’

In (2a,b), the adjective ‘*pokkam*’ tall is attributed on the NP ‘*manuṣyan*’ via the mediation of a non-finite copula to which the relativizing marker *-a* has attached<sup>3</sup>. The copula is also sensitive to this alternation. The existential copula *uṇṭə* is used in (1) whereas the equative copula *aaṇə* is used in (2). There is one more noticeable difference between (1) and (2) - the case on the subject. In (1), the subject gets dative case, whereas in (2), the subject gets nominative. Similar to (1), in the predicative position as well the ‘more’ is optional with *kaal-um*.

### 1.1.2 Nominal comparison

Unlike the adjectival comparisons, in nominal comparison, both *kaal-um* and *il-um* obligatorily need the ‘more’ *kuuṭuttal*.

- (3) a. *njaan ninn-e kaal-um \*(kuuṭuttal) pazham kazhi-ccu (kaal-um)*  
 I you-ACC than-UM more banana eat-PAST  
 ‘I ate more bananas than you’
- b. *njaan nii kazhi-cc-at-ine kaal-um \*(kuuṭuttal) pazham kazhi-ccu*  
 I you eat-PAST-NOML-ACC than-UM more banana eat-PAST  
 ‘I ate more bananas than you ate’

<sup>3</sup> The way adjectives are formed in Malayalam and Dravidian in general is a controversial question. Amritavalli and Jayaseelan (2003), Jayaseelan (2007) has claimed that Dravidian in fact has no adjective. See Menon (to appear) for a recent analysis of the issue.

- (4) a. njaan *ninn-il-um* kuuṭuttal pazham kazhi-ccu (*il-um*)  
 I you-LOC-UM more banana eat-PAST  
 ‘I ate more bananas than you’
- b. njaan *nii kazhi-cc-at-il-um* kuuṭuttal pazham kazhi-ccu  
 I you eat-PAST-NOML-LOC-UM more banana eat-PAST  
 ‘I ate more bananas than you ate’

In addition to being a DP, the standard can also be a nominalized clause as in (3b) and (4b). The nominalized verb is *kazhi-cc-at* ‘how much you had’ where ‘atə’ is a nominalizer. Note that *kaa[-um]* assigns accusative case to the nominalized form of the verb. In (4b) as well, the *il-um* attaches to the nominalized verb.

### 1.1.3 Adverbial comparatives

In adverbial constructions, only *kaa[-um]* is licit. This is reminiscent of the genitive of comparison in Greek which can only attach to the synthetic comparative form of a degree adjective and not to adverbs of any kind (Merchant 2010).

- (5) a. njaan *ninn-e kaa[-um]* veegam ooṭ-i (*kaa[-um]*)  
 I you-ACC than-UM fast run-PAST  
 ‘I ran faster than you’
- b. njaan *nii ooṭ-unn-at-ine* *kaa[-um]* veegam ooṭ-i  
 I you run-PRES-NOML-ACC than-UM fast run-PAST  
 ‘I run faster than you ran’
- (6) a. \*njaan *ninn-il-um* kuuṭuttal veegam ooṭ-i (*\*il-um*)  
 I you-LOC-UM more fast run-PAST  
 ‘I ran faster than you’
- b. \*njaan *nii ooṭ-unn-at-il-um* kuuṭuttal veegam ooṭ-i  
 I you run-PRES-NOML-LOC-UM more fast run-PAST  
 ‘I ran faster than you ran’

### 1.1.4 VP comparatives

Similar to nominal comparatives, VP comparatives require ‘more’, both with *kaa[-um]* and *il-um*. ‘More’ is obligatory with VPs since they are not inherently gradable, thus ‘more’ contributes a *measure function* and introduces the degree argument.

- (7) a. john-inə *mary-e kaa[-um]* kuuṭuttal syntax iṣṭam aaṇə (*kaa[-um]*)  
 john-DAT mary-ACC than-UM more syntax like COP  
 ‘John likes syntax more than Mary’
- b. john-inə *mary-il-um* kuuṭuttal syntax iṣṭam aaṇə (*il-um*)  
 john-DAT mary-LOC-UM more syntax like COP

‘John likes syntax more than Mary’

### 1.1.5 Measure phrase comparatives

In measure phrase comparatives, only *il-um* is licit. The inability of measure phrases such as ‘five feet’ to be case marked prohibits *kaal-um* from assigning accusative case in (8b).

(8)a. john-inə *anja aṭiy-il-um* kuuṭuttal pokkam uṇṭə (*il-um*)  
 john-DAT five feet-LOC-UM more tall COP  
 ‘John is taller than five feet’

b. \*john-inə *anja aṭiy-e kaal-um* kuuṭuttal pokkam uṇṭə (\**kaal-um*)  
 john-DAT five feet-ACC than-UM more tall COP

### 1.1.6 Inanimate comparison

*il-um* cannot be used for inanimate comparisons. There are other instances of animacy restrictions in the language. Plural marking is restricted only to [+animate] DPs and so is accusative case marking. Given this, we would predict inanimates to occur with *il-um* comparatives and not with *kaal-um* comparatives, since *kaal-um* always has to assign accusative case and inanimates anyway need not be obligatorily case marked. In fact, we see the opposite of this. *Kaal-um* is allowed with inanimates and *il-um* is not.

(9) a. ii maratt-inə *aa marattin-e kaal-um* pokkam uṇṭə (*kaal-um*)  
 this tree-DAT that tree-ACC than-UM tall COP  
 ‘This tree is taller than that tree’

b. \*ii maratt-inə *aa maratt-il-um* kuuṭuttal pokkam uṇṭə (*il-um*)  
 this tree-DAT that tree-LOC-UM MORE tall COP  
 ‘This tree is taller than that tree’

c. ii pustakatt-inə *aa pustakatin-e kaal-um* kaṭṭi uṇṭə (*kaal-um*)  
 this book-DAT that book-ACC than-um thick COP  
 ‘This book is thicker than that book’

d. \*ii pustakatt-inə *aa pustakatt-il-um* kuuṭuttal kaṭṭi uṇṭə (*il-um*)  
 this book-DAT that book-LOC-UM more thick COP  
 ‘This book is thicker than that book’

Outside comparatives, inanimates can occur with the locative marker. Thus the animacy restriction with *il-um* is only in the case of comparative structures.

(10) pustakatt-il-um maṭi viiṇu  
 book-LOC-UM ink fall-PAST  
 ‘The ink fell even on the book’

The crucial points of difference between the two comparatives lie in the presence and absence of ‘more’, and the inability of *il-um* comparative to combine with adverbials.

## 2 Background assumptions

There are two kinds of comparatives- clausal comparatives and phrasal comparatives. The analysis of clausal comparatives has become fairly standard (Bresnan 1973, Heim 2000) and is known as the process of comparative deletion. In (11), an example of the clausal comparative, the LF has a *wh*-operator that binds a variable  $d_1$ -tall. At the PF, the *wh*-operator is not pronounced and the variable is deleted:

- (11) a. Mary is taller than John is  
 a'. LF: Mary is taller [<sub>PP</sub> than [<sub>CP</sub> *wh*<sub>*I*</sub> John is  $d_1$ -tall]]  
 a''. PF: Mary is taller [<sub>PP</sub> than [<sub>CP</sub>  $\emptyset$  John is  ~~$d_1$ -tall~~]]

Phrasal comparatives have remained a matter of dispute in recent literature. There are two opposing analyses. The direct analysis (Hanckamer 1973, and more recently Bhatt and Takahashi 2007) postulates that the complement of the *than*-phrase is a DP. Here the comparative *than* semantically composes with an individual. The lexicon has two *thans*, one selecting a clausal complement and the other selecting a DP. The second approach is the reduced clause analysis with two variants- the reduced full clause analysis (Bresnan 1973, Hackl 2000, Lechner 2004, and Merchant 2001) and the reduced small clause analysis (Pancheva 2006, 2009). Both variants contend that the complement of the *than*-phrase is a clause and reduction of the clause involves ellipsis. In the reduced full clause analysis, the *wh*-operator is unpronounced and the variable is elided, along with the ellipsis of the subordinated predicate. In the reduced small clause analysis, the *than*-phrase selects a small clause, and the *wh*-operator and the variable are elided.

- (12) a. Mary is taller than John
- Direct Analysis**  
 a'. LF and PF: Mary is taller [<sub>PP</sub> than [<sub>DP</sub> John]]
- Reduced full clause analysis**  
 b. LF: Mary is taller [<sub>PP</sub> than [<sub>CP</sub> *wh*<sub>*I*</sub> John is  $d_1$ -tall]]  
 b'. PF: Mary is taller [<sub>PP</sub> than [<sub>CP</sub>  $\emptyset$  John is  ~~$d_1$ -tall~~]]
- Reduced small clause analysis**  
 c. LF: Mary is taller than [<sub>SC</sub> *wh*<sub>*I*</sub> John  $d_1$ -tall]  
 c'. PF: Mary is taller than [<sub>SC</sub> John ~~*wh*<sub>*I*</sub>  $d_1$ -tall~~]]

Semantically, this distinction is encoded using different semantic types in the standard. Degree comparison expects a standard that is already a degree of type *d* whereas individual comparison takes a standard of type *e* and deriving a degree by applying the meaning of the gradable adjective to the individual. Given this, does *kaal-um* and *il-um* correspond to the distinction between a clausal and a phrasal comparative?

### 2.1 Are Malayalam comparatives clausal or phrasal?

It is very tempting to analyze *kaal-um* and *il-um* as instantiating the clausal and phrasal distinction since they are two different markers. Slavic languages distinguish this difference with

two different markers. In Polish, the markers are *niż* (clausal) and *od* (phrasal) (examples from Pancheva (2009)).

- (13) a. Jan wazy wizej *niż* Agnieszka (wazy). (Polish *niż*)  
 Jan weighs more than Agnieszka-NOM (weighs)
- b. Jan wazy wizej *od* Agnieszki. (Polish *od*)  
 Jan weighs more from Agnieszka-GEN  
 ‘Jan weighs more than Agnieszka (does).’

In Malayalam, each of the *kaa[-um]* and *il-um* comparatives can be clausal or phrasal. When a clause appears as the standard ((3b) and (4b) repeated here below), the clause appears with nominal properties. This nominalization is a typical property of Dravidian languages and is an embedding strategy<sup>4</sup>.

- (14) a. njaan *nii* *kazhi-cc-at-ine* **kaa[-um]** kuuṭuttal pazham kazhi-ccu  
 I you eat-PAST-NOML-ACC than-UM more banana eat-PAST  
 ‘I ate more bananas than you ate’
- b. njaan *nii* *kazhi-cc-at-il-um* kuuṭuttal pazham kazhi-ccu  
 I you eat-PAST-NOML-LOC-UM more banana eat-PAST  
 ‘I ate more bananas than you ate’

Moreover in (15) which can only be expressed as a clausal comparative, the clause appears nominalized. The nominalization is also seen in correlative constructions as in (16).

- (15) a. john-inə njaan *vicaaric-at-ine* **kaa[-um]** pokkam uṅṅə  
 john-DAT I think-NOML-LOC-UM more tall COP  
 ‘John is taller than I expected’
- b. john-inə njaan *vicaaric-at-il-um* kuuṭuttal pokkam uṅṅə  
 john-DAT I think-NOML-LOC-UM more tall COP  
 ‘John is taller than I expected’
- (16) a. [marykk-ə ethrə pokkam uṅṅə][john-inə *atin-e* **kaa[-um]** pokkam uṅṅə]  
 mary-DAT how much tall COP john-DAT that much-ACC than-UM tall COP  
 ‘John is taller than Mary’
- b. [marykk-ə ethrə pokkam uṅṅə][john-inə *ati-il-um* kuuṭuttal pokkam uṅṅə]  
 mary-DAT how much tall COP john-DAT that much-LOC-UM more tall COP  
 ‘John is taller than Mary’

<sup>4</sup> Many thanks to Rajesh Bhatt for bringing this to my notice.

Thus, the *kaa[-um]* comparative and the *il-um* comparative can both express clausal and phrasal comparison and the difference in the markers cannot be taken as an indication of the different semantic strategies. Are *kaa[-um]* or *il-um* then equivalent to *than* phrases or are they more closely related to instances of “contextual” or “implicit” comparison in English as argued by Beck et al (2004) for Japanese, (see also Kennedy 2007)?

## 2.2 Comparison as implicit or contextual

Kennedy (2007) argues for a distinction between comparatives in Japanese and in English by appealing to inherent context dependence and implicit ordering properties of the unmarked positive form. The positive form is semantically context dependent and lacks overt degree morphology. Thus, implicit comparison is an ordering between objects  $x$  and  $y$  with respect to a gradable property  $g$  such that the positive form is true of  $x$  and false of  $y$ .

The semantics of implicit comparison can be seen by looking at English constructions involving the positive form of the adjective and adverbial modifications such as *compared to*, and *with respect to*. “Compared to” can appear with both the positive and comparative version of an adjective.

- (17) a. *Compared to* John, Mary is tall.  
b. *Compared to* John, Mary is taller.

If  $A$  is the positive form of a gradable adjective then *compared to* constructions have the following truth conditions (Kennedy 2007, 49):

- (18) [*compared to*  $y$ ] ([[ $A$ ]]) is true of  $x$  in a context  $c$  iff [[ $A$ ]] is true of  $x$  in any context  $c'$  just like  $c$  except that the domain includes just  $x$  and  $y$ .

The semantics of implicit comparison thus construed entails that when  $x$  is  $A$  compared to  $y$ ,  $y$  is not  $A$  or in other words, when John is tall compared to Mary implies that Mary is not tall. To test this, I will use diagnostics from Kennedy (2007) and show that the difference between *kaa[-um]* and *il-um* comparatives is not that of implicit versus explicit comparison.

### 2.2.1 Kennedy’s (2007) diagnostics for implicit and explicit comparison

Explicit comparison requires only an asymmetric ordering between degrees to which the object possesses that property. On the contrary, in implicit comparison “Compared to  $x$ ,  $y$  is  $A$ ” commits the speaker to the truth of “ $x$  is  $A$ ” and the falsity of “ $y$  is  $A$ ”. Kennedy (2007) calls this ‘crisp judgments’. In (20), the implicit comparison forces *long* to be true of both the 600-word essay and the 597-word essay. This is infelicitous since the non-trivial partitioning of the domain is violated.

- (19) a. Context: a 600-word essay and a 200 word essay  
a’. This essay is longer than that one.  
b’. Compared to that essay, this essay is long.

- (20) a. Context: a 600-word essay and a 597 word essay

- a'. This essay is longer than that essay.  
 b'. #Compared to that essay, this essay is long.

If *kaal-um* and *il-um* are similar to *compared to*, we expect the equivalent of (20b') to be infelicitous. The comparable construction in Malayalam (21a) is acceptable in the described context with *kaal-um* and without an overt 'more'<sup>5</sup>.

(21) a. Context: a 600 word essay and a 597 word essay

- |        |  |      |                 |                |           |      |
|--------|--|------|-----------------|----------------|-----------|------|
| a'. ii | upanyaasam                             | aa   | upanyaasattin-e | <b>kaal-um</b> | valiy-atə | aaṇə |
|        | this essay                             | that | essay-ACC       | than-UM        | big-NOML  | COP  |
|        | 'This essay is longer than that essay' |      |                 |                |           |      |

Secondly, *compared to* in English has a wide distribution and it can occur with superlatives. This is not true for *kaal-um* or *il-um*.

- |         |                             |                  |          |         |         |          |          |
|---------|-----------------------------|------------------|----------|---------|---------|----------|----------|
| (22) a. | *avar-e                     | <b>kaal-um</b> , | john-inə | aaṇə    | ettavum | pokkam   | u  -atə  |
|         | they-ACC                    | than-UM          | john-DAT | COP     | most    | tall     | COP-NOML |
|         | 'John is tallest than them' |                  |          |         |         |          |          |
| b.      | *avar-il-um,                | john-inə         | aaṇə     | ettavum | pokkam  | u  -atə  |          |
|         | they-LOC-UM                 | john-DAT         | COP      | most    | tall    | COP-NOML |          |
|         | 'John is tallest than them' |                  |          |         |         |          |          |

The last diagnostic looks at measure phrases and their interaction with the positive form. Differential Measure phrases cannot appear in *compared to* constructions without 'more'. In explicit comparison, measure phrases denote the difference between two degrees on a scale. The composition of the measure phrase and a gradable adjective results in a predicate that is not context dependent and implicit comparisons should be rendered infelicitous. This prediction is again not borne out in Malayalam.

- |         |                                 |           |                |            |            |        |      |
|---------|---------------------------------|-----------|----------------|------------|------------|--------|------|
| (23) a. | ninakkə                         | enn-e     | <b>kaal-um</b> | pattu      | centimeter | pokkam | uṇṭə |
|         | you-DAT                         | me-ACC    | than-UM        | ten        | centimeter | tall   | COP  |
|         | 'You are 10 cms taller than me' |           |                |            |            |        |      |
| b.      | ninakkə                         | enn-il-um | pattu          | centimeter | kuuṭuttal  | pokkam | uṇṭə |
|         | you-DAT                         | me-LOC-UM | ten            | centimeter | more       | tall   | COP  |
|         | 'You are 10 cms taller than me' |           |                |            |            |        |      |

The diagnostics above show that the *kaal-um* and *il-um* constructions behave like comparatives with *than* phrases and not *compared to* constructions. Thus, they must involve explicit comparison. Moreover, there is another "compared to" construction, which can be used for implicit construction.

- |         |        |       |             |         |        |      |
|---------|--------|-------|-------------|---------|--------|------|
| (24) a. | ninn-e | vaccə | nokk-um-pol | eni-kkə | pokkam | uṇṭə |
|---------|--------|-------|-------------|---------|--------|------|

<sup>5</sup> Because *il-um* always needs an obligatory 'more', this test cannot be used.

you-ACC keep look-UM-WHEN I-DAT tall COP  
 ‘Compared to you, I am tall’ (literally: ‘When I compare myself to you, I am taller’)

b. ninga| ellavarey-um vaccə nokk-um-**pol** eni-kkə ettavum pokkam uṅṅə  
 you-PL everyone keep look-UM-WHEN I-DAT most tall COP  
 ‘Compared to all of you, I am the tallest’

I have shown that the distinction between the two comparatives is not syntactic- a phrasal comparative versus clausal comparative, nor is it context dependence- implicit versus explicit. In the next section, I will analyze the *il-um* comparative as an adverbial comparative and motivate this semantically and syntactically.

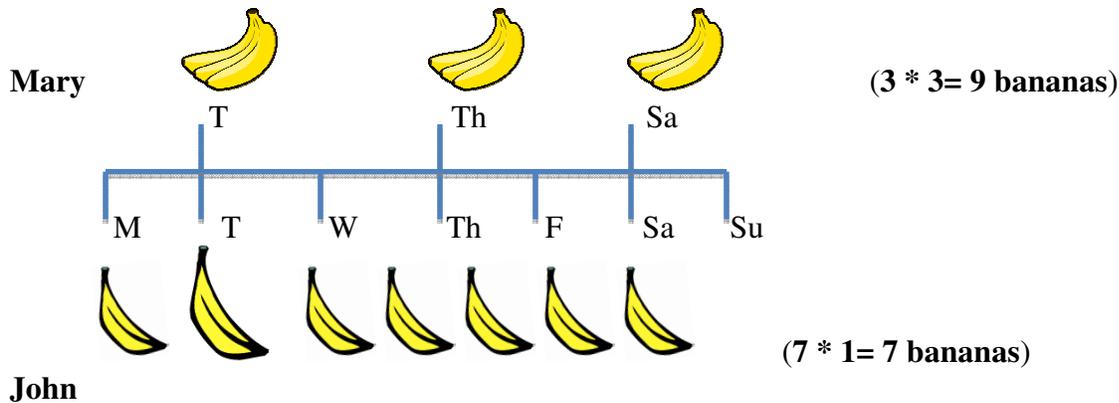
### 3 The analysis

I am essentially going to claim that the *il-um* comparative is always an adverbial comparative and thus express meanings similar to (25). I will follow Nakanishi (2004) who proposes a measure function following Hackl’s (2001) MANY that associates degrees with events. Crucially, these are defined for domains that may be non-trivially ordered and their measurements are monotonic (Nakanishi 2007).

- (25) a. John is tall [more than Mary is].
- b. John ate apples [more than Mary did].

To illustrate, consider the following scenario describing John and Mary’s banana-eating habits.

(26) *Context:* John and Mary love eating bananas. John eats a banana every day. Mary only eats bananas three times a week, and she eats 3 bananas on those days. Thus, in a given week, John eats 7 bananas total and Mary eats 9.



A. #John *mary-e* **kaa|**-um kuuṭuttal pazham kazhi-ccu  
 john mary-ACC than-UM more banana eat-PAST  
 ‘John ate more bananas than Mary’  
 (*False:* John did not eat more bananas than Mary)

B. John *mary-il-um* kuuṭuttal pazham kazhi-ccu

John    mary-LOC-UM more            banana            eat-PAST  
 ‘John ate bananas more (often) than Mary’  
 (*True*: Since, there were more events of John eating bananas than Mary eating bananas)

Given the context in (26), the *kaal-um* comparative is infelicitous since John ate only 7 bananas whereas Mary ate 9. There are however more events of John eating bananas than Mary since he ate a banana every day which makes the *il-um* comparative felicitous. Here, the VP is taken to denote a plurality of events and *John* and *Mary* are taken to satisfy the predicate more than once. This suggests that monotonicity constrains the adverbial ‘more’ the same way as it does in the nominal ‘more’. Following Hackl (2000, 2001), I assume that the nominal determiner ‘more’ decomposes into a measure function ‘MUCH/MANY’ and the comparative quantifier *-er*. MANY involves a non-trivial, orderly mapping of individual sums to degrees of cardinality and *-er* compares the maximum degrees of NPs. The semantics for the determiners are given below, where  $\mu$  is a measurement along a non-cardinal scale, e.g., amount, temporal/spatial length.

- (27) a.  $[|much|] = \lambda d \in D_d . \lambda x \in D_e . \mu(x) = d$             (determiner ‘much’)  
 b.  $[|many|] = \lambda d \in D_d . \lambda x \in D_e . |x| = d$             (determiner ‘many’, from Hackl 2001)  
 c.  $[|much|] = \lambda d \in D_d . \lambda e \in D_v . \mu(e) = d$             (adverbial ‘much’)  
 d.  $[|many|] = \lambda d \in D_d . \lambda e \in D_v . |e| = d$             (adverbial ‘many’, from Nakanishi 2004)  
 e.  $[|-er|] = \lambda D \in D_{\langle d, t \rangle} . \lambda D' \in D_{\langle d, t \rangle} . \max(D') > \max(D)$

The *kuuuttal* ‘more’ is the overt instantiation of ‘much/many + -er’. *kuuuttal* is the comparative form of *kuree* which means ‘a lot’. Similarly, *kuravu* ‘less’ is also formed from the same root ‘kur’. In an adverbial comparative therefore the ‘more’ always has to be obligatorily present. In *kaal-um* comparatives the ‘more’ is not obligatory since the adjective is gradable and the nominal ‘more’ is obligatory while doing nominal comparisons.

- (28) a. John ate more bananas than Mary.  
 b.  $[\lambda d. \text{John ate } d\text{-MANY bananas}] [-er \text{ [than } [\lambda d. \text{Mary ate } d\text{-MANY bananas}]]$   
 c. The number of bananas that John ate exceeds the number of bananas that Mary ate  
 d. John ate bananas more than Mary  
 e.  $[\lambda d. \text{John ate bananas } d\text{-MANY (times)}] [-er \text{ [than } [\lambda d. \text{Mary ate bananas } d\text{-MANY (times)}]]$   
 f. The number of events of John eating bananas exceeds the number of events of Mary eating bananas

Thus, there is a plurality of events in (28d) ranging over degrees of cardinality. The measure function incorporated into ‘more’ maps all the individual denotations to the degree one.

### 3.1 Adverbial vs determiner ‘more’

The verbal domain has been shown to be similar in respects to the nominal domain. The count/mass distinction has been said to parallel telicity in the verbal domain (Krifka 1989, Rothstein 2004). To further show that there is indeed a semantic difference between the two comparatives, I will use three diagnostics from Wellwood et al (To appear).

The first diagnostic comes from telicity. Perfective telic predicates like ‘reach the top’ and ‘climb the mountain’ cannot combine with adverbial ‘more’ because they denote singular events. This is paralleling the ungrammaticality of the nominal determiner ‘more’ in the nominal domain. Our prediction that *il-um* comparative should not combine with perfective telic predicates is borne out.

(29) a. \*Yesterday, John climbed the mountain more than Mary did.

- b. \*raaman      *sitay-il-um*      kuuṭuttal      malay-ute      mukalil      ethi-iṭṭ-untə  
       raman      sita-LOC-UM      more      hill-GEN      top      reach-PERF-COP  
       ‘Raman reached the top of the mountain more than Mary’

The scale for comparison of perfective and progressive marked atelic predicates is variable and constrained by monotonicity. Thus, in (30) the comparative measure maybe by cardinality, temporal duration, or length of spatial path.

(30) a. Last Monday, John ran in the park more than Mary

- b. raaman      *sitay-il-um*      kuuṭuttal      ooT-iṭṭ-untə/oot-uka-aanə  
       raman      sita-LOC-UM      more      run-PERF-COP/run-INF-COP  
       ‘Raman ran more than Sita’

The last diagnostic, tests the scale for comparison of VPs with IMPF-HAB morphology in terms of cardinality.

(31) a.. In those days John ran in the park more than Mary did  
       (John ran in the park more often/more times than Mary did)

- b. raaman      *sitay-il-um*      kuuṭuttal      ii      cinema      kaan-um (Habitual)  
       raman      sita-LOC-UM      more      this      cinema      see-UM  
       ‘Raman watches the film more than Sita’ (Raman watches the film more often/more times than Sita’)

In (31b), the only reading available is in terms of cardinality, i.e. there were more events of Raman watching the film than Sita.

### 3.2 Structural considerations

I have shown in the previous sections that the two comparatives behave differently semantically. In this section, I will consider some structural differences between them suggesting they are indeed two different entities. Malayalam is a language which has scrambling. When the *than*-phrase and the standard of comparison are scrambled in the *kaal-um* comparative, they can be done so separately.

(32) a. vidhyaarhi-ka[ *professor-maar-e*      **kaalum**      kuuṭuttal      nagaraṅṅal      sandarshi-ccu  
       student-PL      professor-PL-ACC      than-UM      more      city-PL      visit-PAST  
       ‘Students visited more cities than professors’

(Literally: Students visited **more cities** than professors visited cities)

- b. vidhyarthi-ka| professor-maar-**il-um** kuuṭuttal nagaraṅṅal sandarshi-ccu  
 student-PL professor-PL-LOC-UM more city-PL visit-PAST  
 ‘Students visited more cities than professors’  
 (Literally: Students visited cities **more than professors** visited cities)

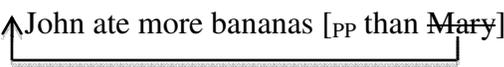
In *il-um* comparatives, on the contrary, scrambling is allowed only if the standard of comparison is moved along with the *than*-phrase.

- (33) a. [professor-maar-*e* **kaa[-um]** kuuṭuttal]vidhyarthi-ka| nagaraṅṅal sandarshi-ccu  
 professor-PL-ACC than-UM more student-PL city-PL visit-PAST  
 ‘More students than professors visited the cities’
- b. [professor-maar-*e* **kaa[-um]**] vidhyarthi-ka| kuuṭuttal nagaraṅṅal sandarshi-ccu  
 professor-PL-ACC than-UM student-PL more city-PL visit-PAST  
 ‘Students visited more cities than professors’
- c. [professor-maar-**il-um** kuuṭuttal] vidhyarthi-ka| nagaraṅṅal sandarshi-ccu  
 professor-PL-LOC-UM more student-PL city-PL visit-PAST  
 ‘Students visited more cities than professors’
- d. \*[professor-maar-**il-um**] vidhyarthi-ka| kuuṭuttal nagaraṅṅal sandarshi-ccu  
 professor-PL-LOC-UM student-PL more city-PL visit-PAST

This suggests that in *il-um* comparatives the ‘more’ and the *than*-phrase form a constituent unlike in *kaa[-um]* comparatives. The second structural test is pied piping which is allowed with *kaa[-um]*, and not with *il-um*.

- (34) a. innale aar-*e* **kaa[-um]** nallavaṅṅam mary guitar vayi-ccu?  
 yesterday who-ACC than-UM better mary guitar read-PAST  
 ‘Yesterday, who did Mary play the guitar better than?’
- b. \*innale aar-**il-um** kuuṭuttal john pazham kazhi-ccu  
 yesterday who-LOC-UM more john banana eat-PAST  
 Intended: ‘Yesterday, more than whom did John eat bananas?’

This suggests that in (34a) extraction is possible since the *than*-clause is a PP. However, in (34b) an adverbial is an island for extraction and thus pied piping is not allowed.

- (35) a. Yesterday,  John ate more bananas [PP than Mary] (nominal)  
 b. Yesterday, who did John eat more bananas than?

- (36) a. Yesterday, John ate bananas [ $\Delta$  more than Mary] (adverbial)  




b\* Yesterday, who did John eat bananas more than?

The last diagnostic comes from reflexives and their inability to be standards with adverbials. This is borne out by the *il-um* comparative.

(37) a. aar-kk-um    *tann-e*    **kaa|-um**    pokkam    illya  
 who-DAT-UM    himself-ACC    than-UM    tall    NEG  
 ‘No one is taller than himself’

b. \*aar-kk-um    *tann-il-um*    kuuṭuttal    pokkam    illya  
 who-DAT-UM    himself-LOC-UM    more    tall    NEG

## 4 Conclusion

In this paper, I have closely looked at the two different comparative constructions in Malayalam arguing that the distinction between the two comparatives is not a phrasal versus clausal distinction, or an implicit versus explicit comparison. The *il-um* comparative is always an adverbial comparative requiring an obligatory ‘more’ which decomposes into ‘MUCH/MANY’ and *-er*. Thus, *kaa|-um-* (‘more’) + standard quantifies over the degree argument of gradable predicates, or the degree argument introduced by the ‘MUCH/MANY’ measure function relating individuals and degrees. The *il-um* – ‘more’ + standard quantifies over the degree argument introduced by a ‘MUCH/MANY’ measure function relating events and degrees.

### 4.1 Forming comparatives in the other Dravidian languages

In Tamil, Kannada and Telugu there is only a single way of forming comparatives, by using the postposition ‘from’. The three languages use the same form for both adjectival/nominal comparative and adverbial comparative. Independently ‘viDa’, ‘agaa’ and ‘ginta’ are postpositions in the language. They show no animacy restriction unlike Malayalam.

(38) nii    yenn-ai    **viDa**    uyaram    *Tamil*  
 you    me-ACC    from    tall  
 ‘You are taller than me’

(39) a. nuuvvu    naakante    **ethugaa**    unaavu    *Telugu*  
 you    me-ACC    tall-than    COP  
 ‘You are taller than me’

(40) a. neenu    **ninaginta**    ethira    iddini    *Kannada*  
 you    me-THAN    tall    COP  
 ‘You are taller than me’

So is it then an accident that Malayalam developed two different comparatives? Probably not, the answer is more deep rooted and hinges on the semantics of the locative used in the *il-um* comparative.

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