THE DRAVIDIAN EXPERIENCER CONSTRUCTION AND THE ENGLISH *SEEM* CONSTRUCTION

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1. Introduction

In many languages – e.g. Malayalam, Tamil, Hindi – , the same verb is used in the Experiencer construction and what corresponds in these languages to the English *seem*-construction. In Malayalam this verb is *toonn-* ('feel'); in Tamil it is *toonn-* ('feel'); and in Hindi it is *lag-* ('feel, seem'). Cf.

(1) (Malayalam)

a. Mary-k'k'ə weedana toonn-i
-DAT pain feel-PAST

'Mary felt pain.'

b. Mary-k'k'ə [John nallawan aaNə ennə] toonn-i
-DAT good man is COMP feel-PAST

'It seemed to Mary that John was a good man.'

(2) (Tamil)

a. Mary-k'k'ə weli toonn-itə
-DAT pain feel-PAST.AGR

'Mary felt pain.'

b. Mary-k'k'ə [John nallawan enrə] toonn-itə
-DAT good man COMP feel-PAST.AGR

'It seemed to Mary that John was a good man.'

(3) (Hindi)

a. Mary-ko bhuukh lag-tii hai
-DAT hunger seem-IMPERF.AGR be.PRES

'Mary is hungry.'

b. Mary-ko lag-taa hai [ki John acchaa hai]
-DAT seem-IMPERF.AGR be.PRES COMP good is

'It seems to Mary that John is good.'

In discussions of the *seem*-construction in English, the '(to) NP' constituent has in fact been referred to as the Experiencer argument.

The point of saying this is that probably we have the same structure in the two constructions; or in other words, that they are the same construction. If we decide (then) to apply what we know about the Experiencer construction of Indian languages to the derivation of the *seem*-construction of English, we get an interesting result: in a sentence like (4), 'Mary' (the Experiencer) originates within the complement of *seem*:

(4) John seems to Mary to be nice.

This is a departure from most current analyses which analyze 'John to be nice' as a complement of 'seem' but generate 'to Mary' outside that complement.[1]

Let us now see in detail how we obtain the above-mentioned result.

2. An Analysis of the Experiencer Construction

Kayne (1993), echoing an earlier analysis of the Hungarian possessive construction in Szabolcsi (1983), proposed that the English possessive construction – or the possessive construction universally – has an underlying representation like (5):

(5) … BE $[_{DP}$ Spec D/P_e^0 [DP_{poss} [AGR^0 QP/NP]]]

There is an abstract verb 'BE', which takes a single complement. This complement is a DP, headed by what Kayne (for reasons that we need not go into) claims to be a "prepositional determiner" D/P; all we need to know about this element is that it assigns dative Case to an NP in its Spec position. Thus in Hungarian, the possessive DP surfaces with a dative Case: 'To John is a sister'. In Dravidian too, the possessor has dative Case, cf.:

(6) John-in∂ oru kuTTi uND∂
-DAT one child is

'John has a child.' (Lit. 'To John is a child.')

However English has lost the dative Case; what happens in English (says Kayne) is that the Case-assigner (D/P) adjoins to the verb BE and is realized as 'have':

(7) D/P + BE → have [2]

[1] Chomsky (1995: 305) analyzes 'to NP' as an optional second argument of *seem*; but this again is different from our analysis which claims that *seem* has only one argument, and that the experiencer NP originates within that argument.

[2] The idea that 'have' is an underlying 'be' into which a preposition has been incorporated, is originally due to Freeze (1992).

The possessor now moves to the subject position where it gets nominative Case; so we have a sentence like 'John has a child.'

In Amritavalli & Jayaseelan (2003), we proposed certain modifications to the structure shown in (5). We claimed that the complement of BE was a Case Phrase (KP), not a DP. In fact, the claim was that universally, the copula selected only a Case Phrase as its complement. Also, in the spirit of distributed morphology, we assumed that there was no such operation as Case "assignment"; a KP was headed by a Case morpheme, and an NP (or DP) got Case by moving into the Spec of this Case morpheme.[3]

In (5), the Possessor and the Possessee are shown (respectively) in the Spec and complement positions of AGR^0. Instead, we suggested that the two arguments were related simply by an abstract head signifying 'relation', which we represented as 'P'. The structure we proposed was (8):[4]

(8) BE $[_{KP}$ Spec $K_{dat}{}^0$ $[_{PP}$ $DP_{possessor}$ $[P^0$ $NP_{possessee}$]]]

The order of the Possessor and the Possessee may actually be freely variable, the more referential phrase being always interpreted as the Possessor. Thus (8) may have a variant (9):

(9) BE $[_{KP}$ Spec $K_{dat}{}^0$ $[_{PP}$ $NP_{possessee}$ $[P^0$ $DP_{possessor}$]]]

At the point of the derivation where K_{dat} has been merged to PP, we assume that $DP_{possessor}$ moves into Spec, KP and gets dative Case:

(10) $[_{KP}$ Spec $K_{dat}{}^0$ $[_{PP}$ $NP_{possessee}$ $[P^0$ $DP_{possessor}$]]]

The derivation now proceeds with the merger of BE and Infl. The $NP_{possessee}$ gets the nominative Case associated with T^0 (possibly by means of a probe, see fn. 3). BE needs to pick up its inflection; in order to enable this, first the complement of BE moves to the left of BE (11), and then 'complement + BE' moves to the left of Infl (12):

(11) $[_{XP}$ X^0 $[_{VP}$ BE $[_{KP}$ $DP_{possessor(i)}$ K^0 $[_{PP}$ $NP_{possessee}$ P^0 t_i]]]]

(12) $[_{IP}$ I^0 $[_{XP}$ $[_{KP(j)}$ $DP_{possessor(i)}$ K^0 $[_{PP}$ $NP_{possessee}$ P^0 t_i]] X^0 $[_{VP}$ BE t_j]]]

[3] The nominative Case, where there is no overt Case morpheme, may be differently realized – possibly by means of a probe, without actual movement into the Spec of a KP.

[4] The reader must see Amritavalli & Jayaseelan (2003) for a fuller discussion of this structure. It is suggested there that there might an optional DP and AGRP between the KP and the PP shown in (8), in a language like Hungarian.

The resulting structure (13) has the right word order for SOV languages like Dravidian; cf. a sentence like (14):

(13) $[_{XP(k)}\ [_{KP(j)}\ DP_{possessor(i)}\ K^0\ [_{PP}\ NP_{possessee}\ P^0\ t_i\ ]]\ X^0\ [_{VP}\ BE\ t_j\ ]]\ I^0\ t_k$

(14) John-in∂ paNam uND∂
-DAT money be.PRES
'John has money.'

In Amritavalli & Jayaseelan (2003) we suggested that the experiencer construction has the same structure as the possessor construction. Thus (15) would be the structure of an experiencer sentence like (16):

(15) $[_{XP(k)}\ [_{KP(j)}\ DP_{experiencer(i)}\ K^0\ [_{PP}\ NP_{experience}\ P^0\ t_i\ ]]\ X^0\ [_{VP}\ BE\ t_j\ ]]\ I^0\ t_k$

(16) John-in∂ talaweedana uND∂
-DAT headache be.PRES
'John has a headache.'

3. Extending the Analysis to the *Seem* Construction

With this background, let us examine the *seem*-construction in Dravidian and in English. The Malayalam verb *toonn-* ('feel') and the English verb *seem*, we assume, take a single complement which is a KP – exactly like the copula in the Possessor or Experiencer construction we illustrated earlier, cf. (9). Let us represent the underlying structure of a sentence with *seem* as (17):

(17) seem $[_{KP}\ K_{dat}{}^0\ [_{PP}\ CP/IP_{experience}\ [\ P^0\ DP_{experiencer}\ ]]]$

Note that the Experience theta-role, which was assigned to an NP in (15), is borne here by a CP or IP. Taking 'Mary' to be the Experiencer, and 'that John is nice' as the Experience, we can instantiate (17) as (18):

(18) seem $[_{KP}\ K_{dat}{}^0\ [_{PP}$ that John is nice $[\ P^0$ Mary $]]]$

In the Malayalam case, the Experiencer moves into the Spec of $K_{dat}{}^0$ and gets dative Case. But in English the dative Case has (for historical reasons) become either defunct or very 'weak'; it can no longer "assign" a Case, i.e. attract an element into its Spec position. The language has developed an alternative strategy for Case-marking that involves prepositions. If we go along with the Kayne proposal (1999, 2003) that Prepositions – along with a "paired" KP – are merged above VP and attract a DP to Spec,KP, then in the present case, 'to' is merged above the VP headed by 'seem' and it attracts 'Mary' from within the complement of 'seem' to a Case position below it:

(19) $[_{PP}$ to $[_{KP}$ $Mary_i$ K^0 $[_{VP}$ seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ that John is nice [P^0 t_i]]]]]]

Now, since 'seem' must get rid of all material to its right if it is to take inflection, its complement KP moves to the Spec of a null head X^0 above PP (20); after which Infl is merged and the VP – now containing only 'seem' as lexical material – moves into Spec,Infl (21):

(20) $[_{XP}$ $[_{KP(j)}$ $K_{dat}{}^0$ $[_{PP}$ that John is nice [P^0 t_i]]] X^0 $[_{PP}$ to $[_{KP}$ $Mary_i$ K^0 $[_{VP}$ seem t_j]]]]

(21) $[_{IP}$ $[_{VP(k)}$ seem t_j] I^0 $[_{XP}$ $[_{KP(j)}$ $K_{dat}{}^0$ $[_{PP}$ that John is nice [P^0 t_i]]] X^0 $[_{PP}$ to $[_{KP}$ $Mary_i$ K^0 t_k]]]]

With the insertion of pleonastic 'it' in the matrix subject position (which must be the Spec of a higher head, possibly $Topic^0$), we derive the sentence:

(22) It seems that John is nice, to Mary.

It will be recalled that the two phrases related by the P^0 signifying 'relation' – Possessor and Possessee, or Experiencer and Experience – can be in either order, cf. (8) and (9). Suppose now we start the derivation with the other order; i.e. suppose we have (23) in the place of (18):

(23) seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ Mary [P^0 that John is nice]]]

Suppose (again) we move out – at this stage – the CP argument to the Spec of a null head X^0 (24), and then merge the Preposition and its paired KP above the resulting structure (25):

(24) $[_{XP}$ $[_{CP(i)}$ that John is nice] X^0 $[_{VP}$ seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ Mary [P^0 t_i]]]]

(25) $[_{PP}$ to $[_{KP}$ $Mary_j$ K^0 $[_{XP}$ $[_{CP(i)}$ that John is nice] X^0 $[_{VP}$ seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ t_j [P^0 t_i]]]]]]

If we now merge Infl and move the VP to the Spec of Infl:

(26) $[_{IP}$ $[_{VP(k)}$ seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ t_j [P^0 t_i]]]] I^0 $[_{PP}$ to $[_{KP}$ $Mary_j$ K^0 $[_{XP}$ $[_{CP(i)}$ that John is nice] X^0 t_k]]]]

we should derive – after insertion of 'it' in the subject position – the alternative order of (22), namely (27):

(27) It seems to Mary that John is nice.

4. Raising and a Minimality Violation: Exploring a Solution

The sentences we derived, (22) and (27), do not involve Raising. But if the Experiencer argument is instantiated by an infinitival IP, we get Raising:

(28) John seems to Mary to be nice.

Let us assume that at a certain stage of the derivation of this sentence we have the structure (29) – which is fully parallel to (26) but for the difference that we have an infinitival IP (instead of CP) as the Experience argument:

(29) $[_{IP}\ [_{VP(k)}$ seem $[_{KP}\ K_{dat}{}^{0}\ [_{PP}\ t_j\ [\ P^0\ t_i\ ]]]]\ I^0\ [_{PP}$ to $[_{KP}$ Mary$_j$ K^0 $[_{XP}\ [_{IP(i)}$ John to be nice] $X^0\ t_k\ ]]]]$

The lexical string that we have generated in (29) is 'seems to Mary John to be nice'. In order to derive (28), we need to raise 'John' to the subject position of the matrix clause. This movement will have to cross the Experiencer argument 'Mary'.

As is well-known, this movement is problematic because it appears to violate Minimality; for there is convincing evidence that the Experiencer argument c-commands all the material to its right in the complement of 'seem' (see Chomsky 1995: 304ff.; also, the Kaynian way of generating PPs predicts this c-command relation).

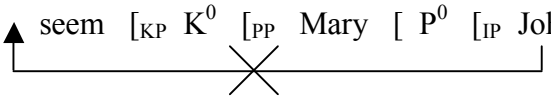
There have been a number of proposals about how to get around this problem. In a recent proposal, Collins (2003) offers a solution in terms of a notion of "smuggling". The steps of his derivation can be summarized as follows:

(30) (i) $[_{VP}$ John$_i$ seem $[_{IP}\ t_i$ to be nice]] (by Raising)
(ii) $[_{XP}\ [_{IP(j)}\ t_i$ to be nice] $[_{X'}\ X^0\ [_{VP}$ John$_i$ seem $t_j\ ]]]$ (by Extraposition of IP)
(iii) $[_{ApplP}$ [to Mary] $[_{Appl'}$ Appl^0 $[_{XP}\ [_{IP(j)}\ t_i$ to be nice] $[_{X'}\ X^0\ [_{VP}$ John$_i$ seem $t_j\ ]]]]]$ (by Merge of Applicative Phrase)
(iv) $[_{vP}\ [_{VP(k)}$ John$_i$ seem $t_j\ ]\ [_{v'}$ v $[_{ApplP}$ [to Mary] $[_{Appl'}$ Appl^0 $[_{XP}\ [_{IP(j)}\ t_i$ to be nice] $[_{X'}\ X^0\ t_k\ ]]]]]]$ (by Merge of v, and Remnant Movement of VP to Spec,vP)
(v) $[_{IP}$ John$_i$ $[_{I'}\ I^0\ [_{vP}\ [_{VP(k)}\ t_i$ seem $t_j\ ]\ [_{v'}$ v $[_{ApplP}$ [to Mary] $[_{Appl'}$ Appl^0 $[_{XP}\ [_{IP(j)}\ t_i$ to be nice] $[_{X'}\ X^0\ t_k\ ]]]]]]]]$ (by Merge of Infl, and Raising (of 'John') to Spec,IP)

The interesting step is (iv), the Remnant Movement of VP, in which 'John', being inside the VP, is "smuggled" across the Experiencer argument.

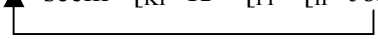
Observe that Collins does not generate the Experiencer argument 'Mary' inside the complement of 'seem'; it is part of an Applicative Phrase merged later, see (iii). But if the underlying structure we motivated were to be adopted, the raising of 'John' to Spec of 'seem' (as in (i)) is not straightforward; cf.

(31) $[_{VP}$ seem $[_{KP}$ K^0 $[_{PP}$ Mary $[$ P^0 $[_{IP}$ John to be nice $]]]]]$



This movement would encounter the same Minimality problem that we are trying to avoid. If we adopt the alternative order for the arguments of the PP:

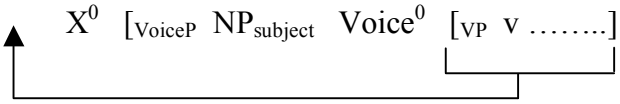
(32) $[_{VP}$ seem $[_{KP}$ K^0 $[_{PP}$ $[_{IP}$ John to be nice] $[$ P^0 Mary $]]]]$



the movement in question would still be difficult, because 'John' is now the Specifier of a Specifier. (I.e., it is not on the line of complementation.) Also note that 'seem' is a bare verb and has no EPP feature; therefore it ought not to be able to attract a DP to its Spec position.

Let us (however) adopt Collins's essential idea, that it is remnant movement that is responsible for the avoidance of a minimality violation here; and let us try a different execution. Let us note that remnant movement is always from the bottom of the tree and targets the top of the tree. Let us explore the possibility that many movements which are currently taken to be NP movements may actually involve remnant movement. (Thus Collins (*op. cit.*) suggests the use of remnant movement in the derivation of the passive.) Consider the clause-internal movement of the subject NP from vP to Spec,IP. The subject NP or external argument (we assume) is merged in the Spec of an abstract head v^0, also called $Voice^0$ (Pylkkänen 2002). Let us suggest that there is a position above vP or VoiceP which is analogous to the position occupied by a 'verb modifier' (VM) in Hungarian (see Koopman & Szabolcsi 2000, Brody 1990). Possibly this position is universal, and it is obligatorily filled (like in Hungarian). In English (let us say) this position is filled by the movement of VP, as shown below:[5]

(33) $[_{XP}$ X^0 $[_{VoiceP}$ $NP_{subject}$ $Voice^0$ $[_{VP}$ v ……..]]



It would then be from the clause-final position that the subject NP (strictly, the remnant '$[_{VoiceP}$ $NP_{subject}$ $Voice^0$ t_{VP}]') raises to Spec,IP (or a position immediately below it).

If this is granted, the structure we have in the place of (29) is (34). ((34) differs from (29) only in the structure of the embedded IP.)

(34) $[_{IP}$ $[_{VP(k)}$ seem $[_{KP}$ $K_{dat}{}^0$ $[_{PP}$ t_j $[$ P^0 t_i $]]]]$ I^0 $[_{PP}$ to $[_{KP}$ $Mary_j$ K^0
$[_{XP}$ $[_{IP(i)}$ to be nice John] X^0 t_k $]]]]$

[5] In Hungarian this position is in fact sometimes filled by an infinitival VP (Koopman & Szabolcsi 2000).

The reader may wonder about the adjunction of V^0 to v^0 (which is commonly assumed). Let us say that since v^0 is not an affix in the real sense, this movement is optional or does not exist.

Here 'John' – or rather, the structure '[$_{VoiceP}$ John Voice^0 t_{VP}]' – is not yet at the right periphery of the structure. However if the trace of remnant movement, and the head X^0 whose only function is to provide a Spec position for remnant movement, can be deleted, the structure '[$_{IP}$ to be nice John]' can be treated as the direct complement of K^0, and as being on the line of complementation. Now 'John' – or rather the more complex structure aforementioned – can be moved by remnant movement to the subject position (which is above IP) or to a position below it.[6]

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[6] Remnant movement does not seem to be possible out of tensed clauses. Therefore we will not generate an unwanted sentence like:

(i) *John seems to Mary is nice.