The English & Foreign Languages University, Hyderabad, India

Abstract

Nouns meaning 'place, region' and 'part' are compounded in Kannada with a 'bleached' noun (a putative postposition) to form Ax-Part and Part readings. As in other languages, the AxPart or 'region' reading does not pluralize, does not permit adjectival modification, and allows for MeasureP modification (unlike the part reading). Ax-Parts may also be formed out of nouns by the fusion of a dative marker or a genitive marker with the N; these case markers introduce the Place element. The dative case may be optionally overt (e.g. pakka-kke 'side-dative,' 'to a side'), or covert (in AxParts like munde 'front'). The genitive marker gives a sense of immediate adjacency that we designate the NextPart reading. Interestingly, the dative and genitive cases in Kannada also allow nouns to assume the function of predicative and attributive adjectives.

1. Introduction

Svenonius (2006b) distinguishes the "axial part" and "part" readings of a body:

- (1) a. (i) There was a kangaroo in the front of the car.
 - (ii) There was a kangaroo on the front of the car.
 - b. (i) There was a kangaroo in front of the car.
 - (ii) *There was a kangaroo on front of the car.

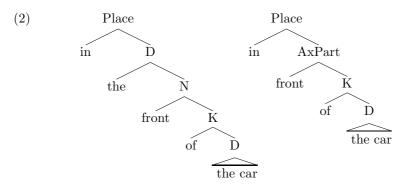
The AxPart reading is seen in (1bi), the part reading in (1bii) and (1aii). Svenonius quotes Jackendoff (1996) on the notion of an axial part:

"The "axial parts" of an object—its top, bottom, front, back, sides, and ends—behave grammatically like parts of the object, but, unlike standard parts such as a handle or a leg, they have no distinctive shape. Rather, they are regions of the object (or its boundary) determined by their relation to the object's axes. The up-down axis determines top and bottom, the front-back axis determines front and back, and a complex set of criteria distinguishing horizontal axes determines sides and ends." (Jackendoff 1996:14)

 $^{^{*}}$ My thanks to Peter Svenonius for his careful comments on an earlier version of this paper.

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Svenonius argues that "AxPart is a category like aspect or modality, realized in many languages" (Svenonius 2006b:50). He refers to the 'part' sense of a word like *front* as its N use, and to the region or spatial sense as its AxPart use:



In English, Svenonius points out, the AxPart

- i. cannot take plural morphology
 - There were kangaroos in the fronts of the cars
 - *There were kangaroos in fronts of the cars
- ii. cannot take adjectival modification
 - There was a kangaroo in the smashed-up front of the car
 - *There was a kangaroo in smashed-up front of the car
- iii. and may combine with measure phrases
 - *There was a kangaroo sixty feet in the front of the car
 - There was a kangaroo sixty feet in front of the car

"The semantic function of AxPart is to identify a region (a set of points in space, cf. Nam 1995, Kracht 2002) based on the Ground element (the complement DP; see Svenonius in press for discussion of the Ground interpretation of P complements) ... The semantic contribution of Place is to specify how space is projected from a region; I will assume a modelling of space in terms of vectors along the lines proposed by Zwarts (1997), Zwarts and Winter (2000). Vectors are one-dimensional objects with direction and length which define points in a space when they are drawn from a region." (Svenonius 2006b:52, references updated)

"PlaceP is relational; I assume a syntactico-semantic component p, which introduces a Figure and specifies a spatial relation to a

Ground (Svenonius 2003). ... The content of p may specify such relations as containment (in), contact (on), support (Dutch an), etc." (Svenonius 2006a)

2.

Kannada encodes the two readings AxPart and Part in the choice of the noun that seems to form a compound with the (putative) postposition. The bare "postposition" (itself perhaps just a noun, or a noun in the process of "bleaching" into a P) appears to convey only the AxPart reading. Cf.¹

- (3) AxPart reading
 - a. in front of the car
 - b. kaar(-ina) munde/mundu-gade car-GEN front /front-place
 - c. kaar(-ina) munde/mundu-gade ondu kangaroo nint-ittu.

 car-GEN front /front-place a kangaroo was.standing

 'There was a kangaroo standing in front of the car'
- (4) Part reading
 - a. on the front of the car
 - b. kaar(-ina) *munde/mum-bhaaga-da meele car-GEN front /front-part-GEN top
 - c. kaar(-ina) mum-bhaaga-da meele ondu kangaroo nint-ittu.

 car-gen front-part-gen top a kangaroo was.standing

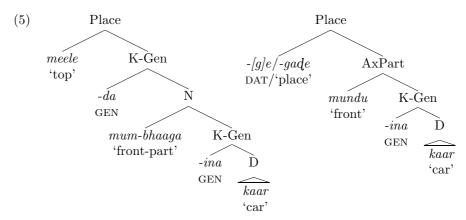
 'A kangaroo was standing on the front (part) of the car'

The noun compound formed by munde 'front' with kade 'place' gives us the AxPart reading (as does the bare munde); the compound formed by munde with bhaaga 'part' gives us the part reading.² Notice that the AxPart munde/mundu-gade manifests no overt postposition or noun corresponding to in in English. We shall later suggest that munde incorporates a phonologically reduced form of the dative case -ge, which functions as the Place head. We suggest also that kade, which we choose to gloss as 'place,'

 $^{^1}kade/gade$ translates into English as 'side' (as in ola-gade 'inside,'), or as 'place' ($ella\ kade$, 'everywhere, every place'; $ondu\ kade$, 'one place, a/some place'). It might also translate as 'direction, way' ($yaava\ kade$, 'in which direction'), or 'end': kade-ge 'in the end.'

 $^{^2{\}rm The}$ change in /kade/ to /gade/ in mundu-gade, and the truncation of munde and concomitant assimilation of /n/ to /m/ in mum-bhaaga, suggests that these words are compounds (of different degrees of cohesion). Kannada does not have a general rule of intervocalic voicing of consonants, either within a word or across word boundaries. Thus the voicing of /k/ in mundu-gade contrasts with the absence of voicing in ii kade 'this place, here,' aa kade 'that place, there,' and similar examples in n. 1 above. This suggests that mundu-gade, olargade are N-N compounds, while ii kade, aa kade, etc. are D-plus-N combinations.

is a Place head.³



- (6) a. kaar(-ina) mum-bhaaga-da meele car-GEN front-part-GEN top 'on the front part of the car'
 - b. kaar(-ina) munde/mundu-gade car-GEN front /front-place 'in front of the car'

Svenonius' observations that the AxPart or 'region' reading

- does not pluralize
- does not permit adjectival modification
- allows for MeasureP modification, unlike the part reading

hold good for Kannada. (There is a caveat about measure phrase modification, see below.)

- (7) munde/mundu-gade does not pluralize; mum-bhaaga does
 - a. kaaru-gala(-ina) munde(*-galu)/mundu-gade(*-galu) car-PL-GEN front-PL /front-place-PL 'in front of the cars'
 - b. kaaru-gala(-ina) mum-bhaaga-galu

 car-PL-GEN front-part-PL

 'the fronts of the cars'/'the front parts of the cars'
- $(8) \qquad {\it munde/mundu-gaqe} \ {\rm does} \ {\rm not} \ {\rm permit} \ {\rm adjectival} \ {\rm modification}; \ {\it mumbhaaga} \ {\rm does}$
 - a. *odeda mundu/mundu-gade $broken\ front/front-place$

 $^{^3}$ AxParts in French can have spatial meanings without a preceding P[lace] element (Roy 2006, reported in Svenonius 2006b). Svenonius suggests that French has a null Place head.

- b. odeda mum-bhaaga broken front-part
- (9) munde and mundu-gade allow MeasureP modification; mum-bhaaga does not (braces here delimit two alternatives where there is more than one word on one or both sides of the slash)

kaar-ina {svalpa/ippattu adi} munde car-GEN a.little/twenty feet front '{a little/twenty feet} in front of the car'

In (9) the measure phrase occurs preceding the AxPart munde. In the case of the AxPart mundu-gade, it appears that the head noun kade does not allow for a coherent reading with measure phrase modification preceding it (cf. *twenty feet place in English). However, a postposed appositive phrase strategy allows a MeasureP to occur with munde as well as mundu-gade in (10).

- (10) a. kaar-ina munde/mundu-gade svalpa duurad-alli car-GEN front /front-place a.little distance.GEN-LOC 'at a little distance in front of the car'
 - b. kaar-ina munde/mundu-gade ippattu adi-ya car-GEN front /front-place twenty feet-GEN duurad-alli distance.GEN-LOC 'at a distance of twenty feet in front of the car'

This postposed appositive phrase strategy is not available for *mum-bhaaga*, as seen in (11).

- (11) a. *kaar-ina mum-bhaaga svalpa duurad-alli car-GEN front-part a.little distance.GEN-LOC
 - b. *kaar-ina mum-bhaaga ippattu adi-ya duurad-alli car-GEN front-part twenty feet-GEN distance.GEN-LOC

In (12), *mum-bhaaga* is marked genitive, and occurs as the "possessor" of a Measure P. But (12) indicates not a distance in front of the car, but a measurement from the front part of the car.

- (12) a. kaar-ina mum-bhaaga-da svalpa duurad-alli car-GEN front-part-GEN $a.little\ distance.$ GEN-LOC 'at a little distance from the front part of the car'
 - b. kaar-ina mum-bhaaga-da ippattu adi-ya duurad-alli car-GEN front-part-GEN twenty feet-GEN distance.GEN-LOC 'at a distance of twenty feet from the front part of the car'

The genitive-marking strategy of (12) is marginally possible with bare munde; and surprisingly, quite possible with mundu-gade. But in such cases, a Part reading seems to be forced for these elements which are oth-

erwise understood as AxParts:

- (13) a. kaar-ina mund(?-ina)/mundu-gade-ya svalpa car-GEN front-GEN /front-place-GEN a.little duurad-alli distance.GEN-LOC 'at a little distance from the front part of the car'
 - b. kaar-ina mund(?-ina)/mundu-gade-ya ippattu adi-ya car-GEN front-GEN /front-place-GEN twenty feet-GEN duurad-alli distance.GEN-LOC 'at a distance of twenty feet from the front part of the car'

It seems that *munde* or *mundu-gade*, when they are marked genitive, cannot be interpreted as AxParts. Note that there is no general prohibition on *munde* taking a genitive marker: *mund-ina kaaryakrama*, 'the next programme.' We shall return to the latter type of expression when we discuss NextParts.

3.

Although the AxParts munde and mundu-gade do not allow genitive case, they do allow for dative, locative and ablative (from) case-modification. In the examples below, the dative and ablative case markers delineate a Path with respect to Place, while the locative case marker specifies a Location. (The locative case marker is homophonous with an adverbial free morpheme alli meaning 'there, at that place.') We may thus take the dative and ablative cases to "represent different values of a functional projection Path, dominating Place," following a suggestion of Svenonius (p.c.); and take Location as the corresponding functional projection for the locative case (17). We note that when the AxPart is thus embedded under Path/Location, a vestigial genitive case may then occur as a frozen morpheme "governed by" the ablative or locative (to use terminology from traditional grammar).

- (14) kaar-ina mundin-inda /mundu-gadey-inda bar beedi.

 car-GEN front.GEN-from/front-place.GEN-from come do.not

 'Do not come from in front of the car' (= do not pass in front of the car)
- (15) suuryanu sanjey namma mane-ya munda-kke/mundu-gade-ge sun evening our house-GEN front-DAT /front-place-DAT baruttaane.

'The sun comes around to the front of our house in the evening'

(16) a. mane-ya mundey-alli /mundu-gadey-alli ondu house-GEN front.GEN-LOC/front-place.GEN-LOC one deevasthaana ide.

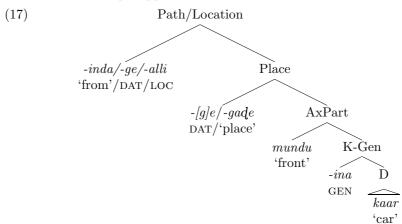
temple is

'There is a temple in front of the house'

b. mane-ya mundey-alli /mundu-gadey-alli ondu house-GEN front-GEN-LOC/front-place.GEN-LOC one deevasthaana barutte.

temple comes

'A temple appears in front of the house'



- (18) a. kaar-ina mundin-inda /munda-kke/mundin-alli car-GEN front.GEN-from/front-DAT /front.GEN-LOC 'from in front of the car/up ahead of the car/at a place in front of the car'
 - b. kaar-ina mundu-gadey-inda /mundu-gade-ge
 car-GEN front-place.GEN-from/front-place-DAT
 /mundu-gadey-alli
 /front-place.GEN-LOC
 'from in front of the car/up ahead of the car/at a

'from in front of the car/up ahead of the car/at a place in front of the car'

4

The reader may notice in (17)/(18) the claim that the dative-marked form of munde, namely munda-kke, incorporates a null dative case (the head of PlaceP) inside the overt dative case (the head of PathP). We shall now consider the evidence for this claim of a null dative case in munde.

We have so far considered the horizontal axis from front to back, with *munde* 'front' as its exemplar. *Hinde* 'back' is essentially similar to *munde*: it is an AxPart in its bare form, and it forms an AxPart and a Part by com-

pounding with the nouns kade and bhaaga respectively (19). (We include the munde forms in (19), for completeness.)

(19) hinde hinda-gade him-bhaaga back back-place back-part munde mundu-gade mum-bhaaga front front-place front-part

The vertical up-down axis is also like the horizontal front-back axis. We give below in (20) the bare form AxParts and the -kaqe/-bhaaga compounds that are the Parts and AxParts for this axis:

Consider now the form kelage 'bottom' in (20). It is morphologically complex, and it seems to incorporate the dative case. To see this, compare kela-ge 'bottom' with the companion forms ola-ge 'inside,' hora-ge 'outside' and yeduri-ge 'in front of, opposite.' All these forms attest an ending, -ge, which is synonymous with the dative case. This -ge disappears when these words are compounded with -kade or -bhaaga:

(21) kela-gade ola-gade hora-gade yeduru-gade 'below' 'inside' 'outside' 'in front, opposite'

The morphemes kela-, ola-, and hora- no longer occur as free morphemes in Kannada. Nor do other case-endings attach directly to these morphemes, when (e.g.) Place is embedded under Path. (In such a case, the case-endings that head the Path projection attach to the ge-fused forms: e.g. kela-ge-inda 'below-ge-from', 'from below'.) But the morpheme yedur- is attested in a ge-less form. It appears in the locative, with the latter attached to a frozen genitive case: yedur-in-alli 'opposite-GEN-LOC.' This shows that -ge in yedur-ge is indeed a separable morpheme, specifically, dative case. Thus the -ge in the other words in this group is also very likely an incorporated dative case.

These dative-marked words are AxParts. They behave like munde, hinde and meele in isolation, and they form AxParts when compounded with kade, Parts when compounded with bhaaga:

- (22) a. idara kela-ge/kela-gade yeenu ide?

 it.GEN below /below-place what is

 'What's under this?'
 - b. kaar-ina kela-bhaaga-gal-anna tole. car-GEN below-part-PL-ACC wash 'Wash the under-parts of the car'

Parts, Axial Parts and Next Parts in Kannada

- (23) a. idanna mane-ya ola-ge/ola-gade idu.

 it.ACC house-GEN inside/inside-place put

 'Put this inside the house'
 - nanna kai ola-bhaaga-galu
 my hand inside-part-PL
 'the palms of my hands'
- (24) yella-ra yeduri-ge/yeduru-gade everyone-GEN front-DAT/front-place 'in front of everyone'

In short, when we consider AxParts in Kannada, we find

- i. elements that are followed by no overt case or postposition at all: munde/hinde/meele 'front/behind/top,' and
- ii. elements that seem to have fused with a dative case: kelage/yedur-ige/... 'under/front/...'

The idea we shall pursue is that the dative case has had a role in the evolution of nouns into AxParts such as kelage, olage, etc. We therefore suggest that there is a submerged dative marker in superficially unmarked AxParts such as munde as well. This is supported by the interchangeability of the bare with the dative-marked form in expressions such as {mund-akke kuutuko/munde kuutuko} 'Sit to the front, sit in front.' It is also suggested by the strong form -kke of the dative case, rather than the expected form -ge, on munde, hinde and meele: we have mund-akke, hind-akke, meel-akke, and not *munde-ge, hinde-ge or meele-ge. The explanation for this strong form of the dative cannot lie purely in the sound pattern of the language, which permits the similar-sounding noun handi 'pig' to be dative marked by -ge: handi-ge, 'to the pig.'

Rather, we find that the strong form -kke of the dative occurs on the AxParts which (on our analysis) already incorporate a dative marker, when these AxPart complements to Place are further embedded under a Path with a dative case head (as postulated in (17) above): kela-ge 'below' $\sim kelakke$ 'to a lower place'; ola-ge 'inside' $\sim olakke$ 'to the inside'; hora-ge 'outside,' $\sim hora-kke$ 'to the outside.'

We suggest that a "bleached" noun like munde, now an AxPart, has become such by virtue of its incorporation of an abstract dative case. Notice that this explains our earlier observation that the AxPart cannot take genitive case. More generally, we can say that what licenses an AxPart reading for a noun is the incorporation of either a Place head like the noun kaqe, which indicates a region, or the dative case marker: hence mundu-gaqe, $munde \ (=mund+ge)$. In the next section we shall reinforce these points by looking at the AxPart that denotes the horizontal axis from side to side.

5.

The Kannada word for 'side' is *pakka*. The bare noun *pakka* 'side' has the 'part of an object' meaning (25a), and it pluralizes (25b). Let us call this *pakka*1.

- (25) a. mane-ya ondu pakka sotta-kke ide. house-GEN one side crooked-DAT is 'One side of the house is crooked'
 - b. ii aakaara-kke yeştu pakka-galu ive? this figure-DAT how.many side-PL are 'How many sides does this figure have?'

pakka1 also forms a -bhaaga or Part compound (26a); but it does not form a -kade or AxPart compound (26b):

- (26) a. mane-ya pakka-galu/pakka-bhaaga-galu house-GEN side-PL /side-part-PL 'the sides (side-parts) of the house'
 - b. *mane-ya pakka-kade house-GEN side-place ('by the side of the house')

The inability of pakka to form a compound with kade may be because pakka itself can also indicate a region. I.e., it can have the same meaning as kade. Thus in (27a), pakka has a non-relational abstract meaning 'these parts,' and in (27b) a directional reading 'towards that side.' On this reading, pakka cannot pluralize:

- (27) a. naanu ii pakka(*-galu) bar-uvud-ee illa. $I \qquad this \ side\text{-PL} \qquad come\text{-GER-EMP NEG}$ 'I don't come to these parts at all'
 - b. aa pakka(*-galu) noodu. that side-PL see.IMP 'Look there/look towards that side'

Pakka in (27) — let us call it pakka2 — is like the non-compounded kade in some of our earlier examples, in that it indicates simply a region. Indeed, pakka and kade are intersubstitutable in examples (27a)-(27b).

All this suggests that pakka2 can (like kade) be the head of a Place phrase that takes an AxPart as its complement; and indeed, in my dialect of Tamil (a sister Dravidian language to Kannada) AxParts are formed with compounds with -pakka, rather than -kade compounds: mum-pakkum 'front-side' 'in front,' pin-pakkum 'back-side' 'at the back.'

In Kannada, however, pakka2, 'side, region,' does not occur as a Place head (this function being fulfilled by kade). Nor can pakka1, 'side,' compound with either kade or with pakka itself: *pakka-kade 'side-place,'

*pakka-pakka 'side-side.' What then is the AxPart for the side-to-side axis? We have said that an AxPart reading for a noun may be licensed in one of two ways: the incorporation of a Place head like the noun kaqe, which indicates a region; or by the incorporation of the dative case marker, which may or may not be overt. Consider now the dative-marked use of pakka.

(28) pakka-ke idu; ondu pakka-kke kuutuko. side-dat put one side-dat sit 'Put (that) to one side; sit to one side'

The dative case (and in the English translation, the preposition to) result in a reading where the noun pakka 'side' acquires the reading of a figure that relates to some unspecified ground. (Dative-marked pakka is also open to metaphorical construal, parallel to the English example "We agreed to put our differences aside.")

We may add an example where dative-marked *pakka* is an AxPart that picks out the figure relative to a ground that is specified:

(29) mane-ya (ondu) pakka-kke deevasthaana ide. house-GEN one side-DAT temple is 'To {the side/one side} of the house is a temple'

Given a clear AxPart context like (29), there is the option of letting the dative case remain covert (as in (30)). It is possible, therefore, that there is a covert dative case in our examples (27) above as well. This would suggest that pakka2, 'the region at the side,' differs consistently from pakka1, 'a side,' in being marked dative.

(30) mane-ya (ondu) pakka deevasthaana ide.

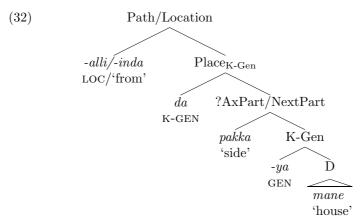
house-GEN one side temple is

'To {the side/one side} of the house is a temple'

6.

But now consider (31)/(32), where an AxPart reading for pakka emerges with genitive case embedded under a locative case (or ablative case, given an appropriate context). The occurrence of the latter cases suggests that what we have in (31)/(32) is a Path/Location projection dominating Place.

(31) mane-ya (ondu) pakka-d-alli deevasthaana ide. house-GEN one side-GEN-LOC temple is '{By the side/At one side} of the house is a temple'



'by the side of the house' lit. house's side's in; 'from the side of the house'

We had noted in connection with example (13) that AxParts seem to lose their ability to take genitive case. But in (31) the "region" reading for pakka emerges with genitive case on it.

There is a subtle semantic difference between (29) and (31): there is in (31) a sense of immediate adjacency that is absent in (29). This is a difference that comes through in the English translations as well: so one can say 'right {by my side/beside me},' 'right/just at the side of,' corresponding to the genitive-marked pakka examples in Kannada, but not *'right/just to the side of,' corresponding to the dative-marked pakka in Kannada. That is, (31) seems to incorporate a reference to the boundary of the house, in a way that (29) does not.

This presence or absence of immediate adjacency is also what makes the idiomatic expression (33) below licit with genitive *pakka*, but illicit with dative *pakka*. While the genitive conveys a sense of nearness, the ungrammatical dative gives rise to an odd reading that the temple is tucked away to one side, out of sight:

(33) deevasthaana ill-ee pakka-d-all-ee /*pakka-kk-ee ide. $temple \qquad here\text{-EMP} \ side\text{-GEN-LOC-EMP}/side\text{-DAT-EMP} \ is$ 'The temple is right here, right next door'

We thus identify a reading 'Next to' or NextPart that is intermediate between a Part and an AxPart reading, which appears to incorporate a reference to the boundary of an object. (This sense of 'contact with the boundary of an object' also emerged earlier in our examples (12) and (13) where genitive case occurred with a MeasureP.) On this reading of adjacency, genitive case is possible on the AxParts discussed earlier as well. Notice that genitive case allows for recursion in the noun phrase: we return to this point.

Parts, Axial Parts and Next Parts in Kannada

- (34) a. ii kaar-ina mund-ina kaar-ina munde

 this car-GEN front-GEN car-GEN front

 'in front of the car in front of this car' lit. this car's front's

 car's front
 - b. ii shelf-ina meel-ina shelf-ina meele this shelf-GEN top-GEN shelf-GEN top
 '(on) top of the shelf on top of this shelf' lit. this shelf's top's shelf's top

The difference between the NextPart and the AxPart readings can be seen clearly with the AxPart meele 'top'. A genitive case can appear on this AxPart when we speak of 'the house above (ours)' (meele-gade-ya mane 'top-place-GEN-house'), or of 'the overhead tank' (meel-ina tankku 'top-GEN tank'), both of which are in contact with the roof of the house. But to speak of the plane that flies overhead, one cannot say *meel-ina plane 'top-GEN plane.' A relative clause structure meele hoog-uva plane 'top go-REL aeroplane' 'the plane going overhead' must occur instead.

The status of the genitive marker in such examples is of some interest. Our suggestion (cf. (31)) is that it is a Place head, a counterpart to the dative case illustrated earlier. We must note here the possibly relevant fact that the genitive and dative cases pattern together elsewhere: there is a 'dative of possession' in Kannada, with dative case appearing on the possessor. Again, a function for the genitive marker other than signaling possession is seen in (35), where the genitive appears merely to link a noun in an attributive or modifier function to a head noun:

- $(35) \qquad \text{a.} \qquad \begin{array}{ll} \text{cinna-da bale} \\ & gold\text{-GEN } bangle \\ & \text{`a bangle of gold, a golden bangle' lit. } gold's \ bangle \end{array}$
 - b. baηηa-da siire
 colour-GEN sari
 'a colourful sari, a sari of colour' lit. colour's sari
 - c. kattale-ya raatri

 darkness-GEN night

 'a night of darkness, a dark night' lit. darkness' night

As the English translations suggest, the *of*-genitive in English has a comparable range of interpretation, although the English affixal genitive does not allow these readings.

Kannada has only the affixal genitive. Indeed, Kannada does not allow any post-N structures at all (such as PPs). This seems to characterize Dravidian more generally; thus Jayaseelan (1988:95) notes for Malayalam the following facts that are true for Kannada as well: "... a noun in Malayalam may not ... take an NP complement. ... A Malayalam noun may not even take a PP complement ..." As Jayaseelan illustrates, structures corresponding to the king's love (for the minister), the king's criticism (of

the poem), or the wealth's squandering (by the king) are ungrammatical in Malayalam if the parenthesized complements are included.

What the Dravidian noun phrase does allow are (i) pre-nominal relative clause structures, and (ii) recursive genitive structures. This brings us to the second interesting fact about the genitive in structures like (31). Although not semantically a possessive marker, it makes possible the recursion shown in (34). This recursion is not possible when the AxPart is marked dative, or is compounded with a noun functioning as a Place head. In such cases iteration is possible only with the help of a relative clause, i.e. option (i) above.

To illustrate, let us go back to our example (3) (=(36)).

- (36) kaar(-ina) munde/mundu-gade ondu kangaroo nint-ittu. car-GEN front /front-place a kangaroo was.standing 'There was a kangaroo standing in front of the car'
- (37) a. kaar(-ina) munde/mundu-gade nint(u) iruva kangaroo car-GEN front /front-place stand be.REL kangaroo 'The kangaroo standing in front of the car'
 - b. *kaar-ina mund-ina/mundu-gade-ya kangaroo car-GEN front-GEN/front-place-GEN kangaroo ('The kangaroo in front of the car') lit. the car's front's kangaroo

To conclude, nouns meaning 'place, region' and 'part' are recruited in Kannada to form AxPart and Part readings. AxParts may also be formed out of nouns by the fusion of a dative marker or a genitive marker with the N. The genitive marker gives a sense of immediate adjacency that we designate as a NextPart reading.

The dative case may be overt, or covert in AxParts like *munde*, where it serves to introduce the Place element. We must note that dative case also serves to introduce time in Kannada: *entu gante-ge* 'eight hours-DAT,' 'at eight o'clock.' Again, a historically fused dative case is visible in such adverbial words as *bela-gge* 'in the morning,' where the morpheme *bela-* has a meaning related to 'light' (*bela-ku*, 'a lamp').

The dative case serves to 'bleach' a noun into a postposition. A noun bleached in this way by dative-marking loses the ability to take genitive case. Thus one difference between nouns and postpositions in Kannada could be the inability of the postpositional "noun" *munde*, *meele*, etc. to build a recursive noun phrase.

The sometimes parallel functions of the dative and genitive cases in Kannada are worthy of investigation. We had earlier suggested (Amritavalli and Jayaseelan 2004) that dative case on a noun can turn it into an adjective, noting the existence of pairs like *udda* 'height,' *udda-kke* 'tall,' as also the consequent change from an Experiencer Dative construction to a Nominative Subject construction (pp. 29-30, exx. 21-22) for the derived

adjectival predicates. In (25a) above we have another such example: the noun *sotta*, which translates into English as the adjective 'crooked,' needs to be dative-marked to occur as a predicate with the verb 'be': *sotta-kke ide* 'is crooked.' Our examples (35) show that the genitive serves to allow a noun to occur attributively, much like the element *of* in English.

Thus the dative and the genitive cases apparently effect the categorial change of a noun to an adjective or attributive element. We have seen that the dative and genitive cases also serve to induce a 'region' or AxPart reading for certain nominal words denoting spatial axes, with genitive case consistently inducing a reading of immediate adjacency.

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