

Non-nominative Subjects

Volume 1

*edited by Peri Bhaskararao
and Karumuri Venkata Subbarao*

Non-nominative Subjects

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Volume 60

Non-nominative Subjects: Volume 1

Edited by Peri Bhaskararao and Karumuri Venkata Subbarao

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Edited by

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Preface

It is our firm conviction that an explanatorily adequate theory requires to be substantiated by empirical facts while empirical facts in isolation do not have much relevance unless they are properly explained in an appropriate framework. The last two decades have witnessed an enormous emphasis on presenting evidence based on empirical data so that the foundations made for theoretical claims are well laid. Keeping this in view a symposium on *Contact, Convergence and Typology in South Asian Languages* was organized at ILCAA, Tokyo University of Foreign Studies in December 1999 and another one on *Non-nominative Subjects* in December 2001. Most of the papers presented and discussed at the latter were compiled and presented in these two volumes.

The aim of the symposium was to study the nature of non-nominative subjects from theoretical, and applied points of view in different theoretical frameworks from a wide variety of languages. Although in most nominative-accusative languages, the subject is in the nominative case, in quite a few languages the logical subject is case-marked by the nominative, dative, genitive or locative case markers. The phenomenon of non-nominative case marking has implications for a variety of syntactic phenomena such as agreement, antecedent-anaphor coreference, control structures, coordination, occurrence or non-occurrence of lexical subjects in a converbial (i.e. conjunctive participial) construction, etc. While in almost all languages a non-nominative subject can be an antecedent of an anaphor, a controller of PRO, and can trigger 'coordinate nominative or non-nominative subject reduction', the behaviour of the non-nominative subject with regard to agreement is varied and hence, parametric. For instance, in all Indo-Aryan languages (except Maithili) and Dravidian languages (except Manda) the non-nominative subject cannot trigger agreement. In Maithili, Japanese and Korean the dative case-marked noun phrase can trigger honorificity agreement while in Manda a non-nominative subject can trigger person and number agreement (Subbarao 2001). Another interesting case concerns *default agreement* (that is, the verb exhibiting no agreement with any of the constituents in a sentence) when the experiencer/possessor is in the dative/genitive case and the theme is **accusative** case-marked as in Tamil or is null as in Telugu.

Another interesting feature with regard to the non-nominative constructions is whether the anaphor that occurs in such constructions is a monomorphemic or polymorphemic anaphor or indeed whether a pronoun can also function as an anaphor. For instance, in Hindi-Urdu and Punjabi the occurrence of a possessive reflexive is obligatory when a genitive Case-marked possessor is coindexed with a nominative subject antecedent while it alternates with a regular possessive pronoun

when coindexed with a non-nominative subject. Further, a possessive pronoun can subcommand PRO in languages such as Hindi–Urdu, Punjabi and Telugu. This shows that the genitive case-marked noun phrase in a subcommanding position behaves like a nominative case-marked subject.

Yet another related phenomenon is that South Asian languages have a construction that is termed as the conjunctive participial construction. The verb in the embedded clause in such a construction is nonfinite in languages such as Hindi–Urdu, Kashmiri and Punjabi and is finite in languages such as Bengali, Assamese, Oriya and the Dravidian languages. Can a non-nominative case-marked noun phrase occur as the subject of the matrix clause irrespective of the nature of the predicate of the participial clause or are there any constraints imposed on it? The subsequent question that needs to be answered is whether a non-nominative subject can occur in a position where PRO occurs? That is, whether a non-nominative subject can be the subject of a participial clause or not. Hindi–Urdu and Punjabi for example do not permit such an occurrence while the Dravidian languages permit such an occurrence. If it is permitted, its implications for the nature of PRO, namely Case-marking and government, raise further questions.

The transitive/intransitive nature of the predicate in non-nominative constructions has been an issue in recent studies. While some treat such predicates as [+transitive] (Chomsky 2000, 2001, Ura 2000, and see Davison's paper in these volumes), some others treat them as [–transitive] and hence unaccusative (Shibatani and Pardeshi 2001, and see Amritavalli's as well as Subbarao and Bhaskararao's papers in these volumes). One piece of evidence in support of the predicate being intransitive comes from the nonoccurrence of the verbal reflexive or reciprocal in the dative subject construction in Dravidian languages. The verbal reflexive functions as a detransitivizer and hence, in the dative subject construction in Telugu the detransitivizer is not permitted as the verb is already intransitive. Further evidence from a wide variety of languages may throw light on this issue.

The occurrence of the non-nominative Case marking itself deserves attention. In the Minimalist Program (MP) and subsequent refinements of it, Case assignment has been dispensed with and only Case checking takes place in MP and the 'probe' attracts the 'goal' under 'strict locality' conditions in Minimalist Inquiries (Chomsky 2000). Case is matched and Case is no longer assigned either 'structurally' or 'inherently'. The question that still remains is: How does the non-nominative Case get to be there? What are the syntactic or semantic elements that are responsible for the occurrence of the non-nominative Case on the subject? Is the nature of the predicate alone that is responsible or the predicate and some other element put together that are responsible for the occurrence of the non-nominative Case on the subject? Some authors have addressed this issue and further research only can shed more light on it.

A crucial issue that needs attention is: What qualifies as a subject? In the MP the question can be raised as: What kind of nominals can occupy the SPEC IP/SPEC AGRPs position. This issue did not arise as clearly in the frameworks that did not

have VP internal subjects (Anoop Mahajan, pc). Scholars working in other frameworks may tackle this issue from their theory-internal view.

From a semantic point of view the non-nominative constructions are interesting. The non-nominative case-marked noun phrase normally indicates possessor (animate as well as inanimate possessor which is language-specific), experiencer of a psychological state/emotions, physiological ailments, natural phenomena pertaining to self's body, perceiver of visual/ auditory activity, subject of predicates expressing obligation or necessity or duty etc. (Verma & Mohanan 1990 and Shibatani & Pardeshi 2001). All the predicates in such constructions are generally nonvolitional where the experiencer subject has no control over the situation and hence, the occurrence of adverbs such as *voluntarily*, *deliberately*, *intentionally* with such predicates is universally prohibited.

From an acquisition point of view the questions that need to be answered are: (i) Does it take a longer period of time for the child to acquire non-nominative constructions, and (ii) are these constructions learnt at a later stage chronologically? From the point of view of syntactic change, the following issues are relevant: what happens when a language with a nominative construction comes in contact with a language that has a non-nominative construction? If two languages in contact have non-nominative constructions that are differently case-marked, what is the direction in which change is likely to take place? From the point of view of language processing too it is desirable to investigate if listeners take more processing time or take the same amount of time as they do for a sentence involving a nominative subject. Another issue that is worth investigating is: How are these constructions manifested in patients with aphasia or dyslexia or in persons suffering from stroke? How are these constructions acquired once the process of 'relearning' takes place? Many of the issues alluded to above have been addressed in the two volumes of *Non-nominative subjects* and we hope that further research will substantiate the findings of this work.

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Works cited

- Bhaskararao, P. and Subbarao, K.V. (ed.). 2001. *The Yearbook of South Asian Languages and Linguistics 2001*. Delhi, Thousand Oaks, London: Sage.
- Chomsky, N. 2000. Minimalist Inquiries: The Framework. In: *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, Martin, R. and Uriagereka, J. (eds.). Cambridge, Mass: MIT Press.
- Chomsky, N. 2001. Derivation by Phases. In *Ken Hale: A Life in Language*, M. Kenstowicz (ed.). Cambridge, Mass: MIT Press.
- Shibatani, M. and Pardeshi, P. 2001. Dative Subject Constructions in South Asian Languages. In: Bhaskararao, P. and Subbarao, K.V. (ed.). 2001.
- Subbarao, K.V. 2001. Agreement in South Asian Languages and the Minimalist Inquiries: The Framework. In: Bhaskararao, P. and Subbarao, K.V. (ed.). 2001.

- Ura, H. 2000. *Multiple Feature Checking: A Theory of Grammatical Functions in Universal Grammar*. Oxford Studies in Comparative Syntax. New York, Oxford: Oxford University Press.
- Verma, M.K. and Mohanan, K.P. (ed.). 1990. *Experiencer Subjects in South Asian Languages*, CSLI Publication. Stanford: Stanford University.

CHAPTER 1

Experiencer datives in Kannada

R. Amritavalli

1. Introduction*

Kannada grammatical tradition,¹ following the Sanskrit, speaks of the relation of the nouns to the verb in a sentence in terms of *kaarakas*. The *kaaraka* was said to be *kriya-nimitta* or decided by the verb; the case-suffix or *naama vibhakti* was said to be under the control of the *kaaraka*.

Kittel (1908: 380) tells us that the subject of a sentence (i) bears the nominative case and (ii) is the *kartR* or the doer of the action. The *kartR* may be the agent (when the verb is “active,” or transitive); or it may “express the agent’s circumstances or state” (if the verb is intransitive). This tradition, then, may be said to recognize subjects by their “coding properties” as well as by their “semantic properties.”

The semantic or relational category of *kartR* brings together the nominative subject and the instrumental agent of the passive. Kittel clarifies that “in such a case, also instances with a double instrumental case occur,” citing the Old Kannada example (1) (p.384):

- (1) hari-yinda arjuna-in karNam koll-is-al paTTam
Hari-INSTR Arjuna-INSTR Karna.NOM kill-CAUS-INF PASS.AUX²
‘By Hari, Karna was caused to be killed by Arjuna.’

In (1), the indirect causative agent *Hari* cooccurs with the passive agent *Arjuna*; both are *kartRs*, but neither is nominative. Such mismatches between *kaaraka* and *vibhakti* (or semantic properties and coding properties) prompts this tradition to add to its initial classification (of six *kaarakas* with their corresponding *vibhaktis*) in two ways. First, it provides detailed *lists* of “specific meanings” expressed by particular case terminations. Second, it recognizes the possibility — again, by listing — of the “cases sometimes changing places,” with one case “standing for” (i.e. expressing the idea of) another. Thus the dative is said to “stand for” the locative in (2) (example from Kittel):

- (2) muurkhar-ige buddhi illa
stupid people-DAT brains be.NEG
‘Stupid people have no brains.’ (Lit. ‘(there) are no brains to stupid people.’)

Here, Kittel (p. 396) tells us, the intended reading is *muurkhar-alli buddhi illa*, “there are no brains *in* stupid people,” with *stupid people* interpreted as a locative and not a dative argument. The suggested interpretation of (2) is perhaps clearer in (3):

- (3) suuji-ge kaNNu illa
 needle-DAT eye be.NEG
 ‘(There) is no eye in the needle.’ (Lit. ‘(there) is no eye to the needle.’)

This grammatical tradition (evidently) has no “Dative Subject Construction” (henceforth DSC), of which putative sentence-type (2) and (3) are prototypical instances. It sees (2)–(3) as of a pattern with (4), examples with locatives which appear to be adverbial adjuncts. In its implicit rejection of the interregnum in contemporary theorizing which postulated “dative subjects,” the traditional approach looks to be more in tune with analyses (Jayaseelan 1988, Shibatani 1999) that take sentences like (2)–(3) at their face value: as intransitive sentences with nominative subjects. (Jayaseelan proposes to treat the remaining argument simply as an adverbial adjunct, very much as in Kittel.)

- (4) a. baavi-nalli niiru illa
 well-LOC water be.NEG
 ‘(There) is no water in the well.’
 b. huuv-inalli vaasane illa
 flower-LOC scent be.NEG
 ‘(There) is no scent in the flowers.’
 c. uuTa-dalli ruci illa
 food-LOC flavour be.NEG
 ‘(There) is no flavour in the food.’

In Section 2 of this chapter, I review the early arguments for a dative subject in Kannada, which have lost much of their force with the passage of time. In Section 3, I accept the current view of the DSC as intransitive, and argue that the DSC is in fact a particular type of intransitive, namely an unaccusative. This lays the foundation for a modular approach to the DSC, allowing for internal variation within this construction. In this spirit, in Section 4 I examine the dative of possession construction (which obtains in the DSC as well as in nominative–accusative constructions) in light of a possessor-extraction account such as has been proposed for non-DSC languages (including English) by Kayne (1993) and Szabolcsi (1983).

2. The dative subject and the properties of subjects in Kannada

2.1. Coding properties

2.1.1. *Case and control of agreement*

Typical subjects in Kannada occur in the nominative case, and the verb agrees with these subjects in person, number, and (for a third-person singular subject) gender. (Verbs with plural third-person subjects distinguish only neuter versus non-neuter gender.) These “coding properties” of case, and control of verb agreement pick out as subject the nominative NP in DSC. Examples (2)–(3) above have the defec-

tive negative verb *illa*, which does not inflect for agreement; but consider the sentences in (5):

- (5) a. makk-aL-ige jvara ban-t-u
 child-PL-DAT fever come-PAST-3SG.N
 ‘The children became ill.’ (Lit. ‘to the children fever came.’)
 b. nana-ge hattu makk-aLu iddaare
 I-DAT ten child-PL be.PRES.3H.PL
 ‘I have ten children.’ (Lit. ‘(there) are to me ten children.’)

In (5a), the dative NP *makkaLu* ‘children’ is animate and plural; the verb agrees with the inanimate singular nominative NP *jvara* ‘fever’. In (5b), the dative NP is the first-person pronoun; the verb agrees with *makkaLu* ‘children,’ occurring in a third-person plural non-neuter (or animate) form. This example also shows that the verb in the DSC does indeed agree with the nominative NP; it does not merely occur in some unmarked neutral form.

2.1.2. Word order in the DSC

There is (however) one coding property that has been a recurrent argument for conferring subjecthood on dative experiencers, and that is word order. As recently as in 1999, Shibatani cites the following word order facts as “more compelling evidence (for) the view that the dative nominals are like nominative subjects of canonical transitive clauses”: the unmarked word order in “dative object transitive sentences” is NOM-DAT-PRED, but in “dative subject sentences” the unmarked word order is DAT-NOM-PRED. Shibatani concludes that “word order indicates that the dative nominal of a dative construction occurs in subject position . . . in contradistinction to a dative-marked object.”

Observe, however, that the word order schemas shown above actually argue only for distinguishing experiencer datives from dative *objects*. These schemas assume the traditional analysis of the DSC as a transitive clause, and contrast the positioning of the two types of datives within this sentence-type. But if (as Jayaseelan 1988 and Shibatani 1999 both suggest) the DSC is an intransitive construction, the question to ask is whether dative experiencers pattern differently from other dative (or locational, or other) adjunct arguments in *intransitive* clauses, in their word order.

The answer here is negative, at least for Kannada. We have already seen that locative adjuncts appear sentence-initially in (4). Consider now the following sentence with an initial locational dative (and a nominative subject):

- (6) a. namma mane-ge rashye-yinda ondu magu bar-utt -e
 our home-DAT Russia-from a child come-NONPST.3SG.N
 ‘A child will come to our home from Russia.’

The subject in (6a) is indefinite; and indefinite subjects apparently prefer to occur to the immediate left of the verb. If we substitute a noun phrase such as *aa khyataa vignaani* ‘that famous scientist’ for the subject in (6a), the word order changes; (6b),

with an initial nominative NP, is the unmarked word order, while (6c) (cf. (6a)) sounds marked:

- (6) b. aa khyataa vignaani rashye-yinda namma mane-ge
 that famous scientist Russia-from our home-DAT
 bar-utt-aare
 come-NONPST-3HPL
 'That famous scientist will come to our home from Russia.'
 c. namma mane-ge rashye-yinda aa khyataa vignaani bar-utt-aare

Further corroboration is that the indefinite expression *obbaru* 'one person' is interpreted differently in the two positions illustrated. When *obbaru* occurs immediately next to the verb, it has the indefinite reading 'someone'. When it occurs initially, it is understood to refer to a member of a previously defined set. Thus in (7), the unmarked use of *obbaru* is in (7a), with the dative of location occurring initially in the sentence.

- (7) a. maisuur-ige obbaru hoodaru
 mysore-DAT a.person went
 'Someone went to Mysore.'
 b. obbaru maisuur-ige hoodaru
 a.person mysore-DAT went
 'One of them went to Mysore, a certain person went to Mysore.'

A reorganization of the locative sentences in (4) to bring the nominative NP to the sentence-initial position has the similar effect of making this NP definite; cf. (8a). Dative-marked time expressions also occur initially, preceding indefinite nominative NPs ((8b)).

- (8) a. niiru baavi-nalli illa
 water well-LOC be.NEG
 'The water is not in the well.'
 b. dinaa aidu gaNTe-ge ondu pakSi kuugutte
 everyday five hours-DAT a bird calls
 'Everyday, at five o'clock, a bird calls.'

In short, the sentence-initial position is the natural position for dative and locative adjuncts when the subject is not definite. The nominative NP in the DSC is usually an abstract indefinite noun such as hunger, fever, anger and so on. Thus its natural position is to the immediate left of the verb, with the dative argument preceding it.³

2.2. Behavioural properties

Proponents of the DSC analysis (e.g. Sridhar 1976) have laid emphasis on not so much the coding as the behavioural properties of experiencer datives. Consider three such properties: control of the pronominal anaphor *taanu*, earlier informally

termed a “reflexive,” control, and interpretation, of the understood argument of infinitival complements, i.e. of PRO; and “control” or interpretation of the understood argument in a construction termed the “conjunctive participle” or the “serial verb” (Jayaseelan 1996) construction. The claim is that the processes involved in these constructions crucially refer to the “subject” of the sentence. Further, dative experiencers pattern differently from dative objects in these constructions. Let us consider each of the three constructions in turn.

2.2.1. Dative antecedents of *taanu*

2.2.1.1. *Does taanu require a subject as its antecedent?* Kannada has a third-person pronominal element *taanu* ‘self’ that is an anti-local long-distance anaphor (Amritavalli 2000a). The antecedent of *taanu* is not normally a non-nominative NP. Thus in (9a), *tann-annu* ‘self-accusative’ in the embedded clause cannot be interpreted as coreferential with the dative object *bhiima-nige* of the verb ‘tell’ in the matrix clause; the only available interpretation is that *tann-annu* is coreferential with the nominative subject of ‘tell’. In (9b), however, the dative NP *bhiima-nige* is an experiencer, the argument of an intransitive verb meaning ‘come to know’ or ‘get to know.’ This dative can antecede *tann-annu*.

- (9) a. [shyamaa tann-annu hoDedanu anta] raama bhiima-nige
 shyama self-ACC beat.3SG.M COMP rama bhima-DAT
 heeLidanu
 told.3SG.M
 ‘Rama_i told Bhima_j that Shyama beat self_{i,j}.’ (self = Rama, not Bhima)
 b. [shyamaa tann-annu hoDedanu anta] bhiima-nige tiLiyitu
 shyama self-ACC beat.3SG.M COMP bhima-DAT knew.3SGN
 ‘Bhima_i got to know that Shyama beat self_i.’

Experiencer datives also pattern with nominative subjects in anteceding *taanu* when it occurs as a “strict reflexive” with a local or same clause antecedent. (Local antecedence is made possible by marking the verb with the “verbal reflexive” *koLLu*.) In (10a), *tann-annu* ‘self-accusative’ has a nominative antecedent. In (10b), the attempt to force a dative goal antecedent for *tann-ann-ee* results in ungrammaticality (the acceptable form here is the non-anaphoric personal pronoun *avaL-ann-ee* ‘she-accusative (emphatic)’).

- (10) a. raama nana-ge tann-annu toor-isi-koND-anu
 rama I-DAT self-ACC show-CAUS-VBLRFL-PST.3SGN
 ‘Rama showed himself to me.’
 b. naanu meeri-ge avaL (*tann)-ann-ee toor-isi-d-e
 I mary-DAT she(*self)-ACC-EMPH show-CAUS-PST-1SG
 ‘I showed Mary herself.’

But in (10c), the experiencer dative can antecede the form *tanna meele tanagee* ‘on self (emphatic)’.

- (10) c. meeri-ge tanna meeLe tana-gee koopA bantu
 mary-DAT self on self-EMPH.DAT anger came
 ‘Mary felt angry with herself.’ (Lit. ‘to Mary anger came on herself.’)

The local anaphor in (10c) occurs in an emphasized, reduplicated form (as the gloss shows). This is because *taanu* is an anti-local long distance anaphor, and its occurrence in the local domain needs to be licensed in some way. The usual licenser (as noted above) is the verbal reflexive *koLLu*; but the verbal reflexive cannot occur in the dative experiencer construction. A plausible account of this restriction is that reflexive *koLLu* is licensed only in transitive constructions, and the dative experiencer construction is an intransitive construction (Amritavalli 2000a: 54). (Here then is additional evidence in favour of the Jayaseelan-Shibatani hypothesis.) The obviation of the anti-locality condition is thus achieved in (10c) by emphasis. (We may note that such emphasis is the regular strategy to allow local occurrences of the long-distance anaphor in Malayalam; cf. the discussion in Jayaseelan (2000).)

Example (10c) therefore illustrates yet another property of the dative experiencer: it can be emphasized by *taanu*. *taanu* is not merely a “reflexive” but also has a use as an emphatic pronoun in Kannada. (Emphatic and reflexive *taanu* can be distinguished by their case: emphatic *taanu*’s case is a copy of the case of the antecedent, the emphasized NP.) But where the personal pronouns, in their emphatic use, can take any NP in the sentence as antecedent, *taanu* as an emphatic is generally limited to emphasizing the subject. Thus in (11a), there is an emphatic *taanu* that is nominative; its antecedent is the subject. Example (11b) shows that emphatic *taanu* cannot take a dative goal antecedent; here a personal pronoun *avarige* must occur as the emphatic pronoun. But (11c) (similar to (10c)) instantiates a dative experiencer emphasized by *taanu*.

- (11) a. makkaLu taav-ee skuul-ige hoo-d-arU
 children.NOM selves.NOM-EMPH school-DAT go-PST-3PL
 ‘The children went to school themselves.’
 b. naanu haNa-vannu makkaL-ige avar-ig-ee (*tama -ge)
 I money-ACC children-DAT they-DAT-EMPH (*selves DAT)
 koTTe
 gave
 ‘I gave the money to the children themselves.’
 c. makkaL-ige tama-g-ee naacike aayi-t-u
 children-DAT selves-DAT-EMPH shame happen-PST-3NSG
 ‘The children themselves felt ashamed.’

To sum up, *taanu* in Kannada occurs in three guises: as an anti-local long distance anaphor, as a local anaphor or “reflexive pronoun”, and as an emphatic pronoun. Each of these uses of *taanu* seems to restrict its antecedent to the nominative subject; in particular, dative object antecedents are disallowed. Experiencer datives, however, can antecede *taanu*. In this, they appear to pattern with nominatives, suggesting that they, too, are “subjects.”

2.2.1.2. *The antecedent of taanu as the clausal perspective* The crucial question that is begged by this analysis (however) is the precise characterization of the nature of the antecedent that *taanu* requires. First, as noticed in (e.g.) Amritavalli (2000a: 104), “there are a few verbs which take experiencers as objects, and these objects are appropriate antecedents for *taanu*”.

- (12) [prakaash tann-annu baida-ddu] raamu-vannu kheeda-goLisitu
 prakash self-ACC scold-NOM ramu-ACC sadness-caused.to.feel
 ‘Prakash’s scolding self_i saddened Ramu_i.’

Example (12) shows the anti-local long-distance anaphor *taanu* taking the matrix object as its antecedent. This example foregrounds the thematic role of the antecedent (as an experiencer) as the operative criterion, and not its grammatical relation. (Other verbs that can occur in (12) are *dukkhisu* ‘make sad,’ *bejaaru paDisu* ‘bore, tire, disgust.’)

There are indicators (however) that not theta role, but perspective-marking is what governs the use of *taanu*. It is a common observation that *taanu* cannot have inanimate antecedents; but a dramatic example from Bhat (1978:58) shows that even animate antecedents are further required to be “aware of the event (or state) indicated” in the sentence. In (13), the matrix subject *raaju*, which refers to a person, cannot antecede the anaphoric form *tann-annu*; only the personal pronoun *avan-annu* can occur in the adverbial adjunct, because the matrix subject is denied consciousness by the matrix predicate:

- (13) [siite avan-annu (*tann-annu) kaaN-alu band-aaga]
 sita he-ACC (*self-ACC) see-INF came-then
 raaju sattu hoog-id-anu
 raju dead go-PST-3SG.M
 ‘When Sita came to see him (*self), Raju was (already) dead.’

A related fact is that *taanu* can take discourse antecedents where its antecedent controls the point of view. Jayaseelan (1998: 17) characterizes such “logophoric binding” as anaphor interpretation with reference to the person “whose speech, thoughts, feelings or general state of consciousness are reported” in the sentence. Discussing “blocking effects” in the interpretation of long-distance *taan* in Malayalam (wherein an intervening first- or second-person NP prevents *taan* from accessing its antecedent), Jayaseelan suggests that there is a Perspective Phrase in the COMP system, and that *taan* must always be bound to Perspective (by moving successive-cyclically to adjoin to it).

Kannada does not appear to have such unequivocal blocking effects as Malayalam does; but the logophoricity of *taanu* in Kannada is well known, and its behaviour in this respect fairly typical. Crucially for our discussion, if the binder of *taanu* is required to be in a Perspective Phrase, then dative experiencers need not be analyzed as subjects. Although subjects are in general natural choices as Perspectives, they are not an inevitable choice. Jayaseelan suggests that the speaker and hearer

of the utterance pre-empt Perspective (thus explaining the “blocking effects”). The choice of Perspective is further determined by a hierarchy of thematic roles which (in a variety of languages) endows the experiencer argument of “psychological predicates” with Perspective, regardless of its grammatical relation.

2.2.2. *Experiencer datives and the control and interpretation of PRO*

2.2.2.1. *Control of PRO* The understood subject of an infinitival complement in Kannada⁴ may be controlled by the matrix nominative, accusative or dative argument. Dative experiencers too may control this understood argument (14a–b). However, since indirect object datives can be controllers, this does not speak to us about the subjecthood of the dative experiencer.

- (14) a. raama-nige_i [PRO_i ood-uvud-ikke] iSTa-villa
 raama-DAT PRO read-NONFIN-DAT liking-be.NEG
 ‘Rama does not like to read.’ (Lit. ‘to Rama to read does not like.’)
 b. avan-ige_i [PRO_i makkal-anna saak-uvud-ikke]
 he-DAT PRO children-ACC bring.up-NONFIN-DAT
 phursattu ira-l-illa
 time be-INF-NEG
 ‘He did not have the time to bring up the children.’

2.2.2.2. *Interpretation of PRO* More difficult to explain is a robust fact about the interpretation of PRO: an experiential dative cannot serve as the null argument of an infinitival complement (cf. Sridhar 1976).

- (15) a. *avan-ige_i [PRO_i koopa bar-uvud-ikke] iSTa-villa
 he-DAT PRO anger come-NONFIN-DAT liking-be.NEG
 ‘He does not like to get angry.’

The complement verb *bar-* does otherwise allow a PRO subject:

- b. avan-ige_i [PRO_i bar-uvud-ikke] iSTa-villa
 he-DAT PRO come-NONFIN-DAT liking-be.NEG
 ‘He does not like to come.’

Nor does a nominative controller make possible a PRO with a dative interpretation; Sridhar cites a minimal pair *operation aagalu* ‘(for) operation (to) happen’ and *operation maaDisikoLLalu* ‘(for) operation (to) have done’ with dative and nominative complement subjects respectively, where only the latter permits control. Thus only nominatives are interpretable as PRO.

It is difficult to evaluate the significance of this fact in the absence of an articulated theory of nominative case marking in Kannada, however. The default theoretical assumption is that this is achieved by tense. (Infinitives being tenseless, PRO occurs as their subject because it here remains “ungoverned”). But this does not explain the occurrence of nominatives in the Kannada gerund, which the negation facts argue to be nonfinite (Kannada has separate negative forms for finite and non-

finite clause negation, cf. Amritavalli 2000b). (The Kannada gerund differs in this respect from the Kannada derived nominal, which has the expected possessive subject.) Nominative case-marking also occurs in modal and negative clauses, where the verb occurs in a nonfinite form; these clauses have neither tense nor agreement morphology, and arguably lack the functional projection of Tense.⁵

Similarly, it is difficult to evaluate the facts about the “conjunctive participle” or serial verb construction, given the current state of our knowledge of these constructions.

3. The DSC as an unaccusative construction

We shall take as essentially correct the Jayaseelan-Shibatani position that the dative experiencer construction is an intransitive construction. We can take this argument a step further: the DSC is an unaccusative intransitive construction.

The intransitive verbs that occur in this construction belong to a very restricted set; typically, they are the verbs *be*, *come* and *become* or *happen* (cf. also Shibatani 1999: 54). These are prototypical unaccusative verbs (Levin and Rappaport 1995). This brings this apparently area-specific and typologically marked construction further into the fold of Universal Grammar, for some of the insights we have gained into the unaccusative construction hold promise for familiar DSC phenomena. Early investigations of both unaccusative and DSC constructions tended to view these monolithically, with little expectation or understanding of internal variation or subgrouping within these construction-types. The fact that the predicates in both these constructions fall into intuitively obvious semantic classes (unaccusatives are prototypically change-of-state verbs, DSC predicates pertain to physical or mental states), gave rise to the assumption that these predicates should behave uniformly. But as Levin and Rappaport say at the outset of their exploration into unaccusativity (pp. 5–6), “given the many-to-one character of the mapping from lexical semantics to syntax, ... (t)here is no more reason to assume that the unaccusative class is semantically homogenous than there is to assume the same about the class of transitive verbs.”

3.1. An inadequacy in the rule government analysis

The first approaches to the DSC (we have said) took its most remarkable feature to be the semantic class of its predicates. This perception translated itself into the suggestion that the dative case on the “subject” was due to a “governed” rule: a lexical but semantically predictable property of a class of predicates that took dative rather than nominative subjects. But there are in Kannada (as in other DSC languages) pairs of intransitive and transitive/causative sentences with the experiencer dative alternating with a nominative experiencer (cf. Amritavalli 1988). (Shibatani (1999) notes this fact for Japanese, Korean and Hindi.) This was an embarrassment for the early analyses.

We shall show the (apparent) nominative–dative alternation to be a non-issue, in the next section. Here we note one other such “alternation” (recapitulated from Amritavalli 1997), this time in the correspondence of dative causees to dative subjects in Kannada. When transitive predicates are causativized in Kannada, the causee is usually marked instrumental. However, for a well-defined class of predicates known as “ingestives,” the causee emerges as dative. Now this fact has been noticed, and thought to have a simple explanation: namely, that the dative case originates from the “quirky” case of the “lower” predicate. Thus, the dative case of the causee *nanage* in (16b) has been thought to be “consistent with deriving such sentences from underlying dative subject sentences” such as (16a) (Sridhar 1990:218):

- (16) a. *nana-ge siT'Tu bantu*
 I-DAT anger came
 ‘I got angry’ (lit. ‘to me anger came.’)
 b. *timma nana-ge siT'Tu bar-is- ida*
 timma I-DAT anger come-CAUS-PST
 ‘Timma made me get angry.’

The problem with this analysis is that dative case on ingestive causees appears even when that argument does not originate as a “dative subject”. Thus its dative case cannot be attributed to a “quirky” source verb. In (17a), we have ingestive predicates with nominative subjects. Notice that these arguments surface as dative causees in (17b).

- (17) a. *magu haalu kuDiyitu (snaana maaDitu)*
 child.NOM milk drank bath did
 ‘The child drank milk (took a bath).’
 b. *taayi maguv-ige haalu kuD-is-id-aru*
 mother child-DAT milk drink-CAUS-PST-AGR
 (*snaana-maaD-is-id-aru*)
 bath-do-CAUS-PST-AGR
 ‘Mother fed the child milk (gave the child a bath).’

3.2. The nominative–dative alternation

In this section we show that the so-called alternation of dative with nominative case for experiencers is only an apparent one. The subject of the predicate is always nominative. What changes is the predicate itself (and, with it, the thematic role realized as nominative subject). As a preliminary to understanding the putative case alternation, we now tease out the pertinent facts about the predicates in these constructions.

3.2.1. *A puzzling morphological complexity in denominal verbs*

There are some nominative subject counterparts of the DSC whose predicates

instantiate rather complex verbal morphology. Compare the following pairs of sentences, where the predicates in both the (a) and the (b) examples are intransitive. In each case, only the first sentence is a DSC: it has both a nominative subject, and a dative experiencer argument. The second sentence has only a single argument, a nominative. This nominative argument corresponds to the dative experiencer of the first. What accounts for this “switch”?

- (18) a. magu-vige naacike aayitu
 child-DAT shyness happened
 ‘The child felt shy.’ (Lit. ‘to the child shyness happened.’)
 b. magu naacik-koND-tu
 child.NOM shy-VBLRFL-PST.3SGN
 ‘The child felt shy.’ (Lit. ‘the child shyened.’)
- (19) a. magu-vige yeccerike aayitu
 child-DAT waking happened
 ‘The child came awake.’
 b. magu yeccettu-koND-tu
 child.NOM wake-VBLRFL-PST.3SGN
 ‘The child awoke.’
- (20) a. avan-ige koopa ban-tu
 he-DAT anger come-PST-3SGN
 ‘He felt angry.’ (Lit. ‘anger came to him.’)
 b. avanu koop-isi-koND-anu
 he.NOM anger-VBLISER-VBLRFL-PST.3SGM
 ‘He felt angry.’ (Lit. ‘He angered.’)

Notice that the subject of the (a) sentences, the DSC, is always an abstract nominal (*naacike* ‘shyness’, *yeccerike* ‘waking’, *koopa* ‘anger’). This nominal appears in the second sentence as (part of) the predicate, i.e., the verb. (Compare English *he has worries*, *he worries*, where the nominal object-complement of the first sentence is the verb in the second.)

The verbalization of the abstract noun is overtly marked in (20b) by *-isu*, the Kannada causative morpheme which functions more generally as a verbalizer (cf. such verb-noun pairs as *puuje* ‘worship-n.’ *-puuj-isu* ‘worship-v.’, *koor-ike* ‘wish-n.’ *koor-isu* ‘wish-v.’). As (18b) and (19b) show, however, the verbalization is not always overtly marked.

The question that remains is: what is the morpheme *-koLL* — usually identified as the verbal reflexive — doing in the (b) sentences?⁶

We shall argue that the intransitive denominal predicates of the nominative-experiencer sentences (18b, 19b, 20b) are decausativized transitive verbs, and assimilate this into a more general pattern that relates unaccusative verbs to their transitive counterparts by decausativization.

3.2.2. Unaccusatives as detransitivized verbs

One of the functions of the morpheme *-koLL* in Kannada is as a detransitivizer, evident in intransitive — transitive verb pairs such as the following:

- (21) tegi 'open, tr.' ~ tegedu-koLL 'open, intr.'
mucc 'close, tr.' ~ mucci-koLL 'close, intr.'
bacciD 'hide, tr.' ~ bacchiTTukoLL 'hide, intr.'

The intransitive verbs in (21) are unaccusatives. Their subject is a Theme, which is the object of the corresponding transitives. The morphological evidence shows that the transitive verb is basic, and the intransitive derived.

Levin and Rappaport (1995:82 ff.) present the following evidence for this direction of derivation for unaccusatives, even in the absence of tell-tale morphology. The set of possible subjects of the intransitive verb is usually a subset of the possible objects of the transitive verb. Such loss of selectional frames is typical of derived words. (The intuitive logic here is from learnability. For its properties to be predictable, a derived word may inherit all, or less than all, meanings from its base; but it cannot have a superset of the meanings of its base and remain predictable.) Levin and Rappaport therefore “assume that the alternating unaccusative verbs have a single lexical semantic representation associated with both their unaccusative and transitive forms, and that this is a causative lexical semantic representation.”

With this assumption, the appearance of *-koLL*, the marker of detransitivization, on the denominal verbs *naachikkoLL* 'feel shy', etc., in (18)–(20) is explained. These unaccusative verbs must be derived intransitives, exactly like the intransitives in (21), although the corresponding transitive verbs are not extant.⁷ Our claim is that the Kannada nouns 'shyness', 'anger', etc. are in fact verbalized into causative or transitive predicates, which are detransitivized to obtain the unaccusative forms in (18)–(20). We surmise this derivational route to fall out from more general principles governing verbalization and valency, glimpses of which have been caught in current work on unaccusativity.

3.2.3. *Experiencer datives, nominative intransitives and nominative transitives*

If this claim is correct, we expect to find at least some predicates where a transitive or causative verb is instantiated that is derived from the nominal in a DSC. I.e. we expect not merely doublets as in (18)–(20), but *triplets* of corresponding predicates: DSC, causative/transitive, and intransitive. Interestingly, this expectation is met:

- (22) a. magu-vige hedar-ike aay-itu
 child-DAT fear(root)-NOUN MARKER happen-PST.3SGN
 'The child felt fear.' (Lit. 'to the child fear happened.')
- b. magu hedar-i-koND-tu
 child fear(root)-PST-DETRANS-PST.3SGN
 'The child felt fear.' (Lit. 'the child feared.')

- c. naayi magu-vannu hedar-is-itu
 dog child-ACC fear(root)V-CAUS-PST.3SGN
 'The dog frightened the child.' (Lit. 'the dog enfear'd the child.')

3.2.4. *The case-marking puzzle dissolves*

There remains no mystery about the case-marking patterns in (18)–(20), or in (22). (22a) is an intransitive sentence with the predicate 'happen'; the nominative NP 'fear' is its subject, and the experiencer is the dative argument.⁸ (22c) is a transitive sentence whose predicate, 'cause fear', is a verbalization of the nominal in (a); it has a nominative subject (the causer) and an accusative object (the experiencer). (22b) is (again) an intransitive sentence, but here the predicate is a decausativized form of 'cause fear'. Its subject is nominative, the theme argument, which corresponds to the transitive object, marked accusative: the expected correspondence in the thematic-to-syntactic mapping for transitives and unaccusatives.

Thus we have in (22) three sentences with nominative subjects, but the theta role that is realized as nominative subject is different in each of these. What produces the apparent dative-nominative alternation is the verbalizing of a nominal, with a resulting change in predicate, and therefore the arguments that the predicate appears with. Consider a limited parallel from English: sentence pairs such as "Remembrance came to him; he remembered," or "A thought came to him; he thought," which show a similar change of predicate from *come* to *remember* (and *come* to *think*), and a concomitant, apparent, dative-nominative alternation in their experiencers.

Such parallels are of course what Jayaseelan (1988) drew our attention to. He suggested that where DSC languages like Kannada differ from English is in their possibility of pro-drop, and their freedom of word-order. Neither of these suggestions, however, suffices to explain the data immediately under consideration. Indeed, freedom of word order is no longer an issue, for we have explained (away) the apparent "fronting" of the dative experiencer in Kannada as its natural position in intransitive sentences with indefinite subjects (Section 2.1.2.). Nor is the pro-drop parameter an issue, for in our "experiencer dative" examples, *remembrance* and *thought* are the subjects of *come*; there is no dummy subject.

The question is why English does not have productive alternations like "an idea came to him; *he idead." Kannada and English seem to differ in their possibilities for deriving verbal predicates. Whereas Kannada regularly allows nominals to be verbalized, English is far more reticent in converting nouns to verbs (**he angered/surprised*), although it readily relates adjectives to verbs (*sharp-sharpen*). This may perhaps be related to the lack of a morphological causative in English.⁹

3.3. The DSC as a complex predicate

The preceding discussion of the dative-nominative alternation suggests a lexical perspective on the DSC. Although the verb in the DSC is simply an intransitive verb with a nominative subject, there is a sense in which the predicates in the DSC are

nominal+verb combinations ('fear happened'); the semantic content of the predicate is felt to be actually expressed by the nominal. Fear "happens", shyness also "happens", so the information content of the predicate is in the noun. The verb itself functions more or less as an auxiliary that allows the noun to be integrated into a predicate. The DSC, thus, consists of complex predicates.¹⁰

Whether such complex predicates are put together productively in the syntax, or lexically, is unclear; my preference is for syntax, because the Kannada DSC allows coinages of a borrowed English noun and a Kannada auxiliary verb: *confidence barutte* lit. 'confidence comes' 'get confidence', *disappoint aagutte* lit. 'disappoint(ment) happens' 'be disappointed', *excite agutte* lit. 'excite(ment) happens' 'get excited'. Verbal affixes such as *-isu* cannot verbalize borrowed words: **confidence-isu*, **disappoint-isu*, **excite-isu*.

There are firm intuitions about the choice of the verbal element in these coinages: **confidence agutte* or **disappoint barutte*, with the Kannada verbs interchanged, are not possible. We notice an intriguing fact: some English words are borrowed as nouns, and others as verb stems, although the nominal forms of the latter are available. Specifically, the unaccusative verb *bar-* 'come' takes an English noun (*confidence*) as its complement, whereas the unaccusative verb *aag-* 'happen' takes the English verb stem *disappoint* as its complement.

Comparing the purely Kannada data, the verbs *bar-* 'come' and *aag-* 'happen' both seem to combine with nouns. What this suggests is that the verb in the complex predicate is sensitive to finer categorial distinctions in its complement than superficially evident from the Kannada facts. Insofar as these sensitivities can be motivated, the need for lexical specification of complex predicates is attenuated.

3.3.1. Dative and nominative arguments of complex predicates

Complex predicates are (of course) not limited to the DSC in Kannada. Thus the triples in (23)–(24) below (corresponding to (22) above) have a complex predicate throughout.

The nominal that occurs in the DSC persists as a nominal in the nominative subject constructions as well. Only the auxiliary verb changes: where the DSC has *aag-* 'happen', the nominative sentences have *paD-* 'experience.' This verb *paD-* occurs in a transitive or causative *-isu* form, and a detransitivized or *koLLu* form, as explained above.

- (23) a. *avan-ige beesara aayitu*
 he-DAT irritation happened
 'He felt irritation.'
 b. *avanu beesara paTTu-koND-anu*
 he irritation experience-DETRANS-AGR
 'He felt irritated.'
 c. *idella avan-annu beesara paD-is-itu*
 all this he-ACC irritation experience-CAUS-AGR
 'All this irritated him.'

- (24) a. avan-ige aashcharya aayitu
 he-DAT surprise happened
 ‘He felt surprise.’
 b. avanu aashcharya paTTanu
 he surprise experienced
 ‘He felt surprised.’
 c. idella avan-annu aashcharya paD-is-itu
 all this he-ACC surprise experience-CAUS-AGR
 ‘All this surprised him.’

4. The dative of possession

A persistent intuition about the DSC — granting that it is an intransitive construction — is that the dative argument is more than an adjunct. Shibatani 1999 notes that the omission of the dative argument results in a felt ellipsis (in pro-drop languages) or in ungrammaticality (in non pro-drop languages). He suggests the the DSC is a “double subject” construction, and assimilates it to the two-nominative double subject construction (reminiscent of the topic and subject construction) in Chinese and Japanese. A suggestion in Levin and Rappaport (1995: 120) that verbs of existence have two arguments, one the entity that exists and the other the location at which it exists, is also of interest.

In the Dravidian languages, a prominent member of the complex that we have labelled the DSC is the dative of possession (DOP). The DOP ranges outside the ambit of the DSC: dative-marked possessors may occur in transitive clauses. We shall approach the dative of possession in terms of the proposals in Szabolcsi (1983) and Kayne (1993) for an extractable, dative-marked position in Hungarian possessive DPs, and a null preposition that incorporates into *be* to yield *have* in English. We shall (however) propose that the dative position is motivated thematically (thus integrating the dative possessor into the argument structure of the sentence), and that it is perhaps interpreted by coindexing rather than movement out of a possessive DP.

4.1. A dative position in possessive noun phrases

4.1.1. *Kayne’s proposal*

Kayne (1993) proposes that possessive *have* in English is an instance of a *be* that incorporates an abstract preposition. This preposition is the non-overt counterpart of what is realized in Hungarian as a dative case on possessors. (Kayne’s concern is to explain an alternation between *have* and *be* in the auxiliary system of the Romance and Germanic languages.)

This proposal captures the parallelism between the Kannada sentence (25), with the verb *be* and a dative case-marked possessor, and possessive *have* sentences in English.

- (25) avan-ige aidu makkaLu iddaare
 he-DAT five children are
 'He has five children.' (Lit. 'to him five children are.')

On the analysis of *have* as a *be* that incorporates an abstract dative, an English sentence like *John has three sisters* originates as a possessive DP complement to the verb *be*.

- (26) BE [_{DP} Spec D⁰ [_{DP POSS} John [AgrO [_{QP/NP} three sisters]]]]

In the corresponding structure in Hungarian (Szabolcsi 1983), the possessive NP can be left *in situ*; its case is then nominative. If the possessor moves to the Spec of the DP, however, it is case-marked dative. There is thus (apparently) a need to assume that Hungarian D⁰ licences an oblique (dative) case in its Spec. Further, the dative possessor in Hungarian can move once again, out of the DP it originates in.

To see English *have* sentences as possessor-moved sentences, suppose the possessor moves, as in Hungarian, first to Spec, DP, and then to the Spec of the verb *be*. This (as Kayne acknowledges) derives the ungrammatical *John is three sisters*, "if nothing further were said." But Kayne suggests that (i) in English as in Hungarian, there is a prepositional D⁰ (written D⁰/P_e) in the possessive DP, which is non-overt; and (ii) this empty D⁰/P_e must (for theory-internal reasons) incorporate to BE when the possessor moves out. The resulting complex (BE+ D⁰/P_e) is spelled out as *have*.

4.1.2. A dative of possession in English?

Abstract as Kayne's analysis is, it receives some support from the following English data. We see in a restricted set of English sentences an alternation of a *be* with an expletive subject and a dative possessor argument, and a *have* with the possessor in subject position. Notice that the *be* sentences in English correspond to Kannada DOP sentences.

- (27) a. i. There must be a lid (a cap) to this.
 ii. This must have a lid (a cap).
 b. ida-kke ondu mucCaLa ira beeku.
 this-DAT one lid be must
 '(There) must be a lid to this.'
- (28) a. i. There is no end to this.
 ii. This has no end (to it).
 b. ida-kke kone illa.
 this-DAT end be-neg.
 '(There) is no end to this.'
- (29) a. i. There are some advantages to this.
 ii. This has some advantages (to it).

- b. ida-kke (ida-ralli) kelavu laabhagaLu ive
 this-DAT (this-LOC) some advantages are
 ‘(There) are some advantages to this/in this.’
- (30) a. i. There is a sequel to this.
 ii. This has a sequel (to it).
 b. ida-kke ondu TippaNi ide
 this-DAT a footnote is
 ‘(There) is a footnote to this.’

This extremely restricted construction in English is happiest when the possessor is inanimate or abstract, and the possessed NP is non-referential: thus *there must be a cap to this* is much more felicitous than **This is the cap to this* (cf. also *there must be more to this than meets the eye*).

4.2. The scope of the Kannada dative of possession

We notice some intriguing gaps in the range of the DOP vis-à-vis the possessive construction in Kannada. In some cases, only the DOP yields a “possessive” or *have* interpretation (Section 4.2.1.1). In other cases, the DOP and the possessive appear to be both possible (Sections 4.2.1.2 and 4.2.2). And in yet others, the DOP is unavailable (again, Section 4.2.2).

4.2.1. The DOP in the DSC

4.2.1.1. Possessive and existential *be* In the first set of examples below, DSC examples with the verb *be*, the dative case is crucial to the interpretation of the possessor and the possessed thing as arguments of a “possessive” verb. A genitive-marked possessor within a larger DP, as in (31b) and (32b), receives an interpretation only within that DP (and that entire “possessive DP” gets an existential interpretation). (I.e., the dative of possession appears to instantiate two arguments for the verb *be*, whereas the “larger possessive DP” functions as a single argument of this verb.)

- (31) a. avan-ige aidu makkaLu iddaare
 he-DAT five children are
 ‘He has five children.’ (Lit. ‘to him five children are.’)
 b. *avan-a aidu makkaLu iddaare
 he GEN five children are
 *‘He has five children.’ (ok: ‘(there) are his five children.’)
- (32) a. nana-ge yeraDu kai ide
 I-DAT two hand is
 ‘I have two hands.’ (Lit. ‘to me two hand is.’)
 b. *nann-a yeraDu kai ide
 I-GEN two hand is
 *‘I have two hands’ (ok ‘(there) are my two hands’)

In Kayne's terms, the movement of the possessor out of its DP yields the *have* reading (compare the parallel English examples *John has three sisters to consider*, with a "moved" possessor, and *There are John's three sisters to consider*, with the possessor left *in situ*). That the dative possessor ends up outside the originating DP altogether is shown by the word order in the following questions, where the dative possessor occurs separated from the possessed elements, in a right-adjoined position.

- (33) a. makkaLu iddaar-aa avarige?
 children are-QUEST to.them
 'Do they have children?'
 b. yeSTu makkaLu iddaare avarige?
 how many children are to.them
 'How many children do they have?'

But whereas in English the movement of the possessor out of its DP "strands" an abstract preposition that incorporates into *be* to yield *have*, in Kannada the matrix verb remains a *be*, and the possessor remains case-marked dative. Do we then assume that what moves out of the DP in Kannada is a dative case-marked possessor? This is a potential problem.

We can explain these facts with a reversal of Kayne's assumption about where the dative case on the possessor originates from. We shall claim that this case does not originate in the possessive DP as a D^0 , but is assigned by the matrix verb.¹¹ In the specific case of the verb *be*, this amounts to saying that there is a *be* of possession separate from the *be* of existence; both options are allowed by UG. The *be* of possession has the option of assigning dative case to a position, or of "incorporating" this case, to be spelt out as *have*. In the case of verbs other than *be* that occur in the dative of possession construction, we shall claim that this dative position is a benefactive argument that is optionally projected. But the distinction between *be* and the other verbs implied above is merely a descriptive convenience. We expect that the dative case assigned by "possessive *be*" is subsumable as well under the benefactive dative (cf. the benefactive argument of *be* in "I am *for* you and against him").¹²

To recapitulate, Kayne assumes without argument that a dative case originates in possessive DPs, which contain this case in addition to genitive or possessive case. The essential insight in Kayne's analysis (however) is that of a relation between the dative case and the matrix verb *be*: a relation of incorporation. Retaining this insight, but reversing the assumption about the origin of the dative case in (31)–(32), then, if only a nominative position is licensed by *be*, the entire possessive DP receives an existential interpretation. In the *be-of-possession* interpretation, the verb must license a dative position in addition to the nominative position. This analysis also gives us a clue about the English data in (27)–(30), where we remarked on the extremely thematically-restricted nature of the "there must be a lid to this" type of possessive construction. It appears that with the lexicalization of *be*+dative case into *have* in English, the dative argument of *be* underwent some kind of de-thematization which prevents it from being properly interpreted, although the position itself

still survives as a peripheral, residual possibility in the grammar. Hence this dative argument of *be* in English cannot host full-blooded possessors extracted from DPs with referential possessions, such as “there are ears to the dog” (derived from *the dog’s ears are*).

4.2.1.2. Locative arguments of *be* Consider now a second set of DSC sentences with the verb *be*. In these sentences, the (a) examples are DOP examples. In the corresponding possessive DP examples (b), the possessive DP is not the subject of the verb *be* (as in (31b, 32b)); it is inside a locative phrase (headed by *meele* ‘on’ or *-alli* ‘locative case’). (The subject of the verb is a nominative DP.)

- (34) a. avan-ige mukha-da meele moDame-gaLu ive
he-DAT face-GEN on pimple-PL.NOM are
‘He has pimples on his face.’ (Lit. ‘to him on (the) face pimples are.’)
b. avan-a mukha-da meele moDame-gaLu ive
he-GEN face-GEN on pimple-PL.NOM are
‘(There) are pimples on his face.’
- (35) a. nana-ge kai-yalli ondu cihne ide
I-DAT hand-LOC one sign.NOM is
‘I have a sign in my hand.’ (Lit. ‘to me on (the) hand is a sign.’)
b. nann-a kai-yalli ondu cihne ide
I-GEN hand-LOC one sign.NOM is
‘(There) is a sign in my hand.’

At first glance, the possessor here appears to have the “option” of staying *in situ*, or moving out into a dative position. No dramatic, corresponding switch is perceived between an existential and a possessive reading for *be*. But this is purely a pragmatic failure; for in the (a) sentences the possessor is a dative argument of *be* (the dative possessor can be scrambled away from the locative containing the possession), whereas the (b) sentences are (strictly) simple locatives with an existential *be*. (There is indeed a subtle foregrounding of the possessor in the DOP that comes through in the English translations.)

The account of the “obligatory DOP” sentences given in the previous section generalizes to these examples. In either case, the dative position is optional; in its absence, an existential reading obtains.

4.2.2. *Inalienable possession and the benefactive dative*

Consider the dative-possessive alternants below. In these examples (36)–(40), only inalienable possession is involved (the face, the hand, the stomach, the hair . . .).¹³ The possessive DPs are sometimes subjects (36b, 37b), but they are also objects (38b, 39b and 40b).

- (36) a. avan-ige kai muriyitu
he-DAT hand broke
‘He broke his hand.’ (Lit. ‘to him (the) hand broke.’)

- b. avan-a kai muriyitu
he-GEN hand broke
'His hand broke.'
- (37) a. avan-ige hoTTe tumbitu
he-DAT stomach filled
'His stomach filled.' (Lit. 'to him (the) stomach filled.')
- b. avan-a hoTTe tumbitu
he-GEN stomach filled
'His stomach filled.'
- (38) a. amma makkaL-ige kai toLedaLu
mother children-DAT hand washed
'Mother washed the children's hands,' (Lit. 'to the children (the) hands.')
- b. amma makkaL-a kai toLedaLu
mother children-GEN hand washed
'Mother washed the children's hands.'
- (39) a. amma makkaL-ige tale baacidaLu
mother children-DAT head combed
'Mother combed the children's hair,' lit. 'to the children (the) head.'
- b. amma makkaL-a tale baacidaLu
mother children-GEN head combed
'Mother combed the children's hair.'
- (40) a. amma makkaL-ige kivi cuc-isidaLu
mother children-DAT ear pierced-CAUS
'Mother had the children's ear(s) pierced.' (Lit. 'to the children (the) ear.')
- b. amma makkaL-a kivi cucc-isidaLu
mother children-GEN ear pierced-CAUS
'Mother had the children's ear(s) pierced.'

Generalizing our analysis to (36)–(40), we have claimed, *contra* Kayne, that the dative position is licensed by the matrix verb. However, consider (36a), with the intransitive (unaccusative) verb *muri* 'break'. This verb takes only one argument; (36b) is its default argument structure. (The transitive counterpart of 'break' does take two arguments, but the second argument is an accusative, not a dative.) How then can our claim be maintained? (Rather, it seems that the Kaynean postulation of a dative within the possessive DP is what is needed here.)

We shall say that the dative case in such sentences is a benefactive case that is optionally projected by the matrix verb: the (a) sentences have a "benefactive dative" argument. In support of this, consider examples (41)–(42) below. These also instantiate inalienable possession; but the DOP is not a possible variant. (Inalienable

possession, then, is only a necessary and not a sufficient condition for the DOP in Kannada.) This is because the verbs in these sentences do not easily allow a benefactive interpretation. I.e., people's heads or hands can be imagined to be "washed" and "combed" for their benefit, but not as easily "looked at" or "touched" for their benefit.¹⁴

- (41) a. *amma makkaL-ige kai nooDidaLu
 mother children-DAT hand saw
 'Mother saw the children's hands.' (Lit. 'to the children (the) hands.')
 (ok: 'Mother read the children's palms')
- b. amma makkaL-a kai nooDidaLu
 mother children-GEN hand saw
 'Mother saw the children's hands.'
- (42) a. *amma makkaL-ige tale muTTidaLu
 mother children-DAT head touched
 *'Mother touched the children's heads.' (Lit. 'to the children (the) head.')
- b. amma makkaL-a tale muTTidaLu
 mother children-GEN head touched
 'Mother touched the children's heads.'

The fact that the only available interpretation of the DOP in (41) is idiomatic, with *see the hand* interpreted as "read the palm," is particularly revealing, for on this reading the possessor is also in some sense the beneficiary of the event. Similarly, (42) becomes acceptable as a DOP when the verb *muTTi* 'touch' is extended into the serial verb *muTTi nooD* 'touch (and) see,' suggesting that the children's heads are being touched to ascertain whether (e.g.) they have got too hot! There must thus be an optional benefactive position, a variant of a goal argument, that is projected in the DOP clause, which hosts the extracted possessor.

Summing up, the dative possessor must be an independent, optional thematic position, which (therefore) cannot be filled by movement, but must be interpreted as a possessor in a possessive DP. Across languages, such interpretation seems to operate under conditions of inalienability, (in)definiteness, and so on. Where the matrix verb is *be*, the failure to project and fill a dative position results in an existential rather than a possessive reading for the verb; the dative is the only option for the possessive reading of *be*. We take this as interesting confirmation of Kayne's analysis of possessive *have* as *be+to*, with *to* incorporated into the verb.

5. Conclusion

Dative experiencers in Kannada occur in unaccusative constructions. The nature of the "complex predicate" in these constructions remains to be investigated. The

Dative of Possession has much in common with similar constructions in languages lacking the range of dative experiencers attested in Kannada; the mechanism of interpretation of these possessors, which must be coindexing rather than movement, needs to be worked out.

Notes

* This chapter has benefited from comments and questions raised during the discussion by Anoop Mahajan, Halldor Sigurdsson, Bernard Comrie, Josef Bayer, James Yoon, Probal Dasgupta, Mamoru Saito, and Shigeaki Kodama. All shortcomings remain my own.

1. E.g. Kittel (1908), based on the *s'abda-maNi-darpanNa*, the thirteenth century work of the grammarian Kees'ava.

2. Abbreviations used are: 1: 1st person; 3: 3rd person; AUX: auxiliary; CAUS: causative; COMP: complementizer; DAT: dative; DETRANS: detransitivizer; EMPH: emphatic marker; GEN: genitive; H: human; INF: infinitive; INSTR: instrumental; LOC: locative; M: masculine; N: neuter; NEG: negative; NOM: nominative; NONFIN: nonfinite; NONPST: nonpast; PASS: passive; PL: plural; PST: past; QUEST: question marker; RFL: reflexive; SG: singular; VBLISER: verbalizer; VBLRFL: verbal reflexive

3. Fronting the nominative has the expected effect of making this NP definite. Compare (i) and (ii) below.

- | | | | |
|-----|---------------------|------|---|
| (i) | nana-ge jvara bantu | (ii) | jvara nana-ge bantu |
| | I-DAT fever came | | fever I-DAT came |
| | 'I got a fever.' | | 'The fever, I got.' 'As for the fever, I got it.' |

While (i) is appropriate in an out-of-the-blue context, (ii) suggests that the fever has been a topic of discourse; the current focus is the recipient of the fever.

4. The literary citation form of the infinitival in such complements ends in *-alu*. However, the standard spoken dialects attest case-marked forms of the verb, ending in *-likke* (a "case-marked infinitive"), or *-uvudukke* (a "case-marked gerund"). Since there is a neutralization of the infinitive and the gerund forms (only in this case-marked context: cf. Amritavalli 2000b), the verb form is here just glossed "nonfinite".

5. These unresolved questions about the position and case-marking of nominative subjects in Kannada (Anoop Mahajan points out) in effect open up the subjecthood question again, in particular, the possibility of a double-subject analysis (Shibatani 1999). Mahajan notes further that extraction facts pertaining to finite clauses in Hindi show experiencer datives to be arguments, not adjuncts.

6. For an attempt at an account in terms of case- and theta-role absorption, see Amritavalli 1988.

7. Levin and Rappaport (p. 87), noting that not all unaccusative (=derived intransitive) verbs have a transitive counterpart, proceed to show that this may not be an entirely unprincipled fact.

8. We return to the status of this argument below.

9. A related observation is that nouns and verbs are perhaps the only two lexical categories in Kannada, with most adjectives — and postpositions — derived from nouns.

10. English complex predicates like *make a prediction*, *make an effort*, *give a kiss*, *give a promise* generally consist of a verb and its object. The suggestion here is that a Kannada unaccusative verb can form a complex predicate with its internal argument. Would this argument then externalize to the subject position?

One useful suggestion (by Mamoru Saito), stemming from the observation that the nominative in the DSC cannot antecede subject oriented anaphors, is that there is *no* subject in this construction. However, proponents of the “double subject” view (who also point to an observed correlation between multiple wh-fronting languages and multiple subjects) might argue this non-antecedence to be irrelevant, given that such anaphors orient to the “higher” subject. I leave this problem in this unsatisfactory state.

11. Interestingly, Szabolcsi (1983:98) “risks the assumption” that the dative morphology in possessive noun phrases has as “its source” the governor of the possessive DP.

12. Presumably, possessive *be* with its dative case unincorporated (and not *have*) is a default option of UG. Thanks to James Yoon for reminding me that a thematic dative position makes the possessor raising analysis technically unworkable, given the prohibition on movement into theta positions. An alternative mechanism of coindexing could conceivably be defended. Cf. also n. 14.

13. “Dressing” verbs (putting on clothes or shoes) occur in the dative of possession, suggesting a grammaticalized notion of inalienability that is not always intuitive; cf. the mismatch between sex and gender in languages.

14. Languages other than Kannada impose inalienability as a condition for linking an “external” possessor to the possessed item: cf. the English *hit someone’s head* (*hand*, *car*), *hit someone on the head* (*hand*, **car*). Josef Bayer observes that in German, dative-possessive doublets exhibit an interesting difference of interpretation, with possession being alienated in the dative. Although our data do not readily suggest such a difference, we may note here as pertinent a puzzling restriction in Kannada on the dative of possession: it does not occur with first- and second-person possessors. Thus the most plausible interpretation of the DOP (ii) below is that the speaker is alienated from himself and watching himself, as in a dream:

- (i) naanu (nanna) kai toLedu-koND-e
I (my/PRO) hands wash-REFL-1SG
'I washed my hands.'
- (ii) *naanu nana-ge kai toLedu-koND-e.
I I-DAT hands wash-REFL-1SG
'I washed my hands.'

This would reinforce the view that the dative and possessive positions are independent thematically, and related by coindexing rather than movement.

References

- Amritavalli, R. 1988. “Case-marking choices for experiencer subjects.” In *Experiencer subjects in South Asian languages*, M.K. Verma and K.P. Mohanan (eds.), 285–95. Stanford: Center for the Study of Language and Information.
- Amritavalli, R. 1997. “A Kannada perspective on morphological causatives.” In *Phases and interfaces of morphology*, M. Hariprasad, Hemalatha Nagarajan, P. Madhavan and K.G. Vijayakrishnan (eds.), vol. two 180–205. Hyderabad: CIEFL.

- Amritavalli, R. 2000a. "Lexical anaphors and pronouns in Kannada." In *Lexical anaphors and pronouns in selected South Asian languages: a principled typology*, Barbara Lust, Kashi Wali, James Gair and K.V. Subbarao (eds.), 49–112. New York: Mouton de Gruyter.
- Amritavalli, R. 2000b. "Kannada clause structure." In *The Yearbook of South Asian Languages and Linguistics*, Rajendra Singh (ed.), 11–30. New Delhi: Sage India.
- Bhat, D.N. Shankara. 1978. *Pronominalization: a cross-linguistic study*. Pune: Deccan College postgraduate and research institute.
- Jayaseelan, K.A. 1988. "The Dative subject construction and the Pro-drop parameter." In *Experiencer subjects in South Asian languages*, M.K. Verma and K.P. Mohanan (eds.), 269–83. Stanford: CSLI.
- Jayaseelan, K.A. 1996. "The serial verb construction in Dravidian." Paper presented at the seminar on Verb Typology, University of Trondheim (Norway), 12–14 September.
- Jayaseelan, K.A. 1998. "Blocking effects and the syntax of Malayalam *taan*." In *The Yearbook of South Asian Languages and Linguistics*, Rajendra Singh (ed.), 11–27. New Delhi: Sage India.
- Jayaseelan, K.A. 2000. "Lexical anaphors and pronouns in Malayalam." In *Lexical anaphors and pronouns in selected South Asian languages: a principled typology*, Barbara Lust, Kashi Wali, James Gair and K.V. Subbarao (eds.), 113–68. New York: Mouton de Gruyter.
- Kayne, Richard S. 1993. "Toward a modular theory of auxiliary selection." *Studia Linguistica* 47.
- Kittel, E. 1908 [1982]. *A Grammar of the Kannada language*. New Delhi: Asian Educational Services.
- Levin, Beth and Rappaport Hovav, Malka. 1995. *Unaccusativity: at the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- Shibatani, Masayoshi. 1999. "Dative-subject constructions twenty-two years later." *Studies in the Linguistic Sciences* 29:2, 45–76.
- Sridhar, S.N. 1976. "Dative subjects, rule government, and relational grammar." *Studies in the Linguistic Sciences* 6:1, 130–51.
- Sridhar, S.N. 1990. *Kannada*. New York: Routledge.
- Szabolcsi, Anna. 1983. "The possessor that ran away from home." *The Linguistic Review* 3: 89–102.

CHAPTER 2

Syntactic change and convergence

The case of non-nominative subjects in Dakkhini and Konkani

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Introduction

This chapter discusses the syntactic changes that took place in non-nominative subjects i.e. ergative, genitive and dative in Konkani and Dakkhini Hindi–Urdu (hereafter Dakkhini) from the point of view of language change due to contact and convergence. Both languages belong to the Indo-Aryan family, and have been in prolonged contact with Kannada and Telugu (languages of the Dravidian family). Konkani¹ is spoken along the west coast of the states of Maharashtra, Goa and in some parts of Karnataka in Southern India. The variety of Konkani used in our data in the present chapter is from North Canara (Karwar district) of Karnataka. Konkani in Karnataka has been in contact with Kannada, thus showing Dravidian influence in its syntax. Dakkhini² is a transplanted variety of Hindi–Urdu spoken in southern parts of India, and is heavily influenced by Telugu, a Dravidian language with which it has been in contact for more than five centuries. Such prolonged contact resulted in the present variety of Dakkhini which in many ways is identical to Telugu in its syntactic traits. It is radically different from Hindi–Urdu as well as the earlier variety of Dakkhini which emerged in the 14th century and existed as a written language till the 17th century.

Based on data from five languages (Hindi–Urdu, Dakkhini, Konkani, Telugu and Kannada), and also from Marathi wherever necessary an attempt has been made to examine syntactic changes that took place in ergative, genitive and dative case markers as a result of convergence in contact situations. We shall show that syntactic change may involve change in function with or without the category being changed³ or may also involve addition or deletion of a particular constituent.

We further show that when syntactic change takes place the function of a constituent is crucial and not just the form alone.⁴ Data will be provided from Dakkhini and Konkani to demonstrate that as a result of contact when a rule, which deletes/replaces a particular constituent is added to the grammar of the recipient language, the new rule only deletes or replaces the specific constituent, taking into consideration the function of the constituent rather than the form alone.

We also provide data to demonstrate that as a result of contact Konkani, and Dakkhini have undergone a process of degenitivization⁵ and are moving towards dativization on the pattern of Dravidian languages⁶. By degenitivization we mean the loss or replacement of the genitive and by dativization we mean replacement of the genitive in the donor language by the dative case marker in the recipient language. Thus, degenitivization may lead to:

- (a) absence of the genitive in the recipient language or
- (b) replacement of the genitive with some other postposition of the donor language (that is, the language it comes in contact with).

We further show that syntactic change may lead to the elimination of an existing category in the recipient language on the pattern of the donor language. The loss of ergative marker *ne* in Dakkhini and the loss of verb *honaa* 'to be' as a tense carrier in most constructions in Dakkhini and Konkani are instances which support this claim.⁷ The loss of gender and number agreement, and the loss of the genitive in participles (both relative and adverbial) and infinitival constructions in Dakkhini too can be cited as further examples.

Section 1 of this chapter, in support of degenitivization, discusses those constructions in which convergence leads to:

- (a) the deletion of the ergative case marker and the consequence of such deletion in Dakkhini;
- (b) the deletion of the genitive of Hindi–Urdu in Dakkhini;
- (c) the replacement of the genitive case marker by the dative case marker *ku* in Dakkhini, and *ka* in Konkani;
- (d) the occurrence of an additional genitive case marker as an obligatory marker in infinitival constructions in Dakkhini and Konkani, and
- (e) the retention of the genitive in a few cases in Konkani and Dakkhini.

Section two provides data in support of the phenomenon of dativization in Dakkhini and Konkani. It discusses the functional distribution of the genitive and the dative to demonstrate that the use of the dative case marker in Dakkhini and Konkani has been extended to several other constructions involving:

- (a) kinship relations and possession,
- (b) conjunctive participles,
- (c) adverbial clauses,
- (d) question words and nonfinite complements and
- (e) comparative constructions.

1.

In the following section we shall present data which shows that Dakkhini and Konkani favour degenitivization and have been proceeding towards dativiza-

1.1.

The ergative-absolutive construction (the theme is in masculine singular):

- In (5) and (6) below in Hindi–Urdu, the ergative marker with subject is not present and hence, agreement with the theme is not permitted.

- (5) *raam Ø roTii_i khaa-yii_i Hindi-Urdu
 Ram.MASC ERG bread.FEM eat-PERF.FEM
- (6) *siitaa Ø khaanaa_i khaa-yaa_i
 Sita.FEM ERG food.MASC eat-PERF.MASC

The loss of the ergative in Dakkhini resulted in the reanalysis of the ergative-absolutive construction to nominative-accusative construction. Dravidian languages do not have the ergative construction and hence the absence of the ergative in Dakkhini can be attributed to Telugu influence. The following examples from Telugu are illustrative:

No ergative marker in Telugu:

The verb agrees with the subject in (7) and (8).

- (7) siitaa_i Ø annam_j tin-in-di_{i/*j} Telugu
 Sita.FEM ERG food.MASC eat-PAST-FEM.SG
 'Sita ate food.'
- (8) raamuDu_i Ø annam_j tinn-aa-Du_{i/*j}
 Ram.MASC ERG food eat-PAST-MASC.SG
 'Ram ate food.'

We shall now discuss the ergative construction in Karnataka Konkani. In Goan as well as Karnataka Konkani the subject is case-marked with ergative case marker *ne*⁸ when the transitive verb is in the perfect aspect just as in Hindi-Urdu. In such cases the verb exhibits agreement with the theme. The following examples are illustrative:

- (9) raamaa_i nE keLE_j khallE_{*i/j} Karnataka/Goan Konkani
 Ram ERG banana.NEUT eat-PERF
 'Ram ate a banana.'
- (10) raamaa_i nE bhakaRii_j khallii_{*i/j}
 Ram ERG bread.FEM.SG eat.PERF
 'Ram ate a bhakaRii-bread.'
- (11) raamaa_i nE ambE_j khallE_{*i/j}
 Ram ERG mangoes.MASC.PL eat.PERF
 'Ram ate mangos.'
- (12) raamaa_i nE bhakaRyO_j khallO_{*i/j}
 Ram ERG bread.FEM.PL eat.PERF
 'Ram ate bhakarRii-breads.'
- (13) raamaa_i nE ambO_j khallO_{*i/j}
 Ram ERG mango.MASC.SG eat.PERF
 'Ram ate a mango'

From the above examples it is evident that the verb exhibits agreement with the theme in number and gender. Indo-Aryan languages such as Marathi and Panjabi too have the ergative construction but with a difference when compared to Konkani and Hindi–Urdu (cf. Subbarao 2001 for further details).

1.2.

We shall now discuss the nature and behaviour of the ergative and genitive case marker in Goan and Karnataka Konkani. The behaviour of the ergative marker *nE* in Karnataka Konkani is similar to the Hindi–Urdu ergative construction and it does not show any Kannada influence. However, its occurrence and behaviour in participial construction is crucial from the point of view of language change. We shall discuss this in the following section while discussing the behaviour of the genitive in contact situations. Let us first observe the distribution of the genitive marker in Goan Konkani. In Goan Konkani the subject is case-marked by the genitive case marker *ce/je* to express possession and kinship. It also functions as a linker in the infinitival construction where the genitive links the infinitival complement with the conjunct verb (i.e. noun–verb combination such as *koshish* (noun) *karnaa* (verb) ‘to try’, *vaadaa* (noun) *karnaa* (verb) ‘to make a promise’ etc. in Hindi–Urdu). The following examples are illustrative:

The genitive *ce/je* denoting possession in Goan Konkani.

- | | | |
|------|--|--------------|
| (14) | te je pustakaa
his/her GEN book
‘his/her book.’ | Goan Konkani |
| (15) | maaii ce gor
mother GEN house
‘mother’s house.’ | |
| (16) | gulaabaa ce puul
rose GEN flower
‘rose flower.’ | |

The genitive functions as a linker in nonfinite complements.

- | | |
|------|---|
| (17) | madhu cii boropaa cii paddati
Madhu GEN write GEN way
‘the style of Madhu’s writing’ |
|------|---|

The genitive links the infinitival complement with the conjunct verb.

- | | |
|------|---|
| (18) | tan nE viikh piunpaa cii prayatn kelle
he/she ERG poison drink GEN attempt do.PAST
‘He/She tried to take poison.’ |
|------|---|

In Karnataka Konkani two types of genitive markers *cel/je* and *galA* (with variants *gali/gale/galo/galyaa*) are used depending upon the nature of the subject. *galA* is used only with animate nouns to denote possession and kinship relations whereas *cel/je* is used with inanimate nouns and in infinitival constructions as a linker. The following examples are illustrative:

The occurrence of the genitive *galyaa* with the animate nouns and *ce/je* with an inanimate noun in Karnataka Konkani:

- (19) raama galyaa pustkaa ce peja Karnataka Konkani
Ram GEN book GEN page
'Ram's book's page (=a page from the book of Ram)'
- (20) suNyaa galO paayO
dog GEN legs
'dog's legs'

galA agrees with the head in number and gender.

- (21) amma gali kūrchi
mother GEN chair.FEM.SG
'Mother's chair.'
- (22) amma galE~ pustaka
mother's GEN book.NEUT
'mother's book.'
- (23) amma galO Dabbo
mother GEN box
'mother's box.'
- (24) amma galyaa pustakaa ce peja pinle
mother GEN book.NEUT GEN page.MASC torn
'The page in the mother's book was torn.'
- (25) amma galyaa Dabbo ce dhakkon
mother gen box.masc gen lid.masc
'the lid of mother's box.'

Only *cel/je* and not *galA* occurs with the verb in its infinitival form, linking the infinitival construction with the noun.

- (26) yewun ce khabar
come.INF GEN news
'the news of (his) arrival.'
- (27) niddon ce samay
sleep.INF GEN time
'the time of sleeping'

However, such distinction is not found in Goan Konkani. Goan Konkani has only *cel/je* used for inanimate as well as animate nouns.

1.3.

After providing a brief description of distribution of the genitive markers in Konkani, we shall now discuss the syntactic behaviour of the genitive in other constructions. Though the genitive of Hindi–Urdu is either deleted or replaced by the dative or by *bolke*⁹ in Dakkhini in most of the cases, there are a few cases where the genitive of Hindi–Urdu is retained in Dakkhini. The ergative marker that occurs with the subject in the infinitival constructions in Goan Konkani is retained in Karnataka Konkani. We shall show how Dakkhini and Konkani differ from their source languages.

Hindi–Urdu has a full-fledged relative clause construction and a participial construction. The participial construction is ‘less relative-like’ because

- (a) the tense of the embedded verb is deleted,
- (b) the genitive occurs in place of the nominative or ergative marker of the embedded subject and
- (c) the embedded object is deleted (Subbarao 1984).

Deletion of tense and attachment of the genitive to the embedded subject reduce the status of the modifying clause from a full-fledged clause to that of a phrase (Subbarao 1984). The genitive in such constructions is labeled as a status reducer. The following examples are illustrative:

Full-fledged relative clause:

- (28) *siitaa ne jo kaam ki-yaa hai vah kaam acchaa thaa* Hindi–Urdu
 Sita ERG which work do-PAST is that work good was
 ‘The work that Sita did was good.’

The participial construction: the genitive as a status reducer occurs with the embedded subject in the perfect participial construction in Hindi–Urdu.

- (29) *siitaa kaa kiyaa.huaa kaam* Hindi–Urdu
 Sita GEN.MASC.SG do.PP.MASC.SG work.MASC.SG
 acchaa thaa
 good.MASC.SG was.MASC.SG
 ‘The work that Sita did was good.’

The embedded subject is *siitaa* ‘Sita’ and it is case-marked by the genitive. The function of the genitive here is that of a status reducer which reduces the status of the embedded subject to that of a modifier of the matrix subject *kaam* ‘work’. In contrast, the genitive as a status reducer is absent with the embedded subject in the perfect participial construction in Telugu and Kannada. The absence of the genitive with the embedded subject is indicated by Ø in (30) and (31) below.

- (30) raamuDu Ø cees-in-a pani Telugu
 Ram GEN do-PAST-ADJR work
 'the work that Ram did'

- (31) raamanu Ø maaDidE kelasa Kannada
 Ram GEN do.PP work
 'the work that Ram did'

Though Dakkhini and Konkani too have full-fledged relative clauses as well as the participial construction, they both prefer the participial construction to full-fledged relative clauses. Let us examine the corresponding participial construction in Dakkhini first. Recall that the ergative marker *ne* is not present in Dakkhini.

- (32) raam Ø kare so¹⁰ kaam
 Ram GEN do.PERF ADJR work
 'the work that Ram did'

Karnataka Konkani in contrast has retained the ergative marker of the source language in a simple clause and with the embedded subject of the participial clause as well. Hence *raam* 'Ram' in (33) and (34) is ergative-case marked.

- (33) raamaa-nE kaam kelle Karnataka Konkani
 Ram-ERG work do.PAST
 'Ram did the work.'
- (34) raamaa-nE kellailE kaam
 Ram-ERG do.PP work
 'the work that Ram did'

The occurrence of the genitive *gale/ce/je* is not permitted in participles in Karnataka Konkani. Hence (35) and (36) are ungrammatical.

- (35) *raamaa gale kellailE kaam Karnataka Konkani
 Ram GEN do.PP work
- (36) *raamaa ce kellailE kaam
 Ram GEN do.PP work

Though the embedded subject is ergative case-marked, the participle in Konkani agrees with the head it modifies (37).

- (37) raamaa nE khalleilO bhaakaryO Karnataka Konkani
 Ram ERG eat.PP.PL.FEM bread.PL.FEM
 'the food that Ram ate'
- (38) raamaa nE khalleili bhaakaryi
 Ram ERG eat.PP.SG.FEM bread.SG.FEM
 'the food that Ram ate'

- (39) raamaa nE khalleilO ambO
 Ram ERG eat.PP.MASC.SG mango.MASC.SG
 'the mango that Ram ate'
- (40) raamaa nE khalleilE ambE
 Ram ERG eat.PP.MASC.PL mangoes.MASC.PL
 'the mangoes that Ram ate'

The absence of the genitive in Dakkhini can be attributed to the influence of Telugu. Though Konkani came in contact with Kannada, it did not adopt the pattern of Kannada of having a nominative case-marked DP in a participial phrase and instead, it retained the ergative marker of the source language.

In contrast, Dakkhini rejects the native Hindi-Urdu pattern and shows a remarkable identity with Telugu in case of relative participial constructions where the genitive as a status reducer is always absent and the relative participle remains invariant with regard to the phi (person, number and gender) features. In Konkani, on the other hand, the participle agrees with the noun it modifies.

1.3.1.

Let us see the impact of Telugu and Kannada on the behaviour of the genitive in nonfinite complements in Dakkhini and Konkani respectively. In Hindi-Urdu, in nonfinite complement constructions too the subject of the embedded sentence is genitive case-marked (41). Such case marking consequently 'reduces' the status of the subject to a modifier and the embedded sentence is 'less sentence like'. That is, the genitive here too functions as a status reducer just as it does in participial constructions.

Genitive as a status reducer

- (41) raam **kaa** roj.roj aa-**naa** mujhe pasand nahī hai Hindi-Urdu
 Ram GEN daily come.INF I.DAT like not is
 'I don't like Ram's coming every day'

The genitive and infinitival markers in the above sentence are in bold. The absence of the genitive with the embedded subject is indicated by Ø (42) and we label it as GEN1. In Dakkhini the genitive as a status reducer does not occur with the embedded subject (42). There is another genitive in Dakkhini that occurs to the right of the infinitive and we label it as GEN2 (42). Such instances are not found in Hindi-Urdu.

- (42) raam Ø sone kaa Dakkhini
 Ram GEN1 sleeping GEN2
 'Ram's sleeping'

In Telugu too the genitive with the embedded subject does not occur and the occurrence of the genitive to the right of the infinitive (GEN2) is not permitted.

- (43) raamuDu Ø panDukoowaDam Telugu
 Ram GEN1 sleeping
 'Ram's sleeping'

The absence of the genitive as a status reducer in Dakkhini can be attributed to the influence of Telugu.

Let us observe the corresponding Konkani and Kannada nonfinite complement constructions. The ergative *nE* that occurs with the subject in a finite clause is retained in Karnataka Konkani in the nonfinite complement construction too and the occurrence of the genitive with the subject of the embedded clause is not permitted. However, just as in Dakkhini there occurs a genitive to the right of the infinitive. We shall label this too as GEN2.

- (44) raamaa nE hanga partun.purtun yewun ce Karnataka Konkani
 Ram ERG here daily come GEN2
 'Ram's coming here everyday'
- (45) raaman nE niddon ce makka aavaDnaa
 Ram ERG sleep GEN2 I.DAT not.like
 'I don't like Ram's sleeping.'

The genitive as a status reducer with the embedded subject is not present in Kannada too just as in Telugu.

- (46) raamanu Ø malaguadu nanage ishTa ille Kannada
 Ram GEN sleeping to me like not
 'I don't like Ram's sleeping.'

The fact that the ergative *nE* with the embedded subject is retained in Karnataka Konkani indicates that there is no convergence with Kannada with regard to the absence of the case marker with the embedded subject in Karnataka Konkani. The question that arises now is: Why does GEN2 occur in Dakkhini (42) and Karnataka Konkani (44) and (45)? An explanation can be provided from the obligative constructions in Dakkhini and Karnataka Konkani in the following section.

1.3.1.1. There is another occurrence of the additional genitive in Dakkhini and Karnataka Konkani in the obligative constructions to the right of the infinitival form of the verb when matrix verb is *be*.

- (47) mere-ku/maĩ jaa-ne kaa ai Dakkhini
 I-DAT/I go.INF GEN2 is
 'I have to go.'
- (48) makka wac ce assa Karnataka Konkani
 I.DAT go GEN2 is
 'I have to go.'

Neither Hindi–Urdu nor Telugu nor Kannada has an additional genitive in obliga-

tive construction with *be* as the main verb. Why does GEN2 occur in (47) and (48)? We hypothesize that it could be the influence of Marathi with which both Dakkhini and Karnataka Konkani have been in contact. Marathi has an additional genitive in desiderative constructions.

- (49) mala gharaat dzaits ahe Marathi
 I home go.GEN2 is
 'I want to go home.'

We hypothesize that the additional genitive in Dakkhini and Konkani (where it occurs in the obligative construction) is due to contact with Marathi. We further hypothesize that it is the occurrence of this genitive that has influenced the nonfinite clauses and hence, there occurs GEN2 in sentences such as (42) in Dakkhini and (44) and (45) in Karnataka Konkani.

Further the occurrence of the additional genitive in Dakkhini and Konkani is purely expletive in nature. Thus, the genitive as a status reducer and Gen2 as expletive should be treated as distinct.

Evidence in support of our claim that Gen2 is different from the genitive that occurs as a status reducer comes from the fact that GEN2 cannot be followed by a head noun while GEN1 has always to be. To summarize, the crucial points with regard to contact and convergence here are:

- (i) Dakkhini does not permit the genitive as a status reducer with the embedded subject due to convergence with Telugu whereas Konkani retains the ergative marker in such constructions indicating that it did not converge with Kannada in this aspect, and
- (ii) Dakkhini and Konkani permit GEN2 in obligative construction unlike Hindi–Urdu, Telugu and Kannada, and this could be due to the influence of Marathi.

Further evidence in support of degentivization where genitive as a status reducer (GEN1) is absent comes from sentential adverbials in Dakkhini and Konkani. When the subjects of the matrix clause and sentence adverbial are different in Hindi–Urdu, the subject of the adverbial clause is case-marked genitive. This genitive performs the role of a status reducer and hence it is labeled as GEN1. This genitive in Hindi–Urdu has an invariant form *ke*.

Adverbial participles

- (50) raadhaa_i ke ghar-se baahar nikal-te-hii Hindi–Urdu
 he GEN1 home-from out emerge.as.soon.as
 baarish_j shuruu ho.gayii
 rain start be.went
 'As soon as Radha came out of the house, it started raining.'
- (51) pitaajii_i ke ghar aa-te-hii saare bacce_j cup ho gaye
 father GEN1 home reach.as.soon.as all children silent be went
 'As soon as father came home, all the children became silent.'

Telugu and Kannada do not permit the genitive with the subject of the adverbial clause in such constructions.

- (52) aayana_i Ø inTi nunci bayalu deera-gaa-nee vaana_j paDindi Telugu
 he GEN1 home from start as.soon.as rain fell
 'As soon as he came out of house, it started raining.'
- (53) avanu_i Ø manE-inda horagE hogakuDale maLLa_j banlu Kannada
 he GEN1 home-from as.soon.as come.out rain came
 'As soon as he came out of home, it started raining.'

Notice the absence of genitive as a status-reducer with the embedded subject in sentential adverbials in Dakkhini too.

- (54) uno_i Ø ghar se baahar nikalte saath-ich paanii_j
 he GEN1 home from out came with-EMPH water
 paDna shuru ho gayaa
 fall.INF begin be went
 'As soon as he came out of the home, it started raining.' Dakkhini
- (55) abba_i Ø ghar me ghuste saath-ich bacce_j logãã khamosh ho.gaye
 father GEN1 home in enter with-EMPH children group silent became
 'The children became silent as soon as father entered home.'

Retention of the ergative case marker in sentential adverbials in Konkani:

In standard Konkani as well as Karnataka Konkani, the ergative marker occurs with the embedded subject in adverbial clauses and its occurrence is obligatory.

- (56) tan nE_i gaaraan bair sartOs paau_j paDlo Konkani
 he ERG home.from out as.soon.as.came rain fell
 'As soon as he came out of home, it started raining.'
- (57) baapu_i nE gaaraant bhiitar sartOs borgi_j ogi poDlo
 father ERG home.in inside as.soon.as.enter children silent became
 'As soon as father entered home, children became silent.'

To sum up, the genitive as a status reducer in Dakkhini is absent in participial constructions, nonfinite constructions and sentential adverbials. In Konkani the ergative *nE* in participles, nonfinite complements, and sentential adverbials is retained.

1.4.

The question that arises now is: how to account for

- (a) the absence of the genitive or replacement of the genitive marker in most of the cases; and
- (b) the retention of the genitive in certain other cases?

The absence of the genitive as a status reducer in Dakkhini infinitival complement constructions, nonfinite complement constructions and sentence adverbials can be explained by hypothesizing that it is due to Telugu influence and can be termed as a process of degenitivization.

The retention of the genitive, however, has implication in terms of rule application. The rule that deletes the genitive in Dakkhini has to take into consideration the function of the genitive that is deleted or replaced. If the genitive is a status reducer, it is always deleted in Dakkhini. If the genitive is a linker, it is retained optionally. The genitive of Hindi–Urdu is replaced by a dative (discussed in section two below in detail) in Dakkhini in some constructions. It clearly shows that it is the function which plays an important role in syntactic change and not just the form alone. It is not the case that the genitive is deleted by an across-the-board genitive deletion rule irrespective of its function.

2.

In the nonnominative subject construction the subject in Dravidian languages mostly is dative case-marked whereas in the corresponding construction in Hindi–Urdu it is genitive case-marked. As pointed out in Subbarao (1984), Dravidian languages are ‘dative-preferring languages’ and Hindi–Urdu is a ‘genitive-preferring language’. As one might predict from the foregoing discussion, Dakkhini follows the Telugu pattern and Konkani the Kannada pattern. We shall show that Dakkhini and Karnataka Konkani are proceeding towards dativization. We shall discuss the functional distribution of the genitive and dative in these languages in this section.

2.1.

Let us now consider possessive constructions expressing kinship relation and inalienable possession in Dakkhini and Konkani. The possessor in kinship relations is case-marked by the genitive in Hindi–Urdu (58). In contrast, the possessor is case-marked by the dative *ku* in Dakkhini (59).

Expressing kinship relation

- | | | |
|------|---|------------|
| (58) | raam us kaa kyaa lagtaa hai?
Ram he DAT what related is
‘What relation does Ram have with him?’ (Lit. ‘How is Ram related to him?’) | Hindi–Urdu |
| (59) | raam us ku kon honaa
Ram he DAT who is
‘How is Ram related to him?’ | Dakkhini |

Possession in kinship relation: the possessor is case-marked by the genitive in Hindi–Urdu.

- (60) siitaa kii ek beTii hai Hindi–Urdu
 Sita GEN one daughter is
 ‘Sita has one daughter.’

The possessor is marked by the dative in Dakkhini, Telugu and Karnataka Konkani.

- (61) siitaa ku ek beTii ai Dakkhini
 Sita DAT one daughter is
 ‘Sita has a daughter.’
- (62) siitaa ki oka biDDa undi Telugu
 Sita DAT one daughter is
 ‘Sita has one daughter.’
- (63) siitaa ka ek ceDO assa Karnataka Konkani
 Sita DAT one daughter is
 ‘Sita has one daughter.’

2.2.

In case of inalienable possession too the subject in Dakkhini and Konkani is dative case-marked just as in Dravidian languages while in Hindi–Urdu it is genitive case-marked.

Inalienable possession (genitive case-marked)

- (64) kutte ke caar pair hote.haĩ Hindi–Urdu
 dog GEN four legs are
 ‘A dog has four legs.’

Inalienable possession (dative case-marked)

- (65) kutte ku caar paavaā ai Dakkhini
 dog DAT four legs are
 ‘A dog has four legs.’
- (66) kukka ki nalugu kaaLLu unTaayi Telugu
 dog DAT four legs are
 ‘A dog has four legs.’
- (67) suNyaa ka caar paaye assa Karnataka Konkani
 dog DAT four legs are
 ‘A dog has four legs.’

- (74) raam kii shaadii huii Hindi-Urdu
 Ram GEN marriage happened
 'Ram got married.' (Lit. 'Ram's wedding took place.')
- (75) raam ku shaadii ho.gayii Dakkhini
 Ram DAT marriage happened
 'Ram got married.'
- (76) raama ka lagn dzalle Karnataka Konkani
 Ram DAT marriage happened
 'Ram got married.'
- (77) raamuDi-ki peLLi ayyindi Telugu
 Ram-DAT marriage happened
 'Ram got married.'

The above discussion clearly demonstrates that in Dakkhini and Karnataka Konkani, the subject is dative case-marked and not genitive-marked in sentences expressing possession and with nonstative verb *be*.

In the following section we shall discuss cases involving an empty embedded subject PRO and show how Dakkhini and Karnataka Konkani are syntactically similar to Dravidian languages in permitting a case-marked PRO (Lalitha Murthy 1994; Subbarao *et al.* 2002).

2.5.

In Dakkhini and Karnataka Konkani the conjunctive participle which is nonfinite in nature permits PRO ((78) and (79)) as well as a dative case-marked subject ((80) and (81)).

- (78) [PRO bukhaar aa-ke] uno mar.gayaa Dakkhini
 fever come-CPM he died
 'Having had fever he died.'
- (79) [PRO taap yewa-nu] tO gello Karnataka Konkani
 fever come-CPM he died
 'Having had fever he died.'
- (80) [us-ku bukhaar aa-ke] uno mar.gayaa Dakkhini
 he-DAT fever come-CPM he died
 'Having had fever he died.'
- (81) [tak ka taap yewa-nu] tO gello Karnataka Konkani
 he DAT fever come-CPM he died
 'Having had fever he died.'

In contrast, the subject of the conjunctive participle in Hindi-Urdu is PRO and is null case-marked and a dative case-marked NP cannot occur in that position (82) and (83).

- (82) [*PRO bukhaar aa-kar] vah mar.gayaa Hindi-Urdu
 fever come-CPM he died
 ‘Having had fever he died.’
- (83) [*us-ko bukhaar aa-kar] (vah) mar gayaa
 he-DAT fever come-CPM he died

The subject of the conjunctive participle in Telugu is PRO (84) and it permits a lexical subject to occur in place of PRO (85) (Lalitha Murthy 1994, Subbarao 1998) just as in Icelandic (Sigurdsson 1991).

- (84) [PRO jwaram wacc-i] aayana pooyaaDu Telugu
fever come-CPM he died
- (85) [aayanaa_i ki jwaram wacc-i] μ pooyaaDu
he DAT fever come-CPM died
'Having had fever he died.'

The subject of the matrix clause (indicated by the symbol μ), coindexed with the subject of the embedded clause, cannot be overtly present (86) and it is an instance of backward PRO (see Subbarao 2003 for further details).

- (86) [*aayanaa_i ki jwaram wacc-i] aayana_i pooyaaDu
 he DAT fever come-CPM died

The data from Dakkhini and Karnataka Konkani clearly demonstrate that they follow the Dravidian pattern in permitting a dative subject in the position in which PRO occurs. They also permit a subject coindexed with it to occur in the position of the matrix subject. According to Principle B of Chomsky (Chomsky 1981) a pronoun must be free in its governing category. In (80) and (81) it is not free as it is coindexed with the matrix subject.

2.6.

The dative in Dakkhini and (Telangana) Telugu is also used to indicate directionality as in (87a) and (87b) respectively while it is not permitted to occur to denote directionality in Hindi–Urdu (88).

- (87) a. kãã ku jaa re Dakkhini
 where DAT go PROG
 'Where are you going?'
 b. pro yaaDi ki bootunnaau? Telangana Telugu
 where DAT are going
 'Where are you going?'

- (88) pro kahāā (*ko) jaa rahe hāī Hindi–Urdu
 where DAT go PROG PRES
 ‘Where are you going?’

2.7.

Expressions denoting time too have to be dative case-marked in Dakkhini and Telugu while they cannot be in Hindi–Urdu.

- (89) mere-ku uno paisa de-ke aaj ku aaTh roj hore Dakkhini
 I.DAT he money give-CPM today DAT eight days happening
 ‘It is already eight days since he gave me the money.’
- (90) naa-ku Dabbu icc-i iwaaLa(Ti) ki enimidi roojulu ayyindi
 I-DAT money having given today DAT eight days happen
 ‘It is eight days since (he) gave me the money.’ Telugu

In Karnataka Konkani too a similar pattern is found.

- (91) tan-nE mak ka paise diuu nu aaji ka aaTh diin dzalle
 I-ERG I DAT money give CPM today DAT eight days happened
 ‘It is already eight days since he gave me the money.’ Karnataka Konkani

In contrast, in Hindi–Urdu a dative case marker cannot occur with time adverbials.

- (92) mujhe paisa diye hue us-ko aaj Ø aaTh din ho.gaye hāī
 I.DAT money give PP he-DAT today DAT eight days completed are
 ‘It is eight days since he gave me the money.’ Hindi–Urdu

2.8.

Dative with imperfect participles:

An imperfect participle followed by the dative case marker imparts the interpretation of ‘the time at which —’ in Dakkhini (93) while such occurrence of the dative is not permitted in Hindi–Urdu (94) or Telugu (95).

- (93) tum kaalej jaate ku mere-ku bol de ke jaanaa thaa
 you college while.going DAT I-DAT tell give CPM go was
 ‘When (the time at which) you were going to college, you should have told me.’ Dakkhini
- (94) tumhē kaalej jaa-te samay mujhe kah-kar jaa-naa caahiye thaa
 you.DAT college go-IMPF time me having.said go-INF should have
 ‘You should have informed me when you left for college.’ Hindi–Urdu

- (95) nuvvu kaaleji ki poyyeT-appuDDu naa-ku ceppi unDaalsindi
 you college DAT go.IMPF-then I-DAT having.told should.have
 'You should have informed me at the time you left for college.' Telugu

Thus, Dakkhini has a construction with the dative that is not found in Telugu or Hindi–Urdu.

2.9.

The dative in Dakkhini and Konkani also occurs to the right of the the infinitival form of the embedded verb when the matrix predicate permits a dative case-marked subject such as *aanaa* 'to come'. Such occurrence of the dative is not found in Hindi–Urdu.

Dative with the embedded verb

- (96) tum-ku baar.baar hansne ku kaaye ku aaraa Dakkhini
 you-DAT again.and.again laugh DAT why DAT coming
 'Why do you feel like laughing again and again?'
- (97) mere-ku ye pen se likhne ku nai aaraa Dakkhini
 I-DAT this pen with write.INF DAT not coming
 'I am not able to write with this pen.'
- (98) tuk-ka gheri.gheri.eka hans ka shen itya-ka dista
 you-DAT again.and.again laugh DAT.INF like why-DAT feel
 'Why do you feel like laughing again and again?' Karnataka Konkani
- (99) mak-ka ye penna naa barunca ka dzaye-na
 I-DAT this pen with write DAT possible-not
 'I am not able to write with this pen.'
- (100) tumhe baar.baar hāsii kyō aa-rahii hai Hindi–Urdu
 you again.again laugh why coming is
 'Why do you feel like laughing again and again.'
- (101) mujh se is pen se likhaa nahī jaa-rahāa
 I by this pen with write not going
 'I am unable to write with this pen.'

Telangana Telugu (see n. 2 for details) has a construction where the dative occurs with the embedded nonfinite verb (102). Standard Telugu does not permit the occurrence of the dative in such cases (103). The following examples are illustrative:

- (102) naa-ku ii pennu too raayaDaani-ki raadu Telangana Telugu
 I-DAT this pen with write.INF not come
 'I am not able to write with this pen.'

Standard Telugu does not permit the occurrence of the dative with the embedded infinitive.

- (103) naa-ku ii pennu too raayaDam Ø raadu Standard Telugu
 you-DAT this pen with write.INF not come
 'I am not able to write with this pen.'

Such occurrence of the dative case marker is found in Marathi. We hypothesize that Marathi might have influenced Dakkhini in this case. The occurrence of the dative case marker in such sentences in Telangana Telugu could be due to Dakkhini influence on it. Notice that there is constraint on the occurrence of the dative with the embedded verb. The dative case marker can occur only when the matrix verb permits the dative subject.

2.10.

Yet another instance that indicates the fact that Dakkhini is also a dative-preferring language similar to Telugu is the occurrence of the dative in the comparative construction. The following example from Dakkhini is illustrative.

- (104) tum ku us ku kyaa farak ai bolke Dakkhini
 you DAT he DAT what difference is COMP
 'What/how much is the difference between you and him?'

Telugu too has a similar comparative construction.

- (105) nii-kuu aayna-kuu enta teeDaa undi Telugu
 you-DAT.and he-DAT.and how.much difference is
 'What/how much is the difference between you and him?'

Hindi-Urdu in contrast uses a locative postposition *mē* 'in' with each of the objects being compared.

- (106) tum mē aur us mē kitnaa fark hai
 you LOC and he LOC how.much difference is
 'What/how much is the difference between you and him?'

The above data once again demonstrates that while Dakkhini prefers the dative case marker with the standard of comparison and object of comparison due to the influence of Telugu, Hindi-Urdu uses a locative postposition in such cases. (For a detailed discussion of the nonnominative subjects in Hindi-Urdu, see Davison 2004 and Subbarao and Bhaskararao 2004).

3. Conclusion

To conclude, the dative case marker *ku* in dakkhini replaces the genitive case marker *ka* of the source language Hindi-Urdu and the dative case marker *ka* in Karnataka

Konkani replaces the genitive case marker *ce/je* of the source language. This clearly demonstrates that there is a process of ‘dativization’ that took place as a result of which the genitive subject of the source language is transformed into the dative subject in the recipient language. The occurrence of the dative in the comparative construction, adverbial clauses and with time and place adverbials etc. clearly shows that Dakkhini prefers the use of the dative case marker in contrast to Hindi–Urdu where the genitive case marker occurs in corresponding constructions. Such occurrence of the dative case marker also proves the extension of functions of a particular construction.

We have also shown in Section 1 that in case of syntactic change it is the function of the constituent that is important and not just the form alone. If the genitive is a status reducer, it is always deleted in Dakkhini whereas in Karnataka Konkani the ergative *nE* of the source language is retained in such cases. If the genitive is a linker in Dakkhini, it is retained and so is the case in Konkani.

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Abbreviations

ADJR: Adjectivalizer, CPM: Conjunctive participial marker, DAT: Dative, EMPH: Emphatic, ERG: Ergative, FEM: Feminine, GEN: Genitive, IMPF: Imperfect, INF: Infinitive, LOC: Locative, MASC: Masculine, NPI: Negative polarity item, NEUT: Neuter, PERF: Perfect; PRES: Present; PROG: progressive; PP: Perfect participle, PL: Plural, SG: Singular

Symbols

[E] stands for half open front unrounded vowel and [O] for half open back rounded vowel. Capital [T], [D] and [L] stand for retroflex sounds.

Notes

1. Goa has the highest concentration of Konkani speakers and it is the official language of the State of Goa. At different times in history, due to various economic and social reasons Konkani speakers migrated from Goa and settled down in the surrounding districts of the state of Karnataka. The Konkani immigrants in Karnataka are a minority amongst the speakers of Kannada, a Dravidian language. (Matthew 1989).
2. Telugu is the predominant language used in the state of Andhra Pradesh. Prior to the formation of the state of Andhra Pradesh, Hyderabad city and other areas of Telangana (in the north-western area of Andhra Pradesh) were under the rule of people who spoke Urdu. Contact between Telugu (Dravidian) and Urdu (Indo-Aryan) speakers started in the 14th century when Urdu expanded into the southern part of India. At present Dakhini is spoken in the areas, in and around Hyderabad city of Andhra Pradesh by a large number of Muslims, Sikhs, Rajputs, Kayasths and other Telugu speakers. Dakhini is also the mother tongue of Muslims, Dakhini Sikhs, Kayasths and Rajputs. Telangana Telugu, the variety of Telugu spoken in the Telangana area constitutes a distinct variety of the language.
3. According to Lightfoot (1983) syntactic change is basically a category change.
4. See Arora and Subbarao (1990).
5. Subbarao (1984); Arora and Subbarao (1989).
6. Subbarao (1984).
7. We shall not discuss here the loss of *hona* 'to be' as it is not relevant to the theme of the chapter.
8. The ergative marker used in the speech of Saraswat Brahmins of Karwar is *ne* and in Goan Konkani *an*. In this chapter we are using *nE* to represent the Konkani ergative marker.
9. *bolke* in Dakhini and *mhoNu* in Konkani are the grammaticalized perfect participial forms of the verb *say* and are used as complementizers. These are labeled as the quotative (Hock 1991, Kachru 1979, Kuiper 1974, Subbarao *et al* 1989).
10. *so* which is a correlative marker in Hindi-Urdu and Punjabi is reanalyzed in Dakhini to perform an entirely new set of functions. One such function is that of an adjectivalizer (Arora and Subbarao 1989).

References

- Arora, H. 1987. *Some Aspects of Dakhini Hindi-Urdu Syntax with Special Reference to Convergence*. Doctoral Dissertation, University of Delhi.
- Arora, H. 2004. *Syntactic Convergence: The Case of Dakhini Hindi-Urdu*. , Delhi: Publications Division, University of Delhi.
- Arora, H. and K. V. Subbarao. 1989. "Convergence and Syntactic Reanalysis: The Case of *so* in Dakhini". *Studies in the Linguistic Sciences*, University of Illinois, Urbana, Illinois, Vol. 19.

- Arora, H. and K.V. Subbarao 1990. "Contrastive Analysis and Syntactic Change". *Papers and Studies in Contrastive Linguistics*. Vol. 27. Poland.
- Chomsky, N. 1980. *Lectures on Government and Binding*. Dordrecht: Foris.
- Davison, A. 1992. "Control Experiencer Subjects: Implications for Phrase Structure". Ms.
- Davison, A. 2004. "Non-nominative subjects in Hindi-Urdu." This volume.
- Hock, H. H. 1991. *Principles of Historical Linguistics*. Berlin: Mouton de Gruyter.
- Kachru, Y. 1979. "The quotative in South Asian languages". *South Asian Languages Analysis*: pp.63-77.
- Kachru, Y. 1981. *Aspects of Hindi syntax*. Delhi: Manohar.
- Kachru, Y. 1981. "On the syntax, semantics and pragmatics of the conjunctive participle in Hindi-Urdu". *Studies in the Linguistic Sciences*. 11:2. Fall 1981. 35-50.
- Kuiper, F.B.J. (1974). "The genesis of a linguistic area". In: (eds.) Southworth, F.C. and M.L. Apte. *Contact and Convergence in South Asian Languages*. *International Journal of Dravidian Languages* 3.1 135-53.
- Lalitha Murthy, B. 1994. *Participial Constructions: A Cross-linguistic Study*. Doctoral dissertation. University of Delhi.
- Lightfoot, D. 1979. *Principles of Diachronic Syntax*. London: Cambridge University Press.
- Lightfoot, D. 1983. "Sur la reconstruction d'une proto-syntaxe". In: I. Rauch and G.F. Carr, (eds.), *Language Change*, Bloomington: Indiana University Press.
- Matthew, A. 1989. *A Description of Konkani*. Mira-Mar, Panaji, Goa: Thomas Stephens Konkanni Kendra.
- Sigurdsson, H.Á.. 1991. "Icelandic case-marked PRO and the licensing of lexical arguments". *Natural Language and Linguistic Theory* 9: 327-63.
- Subbarao, K.V. 1984. *The Study of Linguistic Typology, Language Contact and Areal Universals in the Indian Subcontinent*. Delhi: Department of Linguistics, University of Delhi.
- Subbarao, K.V. 1998. "Linguistic theory and syntactic typology: a proposal for a symbiotic relationship". In: *vaag bharatii : The Proceedings of the international conference on South Asian languages*. Moscow: Moscow State University.
- Subbarao, K.V. 2001. "Agreement in South Asian Languages and Minimalist Inquiries: The Framework". In: P. Bhaskararao and K.V.Subbarao (eds.), *The Yearbook of South Asian Languages and Linguistics 2001*. Delhi, Thousand Oaks, London : Sage.
- Subbarao, K.V. 2003. "Movement and Control: Some theoretical issues and empirical problems". To appear in: T. Bhattacharya, E. Reuland and K.V. Subbarao (eds.). *Argument Structure*. Philadelphia: John Benjamins.
- Subbarao, K.V. and H. Arora. 1989. "On Extreme Convergence: the Case of Dakkhini Hindi-Urdu". *Indian Linguistics* 49.
- Subbarao, K.V. and P. Bhaskararao. 2004. "Non-nominative subjects in Telugu". This volume.
- Subbarao, K.V., U.R. Hakacham and Th. Sarju Devi. 2002. Case-marked PRO: Evidence from Rabha, Manipuri, Hindi-Urdu and Telegu. Plenary lecture delivered at the *South Asian Languages Analysis Conference*, University of Iowa, USA.
- Subbarao, K.V., C. Viswanath Rao, N. Rau and A. Saxena. 1989. "The verb *say* in South Asian Languages". In: A. Mukherjee (ed.), *Language Variation and Change*. Hyderabad: Centre for Advanced Study in Linguistics, Osmania University. Pp.89-103.

CHAPTER 3

Non-nominative subjects in comparison

Josef Bayer

1. Introduction

Among languages with a sufficiently rich system of morphological Case we observe unmarked constituent orderings which deviate from the “nominative preceding non-nominative” pattern. This deviation, if one wants to call it that way, is to a large extent lexically and semantically predictable. Languages of this kind are classified as languages that permit non-nominative subjects. As is well known, however, they differ quite radically as to certain syntactic consequences which the non-nominative-first pattern may have. German and Icelandic are closely related Germanic languages which — not surprisingly — show strong similarities in their argument structures and syntax of Case. Nevertheless, they differ by the fact that non-nominative prominent DPs in Icelandic behave like genuine subjects while they do not (or do to a lesser extent) in German. The goal of the present article is to explore the possibility of deriving differences in “subjecthood” from the basic order of constituents. Icelandic has a head-initial VP which is separated from an external argument by a functional head F^0 (or a number of functional heads), i.e., the order is SpecFP F^0 [_{VP} V . . .]. German has a head-final VP instead. There are strong indications that the order [_{VP} . . . V] F^0 does not give rise to a functionally defined position SpecFP. Following work by others, I will argue that this is related to the nature of F^0 . Given that both German and Icelandic (and perhaps all languages) have a prominent argument that has certain syntactic and semantic properties one associates with the notion “subject”, my conjecture is that the difference derives from the fact that head-initial languages show a grammaticalization of the prominent argument that is missing in head-final languages. I will try to derive this grammaticalization from the nature of F^0 and explore how far this can take us.

Although the German/Icelandic contrasts will set the stage, data from other languages — primarily from Bengali — will be drawn into the argumentation. I will first turn to expletives, then point out the relevant similarities and differences between German and Icelandic. After this there will be a section on argument structure and unmarked ordering. The next section will turn to Minimalist assumptions about checking under c-command, the Extended Projection Principle (EPP) and reasons for displacement. We will then explore how in head-final languages checking can take place under m-command. Finally we will indicate how the different

mechanisms for checking can yield the observed differences in “subjecthood.” I will throughout use the informal term “subject” for convenience. This usage should not imply that there is actually such a thing in the theory of grammar.

2. Expletives

Certain languages insist on the presence of a formal pleonastic subject, others do not. In impersonal passives, for instance, Dutch, Icelandic, Swedish and other languages require an expletive element in subject position; (cf. Rosengren (2002) for a recent presentation of the data and relevant discussion). This is not the case in Bengali (Bangla), German, Turkish, and numerous other languages. Languages of the latter group either altogether lack a lexical element that would serve as an expletive, or, if they have one, require its absence in impersonal passives, as is the case in the German embedded clause shown in (5).

- | | | |
|-----|--|-----------|
| (1) | dat *(er) gedanst wordt
that there danced becomes
'that there is dancing'/'that somebody danced' | Dutch |
| (2) | að *(það) verið dansað
that there becomes danced | Icelandic |
| (3) | att *(det) dansas
that there danced.is | Swedish |
| (4) | je nac hocche
that dance happening.is | Bengali |
| (5) | dass (*es) getanzt wird
that it danced becomes | German |
| (6) | Ahmed dans ed-il-diğ-in-i söyle-di
Ahmed dance do-PASS-FN-3SG-ACC say-PAST
'Ahmed said that there was danced.' | Turkish |

Interestingly, an expletive appears in German as soon as a root clause is chosen. German being a verb second (V2) language in which the finite verb in the root clause moves into the head position of CP, and in which SpecCP is filled by phonetic material, an expletive element appears in SpecCP, if nothing else is moved there.

- | | | |
|-----|---|--------|
| (7) | a. Getanzt wird [t]
danced becomes | German |
| | b. Es wird getanzt
it becomes danced | |

The same is true of Kashmiri, a typical SOV-language which also shows the V2-property. The Kashmiri data in (8) are taken from Wali and Koul (1997). They

show that the element *yi* appears when the pre-verbal position is not filled by another element.

- (8) a. vuchini a:v [t] zi ... Kashmiri
 seen come.PASS that
 'Seen was that ...'
 b. yi a:v vuchini zi ...
 it come.PASS seen that
 'It was seen that ...'

According to Peter Hook (p.c.) Kashmiri has a limited amount of other elements that serve a similar function as expletives and cannot occur elsewhere in the clause.

The appearance of an expletive seems to be forced by the presence of a verb-related functional head such as I^0 and C^0 . Languages which lack an initial functional head of this kind, do not show expletive subjects. German differs from other Germanic languages such as English, Dutch, Scandinavian in not allowing an expletive at the level of IP. This establishes a certain typological link between German and genetically related but rather distant languages such as Bengali and Kashmiri. Icelandic and Swedish are clearly SVO-languages, and Bengali, Kashmiri (as well as genetically unrelated languages such as Turkish) are clearly SOV-languages. The basic typology of Dutch and German seems less perspicuous. Officially they count as SOV, but the expletive facts suggest that Dutch has a pre-VP functional head, while German has either a post-VP functional head which does not activate a specifier or no such head at all. According to Haider (1993), German lacks IP altogether, and C selects only a VP which is enriched with finiteness features, and which includes the subject. Haider's theory presupposes that only initial functional heads are syntactically active, and that there are no final functional heads to begin with. This impression is supported by the distribution of clitic pronouns. In German, clitic pronouns move to C^0 , the so-called "Wackernagel position," while in Dutch they move to a position below the subject which one may identify as a silent I^0 -position (cf. Jaspers 1989 and Zwart 1991 on Dutch and an overview in Cardinaletti 1998). Under the assumption of the universality of the EPP, German must have an empty expletive. But this would be at odds with the fact that German is not a pro-drop language. Pro-drop would strangely be confined to (certain) expletives in subordinate clauses. My assumption is therefore that the EPP does not hold universally, and that the persistent absence of audible expletives in constructions or entire languages is a serious reason to believe that these constructions/languages do not license an expletive at all.¹

3. Unmarked non-nominative first arguments in the clause

Consider the following illustrative examples from German, Icelandic and Bengali in which the unmarked word order requires a non-nominative NP to occupy the first

position. The German data show accusative and dative experiencer arguments with or without nominative theme arguments:²

- (9) a. dass mich friert German
 that me.ACC freezes
 ‘that I am cold’
 b. dass mich der Streit anödet
 that me.ACC the quarrel.NOM bores
 ‘that the quarrel bores me’
 c. dass mir schlecht ist
 that me.DAT bad is
 ‘that I am sick’
 d. dass mir der Streit missfällt
 that me.DAT the quarrel.NOM displeases
 ‘that I am fed up with the quarrel’

The following Icelandic data from Sigurðsson(2000) show dative, accusative as well as genitive experiencer arguments which may be followed by theme arguments in the nominative or accusative:

- (10) a. Henni var kalt Icelandic
 her.DAT was cold
 ‘She felt cold.’
 b. Henni leiddust strákanir
 her.DAT bored boy.the.NOM
 ‘She was bored by the boy.’
 c. Hana vantaði vinnu
 her.ACC lacked job.ACC
 ‘She didn’t have a job.’
 d. Hennar var saknað
 her.GEN was missed
 ‘She was missed.’

The Bengali data in (11) and (12) are drawn from Klaiman (1980). Bengali lacks a morphological dative and uses for its “dative” constructions the *-r* form which stands for possessives and is glossed here with GEN(itive) for purely expository reasons. I also use the Case label ACC without implying that there is an accusative as opposed to a dative. Perhaps Bengali has only one “objective” Case.

- (11) a. amar tomake cai Bengali
 I.GEN you.ACC wants
 ‘I need you (me is need of you).’
 b. tar nak ðake
 (s)he.GEN nose calls
 ‘(S)he snores.’

- c. tar oṣukh koreche/hoyeche
(s)he.GEN illness made/became
'(S)he became unwell.'

Many of the "dative" constructions have nominative counterparts, the semantic difference being that the latter express volitionality while the former have a non-volitional interpretation, e.g.,³

- (12) a. ami tomake cai
 I.NOM you.ACC want
 'I want you.'
- b. še ḍhɔŋ kore nak ḍakchilo
(s)he.NOM pretend doing nose called
'(S)he was faking a snore'/'(S)he pretended to snore.'

4. Subjecthood in Icelandic

As has been pointed out by Andrews (1976), Zaenen *et al.* (1985) and Sigurðsson (1989), there are a number of constructions which show that the non-nominative first argument in Icelandic passes classical tests for subjecthood. I will not present all of them in detail but will rather confine myself to a list, and then turn to two of them in more detail which I take to be of central relevance for a comparison with Bengali and German (see also the contributions by Sigurðsson and Fischer in this volume).

First, the nominative subject takes the first position after C in an embedded clause. Icelandic, not being a scrambling language, does not allow an object there. Non-nominatives as in *María spurði hvort mér hafði leiddist Haraldur* ('Maria asked whether me_{DAT} had bored Harald_{NOM}'), however, are allowed in this position. Second, the raised element in *accusativus cum infinitivo* constructions and other cases of raising must be the subject no matter which Case it bears. Dative subjects undergo raising like nominative subjects whereas non-subject nominatives ("deep objects") fail to undergo raising. Third, for most speakers only subjects can bind reflexives, but as shown by *Honum leiddist konan {sin/?*hans}* ('him_{DAT} bores wife {self's/his}'), non-nominative subjects can bind reflexives too.⁴ Fourth, if the expletive *það* is inserted in first position, a heavy indefinite subject can be postposed, i.e., *það*-insertion affects the external argument. As the grammaticality of *það leiddist þetta bara nokkrum málfræðingum* ('it bored this_{NOM} only several linguists_{DAT}') shows, this principle applies also to dative subjects. Fifth, as Sigurðsson points out, the subject can come right after C or after the negative *ekki*, but when it is a clitic, it can be only after C, not after *ekki*. The distribution of the dative clitic *'er* in *Hefur ('er) ekki (*'er) oft leiddst Haraldur?* ('has him_{DAT} not often bored Harald_{NOM}') suggests that this clitic is a subject. There are two further tests which should be looked at in

more detail since they contrast Icelandic with German rather perspicuously. These concern cases of control and conjunction reduction.

4.1. Control

While it is generally assumed in GB-theory that the subject of infinitives is PRO and as such is Case-less or ungoverned, or — as in the Minimalist Program — that it is PRO and therefore bears the default Case nominative, Icelandic shows that the empty category PRO can also be a representative of non-nominative Case. The verbs in question unambiguously require non-nominative Case on their experiencer arguments; thus, it appears that PRO must also be allowed to correspond to non-nominative Case. (13a,c) are from Sigurðsson (1989) and (13b) with a slight change from Zaenen *et al.* (1985).

- (13) a. hann vonast til að PRO leiðast ekki
 he.NOM hopes for to DAT bores not
 ‘He hopes that he won’t be bored.’
 b. Ég vonast til að PRO vanta ekki peninga
 I.NOM hope for to ACC lack not money.ACC
 ‘I hope to not lack money.’
 c. Við vonuðumst til að PRO verðda hjálpað
 we hoped for to DAT become helped
 ‘We hoped to be helped’/‘We hoped to get help.’

The Icelandic data suggest that it is the subject which must be empty in the infinitive and not necessarily the nominative subject. In fact, as shown by (14), a non-subject nominative can stay in an infinitival clause.

- (14) Hún vonast til að PRO leiðast ekki bókinn
 she hopes for to DAT bore not book.the.NOM
 ‘She hopes not to find the book boring.’

4.2. Conjunction reduction

Another remarkable fact about Icelandic is that the subject of the second member of a conjoined clause can be elided, although it is formally distinct from the first sentence’s subject. As Zaenen *et al.* (1985) put it: “It is not the morphological identity that counts, it is the grammatical function.”

- (15) a. hann segst vera duglegur en ~~hannur~~ finnst
 her.NOM says.self to.be diligent but he.DAT finds
 verkefnið of þungt
 the.homework too hard
 ‘He says he is diligent, but finds the homework too hard.’

- b. Við vorum svangir og okkur vantaði peninga
 we.NOM were hungry and us.DAT lacked money.ACC
 'We were hungry and didn't have any money.'

It is important to notice that these examples cannot be treated as VP-conjunctions because in (15b) *vorum* (1p) and *vantaði* (3sg) retain their respective agreement.

5. Quirky subjects in German and other OV-languages?

As is well known since Zaenen *et al.* (1985), German behaves rather differently from Icelandic when the tests for subjecthood in 4. are applied, despite the fact that the two languages are so similar with respect to argument structure and Case linking. Let me confine myself again to control and conjunction reduction as these render the most perspicuous differences. I will also use Bengali data.

5.1. Control

As the German examples in (16) show, the quirky experiencer in (16a,b) or dative in the passive clause in (16c) cannot be nullified. The verb *grauen* ('dread', 'disgust') requires a dative, the verb *interessieren* ('interest') requires an accusative experiencer argument; *helfen* ('help') requires a dative object which could be expected to promote to subject in the passive (which in fact it does not).

- (16) a. *Er fürchtete PRO vor dem Abend zu grauen
 he feared DAT from the evening to disgust
 'He was afraid of being put off by the evening (party).'
 b. *Er hoffte PRO der neue Roman zu interessieren
 he hoped ACC the new novel.NOM to interest
 'He hoped the new novel would interest him.'
 c. *Wir hofften PRO geholfen zu werden
 we hoped DAT helped to become
 'We hoped to be helped'/'We hoped to get help.'

The reason for the ungrammaticality of (16b) might be seen in the presence of an illicit nominative, but there is some evidence that — like Icelandic — German infinitives do not disallow nominatives in principle:

- (17) a. Die Gefangenen haben versucht [PRO einer nach dem
 the captives have tried one.NOM after the
 anderen durch den Tunnel zu kriechen]
 other through the tunnel to crawl
 'The captives tried to crawl one after the other though the tunnel.'

- b. Odysseus hat versucht [PRO als ein alter Bettler verkleidet
 Ulysses has tried as an old beggar.NOM disguised
 in das Haus zu gelangen]
 in the house to get
 ‘Ulysses tried to get into the house in the disguise of an old beggar.’

As long as there is a PRO argument, the following associated reciprocal part *ein-er* and the *-er* in the adjective *alt-er* unambiguously shows nominative Case.

Experiencer constructions with a nominative theme argument show that, unlike in Icelandic, it is always the nominative theme argument which is nullified under control:

- (18) Der Roman wurde besprochen [*ohne* PRO jemanden ernsthaft
 the novel was discussed without NOM anyone.ACC seriously
 interessiert zu haben]
 interested to have
 ‘The novel was discussed without anyone having taken a serious interest in it.’

Obviously, the relative prominence of the experiencer argument in comparison with the theme argument does not suffice to license PRO. It is rather the null Case of the nominative which serves as the only argument that can be licensed as PRO by the infinitive.

According to Jogamaya Bayer (p.c.), the “quirky” genitive subject seems to be unavailable as a PRO subject in Bengali. Consider the simplex nominative-taking verb *hāša* (‘to laugh’) versus the complex genitive-taking verb *hāši paowa* (‘laugh get’; ‘to be struck by a laugh’). As the examples in (19) show, the former takes a nominative subject while the latter requires a genitive subject.

- (19) a. ram hēšeche
 ram.NOM laughed
 b. ramer hāši peyeche
 ram.GEN laugh got

In perfective participial clauses in which a PRO subject is required, the nominative is replaced by PRO, but the genitive cannot be:

- (20) a. [PRO hēše hēše] ram amake bolchilo je ...
 NOM laughing laughing ram me told that ...
 ‘Constantly laughing, Ram told me that ...’
 b. *[PRO hāši peye] ram amake bolchilo je ...
 GEN laugh having.gotten ram me told that ...

This indicates that in comparison with the nominative, the genitive is not formally identified as a subject and can therefore not be replaced by PRO.⁵ Data of this sort need to be looked at with extra care because there are predicates which allow dif-

ferent Case frames; *bhoy paowa* ('fear get', 'to be frightened'), *bhoy kora* ('fear make', 'to be frightened'), *icche kora* ('wish make', 'to desire') and perhaps others take a dative experiencer subject but alternatively also a nominative subject. These verbs may always appear with a PRO-subject. In this case it is expected that PRO corresponds to nominative and not to genitive Case. Verbs which exclusively take a genitive experiencer subject such as ... *lagano* ('to touch', 'to strike as ...') never seem to show up in such constructions. There are some predicates with *paowa* ('get') which require exclusively dative experiencers, e.g., *khide paowa* ('be hungry') or *kanna paowa* ('feel like crying') for which my informants are not totally sure whether they may license PRO-subjects. *khide peye, bacca cĒcate šuru korlo* ('hunger having-gotten, child to cry beginning made', 'having gotten hungry, the child started to cry') does not seem to be bad. Given the overall variation in Case patterns that can be observed among these verbs, the possibility cannot be excluded that such constructions rest on representations which are not in use in finite verb constructions. The general picture that emerges is, nevertheless, that the head-final language Bengali patterns with head-final German rather than with head-initial Icelandic.

5.2. Conjunction reduction

The German examples in (21) and (22) show that Case mismatch between the external arguments of two conjoined clauses is — unlike in Icelandic — neither tolerated when the quirky subject precedes the nominative subject nor when the latter precedes the former.

- (21) a. **Mich hat gefroren und ich war hungrig*
 me.ACC has frozen and I.NOM was hungry
 'I was cold and was hungry.'
 b. **Ich war hungrig und mich hat gefroren*
 I.NOM was hungry and me.ACC has frozen
 'I was hungry and was cold.'
- (22) a. **Mir war schlecht und ich konnte nicht aufstehen*
 me.DAT was bad and I.NOM could not up.get
 'I was sick and could not get up.'
 b. **Ich konnte nicht aufstehen und mir war schlecht*
 I.NOM could not up.get and me.DAT was bad
 'I could not get up and was sick.'

Without deletion, all the examples are grammatical, of course. With deletion, (22b) has the irrelevant reading "I could not get up and was bad (in character etc.)." The predicate *schlecht sein* ('to be bad') requires nominative Case, and as such the existence of this reading proves that — unlike in Icelandic — only the nominative subject can be deleted.

The same seems to be true in Bengali. The following examples show that nominative and genitive subjects cannot mix in deletion contexts:

- (23) a. *ami bari theke gElam ar ~~amar~~ kanna peyeche
 I.NOM house from went and I.GEN crying came
 'I left the house and I felt like crying.'
 b. *amar kanna peyeche ar ami bari theke gElam
 I.GEN crying came and I.NOM house from went
 'I felt like crying and I left the house.'

The situation seems to be similar in Hindi (cf. T. Mohanan 1994). Icelandic has means to identify the deletion site across non-matching Cases, while German, Bengali and Hindi must lack such means. We are facing the interesting situation that closely related German and Icelandic differ in this construction, while only remotely related German and Indo-Aryan again show the same restrictions.⁶ I will try to relate the observed differences and similarities to the fact that modern Icelandic is a head-initial language, while Bengali and German are in relevant respects head-final. But before I start with this, let me consider the question whether German non-nominatives can always to be classified as "objects."

5.3. Are non-nominatives in German always objects?

We have seen that in German QUIRK-NOM clauses, NOM is the formal subject and thus gets replaced by PRO in infinitives, while in Icelandic QUIRK-NOM clauses, QUIRK is the formal subject which thus gets replaced by PRO in infinitives. On the other hand, there seems to be no reason to believe that the semantics of experiencer constructions would be at significant variance in the two languages. In fact, there is overwhelming similarity. Therefore the differences must be rooted in the formal syntactic systems of the languages.

It can be demonstrated rather easily that the non-nominative experiencer in German experiencer constructions cannot be objects in the sense of an internal argument.⁷ Consider first quotational forms, i.e., forms which may be listed in a dictionary. While the internal argument may be listed with the infinitive, the external argument would never be. If the external argument is provided at all, a finite verb form would be used. If verbs with a non-nominative experiencer are quoted, the experiencer is missing. Alternatively, a finite verb form (3rd person sg.) is used:

- (24) a. jemanden suchen
 someone.ACC search
 'to look for someone'
 b. jemandem helfen
 someone.DAT help
 'to help someone'
 c. *jemanden frieren/jemanden frier-t
 someone.ACC freeze/someone.ACC freeze-3SG

- d. *jemandem grauen/jemandem grau-t
 someone.DAT disgust/someone.DAT disgust-3SG

Something similar can be observed in nominalizations. The internal accusative either converts to a genitive or is put in a *von*-PP. Experiencers with accusative Case do not conform to this rule:

- (25) a. Die Polizei sucht die Kinder
 the police.NOM seeks the children.ACC
 'The police is searching for the children.'
 b. Das Suchen der Kinder (durch die Polizei)
 the searching the children.GEN by the police
 c. Das Suchen von den Kindern (durch die Polizei)
 the searching of the children.DAT by the police
- (26) a. Den Arzt ekelt
 the doctor.ACC disgusts
 'The doctor is disgusted.'
 b. *Das Ekeln des Arztes
 the disgust the doctor.GEN
 'the disgust of the doctor.'
- (27) a. Den Buben interessiert der Bauernhof
 the boy.ACC interests the farm.NOM
 b. *Das Interessieren des Buben (durch den Bauernhof)
 the interest.taking the boy.GEN by the farm
 c. *Das Interessieren von dem Buben (durch den Bauernhof)
 the interest.taking of the boy.DAT by the farm

These tests indicate that the experiencer is not an object. The non-nominative experiencer argument rather behaves like an external argument. This finding is corroborated by constituency tests which had been used extensively to argue in favor or against the existence of VP in the early days of GB-theory. One problem at this stage was that in certain situations nominatives behave more like internal than external arguments. The contrast between (28b) and (28c) shows that under conditions of normal accentuation the accusative is "closer" to V than the nominative, and that as a consequence, if topicalization to clause-initial position ("SpecCP") requires single constituency, ACC+V may move, but not NOM+V.⁸

- (28) a. dass die Polizei den Dieb gejagt hat
 that the police.NOM the thief.ACC chased has
 'that the police chased the thief.'
 b. [Den Dieb gejagt] hat die Polizei
 c. ?*[Die Polizei gejagt] hat den Dieb

Consider now experiencer verbs with a single non-nominative argument or with

a non-nominative experiencer and a nominative theme/stimulus argument. The judgements reverse:

- (29) a. dass nur den Heiligen bitterlich gefroren hat
that only the saint.ACC bitterly frozen has
'that only the saint felt bitterly cold'
b. [Bitterlich gefroren] hat nur den Heiligen
c. ?*[Nur den Heiligen gefroren] hat bitterlich
- (30) a. dass dem Heiligen vor Ratten nicht gegraut hat
that the saint.DAT from rats not disgusted has
'that the saint was not disgusted by rats'
b. [Vor Ratten gegraut] hat dem Heiligen nicht
c. ?*[Dem Heiligen gegraut] hat vor Ratten nicht

These tests show that the non-nominative experiencer may be an external, i.e., "V-distant" argument in the same way as a nominative subject. The contrasts in (31) show that in DAT-NOM clauses, NOM is (normally) closer to V than the DAT-experiencer:

- (31) a. dass dem Heiligen der Streit (schon lange) missfallen hat
that the saint.DAT the quarrel.NOM already long displeased has
'that the saint has been displeased by the quarrel for a long time'
b. [Der Streit missfallen] hat dem Heiligen schon lange
c. ?*[Dem Heiligen missfallen] hat der Streit schon lange

The deviance of the c-examples of (29) through (31) may always be a bit weaker than in (28c), but this is exactly a consequence of the markedness of scrambling. Scrambling in agentive constructions is more marked than in experiencer constructions, whatever the reason for this may be. This does not, however, diminish the insight we gain from the distribution of the data: the non-nominative or quirky "subject" behaves like an external argument and not like an object, although — as we have seen — German lacks a stage of subject grammaticalization which Icelandic has attained. The answer to the question in 5.3 is then clearly negative. Non-nominatives in experiencer constructions are external arguments, a feature which they share with their correspondents in Icelandic.

6. Word order and functional heads

The GB-system and its immediate successors assumed parametric choices according to which languages can be either head-final or head-initial. This assumption has been discussed controversially since Kayne (1994), where it has been argued that all languages are equal in the sense of an underlying head-initial ordering with a preceding specifier, and that this ordering may be obliterated by leftward movement

such that the ordering head-complement is linearly changed to complement-head but would in reality be specifier-head (because the complement has been raised into the position of a specifier). I will follow this idea to a certain extent by assuming that only heads which precede their complements are syntactically active functional heads (F). For the time being, I assume that F can be overt or covert. Covert F can only be visualized, if it attracts lexical material. The process corresponds to traditional head movement to F versus phrasal movement to SpecFP. Thus, there are three ways for F to enter the derivation:

- (32) a. Lexical F is merged, e.g., Neg, C, functional P (like *of*)
- b. zero F is merged and attracts a head, e.g., C in verb-second, little *v*
- c. zero F is merged and a phrase is merged into or moved to SpecFP, e.g., in Dutch the expletive *er* in (1) or a nominative DP.⁹

Chomsky (2001a; 2001b) made the important move to divorce agreement from movement.¹⁰ Thus, F (the “probe”) can agree with X (the “goal”) without X necessarily moving to SpecFP. Movement to or base-insertion into SpecFP is triggered by an additional feature: an “EPP-feature.” It is not clear how it is motivated (apart from achieving its immediate PF-effect, therefore also called “OCC(urrence) feature”), but let us adopt it for the sake of the argumentation.¹¹ Once agreement and movement are disentangled, one begins to see how the system works. In English there are no morphological Cases which could help the syntax-to-semantics mapping. So the grammatical functions have to be detected linearly, and linearity must not be messed up by scrambling. Following Larson’s (1988) analysis of the double object construction and its subsequent development into a theory of argument licensing (cf. Hale and Keyser 1993), I assume that the verb undergoes a series of head movements, thus licensing its arguments. The important point here is that the verb establishes a pre-VP functional position T with an EPP-feature. This defines the landing site of the nominative DP, *there* and other locative phrases like *into the room* being the only remaining alternatives.

Icelandic, for comparison, does have a reasonable system of morphological Case. Given that the morphological Cases trivialize the syntax-to-semantics mapping, and the finite verb agrees with the nominative without movement, there appears to be no *prima facie* reason for the external argument to undergo movement to SpecTP. On the other hand, if the functional head T has an EPP-feature, there is no deeper reason why this feature could not be checked by an argument with quirky Case. The situation is essentially the same as in Old English where due to the system of morphological Case, EPP-checking by a non-nominative DP does not obliterate grammatical relations:

- (33) þam cynge licodon peran
 the king.DAT pleased.PL pear.PL
 ‘To the king pears were pleasing,’ ‘The king liked pears.’ (Lightfoot 1979)

We see the importance of an initial functional head F for the definition of a position

which arises due to the presence of an EPP feature. The EPP-feature demands that SpecFP be syntactically realized.

We will turn to a discussion of final functional heads and their syntactic status. Before doing so in 6.2, however, it is necessary to give an idea of how arguments are ordered in a quasi pre-syntactic fashion, i.e., what the principles are that regulate our intuitions about unmarked word order. This will be done next.

6.1. Universal ordering

There is evidence for cross-linguistic principles of constituent ordering that apply independently of the functional vocabulary of a given language. All other things being equal, arguments with an animate referent precede arguments with an inanimate referent, agents precede non-agents, definites precede indefinites, clitics precede non-clitics, “old” information precedes “new” information, etc. The working of such ordering constraints has been described for German in detail in Lenerz (1977) and in much subsequent work on word order. It has recently been recast in an optimality theoretic approach by Müller (1999; 2000). For a cross-linguistic and more typologically oriented account see Primus (1999). All these approaches broadly converge on ordering principles and preferences which include the ones in (34). (X < Y means that X linearly precedes Y).

- | | | |
|------|-----------------------|-----------------------------------|
| (34) | Animacy | animate < inanimate |
| | Humanness | human < non-human |
| | Theta hierarchy | agent < experiencer < theme < ... |
| | Definiteness | definite < indefinite |
| | Phonological weight | clitic < non-clitics |
| | Information packaging | old information < new information |

These ordering principles often conspire, and they sometimes do not fully resolve an ordering problem. In a system of drastically impoverished morphological Case such as English, animacy is violated in favor of harder principles of structural Case licensing. So we get *The sun disturbs Harry* instead of the expected **Harry disturbs the sun*. In German, cliticization would, for instance, win over animacy, as seen in *dass'se den Mann stört* (‘that it (e.g. the sun) the man-ACC disturbs’). In languages with morphological Case, all other things being equal, animacy becomes decisive, however. Thus, the preferred order in German experiencer constructions with ACC or DAT Case on the experiencer and NOM on the theme/stimulus is as in the following examples:¹²

- | | | | | |
|------|----|--|-----------------|------------|
| (35) | a. | dass den Vater | der Streit | anödet |
| | | that the father.ACC | the quarrel.NOM | bore |
| | | ‘that father is bored by the quarrel’ | | |
| | b. | dass dem Vater | der Streit | missfällt |
| | | that the father.DAT | the quarrel.NOM | displeases |
| | | ‘that father is fed up with the quarrel’ | | |

Although agreement holds between the finite verb and the nominative, the nominative will — all other things being equal — remain the lower argument. For reasons which will become clear in the next section, we assume that German lacks an EPP-feature on T. If this is true, there is no need for either of the two DPs to raise to SpecTP or to any other functionally defined landing site of this sort. If the relation AGREE is independent of movement, it is expected that the universal ordering ANIMATE < INANIMATE is projected directly into syntactic structure by the operation MERGE.

I conclude that argument structure observes universal ordering principles which exist independently of language particular principles of Case licensing. To the extent that this ordering can be projected directly (as I expect is the case in a language with head-final VP), Case-linking is trivialized by the fact that each Case can be licensed without displacement.

6.2. Initial versus final functional heads

Given that universal ordering in the sense of Section 6.1 holds, closely related Germanic languages with morphological Case like German and Icelandic are expected to show the observed similarity in the projection of argument structure. The Bengali data which have been considered, point in the same direction, i.e., non-nominative NPs/DPs can bear the higher argument role under the condition that the other argument is a non-volitional argument etc. Under these conditions it must be explained why Icelandic is special in licensing non-nominative arguments with the highest role as formal subjects while German and Bengali do not. I want to argue that this difference reduces to the fact that Icelandic has developed head-initial ordering which includes a syntactically active initial functional head by which the closest argument, here the quirky subject, will be attracted.

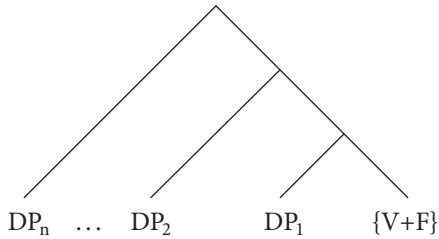
The diachronic shift from a head-final VP to a head-initial VP which occurred in Germanic had deep-rooted consequences, the most prominent perhaps being that this development involved or was even driven by the reorganization of the functional vocabulary of the language.¹³ Head-initial languages usually show a VP-initial functional head (or set of heads) which must be visualized by a phrase that fills its specifier. While this phrase is the nominative subject in English, an expletive *there* or, in rarer cases, a locative PP, the choice can be more diverse in a language with a morphological Case system such as Icelandic. In Icelandic, any argument which bears the highest argument role may serve the function of checking the EPP-feature of T (assuming simply this as the highest functional position of IP for the moment). Sigurðsson (2001) argues that “NP-movement ‘interprets’ more than one feature”, i.e., movement to the specifier position presumably has consequences that go beyond EPP-checking per se. We will turn to the evidence for such other features in the next section. Before doing so we turn to the question why head-final languages (or rather languages with a head-final VP) give no conclusive evidence for a syntactically active functional head.¹⁴

Reconsider (32a–c). (32a) may be true of head final phrases, the only difference being that a functional head *F* would be merged to the right of the phrase. (32b) is problematic, however. Since *V*, *v* and *T* are strictly adjacent due to morphological structure, and since adjacent verbs always form a *V*-cluster, the assumption of *V*-to-*I* (or *V*-to-*v*-to-*T*) raising remains a purely academic issue. Movement would always be string-vacuous. It could be equally true that *I* (or *v* and *T*) are generated as features of a finite transitive *V*. (Cf. Bayer and Kornfilt 1990; 1994 for German; Reuland, 1990; Reuland and Kosmeijer 1988 for Dutch). In this case, the feature complex $\{V+v+T\}$ would formally license arguments under *m*-command. We will shortly see that *m*-command is independently needed. (32c) fares even worse. If a zero functional head *F* is merged which has to be visualized by an *XP* moving into SpecFP, the natural expectation would be to see movement to the right. This would square with Kayne's (1994) conjecture that specifiers must be adjacent to their heads. In head-final structures the specifier would thus have to be to the right of the head: Complement-Head-Specifier. Among the languages of the world, there seems to be close to no evidence for such a structure, however. If the specifier is merged on the left side, the complement intervenes, and given that the complement can be of unbounded length, head-visualization via spec-head agreement looks like a computationally implausible option.

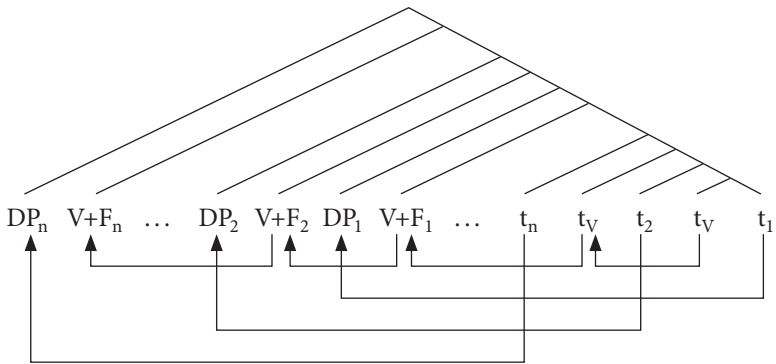
In addition to this, a number of arguments have been presented which show that the assumption of a mirror-image of the IP-structure $[_{IP} \dots [_{I'} I [_{VP} V \dots]]]$ with a VP-final *I*, i.e., $[_{IP} \dots [_{I'} I [_{VP} \dots V] I]]$, leads to problems that can be avoided, if there is no phrase structural difference between pure *V*-projections and *I*-projections. As pointed out in Haider (1993), one obvious problem concerns extraposed elements. If *VP* is disconnected from auxiliaries that have moved to *I*, one would expect extraposed or otherwise adjoined material between *VP* and *Aux*. Such structures are, however, completely ill-formed. Alternatively, extraposed material would have to adjoin to *I'*. But even this would not avoid the problem that extraposed clauses usually appear to be "lower" than expected under adjunction to *IP* or *I'*. This is demonstrated by binding into such clauses. (Cf. Haider 1994; Bayer 1996; 1999 for German as well as for Bengali). Further arguments against *V*-to-*I* in German (and other *OV*-languages) which cannot be reviewed here appear in Vikner (2001: ch.3). Haider (1993; 2000a) argues that in head-final languages the verb's features for tense and agreement are added in the lexicon and project jointly with the lexical verb. Thus, the finite verb may discharge arguments licensed by it regressively along the span of *VP*. Licensing is achieved by successive operations of MERGE. In particular, no verb movement is required which would establish functionally defined positions for specifiers, as expected under (32c). In head-initial languages, instead, the verb has to discharge its arguments progressively by raising to intermediary verbal heads in a Larson-type shell structure. More in line with recent developments, I assume here that government (to the right) can be replaced by checking in derived (specifier) positions. The difference between *SOV*- and *SVO*-licensing is shown in (36) where we mark the functional vocabulary with *F*,

F ranging over v , T, AGR etc., and where the lexical fusion of V and F is symbolized with curly brackets.

(36) a. “Regressive” licensing in a head-final VP



b. “Progressive” licensing in a head-initial VP



Given this, Haider’s (2000b) claim that SOV is “more basic” than SVO is certainly on the right track. (36a) suggests that there is a single “big” local domain in which AGREE can operate, whereas (36b) suggests that there is a series of “small” local domains — characterized for the present purpose as spec-head relations — in which AGREE holds between F and the element to its immediate left. In (36b) displacement is driven by an EPP-feature on F which requires overt movement into its specifier. While I do not intend to claim that this is what happens in SVO-languages in general, I want to maintain that this is at least true for the highest argument as defined by argument structure. Nothing of this sort is required in (36a). If V and F enter the syntax as a lexically complex item, and there is no requirement of EPP-checking, the features associated with F can be checked as soon as the phrase structure unfolds by MERGE. The important aspect for the present purposes is that the external argument is not displaced by EPP-checking.

We have so far assumed that the relation AGREE holds between features of the verb and corresponding arguments which check these features. But AGREE has been defined as a probe-goal relation in which the probe c-commands the goal. The exact opposite is the case in (36a). In (36a) the goal must be reached by a probe which is lower. Provided that AGREE operates in the maximal domain of {V+F}, what Haider

calls “regressive” licensing is tantamount to agreement under *m-command*. Case checking can take place anywhere in the maximal projection of {V+F} in (36a) and is not confined to specific positions in the phrase marker.

Can *m-command* be independently motivated? There is striking evidence for this relation that comes from negation in Bengali and similar head-final languages. The central point is that negative polarity items (NPIs) in these languages may both precede and follow the morpheme of negation which is arguably part of the verbal complex. For details about Bengali cf. Bayer (2001: § 3.5) where it is pointed out that NPI-licensing under *m-command* is not only the simplest but also the only viable solution because NPIs refuse to undergo reconstruction. Thus, there is promising empirical evidence that head-final languages employ *m-command* anyway.

6.3. The derivation of subjecthood

On the basis of the previous considerations we can now flesh out the intuition that a non-nominative or “quirky” subject is sometimes more and sometimes less subject-like, and that this is a consequence of the order of constituents as dictated by the functional vocabulary.

In German and other OV-languages, formal subjecthood is obviously achieved by agreement with the finite verb. The formal subject is the one which agrees with the finite verb. Since agreement is independent of EPP-checking, it may take place in the entire local domain of the inflected verb, i.e., under *m-command*. EPP-checking cannot be universal, a conclusion that has been reached for independent reasons in earlier work such as Fanselow (1991) and Brandner (1993). Comparing German and Bengali, the following can be said about agreement: (i) In German, there is agreement in number and person, while in Bengali, there is no agreement in number. Both languages have a system of honorificity, the Bengali system being more elaborate than the German system. Agreement covers this feature as well, but it is always the nominative argument which agrees, never the dative or genitive.¹⁵ (ii) Both languages have “subjectless” sentences, i.e., sentences in which the only visible argument bears quirky Case. In this situation the verb’s agreement is 3rd person/singular, which is generally considered to be the default value. (iii) As we have already seen, there is clear evidence that in German infinitives only the nominative argument is replaced by PRO, PRO being the infinitival realization of nominative Case rather than a non-Case. As far as I know, other head-final languages behave alike, i.e., they do not show quirky PRO. Given principles of universal ordering by virtue of argument structure, it is expected that the highest argument according to this kind of ordering does not always coincide with the formal (nominative or zero) subject as identified by agreement. Since quirky subjects in these languages behave like external arguments to which a predicate is applied, it is certainly not inappropriate to call the external arguments “subject.”¹⁶ However, these “subjects” are defined on a semantic basis. They lack any kind of formal licensing.

How is subjecthood derived in Icelandic? Being a head-initial language, Icelandic

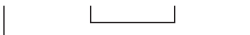
has a pre-VP functional head F into whose specifier the highest argument is moved, be it a nominative or a non-nominative NP/DP. Although Icelandic is mainstream in showing agreement with the nominative-bearing NP/DP, there is evidence for agreement to be split into number and person agreement, as has been pointed out by Taraldsen (1995), Boeckx (2000) and Sigurðsson (2001; 2002). The data in (37) are taken from Sigurðsson (2001: 144).

- (37) a. *Mer höfðum leiðst við
me.DAT had.1PL bored we.NOM
'I had found ourselves boring.'
- b. *Mer höfðuð leiðst þið
me.DAT had.2PL bored you.NOM
'I had found you boring.'
- c. Mer höfðu leiðst þeir
me.DAT had.3PL bored they.NOM
'I had found them boring.'

The (VP-internal) nominative agrees with the finite verb only in (37c), i.e., in a situation where the nominative argument is 3rd person or — in Sigurðsson's theory — "non-person." Whenever it is 1st or 2nd person ("real person") as in (37a,b), agreement is blocked. In German there is no such constraint, i.e., there is unrestricted person agreement with the nominative:¹⁷

- (38) a. Dass ihr nur wir missfallen haben
that her.DAT only we.NOM displeased have.1PL
'that she was only displeased with us'
- b. Dass ihm nur ihr missfallen habt
that him.DAT only you.NOM displeased have.2PL
'that he was only displeased with you_{pl}'

Sigurðsson interprets the Icelandic data in (37) as follows: With respect to third person there is no true person agreement; as a consequence, there is only number agreement, and number agreement is always with the nominative. The finite verb undergoes 3rd person default agreement with the quirky subject. But since this non-person agreement has taken away the possibility of agreement for "real" person, person agreement with the nominative is blocked. Person agreement being trivialized, there is only number agreement with the nominative. The situation is depicted in (39):

- (39) Num ... Pers ... Dat ... Nom


Sigurðsson's analysis, which hinges on very specific assumptions about person (non-)agreement, gains plausibility, if one takes the proposal by Bayer *et al.* (2001) into account that datives are more than DPs, namely K(ase) Phrases. Datives share much with PPs, as has been observed time and again. Most importantly, there is no

agreement between a (locative) PP and the verb. If quirky subjects of all non-nominative Cases turn out to be KPs which force the selection of 3rd person default agreement, the Icelandic facts would constitute rather striking evidence for split agreement in Sigurðsson's sense. The important point is the difference between Icelandic and the closely related language German. As the German data in (38) show, person agreement goes hand in hand with number agreement. This is expected under the assumptions about clause structure expressed in (36). There is no designated position in which the external argument could undergo agreement on the basis of EPP-checking. As a result, the person feature is activated together with the features for number and tense, all of which are part of the finite verb. In Icelandic, the VP-initial functional head must be checked by the highest argument which moves into its specifier. As Sigurðsson (2002a) puts it, it seems that there is an EPP-feature for person which excludes number.

To account for the difference between German and Icelandic DAT-NOM experiencer constructions, Sigurðsson (2002b) suggests the structures in (40) which I took the liberty of changing in some irrelevant detail:

- (40) a. Icelandic
 $[_{CP} C^0 [_{PersP} Pers^0 [_{NumP} DAT_i [_{Num} Num^0 \dots [_{VP} t_i \dots NOM \dots]]]]$
- b. German
 $[_{CP} C^0 [_{PersP} DAT_i [_{Pers} Pers^0 [_{NumP} Num^0 \dots [_{VP} t_i \dots NOM \dots]]]]$

The dative subject raises to NumP in Icelandic where it is close enough to $Pers^0$ to agree with it via immediate c-command. This gives rise to what Sigurðsson calls the *Dative Intervention Effect*. $Pers^0$ cannot agree with the nominative because it is already busy with the dative. If true, why should this effect be absent in German? Due to some parametric variation, the dative is said to raise higher in German than in Icelandic, namely to the left of $Pers^0$ (in fact not exactly to SpecPersP as suggested by (40b)) such that the nominative is controlled by both person and number agreement. Thus, $Pers^0$ must agree with the nominative, while such agreement is broken in Icelandic due to the dative that intervenes between $Pers^0$ and the nominative. The question is why such a parametric variation should exist. Sigurðsson explicitly excludes other explanations such as Haider's (2000b) suggestion to derive these differences from the head-final order of the verbal projection and its consequences for phrase structure.

In the absence of empirical support for the suggested parametric variation (between two closely related and highly comparable Germanic languages), I cannot accept this as an explanation because rather the problem is only shifted to another area. My own answer is in principle compatible with Sigurðsson's account of Icelandic, but suggests a rather different — in my view more radical but also less ad hoc — explanation for the difference between the two languages: German lacks any of the functional positions in the extended verbal domain which would invite EPP-checking. Thus, the quirky external argument which has subject properties for

essentially semantic reasons cannot turn into a grammatical subject as the nominative does due to agreement with the verb. Notice that this rather huge difference follows from something rather small: the syntactic (de-) activation of morphological features of the inflected verb.

7. The squishiness of the notion ‘subject’

It is often said that a certain constituent is more “subject-like” than another one. This suggests that the notion subject is somehow gradable. The present account provides a perspective of how to make this impression precise. We have seen that German and Icelandic are very similar in their Case systems and in their quirky-subject constructions, but that they differ in important features by which quirky subjects acquire properties of grammatical subjects. What is the common denominator then? Dasgupta (2001) speaks of “substantive agreement” versus “formal agreement,” the former being defined on a purely semantic basis of predication, the latter being defined on the basis of featural identity. By extension, we can speak of subjects as *SUBSTANTIVE SUBJECTS* and *FORMAL SUBJECTS*. Very often the formal subject coincides with the substantive subject, but German offers lots of examples where this is not true. Of relevance are cases in which the only role of a human non-agent is linked to accusative or dative Case as in (9a,c), and cases in which the higher role is linked with dative or accusative Case, while the lower role — often an inanimate object — is linked with nominative Case. Among languages with a sufficiently rich array of morphological Cases, this is a very frequent and very typical property. Of course, Icelandic falls perfectly into this set. What makes Icelandic special is the fact that the quirky subject undergoes movement for the reason of EPP-checking, and that the affiliation with a functionally based specifier position seems to have repercussions in the agreement system.

The distinction at hand leads to a decomposition of the notion “subject” according to which rather diverse factors may be responsible for the more or less subject-like behavior of certain arguments. I share with Wunderlich (2001) the conclusion that (i) the notion subject, taken as a theoretical primitive, “does not have much explanatory force,” and that (ii) “the syntax of Icelandic requires a designated argument in the preverbal position, contrary to German [and the better studied head-final languages, JB], which does not have such a position”.¹⁸

8. Conclusion

We have presented data mainly from German and Icelandic but also from Bengali and — more marginally — from other languages which highlighted differences that had received much attention in recent years, but have not led to homogeneous conclusions among the different streams of syntactic research. The central point is that

German and Icelandic are closely related Germanic languages with each retaining a four-ways system of morphological Case but differ significantly in their syntax of argument licensing. While German treats only nominatives as formal subjects and allows only correspondents of nominatives to be nullified in infinitives, Icelandic shows non-nominative (“quirky”) subjects which partially behave like formal subjects and are nullified in infinitives. We have argued that this difference can be accounted for on the basis of another difference between these two languages: German has a head-final VP, Icelandic a head-initial VP. These differences in word order are associated with different implementations of the VP-relevant functional vocabulary. Icelandic has a preverbal functional head (or a set of such heads) which — due to Relativized Minimality — attracts the highest argument of the VP (or ν P) in order to satisfy the EPP. We have argued that it is this property that leads to a “grammaticalization” of the highest argument in the sense of a formal subject. Following important work by Hubert Haider, we have argued that German (like presumably all head-final languages) does not simply employ a mirror-image of the English/Icelandic IP-architecture. Rather, the difference is that head-final languages do not project a functionally defined specifier such as SpecIP, SpecAgrP, SpecTP etc. Checking is rather performed hand in hand with MERGE, i.e., without displacement. Checking in this way is possible, if the verb encodes its functional features morphologically and agrees with its arguments via m-command. This does not give a non-nominative external argument a status with privileges beyond the status assigned to it by argument structure. So the only argument that enjoys such a privilege is the one that is picked up by agreement anyway: the nominative.

A more general result of this study is that the notion subject is either too narrow (as in GB-theory) or too wide (as in functional accounts). The present proposal can integrate central insights from semantic hierarchy approaches (cf. Primus 1999) into a framework of merging and feature checking with the result of a more differentiated landscape of properties of subjecthood. The central issue seems to be to find the point where semantically rooted substantive properties meet with properties of formal licensing. If this can be achieved, what traditional as well as formal grammar has identified as “subject” may decompose into a number of interacting but distinct forces. To the extent that this program of research can be carried out successfully, the notion “subject” can be relegated to the realm of linguistic *façon de parler*.

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Notes

1. For criticism and a relevant alternative to the universal pro/expletive theory cf. Brandner (1993). I do not deny that head-initial pro-drop languages may have empty expletives. As Raposo and Uriagereka (1990) and Kaiser (2002) show, Galician Spanish, Portuguese and the Spanish of the Dominican Republic allow overt expletives.

2. (9a,c) and similar sentences with only one non-nominative argument can in addition use *es* ('it'): *dass es mich friert*; *dass es mir schlecht wird*. This fact should not lead us to the conclusion that *es* is an expletive. In my view it is not, but I cannot present the arguments for reasons of space.

3. (12b) is a slightly corrected example from Klaiman (1980) with which my informants were not entirely happy.

4. Throughout this article I will refrain from discussing anaphor licensing. The reason is that in cross-linguistic perspective the arguments in favor of dative subjects that stem from anaphor licensing are not fully conclusive. Jayaseelan (1990; 2002) provides evidence that the licensing of the Malayalam reflexive *taan* is neither controlled by c-command nor by a subject antecedent. Jayaseelan (1998) argues that the relevant notion is perspective rather than subject-orientedness. As for the German-Icelandic contrast, although German non-nominative experiencers lack many of the subject properties of their Icelandic correspondents, they do license reciprocals and reflexives with *selbst* ('self') as shown in (i) and (ii), whereas dative objects do not as shown by (iii):

- (i) Den Alkoholikern hat vor einander gegraut/ Dem Alkoholiker hat
the alcoholics.DAT has from each.other disgusted/the alcoholic.DAT has
vor sich selbst gegraut
from himself disgusted
- (ii) Die Alkoholiker hat vor einander geekelt/ Den Alkoholiker hat
the alcoholics.ACC has from each.other disgusted/the alcoholic.ACC has
vor sich selbst geekelt
from himself disgusted
- (iii) *Ich habe den Gästen einander vorgestellt
I have the guests.DAT each.other introduced

If the dative DP in (i) had to strictly c-command the anaphor, this would be surprising. There is abundant evidence that the dative (and perhaps a quirky accusative too) is dominated by a K(ase) Phrase (KP) in which K would be a blocking force against c-command. Cf. Bayer, Bader and Meng (2001).

5. Non-finite reason clauses appear to be counter-examples:

- (i) [PRO šilker šari bhalo laga-y] ami oi dokan-e giyechi
GEN silk.GEN sari liking-because I this shop-LOC went
'Because I like silk saris I went to this shop.'

However, (i) is unlikely to involve PRO. The reason is that the understood GEN-subject can also be phonetically realized. So the empty category seems to be little pro rather than big PRO:

- (ii) [amar šilker šaṛi bhalo laga-y] ami oi dokane giyechei

The same holds for non-finite conditional clauses:

- (iii) [(amar) baṛir ranna bhalo.na.lag-le] ami restoran-e khabo
 I-GEN home-GEN cooking not liking-if I restaurant-LOC eat-will
 'If I don't like the food cooked at home, I'm going to eat in a restaurant.'

6. Ura (1996:355), quoting from Lehmann (1993), presents an example from Tamil which may be of relevance in this context. Although the verb's person/number agreement in DAT-NOM clauses is with the nominative, the DAT-subject seems to be able to identify a NOM-subject in a following conjoined clause:

- (i) kumaar-ukku koopam va-ntu kumaar raajaav-api ati-tt-aan
 Kumar-DAT anger.NOM come-PARTIC NOM Raja-ACC beat-PAST-3sg.M
 'Kumar got angry and beat Raja.'

Ura represents the deleted subject as PRO. So I am not sure whether we are dealing with conjunction at all. I believe we do not. If the example is supposed to mean that a dative subject can control the PRO of an embedded clause, (i) would conform to a widespread pattern (cf. Davison 2002 for Hindi). I would be more surprised if in Tamil a nominative subject could control a dative PRO as in Icelandic.

7. Cf. the discussion of the notion 'external argument' and its relation to quirky subjects in Grimshaw (1990:33ff.). Relevant remarks are also found in Barðdal (2002:80), who claims that German and Icelandic are in fact far less different in their quirky constructions than suggested in the established literature.

8. (28c) is perhaps not irreversibly out. With contrastive stress on *Polizei* and full distressing on *Dieb* a marked but still grammatical result seems to be yielded. Given VP-internal subjects and scrambling over the subject, this result should not be too surprising. The price that has to be paid before Xn-topicalization is scrambling. I admit that it is difficult to motivate a discourse situation in which the subject would need to be fronted together with the participle.

9. Notice that we have to assume a zero head because Dutch is still V-final, i.e., under my assumptions the verb does not identify SpecFP.

10. See also Borer's (1986) notion of an "I-subject," i.e., an NP which is coindexed with Infl in the accessible domain of Infl but does not necessarily occupy the [NP, S] position.

11. For an interesting suggestion cf. Rosengren (2002). Rosengren sees the EPP as a parameterized visibility requirement on SpecFinP or SpecTP which yields semantic differences when an expletive is inserted in these positions.

12. Similar sentences are even clearer in Icelandic. While German may blur the picture by scrambling, Icelandic — not being a scrambling language — relies on DAT-NOM or ACC-NOM order entirely.

13. See Kiparsky (1996) for relevant discussion from a diachronic perspective. Rosengren (2002) argues that the EPP is "in the service of semantics," and that languages which achieve

the same semantic effects by scrambling do not (necessarily) attend to the EPP. German is such a language, and more strictly head-final languages such as Bengali are, too.

14. I do not want to claim that German lacks VP-initial functional heads entirely. There is, for example, good evidence that sentential negation is articulated in such a way that the morpheme of negation *nicht* heads a NegP, and that negative quantifier move to its specifier. This is especially clear in dialects like Bavarian which show the negative concord phenomenon. For details cf. Bayer (1997) and Weiß (1999).

15. Modern German has a two-way distinction of intimate/polite which is confined to 2nd person. Bengali has a three-way distinction of inferior/equal/superior which holds in 2nd, and a two-way distinction of equal/superior in 3rd person. In fact, even 3rd person uses a three-way pronominal distinction but only a binary agreement distinction. In comparison to this, Korean and Japanese employ a rather different system of subject-honorification. In these languages it is surprisingly the dative subject which “agrees” with the verb. However, some caution is necessary here because there is no person, number or Case agreement in these languages, and in Japanese the HON-morpheme is a prefix on the verb. Contrary to Ura (1996; 1999), I would not assume that Japanese and Korean have a functionally defined spec-position (SpecTP) into which the dative subject has to move for reasons of EPP-checking and agreement with the verb.

16. Since quirky subjects are NPs/DPs with inherent Case, it is not obvious that they can enter a predication relation. As Bayer *et al.* (2001) have argued, German datives are DPs which are dominated by an extra layer of KASE, i.e., they are KPs; and in this sense they have much in common with PPs. Probal Dasgupta (p.c.), quoting from a 1983 lecture by Richard Kayne, suggests that there is a form of predication in which a quirky subject has the analogue of a P-shell — perhaps what Bayer *et al.* (2001) call a KP —, and the predication indexing holds between P and the predicate rather than between the straight NP/DP and the predicate. Indeed examples of this sort are found even in English. The best known case is perhaps *Under the bed is a good place to hide* where the semantics clearly demands that it is not the bed but the space under the bed that serves as the subject of the predicate. For promising developments and expansions of this idea to which I cannot turn here for reasons of space c.f. Landau (2002).

17. The test cannot be made in Bengali because “dative subject” constructions require an accusative object, not a nominative. Thus, there is only 3rd person default agreement in this language. I could not come up with data which would make this question accessible.

18. Given the adoption of (ii), I do not quite understand why Wunderlich insists on the addition of various constraints by the ranking of which German and Icelandic are supposed to diverge. To account for the differences in control structures he proposes a constraint *NOM-INF by which a nominative argument is banned from an infinitival clause, and a constraint SEMHIER by which the semantically highest argument is banned from an infinitival clause. German is said to observe the ranking *NOM-INF >> SEMHIER, while Icelandic attends to the ranking SEMHIER >> *NOM-INF. This leads to the rather astonishing conclusion that “semantics turns out to be more important in Icelandic than in German, while the morphosyntactic marking turns out to be more important in German than in Icelandic”. According to my own research, no such constraints are needed (or even desirable). My impression is rather that the semantic hierarchy is universally valid, and that its projection in syntax is dependent on the system of morphological Case and the implementation of the functional vocabulary.

References

- Andrews, A. 1976. "The VP complement analysis in modern Icelandic". *NELS* 6: 1–21.
- Barðdal, J. 2002. "Oblique subjects' in Icelandic and German". *Working Papers in Scandinavian Syntax* 70: 61–99.
- Bayer, J. 1996. *Directionality and Logical Form: On the Scope of Focusing Particles and WH-in-situ*. Dordrecht: Kluwer.
- Bayer, J. 1997. "Word order in Bavarian multiple negation". Ninth Wuppertaler Linguistic Colloquium, 20–21 November 1997.
- Bayer, J. 1999. "Final complementizers in hybrid language". *Journal of Linguistics* 35: 233–71.
- Bayer, J. 2001. "Two grammars in one: Sentential complements and complementizers in Bengali and other South Asian languages". In *The Yearbook of South Asian Languages: Tokyo Symposium on South Asian Languages — Contact, Convergence and Typology*, P. Bhaskararao and K. V. Subbarao (eds.), 11–36. Sage Publications, New Delhi.
- Bayer, J., M. Bader and M. Meng. 2001. "Morphological underspecification meets oblique case: syntactic and processing effects in German". *Lingua* 111: 465–514.
- Bayer, J. and J. Kornfilt. 1990. "Restructuring effects in German". In *Parametric Variation in Germanic and Romance. Proceedings for a DYANA Workshop. September 1989*, E. Engdahl, M. Reape, M. Mellor and R. P. Cooper (eds), 21–42. Edinburgh Working Papers in Cognitive Science 6. University of Edinburgh.
- Bayer, J. and J. Kornfilt. 1994. "Against scrambling as an instance of move- α ". In *Studies on Scrambling*, H. van Riemsdijk and N. Corver (eds), 17–60. Berlin: De Gruyter.
- Bierwisch, M. 1990. "Verb cluster formation as a morphological process". In *Yearbook of Morphology* 3, G. Booij and J. van Marle (eds), 173–99. Foris: Dordrecht.
- Boeckx, C. 2000. "Quirky agreement". *Studia Linguistica* 54: 354–80.
- Borer, H. 1986. "I-subjects". *Linguistic Inquiry* 17: 375–416.
- Brandner, E. 1993. "The projection of categories and the nature of agreement". In *The Parametrization of Universal Grammar*, G. Fanselow (ed.), 73–121. Amsterdam: Benjamins.
- Cardinaletti, A. 1998. "Pronouns in Germanic and Romance languages: an overview". In *Clitics in the Languages of Europe*, H. van Riemsdijk (ed.), 35–82. Berlin: de Gruyter.
- Chomsky, N. 2001a. "Derivation by phase". In *Ken Hale: A Life in Language*, M. Kenstowicz (ed.), 1–52. Cambridge, MA: MIT-Press.
- Chomsky, N. 2001b. "Beyond explanatory adequacy". Ms., MIT.
- Dasgupta, P. 2004. "Some non-nominative subjects in Bangla". This volume.
- Davison, A. 2004. "Non-nominative subjects in Hindi/Urdu: VP structure and case parameters". This volume.
- Fanselow, G. 1991. *Minimale Syntax*. Groninger Arbeiten zur Germanistischen Linguistik 32.
- Fischer, S. 2002. "The diachronic relationship between quirky subjects and stylistic fronting". This volume.
- Grimshaw, J. 1990. *Argument Structure*. Cambridge, MA: MIT-Press.
- Haider, H. 1993. *Deutsche Syntax generativ*. Tübingen: Gunter Narr Verlag.
- Haider, H. 1994. "Detachment — the later, the deeper". *Working Paper #41 of the Sonderforschungsbereich 340* (Universities of Stuttgart and Tübingen).
- Haider, H. 2000a. "Branching and discharge". In *Lexical Specification and Insertion*, P. Coopmans, M. Everaert and J. Grimshaw (eds), 135–64. Amsterdam: Benjamins.
- Haider, H. 2000b. "OV is more basic than VO". In *The Derivation of VO and OV*, P. Svenonius (ed.), 45–67. Amsterdam: Benjamins.

- Hale, K. and S.J. Keyser. 1993. "On argument structure and the lexical expression of syntactic relations". In *The View from Building 20*, K. Hale and S.J. Keyser (eds), 53–109. Cambridge, MA: MIT Press.
- Jaspers, D. 1989. "A head position for Dutch clitics, or: Wilma, Wim and Wackernagel". In *Sentential Complementation and the Lexicon. Studies in Honor of Wim de Geest*, D. Jaspers, W. Klooster, Y. Putseys and P. Seuren (eds), 241–52. Dordrecht: Foris.
- Jayaseelan, K.A. 1990. "The dative subject construction and the pro-drop parameter". In *Experiencer Subjects in South Asian Languages*, M.K. Verma and K.P. Mohanan (eds), 269–83. Stanford: CSLI Publications.
- Jayaseelan, K.A. 1998. *Parametric Studies in Malayalam Syntax*. New Delhi: Allied Publishers.
- Jayaseelan, K.A. 2002. "The possessor/experiencer dative in Malayalam". This volume.
- Kaiser, G. 2002. "Syntaktische Variation und generative Syntaxtheorie". To appear in *Syntaxtheorien: Modelle, Methoden, Motive*, E. Stark and U. Wanduska (eds). Tübingen: Narr.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT-Press.
- Kiparsky, P. 1996. "The shift to head-initial VP in Germanic". In *Studies in Comparative Germanic Syntax II*, H. Thráinsson, S. Epstein and S. Peter (eds), 140–79. Dordrecht: Kluwer.
- Klaiman, M. 1980. "Bengali dative subjects". *Lingua* 51: 275–95.
- Landau, I. 2002. "The locative syntax of experiencers". Talk presented at IATL 18.
- Larson, R. 1988. "On the double object construction". *Linguistic Inquiry* 14: 223–49.
- Lehmann, T. 1993. *A Grammar of Modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.
- Lenerz, J. 1977. *Zur Abfolge nominaler Satzglieder im Deutschen*. Tübingen: Gunter Narr Verlag.
- Lightfoot, D. 1979. *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Mohanan, T. 1994. *Argument Structure in Hindi*. Stanford, CA: CSLI.
- Müller, G. 1999. "Optimality, markedness, and word order in German". *Linguistics* 37: 777–818.
- Müller, G. 2000. *Elemente der optimalitätstheoretischen Syntax*. Tübingen: Stauffenburg-Verlag.
- Primus, B. 1999. *Cases and Thematic Roles: Ergative, Accusative and Active*. Tübingen: Niemeyer.
- Raposo, E. and J. Uriagereka. 1990. "Long distance Case assignment". *Linguistic Inquiry* 21: 505–37.
- Reuland, E. 1990. "Head movement and the relation between morphology and syntax". In *Yearbook of Morphology* 3, G. Booij and J. van Marle (eds), 129–61.
- Reuland, E. and W. Kosmeijer. 1988. "Projecting inflected verbs". *Groninger Arbeiten zur Germanistischen Linguistik* 29: 88–113.
- Rosengren, I. 2002. "EPP: A syntactic device in the service of semantics". *Studia Linguistica* 56: 145–90.
- Sigurðsson, H. 1989. *Verbal Syntax and Case in Icelandic*. Doctoral dissertation, University of Iceland, Reykjavik.
- Sigurðsson, H. 2000. "To be an oblique subject: Russian vs. Icelandic". *Working Papers in Scandinavian Syntax* 66: 1–32.
- Sigurðsson, H. 2001. "Case: abstract vs. morphological". *Working Papers in Scandinavian Syntax* 67: 103–51.
- Sigurðsson, H. 2002a. "Icelandic non-nominative subjects: facts and implications". This volume.

- Sigurðsson, H. 2002b. "Agree and agreement: Evidence from Germanic". *Working Papers in Scandinavian Syntax* 70: 101–56.
- Taraldsen, T. 1995. "On agreement and nominative objects in Icelandic". In *Studies in Comparative Germanic Syntax*, H. Haider, S. Olsen and S. Vikner (eds), 307–27. Dordrecht: Kluwer.
- Ura, H. 1996. *Multiple Feature Checking: A Theory of Grammatical Function Splitting*. PhD dissertation, MIT.
- Ura, H. 1999. "Checking theory and dative-subject constructions in Japanese and Korean". *Journal of East Asian Linguistics* 8: 223–54.
- Vikner, S. 2001. *Verb Movement Variation in Germanic and Optimality Theory*. Habilitation thesis, University of Stuttgart.
- Wali, K. and O.N. Koul. 1997. *Kashmiri*. London: Routledge.
- Weiß, H. 1999. "Duplex negatio non semper affirmat". *Linguistics* 37: 819–46.
- Wunderlich, D. 2001. "The force of lexical case: German and Icelandic compared". To appear in *The Nature of the Word: Essays in Honor of Paul Kiparsky*, K. Hanson and S. Inkelas (eds). Cambridge, MA: MIT Press.
- Zaenen, A., J. Maling and H. Thráinsson. 1985. "Case and grammatical functions: The Icelandic passive". *Natural Language and Linguistic Theory* 3: 441–83.
- Zwart, J.-W. 1991. "Clitics in Dutch: evidence for the position of INFL". *Groninger Arbeiten zur Germanistischen Linguistik* 33: 71–92.

CHAPTER 4

The syntax of experiencers in the Himalayas

Balthasar Bickel

1. Introduction

Theories of argument structure agree that not all participants are equal in the linguistic representation of a situation. In most situations, some participant is more prominent than the other(s); for instance, the experiencer participant in an experiential situation is typically more prominent than the stimulus (or ‘theme’) that brings about the experience or forms its domain. This intuition is shared by theories regardless of whether they define participants in terms of thematic roles or proto-roles (Givón 1984, Bresnan and Kanerva 1989, Dowty 1991, Bresnan 2001) or in terms of configurational positions in semantic structure (Foley and Van Valin 1984, Jackendoff 1987), and regardless of whether the notion of prominence is explicated as a universal structural hierarchy (Foley and Van Valin 1984, Van Valin and LaPolla 1997, Bresnan and Kanerva 1989, Bresnan 2001) or as the result of more general principles of discourse organization (Givón 1984) or event conceptualization (Fried 1998, Croft 1998).

When such an asymmetry in participant prominence is at all found in a language, there can be various ways in which it has effects on grammar. A fairly widespread effect is that experiencers tend to be more topical than stimuli, and that this makes them privileged antecedents of reflexivization and other anaphora, and lets them gravitate towards clausal topic positions. However, languages vary considerably as to whether or not they take this further, i.e. as to whether morphology and syntax too treat experiencers as prominent. Case-marking, for example, often treats experiencers as nonprominent by assigning them cases that are canonically reserved for grammatical functions like objects or adjuncts (datives, genitives and other oblique cases). Such coding reflects the semantic nature of an experience as something that befalls or affects the experiencer, or a certain part or aspect of it (cf. Fried 1998). Similarly, interclausal syntax sometimes treats experiencers as object-like or adjunct-like by excluding them from pivohood, e.g. in control or relative constructions.¹ Where such *downgrading* or nonprominent treatment is found, it is often limited to subsets of experiencers. And downgrading in one part of grammar does not necessarily entail downgrading in other parts as well.

In this chapter I compare the treatment of experiencers in Tibeto-Burman and Indo-Aryan languages of the Himalayas. Among Indo-Aryan languages, this survey includes Nepali, Kashmiri, and a few less well-described languages, and also to some

degree Maithili. Although Maithili is not spoken in the Himalayas as defined geologically, it does belong to this region linguistically. Through trade relations, Maithili has been for centuries in contact with many Tibeto-Burman languages of the Himalayan foothills, leaving traces in borrowings. It is only sometime after the Gorkha conquests of the late 18th and early 19th centuries AD that Nepali has taken over as the most important Indo-Aryan contact language in the Tibeto-Burman world of the Central Himalayas. Furthermore, Maithili was an important literary and court language in the Kathmandu Valley during parts of the Malla period (14th–18th cent. AD), where it was in contact with the autochthonous Tibeto-Burman language Newar.

Most of the languages surveyed have subsets of experiential predicates with morphologically downgraded experiencers, i.e. nonnominative or nonergative experiencers. While in all languages of the area, these experiencers apparently show topicality effects in discourse, there seems to be a systematic difference between Tibeto-Burman and Indo-Aryan as to whether there are genuinely *syntactic* prominence effects as well: there are many such effects in Tibeto-Burman, and virtually none in Indo-Aryan. I will present evidence for this in Section 5; in Sections 2–4 I will first survey the morphological coding of experiencers in the Himalayas. In Section 6 I propose a theoretical interpretation of the typological difference found. Section 7 draws together the findings of this paper.

2. Experiencer coding in Indo-Aryan

The Indo-Aryan languages of the area virtually all code experiencers either as nominatives/ergatives, or as datives. Nominative and ergative are in these languages the canonical cases of intransitive and transitive subjects, respectively, except that Maithili has no ergative and uses the nominative for all subjects. The dative is the canonical case of what may be referred to as ‘highly indexable’ objects (O), i.e. objects that score high on topicality, person and animacy hierarchies.² The dative also marks goal (G) arguments in ditransitive clauses. Less indexable O-arguments and ditransitive themes (T) appear in the nominative, resulting in a system of *split* (differential) *object marking* that aligns O with G when the referent is highly indexable, and O with T when it is less indexable. Dative experiencer constructions follow the pan-South Asian and pan-Indo-European model.

The following examples document nominative and dative experiencers for Nepali; for Kashmiri examples, see Wali and Koul (1997); for Maithili, see Bickel and Yāḍava (2000).

- (1) Nepali
 - a. ma bhut saṅga ḍarā-ẽ.
 1SG.NOM ghost with fear-1SG.PT
 ‘I was afraid of the ghost.’

- b. *malā-ī bhut saṅga ḍar lāg-yo.*
 1SG.DAT ghost with fear perceptible-PT.3SG.M
 'I was afraid of the ghost.'

As pointed out by Masica (1991: 346–56), Indo-Aryan dative experiencers are as topical in discourse as nominative experiencers. Indeed, a statistical analysis of 12 Nepali texts by Ichihashi-Nakayama (1994) reveals that experiencers tend to be animate (100%), given (93.3%) and identifiable (100%). 76.7% instances are found as pronouns or zero anaphora. These are all typical concomitants of high topicality. Further, since Indo-Aryan word order reflects a left-to-right increase in rhematicity, experiencers typically precede the stimulus in discourse (pending statistical analysis). As a result of this, experiencers tend to occupy what is traditionally called the 'subject position' in a basic 'subject-object-verb' arrangement (cf. Masica 1976, 1991, Shibatani and Pardeshi 1999 and others).

Another reflex of their topical discourse status is that experiencers are felicitous antecedents of reflexives and other anaphora. Despite their downgraded case-marking, dative experiencers share this property with nominative experiencers, and indeed subjects in general:

- (2) Nepali (Gupta and Tuladhar 1979/80)
Rām-lāi āphno_i bhāi-ko samjhanā
 R.-DAT REFL.GEN.SG.M younger.brother-GEN memory.NOM
ā-yo.
 come-PT.3SG.M
 'Ram_i remembered his_i brother.'
- (3) Kashmiri (Wali *et al.* 2000)
koor_i chu pan-un_i booy pasand.
 girl.DAT AUX.3SG.M REFL-GEN.SG.M.NOM brother.NOM like
 'The girl_i likes her_i brother.'

In this property, dative experiencers contrast to some degree with dative objects, which tend to be less likely antecedents of reflexives. However, this clearly is a difference that depends on the allocation of topicality and rhematicity degrees in discourse rather than on any rigid syntactic constraints. It does not (or should not) come as a surprise therefore that objects too may occasionally antecede reflexives (also cf. Bickel and Yādava 2000 on Maithili; and Mahajan 1990, Hook 1990b, and Gurtu 1992 on Hindi):

- (4) Kashmiri (Hook and Koul 1992)
su_i ni-yi me_j pan-un_{i,j} gar-i
 3SG.NOM take-FUT.3SG 1SG.DAT REFL-GEN.SG.M.NOM house-DAT
kaar-i manz.
 car-DAT in
 'He'll take me to his/my house in the car.'

- (5) Nepali (Bickel and Yādava 2000)
 Rām-le svasnī-lāi āphno_i sārī di-yo.
 R.-ERG wife-DAT REFL.GEN.SG.M sari.NOM give-PT.3SG.M
 'Ram gave [his] wife her own sari.'

These possibilities exist also with nominative stimuli in experiential predicates. That is, the fact that a dative experiencer can function as antecedent of reflexives does not preempt the nominative stimulus from assuming the same function:

- (6) Kashmiri (Wali and Koul 1997, Wali, *et al.* 2000)
 ma:hren'_i a:yi pan-in-is_i ma:hraz-as khosh.
 bride.NOM come.PT.3SG.F REFL-GEN-SG.M.DAT bridegroom-DAT like
 'Her own husband likes the bride.'

South Asian reflexives are sometimes said to show a 'subject orientation', i.e. that their antecedents must be subjects (cf. Gair *et al.* 2000 for a recent survey and discussion). But the preceding data suggest that at least for the Indo-Aryan languages of the Himalayas, this is a preferential topic orientation in discourse rather than a rigid syntactic constraint. Such preference rules are grounded in the same general conditions on anaphora that also hold for pronominal anaphora: intraclausal pronoun anaphora is generally possible if the antecedent is more topical and therefore less rhematic than the pronoun (Van Valin and LaPolla 1997, among others). This condition is satisfied for example if a plain pronoun is marked as focused and put into a clausal position that is more rhematic than the antecedent. Since clausal positions in Nepali are keyed to rhematicity degrees rather than grammatical relations, this is possible even with pronouns in transitive subject ('A') function:

- (7) Nepali
 Rām-ko_i nayā kitāb usai-le_{i,j} ma-lāi di-yo.
 R.-GEN new book.NOM 3SG:FOC-ERG 1SG-DAT give-PT.3SG.M
 'HE gave me Ram's new book.'

Reflexive pronouns always satisfy the topicality condition on antecedents because (i) reflexives are identical in these languages with emphatic pronouns and because (ii) they typically are used in rhematic positions. These two properties make reflexives unlikely (though not impossible) candidates for subjects (S or A). But because the relevant condition refers to information structure and not to syntactic subjecthood, antecedents need not be subjects (unless of course by 'subject' is meant 'topic').

Another way in which dative experiencers manifest discourse prominence is in converbial and conjunctive reduction. Converbial and conjunctive reduction involve a variety of zero anaphora, which in turn is a prime strategy for signaling topic continuity (Givón 1983, Ichihashi-Nakayama 1994, among others). Since dative experiencers tend to be topical, they are excellent controllers of zero anaphora in cosubordinate verb clauses and coordinate structures:

(8) Nepali

- a. *uslā_i jyādai tirkhā lāg-yo ra ø_i eu-ṭā*
 3SG.DAT much:FOC thirst.NOM perceptible-PT.3SG and one-CLASS
gāū-mā pas-yo.
 village-LOC enter-PT.3SG.M
 'He was very thirsty and went into a village.'
 (Ichihashi-Nakayama 1994)
- b. *ø_i Sitā-lāi dekh-era Syām-lāi aphnī swāsni-ko*
 S.-DAT see-CONV S.-DAT REFL.GEN.SG.F wife-GEN
samjhanā ā-yo.
 memory.NOM come-PT.3SG.M
 'Having seen Sita, Shyam was reminded of his own wife.'
 (Gupta and Tuladhar 1979/80)

(9) Kashmiri (Hook 1990b)

- ø_i zyaadi khye-th keryin tyimān_i pyeeych.*
 too.much eat-CONV make.PT.3SG 3PL-DAT cramps.NOM
 'Eating too much, they suffered cramps.'

By the same token, dative experiencers can also easily undergo zero anaphora. (To make the structure explicit, zero anaphora is glossed here and in the following by the case marker that would be used with the argument in main clauses):

(10) Nepali (Ichihashi-Nakayama 1994)

- ø_i pāni cāhi-era u_i nadi tira ga-yo.*
 DAT water.NOM need-CONV 3SG.NOM river toward go-PT.3SG.M
 'Needing water, he went to the river.'

Like the condition on reflexives, the condition on zero anaphora is one of relative topicality rather than one of syntactic subjecthood (*pace* Gupta and Tuladhar 1979/80, Masica 1991). While nominative subjects are presumably the most common controllers because they are the most common topics,³ objects can perform the same function as well:

(11) Nepali

- a. *maile gilasi phyāk-ē ra ø_i phuṭ-yo.*
 1SG.ERG glass.NOM throw-PT.1SG and break-PT.3SG.M
 'I threw the glass and [it] broke.' (Bickel and Yādava 2000)
- b. *ø_i ahile sammā na-ā-era*
 now until NEG-come-CONV
maile tiniharu-lāi paḍhāu-na sak-inā.
 1SG.ERG DEM.PL-DAT teach-INF be.able-NEG.PT.1SG
 'Since [they] haven't come up to now, I can't teach them.'

- (12) Kashmiri (Wali and Koul 1997)
 ø_{i,j} kə:m mukamal kər-ith so:z-a-th
 work.NOM complete do-CONV send-FUT.1SG.NOM-2SG.NOM
 ts_i bi_j gari. [69]
 2SG.NOM 1SG.NOM home
 'I will send you home when [you/I] finish the job.'

They can also be occasional targets of zero-anaphora:

- (13) Nepali (Crain 1992:44)
 yo-ṭā sarpa-le uslāi ṭoki-di-e-cha.
 one-CLASS snake-ERG 3SG.DAT bite-BENEFACTIVE-MIRATIVE.PT-3SG
 ø ø_i ṭok-era tyo rājkumār_i mar-e-cha.
 ERG DAT bite-CONV DEM princess.NOM die-MIRATIVE.PT-3SG
 'A snake bit her. Since [it] bit [her], the princess died.'

Coreference between O (of *ṭoknu* 'to bite') and S (of *marnu* 'to die') here may be facilitated by the fact that the converb *ṭokera* 'having bitten' performs the function of tail-head linkage. Be this as it may, there is apparently no *syntactic* constraint against O-S coreference in Nepali clause chaining.

In conclusion, it appears that dative experiencers in the Indo-Aryan languages under survey exhibit some degree of discursive prominence, with effects on preferred word order and anaphora antecedence. The question remains whether they also acquire categorical (rather than preferential) syntactic prominence. I will take up this issue in Section 5.

3. Experiencer coding in Tibeto-Burman

Dative-marked experiencers of the Indo-European type are not a general feature of Tibeto-Burman. Examples are found, however, in Newar and Tibetan languages. Example (14) is from the variety of Newar spoken in Kathmandu.

- (14) Kathmandu Newar (Hale 1997)
 ita: tyānhulā.
 1SG.DAT tired-PT.DISJUNCT.AGENT
 'I became tired.'

The following example is from Lhomi, a Central Tibetan language spoken in the upper reaches of the Aruṇ valley in Eastern Nepal.

- (15) Lhomi (Versalainen and Versalainen 1980:10)
 'phica-la ṇiccok 'čap-son.
 child-DAT tired become-AORIST.DISJUNCT
 'The child got extremely tired.'

For Balti, a Western Tibetan language spoken in Ladakh in close contact with Indo-Aryan, Read (1934:64) lists nine ‘impersonal’ verbs (*thoñma* ‘to see’, *kwā* ‘to hear’, *shespa* ‘to know’, *xsama* ‘to think’, *chudpa* ‘to realize, comprehend, understand’, *rgospa* ‘to need’, *chama* ‘to finish’, *khyudpa* ‘to have the power to’, *khukhpa* ‘to be able to’, *yanma* ‘to be unwell; to be able to’):

- (16) Balti (Read 1934)
- a. ña-la kho thoñma-med
1SG-DAT 3SG.NOM see-IPFV.NEG
‘I do not see him.’
 - b. kho-la chī shes-ed?
3SG-DAT what.NOM know-PERFECT
‘What does he know?’

Occasional examples are also found in the variety of Tibetan that Tournadre (2001) calls ‘Standard Spoken Tibetan’. Unlike dative experiencers, dative possessors as in (17b) are common currency:

- (17) Standard Spoken Tibetan
- a. ña-r rmi.lam de yañ.gyar btañ-byuñ.
1SG-DAT dream DEM.NOM again emit-AORIST.CONJUNCT.GOAL
‘I dreamed that dream again.’ (DeLancey 1990:307)
 - b. khoñ-la deb mañ.po yod-red.
3SG-DAT book.NOM many be-ASSERTIVE.DISJUNCT
‘He has got many books.’ (Tournadre 1996:76)

Experiencers are more commonly coded by ergatives or nominatives, i.e. the canonical cases for transitive and intransitive subjects:

- (18) Standard Spoken Tibetan (Tournadre 1996:76, 167)
- a. ña-rañ.thso.s ño.thsa byed.kyi-med.
1SG-PL.ERG shame.NOM do-IPFV.NEG
‘We are not ashamed.’
 - b. kho stag-la zhed-soñ.
3SG.NOM tiger-DAT fear-AORIST.DISJUNCT
‘He was afraid of the tiger.’

Chantyal, Thakali, and Magar, which are all spoken in Western Nepal, have occasional examples of dative experiencers as well. As in Tibetan, ergatives and nominatives are more common, however:

- (19) Chantyal (Noonan 2003)
- a. na-ra joro kha-si-m.
1SG-DAT fever come-ANTERIOR-NPT
‘I have a fever’

- b. khi-sə na-ra cini-m.
3SG-ERG 1SG-DAT know-NPT
'She knows me'
- (20) Marphatan Thakali (Georg 1996:87, 183)
- a. the¹-e ki²-pa já¹-se the¹-ra na¹-si mu¹.
3SG-GEN break-NZR hand/arm-ERG/ABL 3SG-DAT hurt-CONV AUX
'His broken arm hurts.'
- b. ña¹ kitá³-e já¹-se nin³-ci.
1SG.NOM vulture-GEN hand/arm-ERG/ABL fear-PT
'I fear the vulture's grip.'

Dative experiencers seem to be sporadically attested for the Tibeto-Burman languages of Uttar and Himācal Pradeś, such as Kinnauri, spoken in the upper Satluj valley (Anju Saxena, p.c.), and Rangpas, spoken in the upper Alaknandā valley (Zoller 1983). Datives appear to be used in these languages for obligative constructions, though.

Dative experiencer constructions are at first sight absent from the Kiranti languages spoken in Eastern Nepal (the *Kirāt* or Kirant area), but this absence is more apparent than real. Dative experiencers *sensu stricto* are impossible in these languages because there is no dative case to begin with (at least natively; cf. below). The canonical object case in Kiranti is the nominative (also known as 'absolutive' in other terminological traditions), and it is this case that codes a subset of experiencers. The clause patterns involved are formally transitive and the canonical subject in these clauses is the ergative (regardless of tense and aspect). Therefore, nominative marking of experiencers in these clauses entails morphological downgrading, and in line with this, the experiencer triggers object agreement in the verb. This is illustrated by the following examples:

- (21) Hayu (Michailovsky 1988)
- a. gu dzū:sa-ha u-suŋ. [138]
1SG.NOM fever-ERG find-1SG.O.PT[-3.SG.A]
'I caught a fever.'
- b. mi kun-ha dzi:-t-o. [139]
3SG.NOM meat-ERG smell.bad-APPLICATIVE-3SG.O.3SG.A.PT
'The meat smells bad to him.'
- (22) Belhare (Bickel 1997)
- a. ŋka cuŋ-ŋa mai-tar-he.
1SG.NOM cold/fever-ERG 1SG.O-[3SG.A-]bring-PT
'I've got fever.' (lit., 'the cold brought [fever] to me')
- b. (ŋke) iŋa-a ka-sei-ʔ-ni.
1PL.INCL.NOM beer-ERG INCL.O-[3SG.A-]make.drunk-NPT (lit., 'kill')
'One doesn't get drunk from beer.' (lit., 'beer does not kill us.')

- (23) Maivā-Mevā Limbu (Michailovsky 1997)
- a. naŋ-el-le a-laŋ-en
 snow-ART-ERG 1SG.POSS-leg/foot-ART.NOM
 thoŋtt-u
 [3SG.A-]get.numb-3[SG]O
 'My feet felt numb because of the snow.' (lit., 'the snow made my feet feel numb.')
- b. khi:kt-usi.
 [3SG.A-]taste.bitter-3.NSG.O
 'It tastes/tasted bitter to them.'

Thus, Kiranti nominative experiencers are the analogue of dative experiencers in languages that lack datives. Like dative experiencers, Kiranti nominative experiencers differ from regular objects by their tendency to be topics. As such they are often dropped as the result of zero anaphora. When they occur overtly, they tend to be in clause-initial position (on Hayu, cf. Michailovsky 1988:203).

The common denominator of both nominative object experiencers in Kiranti and dative experiencers in Indo-Aryan is that they are treated morphologically in the same way as goal or patient arguments, and I therefore subsume both constructions under the title of *experiencer-as-goal* constructions. Another variation on the same theme is found in Belhare examples like the following.

- (24) Belhare (Bickel 1997)
- a. ŋka caleppa khikt-he.
 1SG.NOM bread.NOM [3SG.S-]taste.bitter-PT
 'To me the bread tastes bitter.'
- b. ŋka hakliūa lus-e.
 1SG.NOM sweat.NOM [3SG.S-]perceptible-PT
 'I am hot.'

As in (21)–(23), the experiencer is coded as a nominative, but so is the stimulus here. The examples therefore have the surface appearance of *double subject* constructions based on intransitive predication (and indeed such an analysis has been proposed for morphologically downgraded experiencers in general by Shibatani and Pardeshi 1999). However, there is evidence that they are indeed *experiencer-as-goal* constructions, and that the experiencer is a full-fledged core argument rather than an extra-clausal topic or adjunct constituent. First, as we will see in Section 5, unlike topics and adjuncts, the experiencer argument in examples like the ones in (24) has unrestricted access to S/A or A pivothood in syntax; clauses like (24a) are therefore syntactically transitive. The only pivot property that the experiencer does not have is control of verb agreement. Second, some Belhare speakers occasionally borrow the Nepali dative suffix *-lāi*, and if they do, they use it as much for experiencers in these constructions as for ditransitive goal arguments. Ditransitive goal

- (29) Thai (Tai-Kadai; Matisoff 1986)
 tòg caj.
 heart fall
 'I am scared/afraid.'

Experiencer-as-possessor constructions are also reflected in the Eastern Indo-Aryan languages Bangla, Assamese, and Oriya (Masica 1991: 346):

- (30) Bangla (Klaiman 1980)
 tomār Bānlā sun-e āmār āscorjo ho-lo.
 2SG.GEN B.NOM hear-CONV 1SG.GEN surprise.NOM become-PT.3
 'I was surprised when I heard your Bangla.'
- (31) Assamese (Sharma 1963: 122)
 mor piyāha lāg-is-e.
 1SG.GEN thirst.NOM perceptible-IPFV-3
 'I am getting thirsty.'

While possessed feelings and body parts are clearly at the historical root of this construction (cf. Klaiman 1979), modern Bangla seems to have partially assimilated the structure to standard Indo-Aryan dative subjects (*experiencer-as-goal* constructions). As a result, the genitive experiencer is a clausal argument of its own: it is often separated from the noun denoting the affected body part or feeling, as in (32a), or indeed, no such noun may even be present, as in (32b):

- (32) Bangla (Klaiman 1980)
 a. āmār tomāke mone por-b-e.
 1SG.GEN 2SG.DAT mind.LOC fall-FUT-3
 'I shall remember you.'
- b. āmār tomāke cāi.
 1SG.GEN 2SG.DAT need:3
 'I need you.'

Likewise in Assamese, genitive experiencers behave syntactically like clausal arguments; in fact, they are sometimes in direct competition with datives. This is so, for instance, with *lāg*- 'want, need' (also cf. the same verb with a slightly different meaning in (31)):

- (33) Assamese (Babakaev 1961)
 a. mor khā-bo lagi-yā. [80]
 1SG.GEN eat-INF need-PERF.PART
 'I have to eat.'
- b. mok pāni lāg-e. [93]
 1SG.DAT water.NOM need-3
 'I want (need) water.'

Genitive/dative alternations are also characteristic of Oriya (Lukas Neukom, p.c.). As examples like the following suggest, a similar assimilation is found in Kathmandu Newar, which has both dative-marked *experiencer-as-goal* (cf. the examples in (14) above) and genitive-marked *experiencer-as-possessor* constructions (cf. (27)). An alternative to the dative construction in (34a) marks the experiencer by the genitive as in (34b):⁵

- (34) Kathmandu Newar (Hale 1997)
- a. Mirā-yāta tyānhul-a.
M.-DAT tired-PT.DISJUNCT.AGENT
'Mira became tired.'
 - b. Mirā-yā tyānhul-a
M.-GEN tired-PT.DISJUNCT.AGENT
'Mira became tired.'

As in the Bangla example (32b), and unlike in true *experiencer-as-possessor* constructions, there is no experiential noun in (34b).

4. Areal patterns

The ways experiencers are coded in Himalayan languages suggest two broad areal patterns, one characterized by *experiencer-as-goal* constructions, the other by *experiencer-as-possessor* (or *psycholocation*) constructions.

The *experiencer-as-goal* constructions extends all-over South Asia and spreads throughout most of Indo-European and its neighboring language families into Europe (cf. Bossong 1998). In the Himalayas, the construction loses in importance; it is universal in the Indo-Aryan languages, but has spread into adjacent Tibeto-Burman languages (and into Burushaski; Bashir 1985) only to a limited extent. It is most robustly attested in the Newar and Kiranti languages of Eastern Nepal, and also in the Western Tibetan language Balti. In many instances, *experiencer-as-goal* constructions are recent and transparent calque translations of Indo-Aryan patterns (cf. Noonan 1999, Genetti 1994, Shibatani and Pardeshi 1999). Certainly expressions like the ones in (19) from Chantyal have literal counterparts in Nepali, and the experiential nouns involved are loanwords from Nepali (here, *joro* < Nep. *jvaro* 'fever').

In the Northeastern part of the Indic subcontinent, the *experiencer-as-goal* construction abuts against the *experiencer-as-possessor* construction. This constructional type spreads all-over South East Asia (including Myao-Yao, Mon-Khmer and Tai-Kadai languages) and follows the stretch of Tibeto-Burman languages extending from there into the Himalayas. It is a universal feature in Kiranti languages, but apart from occasional examples in Newar it is not characteristic of other Himalayan Tibeto-Burman languages. Among Indo-Aryan languages, it is found to some extent in Assamese, Bangla and Oriya — all adjacent to the Tibeto-Burman world. However, in these Indo-Aryan languages, the construction amalgamates to some

extent with the syntax of *experiencer-as-goal* constructions. The *experiencer-as-possessor* construction does not seem to have spread into neighboring Munda and North Dravidian languages, where *experiencer-as-goal* constructions seem to prevail (Zide 1990 on Gorum, Osada 1999 on Mundari, Neukom, p.c., on Santali, Mahapatra 1979: 69f on Malto).

The border between the *experiencer-as-goal* and the *experiencer-as-possessor* areas thus seems to form a broad arc extending from the Kathmandu valley through Eastern Nepal to the Bay of Bengal. Along this border area the constructional types exist side-by-side (Kiranti) or have assimilated over time to each other (Eastern Indo-Aryan; Newar).

Both constructional types are also found outside these two areas. The *experiencer-as-goal* construction is fairly widespread worldwide, but its distribution appears to be neither continuous nor even. (Masica 1976 notes its absence from the Altaic region, Indonesian, and Eastern Bantu). Also *experiencer-as-possessor* constructions are attested beyond Southeast Asia and the Himalayas. They are found as grammaticalized constructions in a number of African languages (Reh 1998), and also along the Northeast coast of Papua New Guinea (McElhanon 1975, 1977, 1992):

- (35) Lango (Nilotic; Uganda; Noonan 1992: 189)
 cwíné yòm.
 liver:3SG.POSS 3SG.be.soft
 ‘S/he is happy.’
- (36) Kâte (Finisterre-Huon; Huon Peninsula; McElhanon 1992: 242)
 maŋ-ne bianke-kaʔ.
 thoracic.cavity-3SG.POSS be.well-3SG.PRESENT
 ‘S/he is happy.’
- (37) Mangap Mbula (Austronesian; Umbo and Sakar Islands; Bugenhagen 1990)
 ni-ŋ i-saana.
 body-1SG.POSS 3SG-go.bad
 ‘I am exhausted.’

Apart from this, many languages have occasional metaphors of the type *this broke my heart*. But the constructions surveyed here are systematic and regular strategies for encoding experiencers.

5. Experiencers as syntactic pivots

As we saw in the preceding sections, all languages of the Himalayas have subsets of experiencers with *downgraded morphology*: some experiencers are treated morphologically in the same way as goals or possessors, and thereby different from canonical

A or S arguments. There is also evidence that despite this morphological downgrading, these experiencer arguments retain a certain prominence in discourse: they tend to be topical and this has effects on word order and anaphora antecedence. Turning to syntactic pivothood, however, Indo-Aryan and Tibeto-Burman seem to go their own ways. In Indo-Aryan, morphologically downgraded experiencers have virtually no access to pivothood. Pivothood is, with few exceptions, reserved for nominative, or in some languages, nominative or ergative arguments. In Tibeto-Burman, by contrast, morphologically downgraded experiencers by and large have full-fledged access to pivothood. Case-marking on the experiencer is irrelevant for the determination of pivothood.

The notion of pivothood that I assume in the following is a strictly syntactic one. If there is, for instance, a tendency in discourse for some argument to be highly topical and thereby to regularly trigger zero-anaphora, I do not take this as evidence on syntax unless the pattern is *strictly grammaticalized* and is thus by and large without exceptions beyond false starts, anacoluthic breaks, and other pure performance issues. This is why I do not take, for example, converb chaining, conjunction reduction and reflexivization to reveal anything about syntactic pivothood in Nepali and Kashmiri. As we saw in Section 2, none of these constructions is inviolably tied to a syntactic pivot although there are strong discourse preferences. Syntactic pivots are properties of grammaticalized constructions, which have a distinct form and meaning.

This approach, which follows RRG theory (Foley and Van Valin, 1984, Van Valin 1995, Van Valin and LaPolla 1997) in spirit, may very well prove little in grammar to be truly syntactic in nature, but I believe that the constructions surveyed in the following involve robustly syntactic pivots that cannot be violated under any pragmatic circumstances. I should also note, however, that the syntactic data available to me are sometimes insufficient in the languages under review. Especially when concerned with more complex constructions (Sections 5.2–5.4), I therefore focus primarily on Nepali as a representative of Indo-Aryan and on Belhare as a representative of Tibeto-Burman. For these languages I have direct fieldwork and corpus access.

5.1. Verb agreement

In Indo-Aryan, dative experiencers do not in general trigger regular subject agreement on the verb. The verb is either in a third singular masculine default form (38a), or with bivalent experiential predicates, it shows agreement with the nominative stimulus argument (38b):

(38) Nepali

- a. malāi jvaro lāg-yo.
 1SG.DAT fever.NOM perceptible-PT.3SG.M
 ‘I’ve got fever’

- b. malāi timī man par-chāu.
 1SG.DAT 2MH.NOM liking.NOM occur-NPT-2MH
 'I like you.'

Kashmiri has apart from standard nominative subject agreement ('NOM') pronominal (anaphoric) agreement clitics, one of them referring to dative experiencers and other affected participants ('DAT'). The choice is "crucially conditioned by the morphological case of their coreferent nominal" (Wali and Koul 1997: 253).

- (39) Kashmiri (Wali and Koul 1997: 253)
 a. me o:su-kh tsi seṭha: pasand.
 1SG.DAT be-2SG.NOM 2SG.NOM very liking
 'I liked you very much.'
 b. tsi o:su-h=am seṭha: pasand.
 2SG.NOM be-2SG.NOM=1SG.DAT very liking
 'I liked you very much.'

In most instances, these clitics absorb clausal argument positions, whence no overt coreferential NP appears in the clause in (39b).

Maithili too has additional nonnominative agreement, but here nonnominative ('NONNOM') agreement can usurp the whole of agreement morphology (Bickel *et al.* 1999, Yādava 1999):

- (40) Maithili
 hunkā u man parāit chāinh.
 3H.REM.DAT 3NH.REM.NOM liking occur-IPFV.PART AUX-3H.NONNOM
 'S/he likes him/her.'

However, as emphasized by Mishra (1990), Bickel *et al.* (1999), and Bickel and Yādava (2000), unlike nominative agreement, nonnominative morphology in Maithili is not at all syntactically regulated. Rather, it serves a pragmatic function of indexing socially important participants, regardless of whether they are overtly mentioned in the clause or not. As a result, this agreement system is also used for extrathematic participants, e.g., for a *dativus incommodi*:

- (41) Maithili (Bickel *et al.* 1999)
 u bhāig je-tāinh.
 3NH.NOM run.CONV AUX-FUT-3H.NONNOM
 'He will run away (because he is afraid of him).'

Dative experiencers exclusively trigger nonnominative agreement. Nominative agreement is restricted to control by nominative subjects. Thus, Maithili conforms to the general Indo-Aryan indeed, Indo-European-principle that dative experiencers are excluded from agreement-controlling pivohood (subjecthood).

There is one exception to this generalization noted by Bailey (1924) and Hook (1990a).

- a. mo-re tāto daṣṭ-ās
1SG-DAT heat feel-PT.1SG
'I feel hot.'
- b. Salim-ere aṅgrezi kitābe siē
S.-DAT English book(F).PL.NOM good.F.PL.NOM
daṣṭ-oñ.
seem-PRESENT.3SG
'Salim likes English books.'

Shina has been and still is in intense contact with Tibeto-Burman, especially with the regionally dominant Balti. According to Rangan (1975: 2), most Shina speakers are bilingual in Balti and Hook (1990a) also notes this for his consultants. Against this background, it is possible that the exceptional pattern in (42) is a contact effect. Like most other Tibetan languages and dialects, Balti has no agreement morphology *sensu stricto*, but instead has special marking for personally assimilated, definite knowledge (Read 1934, Bielmeier 2000). While this basically involves knowledge of the reported situation, there is a cross-dialectal tendency for the category to specifically mark knowledge about a participant's mental state. The only situation in which a speaker has personal knowledge about a participant's mental state is of course when the speaker is the participant himself or herself. Hence, personal knowledge marking often has the effect of indexing that the speaker is a participant in some role or capacity. Such an incipient system of person marking is very similar to the unrestricted coding of the experiencer in Shina: involvement of the speaker in (42a) is marked regardless of its role and case-marking. The difference to Balti is of course that the Shina agreement morphology distinguishes between three persons rather than between speaker and the rest. But note that the 'Brokskat' variety of Shina described by Ramaswami (1982) has reduced its agreement system to a Tibetoid speaker vs. non-speaker contrast.

In those Tibeto-Burman languages that have full-fledged agreement systems, experiencers with downgraded case-marking are sometimes treated by the agreement morphology as *downgraded* as well, but sometimes they are accorded full-fledged S/A or A status. This depends on language and lexical choice.

If the experiencer is treated as downgraded, it is registered on the verb as an object or goal. This is so, for example, in the *experiencer-as-goal* constructions of Standard Spoken Tibetan, where (unlike in Balti) the agreement system is fully grammaticalized in the aorist and future systems. The agreement morphology registers involvement of either of two persons (see Bickel 2000b for a recent overview): the conjunct person or the disjunct person. The conjunct person is the speaker in statements or the addressee in questions; the disjunct person includes all other referents.⁶ In the aorist, there is an additional distinction between agent and goal agreement (-*yin* and -*byun*, respectively vs. disjunct -*son*). Dative experiencer conjunct persons regularly trigger conjunct goal agreement:

- (43) Standard Spoken Tibetan (repeated from (17))
- a. ña-r rmi.lam de yañ.gyar btañ-byuñ.
 1SG-DAT dream DEM.NOM again emit-AORIST.CONJUNCT.GOAL
 'I dreamed that dream again.' (DeLancey 1990:307)
- b. ña-r lde.mig brnyed-byuñ.
 1SG-DAT key.NOM find-AORIST.CONJUNCT.GOAL
 'I found the key.' (Tournadre 1996:76)

Kiranti languages have three-person agreement systems for both subjects and objects. Nominative goal experiencers regularly trigger object agreement, cf. the following Hayu example repeated from (21) above:

- (44) Hayu
- gu dzū:sa-ha U-SUŋ.
 1SG.NOM fever-ERG find-1SG.O.PT[-3.SG.A]
 'I caught a fever.'

But at least in Belhare there are also examples where the experiencer does not trigger any agreement at all. This is so in the double-nominative constructions exemplified by (24) above and repeated here as (45).

- (45) Belhare
- ŋka hakliūa lus-e.
 1SG.NOM sweat.NOM [3SG.S-]perceptible-PT
 'I am hot.'

This makes the construction very similar to the standard Indo-Aryan type discussed before. However, in the Indo-Aryan standard, the lack of agreement with dative experiencers is a matter of principle: with the exception of Shina (and perhaps other languages close to Shina), syntactically regulated agreement systems are tied in these languages to the nominative, or in some languages, to the nominative or ergative S/A-pivots. This is not so in Belhare, or indeed Tibeto-Burman in general. Verb agreement can be triggered by S, A and O-arguments, regardless of their case-marking. The fact that the experiencer does not trigger S-agreement in (45) is a lexical idiosyncrasy of these verbs. There is certainly no general ban against nominative arguments triggering agreement (as readily testified by the stimulus argument *hakliūa* 'sweat' triggering S-agreement in (45)).

This is further confirmed by the *experiencer-as-possessor* constructions found in these languages. In this type, experiencers are not downgraded by the agreement system, despite their downgrading in case. This is exemplified in the following by transitive variants of Belhare and Limbu *experiencer-as-possessor* constructions:

- (46) Belhare (Bickel 1997)
- a. cia a-niūa tiu-t-u-ŋ.
 tea.NOM 1SG.POSS-mind.NOM like-NPT-3[SG]O-1SG.A
 'I like this tea.'

- b. a-kipma kaiʔ-t-u-ŋ.
1SG.POSS-fear.NOM bring.up-NPT-3[SG]O-**1SG.A**
 ‘I am afraid of him.’
- c. ŋka hale ekchumma hani-niūa
 1SG.NOM before sash.NOM **2PL.POSS**-mind.NOM
 ka-tiu-s-ik-kha.
 1SG.O-spend-TRANS.PERF-**2PL.A**-PERF
 ‘Before, you liked me for my sash.’
- (47) Phedäppe Limbu (van Driem 1987, s.v. *luŋma*)
 an-dzum-in sa:ʔrik a-luŋma
 1SG.KIN.POSS-friend.ART.NOM very **1SG.POSS**-liver.NOM
 hipt-u-ŋ.
 yearn-3[SG]O-**1SG.A**
 ‘I miss my friend very much.’

In these examples, the experiencer-possessor triggers regular A-agreement. Tibeto-Burman languages neutralizing A with S agreement are untypical for the Himalayas, but Dolakha Newar is such a language. Again, there is no general principle against oblique experiencers triggering S/A-agreement. The dative experiencer in (48) illustrates this. (The reflexive is used exophorically to index the speaker in this example):

- (48) Dolakha Newar
 thau-ta gibir ma-gyāt-ki.
REFL-DAT nothing.NOM NEG-fear-**1SG.NPT**
 ‘I wasn’t afraid at all.’

The agreement system of Kathmandu Newar is based on conjunct vs. disjunct person distinction and is restricted to volitional agents. Experiencers can therefore never trigger conjunct agreement, and this is why all examples in (14), (27), and (34) involve the disjunct form.

In summary, the Tibeto-Burman data suggest that with the exception of some *experiencer-as-goal* constructions, the experiencer has access to S/A pivots controlling agreement, or, if the languages has both A and O agreement, is treated like an A-argument. This is regardless of the morphological coding of the experiencer.

5.2. Control and raising constructions

In most languages under review control and raising constructions are subject to pivot constraints: they require the pivot argument of the complement predicate to be shared with (‘controlled by’ or ‘raised to’) the A or O argument of the matrix. The pivot is the S/A or the S/O argument, depending on whether the construction involves accusative or ergative syntax.

Among Indo-Aryan languages one commonly finds verbs like ‘tell or order someone to do something’ requiring the lower S/A argument to be deleted under identity

(‘EQUI-deleted’) with their O argument (49a).⁷ The lower O argument is excluded from pivohood, as shown by (49b)

- (49) Nepali (Bickel and Yādava 2000)
- a. Har-ī-lā-ī [ø Kāthmāṇḍū-mā paḍh-na] paṭhā-yo.
H.-DAT **ERG/NOM** K.-LOC study-INF send-PT.3SG.M
'He sent Hari to study in Kathmandu.'
- b. *sardār-le cor-haru-lāi [pulis-le ø na-dekh-na] bhan-yo.
chief-ERG thief-PL-DAT police-ERG **DAT** NEG-see-INF tell-PT.3SG.M
Intended: 'The chief told the thieves not to let themselves be seen by the police.'

The S/A pivot can be a nominative (or ergative) experiencer but not a dative experiencer; in these constructions, the dative experiencer manifests the same syntactic behavior as a dative object:

- (50) Nepali (Bickel and Yādava 2000, also cf. Wallace 1985)
- a. Rām-le Harī-lāi [ø na-ḍarāu-na] bhan-yo.
R.-ERG H.-DAT **NOM** NEG-fear-INF tell-PT.3SG.M
'Ram told Hari not to get afraid.'
- b. *Rām-le Harī-lāi [ø ḍar na-lāg-na] bhan-yo.
R.-ERG H.-DAT **DAT** fear.NOM NEG-feel-INF tell-PT.3SG.M
Intended: 'Ram told Hari not to be afraid.'

As shown by Bickel and Yādava (2000), the same case constraint on pivothood holds for Maithili and Hindi.

It has been suggested that the exclusion of dative experiencers from pivothood in control construction may be due to the fact that the dative case imposes nonvolitional or even uncontrollable semantics (e.g., Sridhar 1976, Klaiman 1979, 1980). While this may be so in some Indo-Aryan languages, it is not the general rule. Nepali datives at least do not deprive experiencers of control in a semantic sense: with many predicates they still exert control over whether or not to *allow* the experience. As a result of this, it is possible to form imperatives with such predicates:

- (51) Nepali
 timī-lāi ɖar na-lag-os hai!
 2MH-DAT fear.NOM NEG-be(come)-3SG.IMPERATIVE REQUEST
 'Don't be afraid!'

The only generalization that holds true of all Indo-Aryan languages under review is that dative case-marking blocks access to pivothood (with the *Shina* exception noted above). This is a purely syntactic constraint, although its historical root and functional motivation may well be found in the semantics of the dative.

Raising constructions in Nepali exhibit similar behavior: the pivot must be an S/A-argument in the nominative (52a) or ergative (52b); pivothood does not extend to O-arguments (52c) or dative experiencers (52d):⁸

- (52) Nepali (Bickel and Yādava 2000)
- a. ma [ø Harī-bāṭa piṭ-ī-na] lāg-ẽ.
1SG.NOM NOM H.-via beat-PASSIVE-INF take.up-PT.1SG
'I began to be beaten by Hari.'
 - b. ma [ø Hindī paḍh-na] lāg-ẽ.
1SG.NOM ERG H.:NOM study-INF take.up-PT.1SG
'I took up studying Hindi.'
 - c. *ma_i [Harī-le ø piṭ-na] lāg-ẽ.
1SG.NOM H.-ERG DAT beat-INF take.up-PT.1SG
Intended: 'I began to be beaten by Hari.'
 - d. *ma [ø yo kitāb man par-na] lāg-ẽ.
1SG.NOM DAT this book.NOM liking occur-INF take.up-PT.1SG
Intended: 'I began to like this book.'

The available data on Kashmiri present basically the same picture. In subject-to-object raising constructions (a.k.a. *accusativus*⁹ *cum infinitivo* or exceptional case marking), only the nominative-marked argument in (53a) has access to S/A-pivotality. The dative-marked experiencer in (53b) is banned from pivotality despite its discourse prominence noted in Section 2.

- (53) Kashmiri (Kachru *et al.* 1976)
- a. asi vuch ləḍki [ø akhbār
1PL.ERG see.PT.3SG.M boy.PL.NOM NOM newspaper.NOM
kin-ān].
sell-IPFV.PART
'We saw the boys selling newspaper.'
 - b. *me vuch Rām-as [ø bōchi lag-ān].
1SG.ERG see.PT.3SG.M R.-DAT DAT hunger(F).NOM feel-IPFV.PART
Intended: 'I saw Ram being hungry.'

Raising constructions involving light verbs as in Nepali are also found in Belhare, but here the syntax is ergative: the pivot must be the S/O argument (Bickel 1999a, 2004; Bickel and Nichols 2001). Therefore, in a sentence like the following, only the S or O argument of the complement clause can be understood as coreferential with the matrix S argument as reflected by the agreement morphology:

- (54) Belhare
- a. [ø khonj-ma] n-nui-ʔ-ni-ga.
NOM play-INF NEG-be.permitted-NPT-NEG-2[SG.S]
'You shouldn't play.'
 - b. [ø ø kit-ma] n-nui-ʔ-ni-ga.
ERG NOM fear-INF NEG-be.permitted-NPT-NEG-2[SG.S]
'You shouldn't be feared.' ('[s/he/they/I] shouldn't fear you.')
- Not*: 'You shouldn't fear [him/her/it/them]'

As a result, in an experiential role frame <experiencer, stimulus>, one would expect the less prominent role, i.e. the stimulus, to be the one that has access to the S/O pivot. This is exactly what one finds. (55) illustrates this for *experiencer-as-goal* constructions and (56) for *experiencer-as-possessor* constructions.

(55) Belhare

- a. [ŋka ø su-ma] nu-yu.
 1SG.NOM NOM sour-INF [3SG.S-]be.permitted-NPT
 ‘I like [the beer] sour.’ (literally, ‘[the beer] may be sour to me.’)
- b. *[ø iŋa su-ma] nui-ʔ-ŋa.
 NOM beer.NOM sour-INF be.permitted-NPT-1SG.S
 Intended: ‘I like [the beer] sour.’ (literally, ‘to me, [the beer] may be sour.’)

(56) Belhare

- a. [n-ris kat-ma]
 2SG.POSS-anger.NOM come.up-INF
 n-nui-ʔ-ni.
 [3SG-]NEG-be.permitted-NPT-NEG
 ‘You shouldn’t get angry’ (literally, ‘your anger shouldn’t come up.’)
- b. [*n-ris kat-ma]
 2SG.POSS-anger.NOM come.up-INF
 n-nui-ʔ-ni-ga.
 NEG-be.permitted-NPT-NEG-2[SG.S]
 Intended: ‘You shouldn’t get angry.’ (lit., ‘you shouldn’t let your anger come up’)

It is always the stimulus that qualifies as object in these constructions and thus only the stimulus (*iŋa* ‘beer’ in (55), *ris* ‘anger’ in (56)) can be cross-referenced by the matrix verb agreement morphology.¹⁰ The fact that the experiencer is morphologically downgraded and bears object case (nominative) in (55) does not make it a syntactic object in these construction. Thus, morphological downgrading is irrelevant for pivohood. This is in contrast with the Indo-Aryan data where it was precisely case morphology that co-defined what can and what cannot be pivot.

5.3. Participial relative constructions

In both Tibeto-Burman and Indo-Aryan languages one sometimes finds participial relative constructions that are constrained to a strict S/A pivot. This is so for example in Kiranti languages, where only an S or an A argument can be relativized on by active participles. Note that the pivot need not be agentive; it only needs to be more agentive than the other argument following the thematic hierarchy (as posited, e.g., by Van Valin and LaPolla 1997):

(57) Belhare

- a. asenle maʔi pikg-ar-he.
recently person.NOM [3SG.S-]fall-downwards-PT
'Recently a guy fell down.'
- a'. asenle ka-pikg-a-ba maʔi
recently ACT.PART-fall-downwards-M person.NOM
'the guy who fell down recently.' (Relativization on nominative S-theme)
- b. han-na i-cha n-takg-att-u-n-ga i?
2SG-ERG one-ADD NEG-receive-PT-3[SG]O-NEG-2[SG.A] Q
'Haven't you received anything?'
- b'. ka-tak-pa
ACT.PART-receive-M
'one who receives/received/will receive,' *not* 'what was/will be received' (Relativization on ergative A-recipient)

Experiencers have always access to this pivot even when they are morphologically downgraded in a *experiencer-as-goal* or a *experiencer-as-possessor* construction:

(58) Belhare

- a. ŋka cuŋ-ŋa mai-tar-he.
1SG.NOM cold/fever-ERG 1SG.O-[3SG.A-]bring-PT
'I've got fever.'
- a'. cuŋ-ŋa ka-tat-pa
cold/fever-ERG ACT.PART-bring-M
'the one who has got fever.'
- b. ŋka iŋa lim-yu
1SG.NOM beer.NOM [3SG.S-]be.delicious-NPT
'I like the beer.'
- b'. iŋa ka-lim-ba
beer ACT.PART-delicious-M
'one who likes/liked/will like the beer'
- c. u-ris kar-he
3SG.POSS-anger [3SG.S-]come.up-NPT
'S/he got angry'
- c'. ris ka-ta-ba
anger ACT.PART-come.up-M
'an angry person'

The same distribution of facts holds for Limbu (Michailovsky 1997), but with some experiential predicates of this language the ergative-marked stimulus of the pattern exemplified here by example (58a) and for Limbu by the examples in (23) above, is often absent or even nonreferential (cf. van Driem 1987:275). This calls into question whether the stimulus is at all a syntactic argument, and the relevant verbs

may in fact prove to be deponents, as argued by Weidert and Subba (1985) and Michailovsky (1997). If so, the morphologically downgraded experiencer is the only syntactic argument ('S').

Active participle constructions that are constrained to S/A pivots are also sometimes found among Indo-Aryan languages. In the Himalayan area, such a construction is described for Kashmiri (Wali and Koul 1997:65), but the relevant data on dative experiencers are lacking. Such data are available for a Southern Indo-Aryan language, Marathi. Here, dative experiencers have no access to the S/A-pivot (Pandharipande 1990). Nepali participial relativization is not restricted to any pivot. The relevant forms are better analyzed as plain attributive; cf., e.g., phrases like *Belhārā jāne bāṭo* 'the trail to go to Belhara' or *ma gaeko bāṭo* 'the trail I went'.

Maithili participial constructions are not subject to an S/A pivot either. However, unlike Nepali, they ban overt S/A-arguments in the nominative. If such an argument is to appear overtly, its case needs to be 'demoted' to the genitive (like in Hindi; Hook 1990b):

- (59) Maithili (Bickel and Yādava 2000)
- a. *[[Rām kə-l ge-l] kāj]
 R.NOM do-PART AUX-PART work
 Intended: 'the work done by Ram'
 - b. [[Rāmāk kə-l ge-l] kāj]
 R.-GEN do-PART AUX-PART work
 'the work done by Ram'

In this construction, dative experiencers are not treated like nominative S/A arguments and retain their original case:

- (60) Maithili (Bickel and Yādava 2000)
- [[Rām-kē nik lāg-al] cij]
 R.-DAT good feel-PART thing
 'the thing that Ram felt good about'

This suggests that morphologically downgraded experiencers do not share syntactic properties with canonically marked S/A arguments.

5.4. Converb constructions

The preceding comparisons suggest that morphologically downgraded experiencers generally have access to pivothood in Tibeto-Burman, but not in Indo-Aryan. And in line with this, in syntactically ergative constructions, morphological downgrading of experiencers to O-like arguments does not allow these same experiencers to access S/O-pivots in Belhare. Case morphology thus seems to be largely irrelevant for pivothood in Tibeto-Burman and highly relevant in Indo-Aryan. The Tibeto-Burman pattern is further exemplified by converb construction in Belhare. Unlike

in many other Himalayan languages, including Nepali and Kashmiri, Belhare converbs are not used for narrative clause chaining, but instead head manner adverbials modifying the main predicate. Again unlike in most other Himalayan languages (cf. (11b) and (13) from Nepali and (12) from Kashmiri), Belhare converbs strictly require identity of their (obligatorily covert) S/A argument with the matrix S/A-argument:

- (61) Belhare (Bickel 1997, 2004)
- a. \emptyset khatd-e yuŋ-sa mai-lur-he.
NOM bed-LOC sit-CONV 1SG.O-tell-PT
 ‘He told me while sitting on the bed.’
 - b. \emptyset dhol teĩ-sa la ŋŋ-us-e.¹¹
ERG drum beat-CONV dance 3NSG.S-dance-PT
 ‘They danced beating the drum.’
 - c. *un-na \emptyset teĩ-sa riŋs-e.
 3SG-ERG **NOM** beat-CONV [3SG.S-]sound-PT
Intended: ‘The drum sounded being beaten.’

As shown by (61a) and (61b), S and A arguments (associated with nominative and ergative case, respectively) satisfy the condition on the use of converbs. O arguments, as in (61c) do not. Experiencer arguments have unrestricted access to S/A pivot:

- (62) Belhare (Bickel 1997)
- a. cuŋ-ŋa \emptyset tas-sa=ro Dhankuta
 cold/fever-ERG **NOM** bring-CONV=FOC D.
 tas-e-ŋ.
 reach-PT[-3SG.O]-1SG.A
 ‘I reached Dhankuta even with this fever (=although I indeed had this fever).’
 - b. \emptyset hagliūa lu-sa thanŋ-har-e-ŋa.
NOM sweat.NOM perceptible-CONV go.up-TELIC-PT-1SG.S
 ‘I started to climb up in the heat.’
 - c. a-ppa la-har-e, uŋ,
 1SG.POSS-father.NOM [3SG.S-]return-TELIC-PT TQ
 u-ris kas-sa?
 3SG.POSS-anger.NOM come.up-CONV
 ‘My father went back angrily, didn’t he?’

Thus, like in the Kiranti participial constructions discussed in the preceding section, the experiencer has access to pivothood even if the argument is morphologically treated as an object or as a possessor. What is particularly noteworthy is that in the *experiencer-as-goal* construction of the type illustrated by (62a), the experiencer would trigger O-agreement in finite clauses (cf. example (22a) in Section 3). Yet for converbial constructions, the experiencer is not downgraded at all and counts as an

A argument syntactically. Also, note that in (62c), the coreferential S/A argument is not deleted in the converb clause but present in the form a possessive prefix (*u-* ‘his/her/its’) on the experiential noun. Converbs ban overt representatives of the S/A pivot only as independent constituents, not as affixes.

6. A typological contrast and its theoretical interpretation

The findings in the preceding suggest a systematic difference between morphologically downgraded experiencers in Indo-Aryan and Tibeto-Burman languages of the Himalayas. In all constructions involving syntactic pivots surveyed here, Indo-Aryan experiencers have access to an S/A-pivot only as long as they are not morphologically downgraded, i.e. only nominative and ergative experiencers can be pivots, but not dative experiencers. There is one exception and this is dative-triggered subject agreement in Shina. In the Tibeto-Burman languages surveyed, by contrast, experiencers have always access to S/A or A pivoothood, regardless of how they are treated morphologically. And, in turn, downgrading an experiencer morphologically does not let it access an S/O pivot, as it is found in Belhare light verb complementation. Again, there is one exception and this comes from a subset of experiencers in Tibetan and Kiranti languages that trigger regular O-agreement or no agreement at all.

This typological difference is in striking contrast with the areal convergence that has affected the morphological coding of experiencers in the Himalayas. As we saw in Section 4, the two coding types — *experiencer-as-goal* and *experiencer-as-possessor* — crosscut genetic boundaries and show a distribution that is better predicted by geographical than by genetic terms. The syntactic behavior of experiencers, by contrast, is with few exceptions better predicted by genetic affiliation than by geographical location.

An explanation for this might be found in the theoretical nature of case-marking and syntactic pivots. Case-marking is a fully transparent, overtly present feature of language; this makes it a readily accessible target of borrowing and structural copying (cf., among others, Trudgill 1992 or Johanson 1992). Syntactic pivots, by contrast, are constraints imposed on individual constructions. They often have no direct morphological reflex; one does not hear them, as it were. Pivots exert their power only through constraining how one can combine constituents and clauses and how referents can be tracked through the combinations resulting therefrom.

This difference between case-marking and syntactic pivots can be explicated formally in the following way. Case marks a relation between an argument and the predicate in which this plays some role. Whether case frames are lexically idiosyncratic or inherited from some general constructional schema, they are essentially a property of the *valence structure of a predicate*. In the experiential predicates under review, valence structures are to a large extent inherited from the *experiencer-as-goal* and *experiencer-as-possessor* constructional templates that characterize the

Himalayan area; other predicates inherit valence structures from a standard *ergative-nominative* or *nominative-only* case frame.

Pivots, by contrast, are properties of *constructions above the predicate level* (Van Valin and LaPolla 1997). Instead of a relation between an argument and a predicate, pivots characterize the relation between an argument and a particular construction. Pivots pick out one argument and make this argument the target of whatever is the syntactic effect of the construction, e.g., control of verb agreement morphology, 'raising', relativization, etc.

This can be formalized in any theory that makes a principled distinction between relational syntactic specifications on the predicate level (valence) and on constructional levels above the predicate (pivots). I choose here Construction Grammar (Lakoff 1987, Fillmore 1988, Goldberg 1995, Fried 1998, Kay and Fillmore 1999, etc.), but similar formalization is possible in HPSG, RRG, and also in LFG if one adopts, with Falk (2000), the pivot-function for this theory.

- (63) Belhare

ɲka hani-niŋa ka-tiu-s-ik-kha.
1SG.NOM 2PL.POSS-mind.NOM 1SG.O-spend-TRANS.PERF-2PL.A-PERF
'You liked me.'

$$\begin{array}{l}
\text{agr_constr} \\
\text{syn} \quad \left\{ \begin{array}{l} \text{rel} \left[\begin{array}{ll} \text{gf} & \text{A} \\ \text{sem} & \#a \end{array} \right] \\ \text{int} \left[\begin{array}{ll} \text{mph} & \text{'-ik'} \\ \text{cat} & \text{V} \end{array} \right] \end{array} \right\} \left[\begin{array}{l} \text{rel} \left[\begin{array}{ll} \text{gf} & \text{PO} \\ \text{sem} & \#u \end{array} \right] \\ \text{int} \left[\begin{array}{ll} \text{mph} & \text{'ka-'} \\ \text{cat} & \text{N} \end{array} \right] \end{array} \right] \\
\text{val} \quad \left\{ \begin{array}{l} \text{lex} \text{'-niüa ti-'} \\ \text{syn} \left[\text{int} \left[\text{cat V} \right] \right] \\ \text{val} \left[\text{syn} \left\{ \begin{array}{l} \text{rel} \left[\begin{array}{ll} \text{gf} & \text{POSS} \\ \text{sem} & \#a \end{array} \right] \\ \text{int} \left[\begin{array}{ll} \text{mph} & \text{'hani-'} \\ \text{cat} & \text{N} \end{array} \right] \end{array} \right\} \right], \left[\begin{array}{l} \text{rel} \left[\begin{array}{ll} \text{gf} & \text{O} \\ \text{sem} & \#u \end{array} \right] \\ \text{int} \left[\begin{array}{ll} \text{mph} & \text{'NOM'} \\ \text{cat} & \text{N} \end{array} \right] \end{array} \right] \right\} \right] \\ \text{sem} \left\{ \left[\begin{array}{ll} \text{frame} & \text{EXPERIENCE} \\ \text{args} & \{ \#a, \#u \} \end{array} \right], \left[\begin{array}{ll} \text{frame} & \text{BODY PART} \\ \text{args} & \{ \#a \} \end{array} \right] \right\} \end{array} \right\} \\
\text{sem} \quad \dots
\end{array}$$

The attribute–value matrix in (63) represents an agreement construction in Belhare of the type exemplified by (46) above. In the formalization, the predicate-level valence information is spelled out in some detail although most of its content is inherited from a more general experiencer construction, here from the *experiencer-as-possessor* construction. Morphological specifications appear in single quotes and are meant to be pointers to paradigm templates. ‘#’ marks unificational indices.

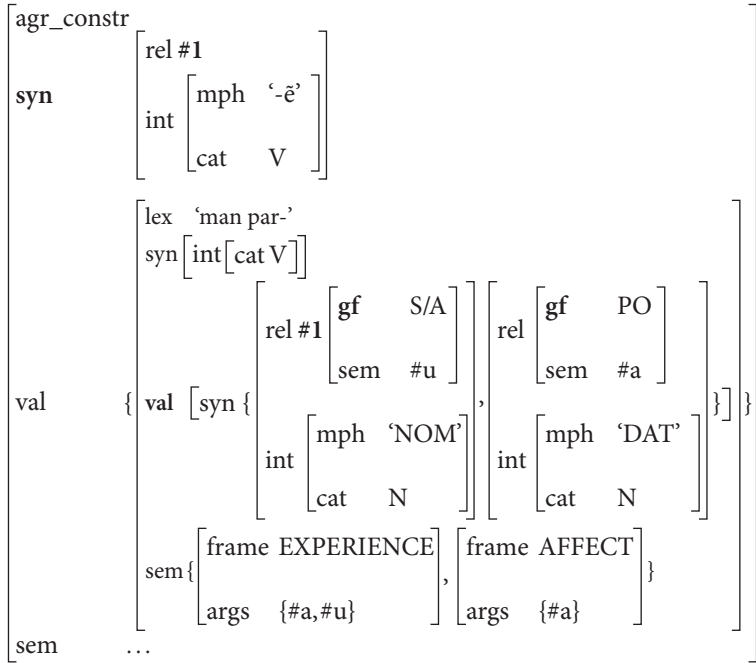
Case is a property of elements in the predicate valence (*val*), and these elements are in specific relations (*rel*) to the predicate: the relation of one element is specified by the grammatical function (*gf*) POSS (possessor) and is linked to the semantic argument indexed as ‘a’; the other relation is defined by the grammatical function O (object) and is linked to the semantic argument indexed as ‘u’. Independently of this, the agreement construction has its own relational properties as part of its syntactic (*syn*) specification. These specifications relate the construction to specific arguments: they pick out specific arguments as controllers of verb agreement morphology, once an A-argument (*gf* = A, linked to the argument indexed as ‘a’) and once a PO-argument (*gf* = PO, linked to an argument indexed as ‘u’). Here, PO stands for ‘primary object’ in Dryer’s (1986) sense. While verbs agree with POs only, case morphology does not distinguish between primary and secondary objects and the relevant *gf* is therefore called simply ‘O’ (cf. Bickel 2003)

Crucially, the *rel*-specifications in the valence of the predicate is independent of the *rel*-specifications in the agreement construction. In a sense, semantic arguments are linked twice: once to the grammatical functions listed in the valence frame of the predicate, and once to the grammatical function controlling agreement. Their ultimate identity is guaranteed by the shared indices in semantic structure. (But note that the constructional semantics of Belhare agreement allows for other than identificational relationships between agreement markers and their controller NPs; see Bickel 2000a)

The relationship between the different *rel*-specifications is different in most of Indo-Aryan (and, as argued in Bickel 1999a, in most of Indo-European in general); see (64). Here, arguments defined in the semantic structure of individual verb lexemes are linked only once to a grammatical function, and this is the function defined in the valence frame inherited from the *experiencer-as-goal* construction. The argument indexed as ‘u’ is linked to the S/A (‘subject’) grammatical function. Unlike in (63), this *rel*-specification is coindexed (by ‘#1’) with the constructional pivot, i.e. the *rel*-specification of the agreement construction. As a result, only those arguments can ever trigger agreement that bear the specification associated with the *rel*-specification in verbal valence. Since this involves a case feature (here, ‘NOM’), case choices defined by valence frames systematically constrain what can be pivot.

Explicated this way, the crucial difference between Tibeto-Burman and Indo-Aryan syntactic pivots is that in Tibeto-Burman they are linked to semantic arguments (*participant roles* in Goldberg’s 1995 terms) directly and independently of verbal valence frames (*argument roles* in her terms) whereas in Indo-Aryan they are identified with elements listed in verbal valence frames and are therefore sensitive

- (64) Nepali
 tim-ilā-ī ma man par-ẽ.
 2MH.DAT 1SG.NOM liking occur-PT.1SG
 ‘You liked me.’



to the properties of these elements.¹² I call the identificational principle that is characteristic of most Indo-Aryan — indeed, Indo-European — constructions the *Integrativity Principle* (Bickel 1999a, 2001):

- (65) *The Indo-European Integrativity Principle*
 If a construction is constrained by a syntactic pivot, this pivot is likely to be identified with an element listed in predicate-level valence frames (rather than directly in semantic argument structure).

This principle is genetically stable in the sense that it does not appear to easily spread across genetic boundaries into Tibeto-Burman languages.

7. Conclusions

In the literature on morphologically downgraded experiencers, it is often claimed that these experiencers have subject properties, i.e. that there are true *nonnominative* (or *nonergative*) subjects. Such a claim hinges of course on what one takes to

be subject properties. If understood as topicality in discourse, the morphologically downgraded experiencers of all Himalayan languages under review manifest this property — a point well taken for Nepali by Ichihashi-Nakayama (1994). This suggests that experiencers rank higher than stimuli on some hierarchy. This hierarchy is probably best explicated, with Givón (1984), as a discourse-driven hierarchy of topicality potentials.

But if subject properties are taken to refer to rigid syntactic constraints in the sense of pivots, then the Indo-Aryan and Tibeto-Burman languages of the Himalayas part from each other: few exceptions aside, morphologically downgraded experiencer have access to syntactic pivothood only in Tibeto-Burman, not in Indo-Aryan. The reason for resistance against structural copying and substratal effects in this domain may be found in the nature of the typological difference, which rests on whether or not pivots are coindexed with valence elements on the predicate level. This difference has no direct morphological reflex, but is instead grounded in the mechanisms of the syntax–semantics interface. As such it is relatively abstract and nontransparent.

The resistance against areal spread of syntactic pivot properties contrasts with the spread of constructional templates that downgrade experiencers in case-marking. Although they vary in frequency and importance, their distribution is better predicted by geography than by phylogeny. As we saw in Section 4, the Himalayan region is at the intersection of two constructional types, which both spread along broad arcs: one, the *experiencer-as-goal* type spreads from South Asia into Europe; the other, the *experiencer-as-possessor* type, spreads from South East Asia into the Himalayas.

Abbreviations

A ‘actor (most agent-like argument) of transitives’, ABL ‘ablative’, ACT ‘active’, ART ‘article’, CLASS ‘classifier’, CONV ‘converb’, DAT ‘dative’, AUX ‘auxiliary’, DEM ‘demonstrative’, ERG ‘ergative’, F ‘feminine’, FOC ‘focus’, FUT ‘future’, GEN ‘genitive’, H ‘honorific’, INCL ‘inclusive (of addressee)’, INF ‘infinitive’, IPFV ‘imperfective’, MH ‘mid-honorific’, NEG ‘negative’, NH ‘nonhonorific’, NOM ‘nominative’, NONNOM ‘nonnominative’, NPT ‘non-past’, NSG ‘nonsingular’, NZR ‘nominalizer’, O ‘object (most patient-like argument of transitives)’, PART ‘participle’, PERF ‘perfect’, POSS ‘possessive’, PT ‘past’, M ‘masculine’, Q ‘question’, REFL ‘reflexive’, REM ‘remote’, TQ ‘tag question (‘isn’t it’), S ‘single argument of intransitives’, SG ‘singular’, TRANS ‘transitive’; ‘=’ denotes a clitic boundary; elements in square brackets are zero-marked (i.e., implied by paradigmatic opposition only).

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Notes

1. I use the term *PIVOT* for specific sets of arguments that are targeted by a syntactic construction as being referentially controlled, zeroed, relativized, etc. Most prominent sets are {S,A} ('subjects') and {S,O}, where S designates the single argument of intransitives (including passives and antipassives), and A and O designate the most agent-like and the most patient-like argument of transitives, respectively (cf. Dixon 1994).
2. See Bickel (1999b) for a survey of indexability effects in Himalayan languages, and Bickel and Nichols (in press) for general typological discussion.
3. But note that statistical analysis of actual discourse data is pending.
4. See Bickel 1997 for a detailed semantic and syntactic analysis of the expressions involved in Belhare.
5. The semantic difference between the two constructions needs further research. Tej Ratna Kansakar (p.c.) suggests that the dative implies a more static and the genitive a more processual conceptualization of the experience.
6. Balti definite knowledge marking may turn out to be based on the same notions rather than simply on the speaker's knowledge. This awaits further research.
7. The controller of control verbs depends on their semantics, cf., e.g., English *to promise* with subject control and *to order* with object control. There is no way in which the nature of the controller could reveal anything about pivothood or 'subjecthood' as is sometimes assumed in the literature (e.g., Gupta and Tuladhar 1979/80, Wallace 1985, Masica 1991). If a dative experiencer verb can be used as a control verb and if its experiencer argument can control pivot reference, this is a fact about the lexical semantics of the verb just like it is a lexical (or indeed lexico-semantic) fact that it is the object of *to order* and the subject of *to promise* that control pivot reference.
8. Gupta and Tuladhar (1979/80) and Wallace (1985) claim that Nepali also has subject-to-object raising construction. I disagree because unlike in true subject-to-object raising, the relevant examples allow overt realization of the lower subject. See Bickel and Yadava (2000) for examples and discussion.
9. Except that Indo-Aryan does not use an accusative marker for its objects but rather the nominative (if low on the indexability hierarchy) or the dative (if high on the hierarchy), as explained above.
10. And since at the same time the stimulus qualifies as an S-argument for agreement pur-

poses I termed these constructions UNACCUSATIVE in Bickel (1997). Weidert and Subba (1985) use the term MEDIOPASSIVE for experiencer-as-goal constructions with ergative-marked stimuli in Limbu (exemplified above by (23)).

11. Lexico-syntactic units in Belhare may consist of two distinct morphological words (see Bickel 2003).

12. This difference can easily be modeled in Competing Motivations Theory (DuBois 1985) or Optimality Theory (Prince and Smolensky 1993) where there are two competing hierarchies for pivothood determination, one defined on argument structure and one defined on valence structure. In Tibeto-Burman, the argument structure hierarchy outranks the valence structure hierarchy; in Indo-Aryan, the valence structure hierarchy outranks the argument structure hierarchy (cf. Primus 1999 for a related proposal where case-determination effects on pivothood are modeled by morphological case hierarchies).

References

- Babakae, Vasilij Danilovich, 1961. *Assamskij jazyk*. Moscow: Izdatel'stvo Vostochnoj Literatury.
- Bailey, Thomas Grahame, 1924. *Grammar of the Shina (Ṣiṇā) language*. London: Royal Asiatic Society.
- Bashir, Elena, 1985. "Toward a semantics of the Burushaski verb". In *Proceedings of the conference on participant roles: South Asia and adjacent areas*, Arlene K. Zide, David Magier and Eric Schiller (eds.), pp. 1–32. Bloomington: Indiana University Linguistics Club.
- Bickel, Balthasar, 1997. "The possessive of experience in Belhare". In *Tibeto-Burman languages of the Himalayas*, David Bradley (ed.), pp. 135–55. Canberra: Pacific Linguistics (A-86).
- Bickel, Balthasar 1999a. Grammatical relations, agreement, and genetic stability. Ms., University of California, Berkeley; <http://www.uni-leipzig.de/~bickel/research/papers>.
- Bickel, Balthasar 1999b. Indexability effects in Himalayan languages. Presented at the 4th Meeting of the European Project on Himalayan Languages, Heidelberg, June 1998, and at the Workshop on Himalayan languages, Santa Barbara, June 1999.
- Bickel, Balthasar, 2000a. "On the syntax of agreement in Tibeto-Burman". *Studies in Language* 24: 583–609.
- Bickel, Balthasar, 2000b. "Person and evidence in Himalayan languages". *Linguistics of the Tibeto-Burman Area* 23: 1–12.
- Bickel, Balthasar 2001. Genetic stability in the contact zone of Sino-Tibetan and Indo-European. Handout of talk presented at the 23rd Annual Meeting of the German Society for Linguistics, Leipzig, March 28, 2001.
- Bickel, Balthasar, 2003. "Belhare". In *The Sino-Tibetan languages*, Graham Thurgood and Randy J. LaPolla (eds.), pp. 546–70. London: Routledge.
- Bickel, Balthasar, 2004. "Hidden syntax in Belhare". In *Himalayan languages*, Anju Saxena (ed.), pp. 141–90. Berlin: Mouton de Gruyter.
- Bickel, Balthasar, Bisang, Walter and Yādava, Yogendra P., 1999. "Face vs. empathy: the social foundations of Maithili verb agreement". *Linguistics* 37: 481–518.
- Bickel, Balthasar and Nichols, Johanna, 2001. "Syntactic ergativity in light verb complements". *Proceedings of the 27th Annual Meeting of the Berkeley Linguistics Society*.

- Bickel, Balthasar and Nichols, Johanna, in press. "Inflectional morphology". In *Language typology and syntactic description*, Timothy Shopen (ed.), Cambridge: Cambridge University Press (revised second edition).
- Bickel, Balthasar and Yadava, Yogendra P., 2000. "A fresh look at grammatical relations in Indo-Aryan". *Lingua* 110: 343–73.
- Bielmeier, Roland, 2000. "Syntactic, semantic, and pragmatic-epistemic functions of auxiliaries in Western Tibetan". *Linguistics of the Tibeto-Burman Area* 23: 79–125.
- Bosson, Georg, 1998. "Le marquage de l'expérience dans les langues de l'Europe". In *Actance et valence dans les langues de l'Europe*, Jack Feuillet (ed.), pp. 259–94. Berlin: Mouton de Gruyter.
- Bresnan, Joan, 2001. *Lexical-functional Syntax*. London: Blackwell.
- Bresnan, Joan and Kanerva, Jonni, 1989. "Locative inversion in Chichewa: a case study in factorization in grammar". *Linguistic Inquiry* 20: 1–50.
- Bugenhagen, Robert D., 1990. "Experiential constructions in Mangap-Mbula". *Australian Journal of Linguistics* 10: 183–215.
- Crain, Laura D. 1992. *Clause Chaining in Nepali Discourse*. Ph. D. Dissertation, University of California at Los Angeles.
- Croft, William, 1998. "Event structure in argument linking". In *The projection of arguments*, Miriam Butt and Wilhelm Geuder (eds.), pp. 21–63. Stanford: CSLI.
- DeLancey, Scott, 1990. "Ergativity and the cognitive model of event structure in Lhasa Tibetan". *Cognitive Linguistics* 1: 289–321.
- Dixon, Robert M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Dowty, David R., 1991. "Thematic proto-roles and argument selection". *Language* 67: 547–619.
- Driem, George van, 1987. *A grammar of Limbu*. Berlin: Mouton de Gruyter.
- Driem, George van, 1993. "The Newar verb in Tibeto-Burman perspective". *Acta Linguistica Hafniensia* 26: 23–43.
- Dryer, Matthew S., 1986. "Primary objects, secondary objects, and antidative". *Language* 62: 808–45.
- DuBois, John W., 1985. "Competing motivations". In *Iconicity in syntax*, John Haiman (ed.), Amsterdam: Benjamins.
- Ebert, Karen H., 1997. *Camling*. München: LINCOM.
- Falk, Yehuda N., 2000. "Pivots and the theory of grammatical functions". In *Proceedings of the LFG00 Conference*, Miriam Butt and Tracy Holloway King (eds.), <http://cslipublications.stanford.edu/LFG/5/lfg00.html>.
- Fillmore, Charles J., 1988. "The mechanisms of 'Construction Grammar'". *Proceedings of the 14th Annual Meeting of the Berkeley Linguistics Society* 35–55.
- Foley, William A. and Van Valin, Robert D. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- Fried, Mirjam 1998. *Construction Grammar and the syntax-semantics interface*. Book ms., University of California, Berkeley.
- Gair, James W., Lust, Barbara, Subbarao, K. V. and Wali, Kashi, 2000. "Introduction". In *Lexical anaphors and pronouns in Selected South Asian languages*, Barbara Lust, Kashi Wali, James W. Gair and K. V. Subbarao (eds.), pp. 1–46. Berlin.
- Genetti, Carol, 1994. *A descriptive and historical account of the Dolakha Newari dialect*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Georg, Stefan, 1996. *Marphatan Thakali*. München: LINCOM Europa.

- Givón, T. (ed.), 1983. *Topic continuity in discourse: a quantitative cross-language study*. Amsterdam: Benjamins.
- Givón, T., 1984. *Syntax: a functional-typological introduction*, Vol. I. Amsterdam: Benjamins.
- Goldberg, Adele, 1995. *Constructions: a Construction Grammar approach to argument structure*. Chicago: The University of Chicago Press.
- Gupta, Sagar Mal and Tuladhar, Jyoti, 1979/80. "Dative-subject constructions in Hindi, Nepali and Marathi and relational grammar". *Contributions to Nepalese Studies* 7: 119–53.
- Gurtu, Madhu, 1992. *Anaphoric relations in Hindi and English*. Delhi: Munshiram Manoharlal.
- Hale, Austin 1997. Actors, Undergoers and Sites in Newari. Handout of talk given at the University of Zürich, April 23, 1997.
- Hook, Peter E., 1990a. "A note on expressions of involuntary experience in Shina". *Bulletin of the School of Oriental and African Studies* 53: 77–82.
- Hook, Peter E. and Koul, Omkar N., 1992. "Reflexive possessives in Kashmiri and Hindi–Urdu: evidence for an antecedence hierarchy". *South Asian Language Review* 2: 68–83.
- Hook, Peter E. 1990b. "Experiencers in South Asian languages: a gallery". In *Experiencer subjects in South Asian languages*, Manindra K. Verma and K. P. Mohanan (eds.), pp. 319–34. Stanford: CSLI.
- Ichihashi-Nakayama, Kumiko, 1994. "On dative 'subject' constructions in Nepali". In *Aspects of Nepali grammar*, Carol Genetti (ed.), pp. 41–76. Santa Barbara: Dept. of Linguistics, UC Santa Barbara (Papers in Linguistics 6).
- Jackendoff, Ray, 1987. "The status of thematic relations in linguistic theory". *Linguistic Inquiry* 18: 369–411.
- Johanson, Lars, 1992. *Strukturelle Faktoren in türkischen Sprachkontakten*. Stuttgart: Steiner.
- Kachru, Yamuna, Kachru, Braj B. and Bhatia, Tej K., 1976. "The notion 'subject': a note on Hindi–Urdu, Kashmiri, and Panjabi". In *The notion of subject in South-Asian languages*, Manindra K. Verma (ed.), pp. 79–109. Madison: South Asian Studies Publications Series, University of Wisconsin.
- Kay, Paul and Fillmore, Charles J., 1999. "Grammatical constructions and linguistic generalizations: the *What's X doing Y?* construction". *Language* 75: 1–33.
- Klaiman, Miriam H., 1979. "On the status of the subjecthood hierarchy in Hindi". *International Journal of Dravidian Linguistics* 8: 17–31.
- Klaiman, Miriam H., 1980. "Bengali dative subjects". *Lingua* 51: 275–95.
- Lakoff, George, 1987. *Women, fire, and dangerous things: what categories reveal about the mind*. Chicago: Chicago University Press.
- Mahajan, Anoop 1990. The A/A' distinction and movement theory. Ph.D. dissertation, MIT.
- Mahapatra, B.P., 1979. *Malto: an ethnosemantic study*. Mysore: Central Institute of Indian Languages.
- Masica, Colin P., 1976. *Defining a linguistic area (South Asia)*. Chicago: The University of Chicago Press.
- Masica, Colin P., 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Matisoff, James A., 1986. "Hearts and minds in South-East Asian languages and English: an essay in the comparative lexical semantics of psycho-collocations". *Cahiers de linguistique asie-orientale* 15: 5–57.
- McElhanon, K.A., 1975. "Idiomaticity in a Papuan (non-Austronesian) language". *Kivung* 8: 103–44.

- McElhanon, K.A. 1977. "Body image expressions in Irianese and Papua New Guinea languages". *Irian* 6: 3–27.
- McElhanon, K.A., 1992. "On the concept of person". In *The language game: papers in memory of Donald C. Laycock*, Tom Dutton, Malcolm Ross and Darrell Tryon (eds.), Canberra: Pacific Linguistics (PL-C 110).
- Michailovsky, Boyd, 1988. *La langue hayu*. Paris: CNRS.
- Michailovsky, Boyd, 1997. "Catégories verbales et intransitivité duale en Limbu". *Studi Italiani di Linguistica Teorica e Applicata* 26: 307–25.
- Mishra, Mithilesh, 1990. "Dative/experiencer subjects in Maithili". In *Experiencer subjects in South Asian languages*, Manindra K. Verma and K.P. Mohanan (eds.), pp. 105–17. Stanford: CSLI.
- Noonan, Michael, 1992. *A grammar of Lango*. Berlin: Mouton de Gruyter.
- Noonan, Michael 1999. Recent language contact in the Nepal Himalaya. Ms., University of Wisconsin-Milwaukee.
- Noonan, Michael, 2003. "The Chantyal language". In *The Sino-Tibetan languages*, Randy J. LaPolla and Graham T. Thurgood (eds.), pp. 315–35. London: Routledge.
- Osada, Toshiki, 1999. "Experiential constructions in Mundari". *Gengo kenkyu* 115: 51–76.
- Pandharipande, Rajeshwari, 1990. "Experiencer (dative) NPs in Marathi". In *Experiencer subjects in South Asian languages*, Manindra K. Verma and K.P. Mohanan (eds.), pp. 161–79. Stanford: CSLI.
- Primus, Beatrice, 1999. *Cases and thematic roles*. Tübingen: Niemeyer.
- Prince, Alan and Smolensky, Paul 1993. Optimality Theory. Technical Report No. 2, Rutgers University Center for Cognitive Science.
- Ramaswami, N., 1982. *Brokskat grammar*. Mysore: Central Institute of Indian Languages.
- Rangan, K., 1975. *Balti phonetic reader*. Mysore: Central Institute of Indian Languages.
- Read, Alfred Frank Charles, 1934. *Balti grammar*. London: The Royal Asiatic Society.
- Reh, Mechthild, 1998. "The language of emotion: an analysis of Dholuo on the basis of Grace Ogot's novel *Miaha*". In *Speaking of emotions: conceptualisation and expression*, Angeliki Athanasiadou and Elzbieta Tabakowska (eds.). Berlin: Mouton de Gruyter.
- Sharma, Mukunda Madhava, 1963. *Assamese for all*. Jorhat: Asam Sahitya Sabha.
- Shibatani, Masayoshi and Pardeshi, Prashant 1999. Dative-subject constructions in South Asian languages. Ms., Kobe University.
- Sridhar, S.N., 1976. "Dative subject, rule government, and relational grammar". *Studies in the Linguistic Sciences* 6: 130–51.
- Tournadre, Nicolas, 1996. *L'ergativité en tibétain*. Louvain: Peeters.
- Tournadre, Nicolas, 2001. "Final auxiliary verbs in literary Tibetan and the dialects". *Linguistics of the Tibeto-Burman Area* 24: 49–111.
- Trudgill, Peter, 1992. "Dialect typology and social structure". In *Language contact*, Ernst H. Jahr (ed.), pp. 195–211. Berlin.
- Van Valin, Robert D., Jr., 1995. "Towards a functionalist account of so-called extraction constraints". In *Complex structures: a functionalist perspective*, Betty Devriendt, Louis Goossens and Johan van der Auwera (eds.), pp. 29–60. Berlin: Mouton de Gruyter.
- Van Valin, Robert D., Jr., and LaPolla, Randy J., 1997. *Syntax: structure, meaning, and function*. Cambridge: Cambridge University Press.
- Van-Bik, Kenneth, 1998. "Lai psycho-collocations". *Linguistics of the Tibeto-Burman Area* 21.1: 201–33.

- Versalainen, Olavi and Versalainen, Marja, 1980. *Clause patterns in Lhomi*. Canberra: Pacific Linguistics (B-53).
- Wali, Kashi, Koul, O.N., Hook, P.E. and Koul, A.K., 2000. "Lexical anaphors and pronouns in Kashmiri". In *Lexical anaphors and pronouns in selected South Asian languages*, Barbara C. Lust, Kashi Wali, James W. Gair and K.V. Subbarao (eds.), pp. 471–512. Berlin: Mouton de Gruyter.
- Wali, Kashi and Koul, Omkar N., 1997. *Kashmiri: a cognitive-descriptive grammar*. London: Routledge.
- Wallace, William D. 1985. Subjects and subjecthood in Nepali: an analysis of Nepali clause structure and its challenges to Relational Grammar and Government & Binding. Ph. D. dissertation, University of Illinois, Urbana-Champaign.
- Weidert, Alfons and Subba, Bikram, 1985. *Concise Limbu grammar and dictionary*. Amsterdam: Lobster Publications.
- Yadava, Yogendra P., 1999. "The complexity of Maithili verb agreement". *The Yearbook of South Asian Linguistics* 1999: 139–52.
- Zide, Arlene R. K., 1990. "Cislocative, affectiveness, and the experiencer subject in Gorum". In *Experiencer subjects in South Asian languages*, Mahindra K. Verma and K.P. Mohanan (eds.), pp. 343–54. Stanford.
- Zoller, Claus Peter, 1983. *Die Sprache der Rang Pas von Garhwal (Raṅ Po Bhāṣa)*. Wiesbaden: Harrassowitz.

CHAPTER 5

Oblique-case subjects in Tsez

Bernard Comrie

1. Introduction

The Tsez language belongs to the Tsezic group of languages within the Nakh-Daghestanian (Northeast Caucasian, East Caucasian) language family; in the earlier literature it is often referred to by its Georgian name Dido. Tsez is spoken by perhaps 14,000 speakers, mainly in the west of the Republic of Daghestan (van den Berg 1995:8). The material on Tsez presented below derives primarily from fieldwork conducted in cooperation with Maria Polinsky, with the help of Ramazan Rajabov as a native-speaker research assistant during the early part of our work and with the special assistance of Arsen Abdulaev as a native-speaker in more recent years. The only published, reasonably detailed study of the language is Imnajašvili (1963). The present chapter is concerned primarily with the Tsez language itself, although occasionally reference will be made to other Tsezic languages, in order to show how closely related languages can sometimes differ in terms of the points that are of interest to present considerations; such reference will be especially to Hunzib and Bezhta, the only two other Tsezic languages for which reasonably detailed modern work on syntax has been carried out. (For Hunzib, see van den Berg (1995). Bezhta material is based primarily on my own fieldwork with Madjid Khalilov.)

Before entering into the details of Tsez clause structure in Section 2, it is necessary to clarify some preliminary points. The title of the conference to which this chapter was originally presented includes reference to “nonnominative subjects”, but the application of this terminology is far from straightforward in the case of Tsez. First, Tsez has a rather consistent ergative-absolutive case-marking system, which means that, in the terminology to which I am accustomed, the language does not have a case that can be called nominative, rather the citation form of a noun is its absolutive case. There is an alternative terminology, used especially by linguists from Moscow State University working on languages of Daghestan, according to which the citation form is called the nominative, i.e. the overall case-marking system would be called ergative-nominative. I will interpret the intent of the terminology occurring in the title of the conference with respect to Tsez as asking about subjects in Tsez that do not occur in the case that I will call absolutive. All other cases of Tsez will be subsumed under the term oblique.

But for Tsez the term “subject” is also problematic. The notion of subject refers to a grammatical relation. A grammatical relation must be justified language-internally in terms of syntactic tests that identify a particular syntactic position in clause struc-

ture that has uniform syntactic properties. Moreover, for the grammatical relation in question to be called subject it must show at least a substantial overlap with subjects of translation equivalents in other languages (Comrie 1989: 66–70). This topic is discussed in detail in Section 3. In Section 2, I present details on the structure of clauses in Tsez primarily in terms of their morphological marking, especially case-marking and semantics, leaving open for the time being whether any particular noun phrase should be assigned the grammatical relation subject or not. In Section 3, it will become apparent that the Tsez translation equivalents of English subjects often share some, but not all, of the syntactic properties of clear instances of subjects in Tsez.

2. Clause types in Tsez

Like most Nakh-Daghestanian languages, Tsez has a number of distinct clause types, distinguished from one another syntactically (for instance, in terms of transitivity) and/or semantically (for instance in terms of volitionality). The aim of this section is to present the major clause types, thus setting out the data that will be relevant for the more theoretical discussion of Section 3.

The intransitive clause has a single argument in the absolutive case, which, as noted above, is the citation form in Tsez. If the verb can show agreement, then it agrees in gender and number with this single argument. Gender agreement of verbs in Tsez is restricted to verbs with an initial vowel (and there are even a few verbs beginning with a vowel that show no agreement), i.e. verbs beginning with a consonant show no agreement. Agreement is shown by means of a consonant prefix, distinguishing four genders in the singular and two in the plural. The genders are identified by means of the roman numerals I–IV (with II–IV merging in the plural). Gender I contains all and only nouns denoting male humans. Gender II contains all nouns denoting female humans and also a certain number of inanimate nouns. Gender III contains all nouns denoting animals and also a large number of inanimate nouns. Gender IV contains only inanimate nouns. The agreement prefixes corresponding to the genders and numbers are shown in Table 1.

The usual word order in Tsez is verb-final, although in principle all permutations of major constituents are possible. An example of an intransitive clause is given in (1).¹

Table 1. Gender–number agreement prefixes in Tsez

Gender	Singular	Plural
I	Ø-	b-
II	y-	r-
III	b-	r-
IV	r-	r-

- (1) is b-exu-s.
 bull.ABS III-die-PSTWIT
 'The bull died.'

It should be noted that Tsez, unlike Hunzib (van den Berg 1995: 124) and Bezhta, does not have intransitive verbs that take their sole argument in the ergative case. Thus the same clause type as in (1), with a patient-like (unaccusative) single argument, is also found in (2), with an agent-like (unergative) single argument.

- (2) ečru žek'u qoqoɬi-s.
 old man.ABS laugh-PSTWIT
 'The old man laughed.'

The basic clause type for two-place predicates is the ergative clause, in which the more agent-like argument appears in the ergative case, the more patient-like argument in the absolutive case. If the verb can show agreement, it agrees with the absolutive argument, as in (3).

- (3) žek'-ā bišwa r-ac'-xo.
 man-ERG food.ABS IV-eat-PRS
 'The man is eating the food.'

Before leaving this clause type, a few words need to be said about the ergative case. Most Nakh-Daghestanian languages, including some Tsezic languages, have an ergative case that is distinct from all other cases. In Tsez, for most nouns the case used in the ergative clause type is identical to one of the local cases, the inessive. However, a small number of Tsez nouns having an oblique stem ending in *-o* and distinct from the absolutive use the oblique stem, often in free variation with the inessive-like form in *-ā*, as their ergative. On this basis, I gloss this case uniformly as ergative, whether or not it is identical to the inessive.

One of the ways in which semantic factors influence clause types in Tsez is that in certain verbal aspects, the ergative construction as illustrated in (3) is replaced, either optionally or obligatorily, by the so-called biabsolutive clause type, in which both agent- and patient-like arguments appear in the absolutive case. This occurs only with certain periphrastic aspect forms, and in these the lexical verb agrees with its patient-like argument, while the auxiliary verb agrees with its agent-like argument, as in (4)–(5).

- (4) kid/kidb-ā bišwa r-ac'-xo zow-si.
 girl.ABS/-ERG food.ABS IV-eat-IPVCVB be-PSTWIT
 'The girl was eating the food.'
- (5) kid bišwa r-ac'-xo y-ič-āsi yoɬ.
 girl.ABS food.ABS IV-eat-IPVCVB II-become-RES be.PRS
 'The girl is still engaged in eating the food.'

In the bipartite periphrastic construction of (4), the agent-like argument may appear either in the ergative or the absolutive. In the tripartite periphrastic construction of (5), only the absolutive is possible.

Like most Nakh-Daghestanian languages, Tsez has a distinct construction used with experiencer verbs, the so-called affective clause type. While different experiencer verbs can take different cases for the experiencer, the examples used here will illustrate the use of the lative, a case also used for recipients and for motion towards. In the Tsez translation equivalent of an English sentence like ‘the shepherd saw the calf’, the experiencer appears in the lative case, the stimulus appears in the absolutive case, and if the verb can show agreement it agrees with the stimulus — it will be noted that there is a general, but not quite exceptionless principle in Tsez that agreement is with absolutives, a point that will arise again in Section 3. This is illustrated by sentence (6).

- (6) aħo-r meši b-ikway-si.
 shepherd-LAT calf.ABS III-see-PSTWIT
 ‘The shepherd saw the calf.’

One question that arises in connection with the affective clause type is whether the experiencer noun phrase in the affective construction is really an argument of the clause, rather than an adjunct. This question is not straightforward, since Tsez does allow the omission of noun phrases that are retrievable from context, and thus mere omissibility cannot be used as a secure criterion for argumenthood. In all of the clause-types discussed, the absolutive noun phrase presumably is an argument, since it triggers verb agreement (a sufficient, though not a necessary, criterion for argument status). In the ergative construction, the ergative noun phrase does not trigger agreement and can be omitted, but nonetheless there is reason to suppose that this is an argument position, since omission of the ergative noun in an example like (3) is clearly felt to be elliptic. Moreover, Tsez strictly distinguishes intransitive and transitive verb stems: in contrast to many Nakh-Daghestanian languages, including Bezhta, it has no labile verbs, i.e. verbs that can be used both transitively and intransitively, whether in the pattern of English ‘John melted the ice’ versus ‘the ice melted’ or ‘John ate the food’ versus ‘John ate’. Thus, a sentence like (7), which is morphologically the causative of (1), will still mean that someone killed the bull even if the ergative noun phrase is omitted, and cannot have the meaning ‘the bull died (perhaps spontaneously)’.

- (7) žek’-ā is b-exu-r-si.
 man-ERG bull.ABS III-die-CAUS-PSTWIT
 ‘The man killed the bull.’

However, the behavior of different verbs in the affective construction is not entirely uniform. Omission of the lative noun phrase in (6) is apparently judged by native speakers to be elliptic, although it is notoriously difficult to elicit firm judgments on such issues, i.e. one gets an interpretation along the lines of ‘someone saw

the calf' rather than 'the calf was visible'. But with another verb, one finds that omission of the lative noun phrase is not felt to be elliptic, as in (8)–(9).

- (8) aħo-r meši b-esu-s.
shepherd-LAT calf.ABS III-find-PSTWIT
'The shepherd found the calf.'

- (9) meši b-esu-s.
calf.ABS III-find-PSTWIT
'The calf turned up.'

Note that a more accurate translation of (8) might be something like 'the shepherd came across the calf', since (8) implies accidental finding, rather than a deliberate search; for the latter meaning, the sentence would have to be causativized, making it transitive and thus of the ergative clause type, as in (10).

- (10) aħ-ā meši b-esu-r-si.
shepherd-ERG calf.ABS III-find-CAUS-PSTWIT
'The shepherd [searched for and] found the calf.'

Another variant of the affective construction is the potential construction, when derived from a transitive verb. The potential in Tsez takes the suffix *-l*. Potential equivalents of an intransitive clause retain the intransitive clause-type, with a single argument in the absolutive. The potential equivalent of a transitive clause, however, replaces the ergative with one of the local cases, called (somewhat arbitrarily) the possessive (because it is also used to mark the possessor in translation equivalents of sentences like 'John has a book'; as a local case it indicates location on a vertical surface, like German *an*). This is illustrated in (11).

- (11) k'et'u-q γ^{ay} ħaλu-l-xo.
cat-POSS milk.ABS drink-POT-PRS
'The cat can drink the milk.'

This same possessive case is used in another construction, the accidental construction, which indicates that someone accidentally brought about a certain state of affairs. In order to illustrate this construction, it will be useful to start from the more basic intransitive and transitive sentences (12) and (13).

- (12) č'ikay γ-exu-s.
glass.ABS II-break-PSTWIT
'The glass broke.'
- (13) uż-ā č'ikay γ-exu-r-si.
boy-ERG glass.ABS II-break-CAUS-PSTWIT
'The boy broke the glass.'

Sentence (13) would normally receive the interpretation that the boy deliberately broke the glass. Sentence (12) is of the intransitive clause type, sentence (13) of the

ergative clause type (morphologically, it is the causative of (12)). If one wants to express the idea that the boy accidentally broke the glass, in Tsez one starts not from the transitive sentence (13) but rather from the intransitive sentence (12), and adds an expression denoting the involuntary agent in the possessive case, as in (14). Note that Tsez *-exu-* ‘break, die’ is quite unequivocally an intransitive verb.

- (14) uži-q č'ikay y-exu-s.
 boy-POSS glass.ABS II-break-PSTWIT
 ‘The boy [accidentally] broke the glass.’

In the accidental construction, the oblique noun phrase is clearly omissible without the result being elliptic, since the result of omitting the noun phrase in the possessive case is simply the intransitive construction of (12).

As a final remark in this section, it should be noted that Tsez does not have sentence-pairs like active and passive that allow precisely the same semantic roles to be expressed by different syntactic positions, as when the English active expresses the patient as direct object while the passive presents it as subject. Related sentences such as (3) in comparison with (4)–(5), or (13) in comparison with (14), always have a well-defined semantic difference corresponding to the choice of construction, in the case of the latter pair also showing a fairly direct correlation between the case of the relevant noun phrase and its semantic interpretation (intentional agent for the ergative, involuntary agent for the possessive). This aspect of argument structure in Tsez is discussed in more detail, using essentially the same empirical material, in Comrie (2000).

3. Grammatical relations in Tsez

In this section, we turn to evaluating the grammatical, in particular the syntactic criteria for identifying grammatical relations, or rather more specifically the grammatical relation of subject, in Tsez. The basic way in which the argumentation will proceed will be as follows. For a number of syntactic tests, we will first establish how the absolutive noun phrase of the intransitive construction behaves, on the assumption that this is the clearest instance of subject, assuming of course that such a concept is relevant for Tsez. We will then look at the other constructions and see which noun phrase has, or which noun phrases have the same property in these other constructions. The proviso ‘assuming of course that [the] concept [subject] is relevant for Tsez’ is an important one in this discussion, especially since the question of the validity of such a notion has been called into question for a number of languages, including a number of languages with ergative morphology, and more specifically for the Nakh-Daghestanian languages.

One can start with case-marking, although research on grammatical relations in general has often shown that there can be discrepancies between case-marking patterns and grammatical relations, as for instance with purely morphological ergativ-

ity or with (in the literal interpretation of the term) dative and other nonnominative subjects. But for what it is worth, the following pattern emerges in Tsez. The single argument of the intransitive clause type stands in the absolutive case. The argument standing in the absolutive case in all but one of the other clause types is the patient, or the stimulus in the affective construction, never the agent (voluntary or involuntary) or the experiencer. In the biabsolutive construction there are two absolutive noun phrases, agent and patient, so both in this sense pattern with the single argument of the intransitive construction.

Turning to verb agreement, one sees essentially the same generalization. Almost without exception, verbs that can show agreement agree with the absolutive argument of the clause and only with that argument. (No single Tsez verb, incidentally, can show agreement with more than one noun phrase, although the components of verbal periphrases, as in the biabsolutive construction, can each agree with a different noun phrase.) Thus far, one has exactly the same pattern for verb agreement as for nominal case-marking. However, there are two constructions in which a verb agrees with an oblique noun phrase which either is or could at least be construed as an agent. The first is in the variant of the bipartite biabsolutive construction in which the agent appears in the ergative case. In (4), the auxiliary verb does not begin with a vowel, so no agreement with the agent is possible. If, however, one puts (4) into the future, as in (15), and given the fact that the verb ‘to be’ has no future of its own in Tsez but uses that of the verb ‘to become’, the auxiliary verb does have an initial vowel, and shows agreement with the agent whether this is in the absolutive or the ergative case.

- (15) kid/kidb-ā bišwa r-ac’-xo y-āči.
 girl.ABS/-ERG food.ABS IV-eat-IPVCVB II-become.FUTIND
 ‘The girl will be eating the food.’

The second is when a transitive verb appears as complement of one of certain phasal verbs, such as *-oq-* ‘begin’, in which case the noun phrase argument of the main clause verb ‘begin’ may appear in either the absolutive or the ergative, but in either case agreement of *-oq-* is with that noun phrase, as in (16); a fuller discussion of this construction, apparently first noted by Kibrik (1981: 38–9), is in Polinsky (2000).

- (16) kid/kidb-ā ziya b-ič’-r-a y-oq-si.
 girl.ABS/-ERG COW.ABS III-eat-CAUS-INF II-begin-PSTWIT
 ‘The girl began to feed the cow.’

Although these are quite restricted constructions in Tsez, they nonetheless point towards a certain movement in favor of subject properties being assigned to the ergative, agent-like noun phrase in the ergative construction, despite the case-marking.

Leaving morphology, we may now turn to word order as the first purely syntactic criterion. As noted in Section 2, Tsez word order is in principle free, although there are clear preferences, departures from these preferences being associated with particular pragmatic values, especially preposing to indicate topicalization, movement

to preverbal position to indicate focus, and movement to postverbal position to indicate backgrounding — although Tsez is basically verb-final, it is quite normal for certain backgrounded, non-focused noun phrases to follow the verb. Turning more specifically to the clause types discussed in Section 2, the following generalizations concerning the most neutral and most frequent constituent order may be noted, following the examples in section (2) and variations on them discussed in what follows. In the intransitive clause type, the neutral word order is for the single noun phrase in the absolutive to precede the verb. In the ergative construction, the neutral word order is for the agent-like noun phrase in the ergative to come first, while the patient-like noun phrase most neutrally comes between agent and verb. Likewise, in the affective construction in the most neutral word order the experiencer in the lative or other oblique case comes first, the stimulus between the experiencer and the verb. One finds similar behavior of the possessive oblique case in the potential and accidental constructions, occurring initially in the most neutral word order with the patient again between this noun phrase and the verb. In the biabsolutive construction, the order of agent before patient is rigid, perhaps reflecting the fact that only word order serves to distinguish these two morphologically identically marked noun phrases. Given that in the intransitive construction one noun phrase precedes the verb, while in the other constructions two noun phrases precede the verb, it is difficult or impossible to argue on the basis of word order that one or other of these two noun phrases should be identified with the single argument of the intransitive construction. Moreover, one should not lose sight of the correlation between clause-initial position and topic status. In each of the constructions discussed, other things being equal, the noun phrase that occurs first is most topicworthy, so that the patterning is arguably not purely syntactic, but includes influence from pragmatics (functional sentence perspective).

We may now turn to a group of two constructions that give similar results, starting with the imperative. In Tsez, the imperative can be formed from the intransitive construction, with the single argument being understood (and optionally, though not usually, expressed) as the one who is expected to carry out the action in question, as in (17).

- (17) *y-ik'i!*
 II-go.IPR
 'Go! (said to a woman)'

In the ergative construction, the imperative is likewise possible, but unequivocally with the agent-like noun phrase in the ergative (or that would appear in the ergative if overtly expressed) as the one expected to carry out the action, as in (18).

- (18) *bišwa r-ac'-o!*
 food.ABS IV-eat-IPR
 'Eat the food!'

(In Tsez, as a general rule, simplex transitive verbs have the suffix *-o* in the impera-

tive, while intransitive verbs and derived transitive verbs have a zero suffix.) In this respect, then, it is the agent-like, ergative noun phrase of the ergative clause type that behaves like the single argument of the intransitive construction. What, then, happens when one forms the imperative from the other construction types with an oblique noun phrase? The answer is devastatingly simple: it is impossible to form an imperative from these other constructions. If one takes a verb like *-esu-* ‘find’ which requires the affective construction, for instance, then there is no way of saying literally ‘find the calf!’ as in the ungrammatical (19), rather, one must recast the sentence using the causative, so that the clause type is ergative, as in (20).

- (19) *meši b-esu!
calf.ABS III-find.IPR
- (20) meši b-esu-r!
calf.ABS III-find-CAUS.IPR
‘Find the calf!’

(Interestingly, exactly the same constraint is found in Hunzib (van den Berg 1995: 88), but not in Bezhta; in the latter language literal translations of ‘find the calf!’ are possible, with the experiencer that would have been in the lative case understood as the one who is to carry out the action in question (Comrie 2001).) While the constraint can be stated in the syntactic terms suggested here, there is a clear semantic analog: one can form imperative constructions where a participant is identifiable as one having control over whether or not the situation requested comes about, and it is always this noun phrase that is construed as the addressee of the imperative construction. Indeed, there is evidence that the semantic constraint is actually stronger than the syntactic one, since imperatives are generally judged unacceptable in Tsez when formed from unaccusative verbs, i.e. where the single argument of an intransitive verb is patient-like rather than agent-like. For further discussion, also of the future definite discussed in the next paragraph, see Comrie (2001).

Tsez has a number of expressions for future time reference, most of them with no constraint on the grammatical person of the participants. There is, however, one of these future expressions, the so-called future definite, that is restricted to the first person. Thus, with an intransitive verb where only one noun phrase is in question, sentence (21) is possible in Tsez while sentence (22) is not.

- (21) eli b-ik'-an.
we.ABS IPL-go-FUTDEF
‘We will go.’
- (22) *meži b-ik'-an.
you.PL.ABS IPL-go-FUTDEF
‘You will go.’

Equivalents of (22) are of course quite possible with other expressions of future time reference. In the ergative construction, the noun phrase that must be first person

is the agent-like noun phrase, not the patient-like participant, as can be seen in (23)–(24).

- (23) el-ā meži žek'-an.
 we-ERG you.PL.ABS beat-FUTDEF
 'We will beat you.'
- (24) *mež-ā eli žek'-an.
 you.PL-ERG we.ABS beat-FUTDEF
 'You will beat us.'

In the other constructions with an oblique noun phrase, it is impossible to form the future definite, just as it is impossible to form the imperative. And once again, a semantic explanation seems plausible: the future definite expresses volition on the part of the speaker, and this is incompatible with clause types whose semantics excludes such volition. (Such concepts can be expressed either by using one of the other future expressions, which lack this constraint, or by causativizing the clause to produce the ergative clause type.)

We may now turn to the occurrence of the infinitive after such verbs as *-eti* 'want'. The verb *-eti* itself occurs in the affective construction, but our concern is rather with the arguments of the infinitive. In a Tsez infinitival clause one of the arguments is typically covert and coreferential with some argument of the main clause, in the case of *-eti* the experiencer. In the intransitive construction, the relevant argument in the infinitival clause is the single argument that would have appeared in the absolutive if overt, as in (25). In the ergative construction, it is the agent-like noun phrase that would have appeared in the ergative case, as in (26), and not the patient-like noun phrase that would have appeared in the absolutive.

- (25) dā-r new-ā-yor Ø-ik'-a r-eti-x.
 me-LAT Mokok-IN-VERS I-go-INF IV-want-PRS
 'I want to go to Mokok. (man speaking)'
- (26) dā-r kayat cax-a y-eti-x.
 me-LAT letter.ABS write-INF II-want-PRS
 'I want to write a letter.'

In (25), there is no noun phrase for the main clause verb to agree with, and therefore it takes by default gender IV agreement. Note that absence of overt agreement morpheme on a verb that can show agreement always indicates agreement with gender I, never absence of agreement. In sentence (26), the main clause verb agrees with the absolutive noun phrase of the infinitival construction, so-called long-distance agreement; see Polinsky and Comrie (1999: 116–27) for further discussion of Tsez long-distance agreement. In (26), default agreement, i.e. *r-eti-x*, would also be possible. In both (25) and (26), it is the experiencer of the main clause that is interpreted as the covert argument of the infinitival clause, in (25) corresponding to an absolutive argument, in (26) corresponding to an ergative argument. In (27), it is

the experiencer argument of the infinitival affective construction that is covert and coreferential with the experiencer noun phrase in the main clause.

- (27) uži-r kid y-ikwad-a y-eti-s.
 boy-LAT girl.ABS II-see-INF II-want-PSTWIT
 'The boy wanted to see the girl.'

(In (27), default agreement, i.e. *r-eti-s*, would also be possible in the main clause; the example is based on Kibrik (1981:40).) With this infinitival construction, then, we can conclude that the absolutive noun phrase of the intransitive construction, the ergative noun phrase of the ergative construction, and the lative noun phrase of the affective construction behave alike.

Another test that can potentially be used for identifying grammatical relations in Tsez is reflexivization. Reflexivization in Tsez involves a number of problems — for further details, see Polinsky and Comrie (2003) — not least of them the morphology of reflexive pronouns, which involves a kind of reduplication but which we will skip over here. The crucial point is the relation between the antecedent of reflexivization (the trigger or controller) and the reflexive pronoun (the target), more specifically the identification of the trigger. In the intransitive construction, the single argument noun phrase in the absolutive is the only possible trigger, as in (28).

- (28) pat'i nelā.nelo-λ' qoqoλi-x.
 Fatima.ABS REFL-SUPER laugh-PRS
 'Fatima is laughing at herself.'

In the ergative construction, the most natural trigger for reflexivization is the agent-like noun phrase in the ergative case, as in (29)–(31).

- (29) ʃal-ā nesā že žek'-si.
 Ali-ERG REFL.ABS hit-PSTWIT
 'Ali beat himself.'
- (30) ʃal-ā nesā nesi-l-āy keč' b-oy-si.
 Ali-ERG REFL-CONT-ABL song.ABS III-make-PSTWIT
 'Ali wrote a song about himself.'
- (31) ʃal-ā wacʃal-qo-r nesā nesi-l-āy Ø-aλ'i-s.
 Ali-ERG cousin-POSS-LAT REFL-CONT-ABL I-talk-PSTWIT
 'Ali_i talked to his cousin_j about himself_{i>j}.'

However, in addition to the preferred interpretation of (31), where the reflexive pronoun refers back to Ali, at least some speakers allow another interpretation of examples where there is an alternative pragmatically plausible trigger, in that they also allow the reflexive pronoun to refer back to the patient, the cousin. This is only possible if this trigger precedes the reflexive pronoun, a constraint that does not apply when the trigger is the ergative noun phrase, in which case the reflexive pronoun could appear to the left of its antecedent. The biabsolutive construction likewise

shows the agent-like noun phrase at least as the preferred antecedent for a reflexive, as in (32).

- (32) *fali nesā že žek'-xo Ø-ič-āsi zow-si.*
 Ali.ABS REFL.ABS beat-IPVCVB I-become-RES be-PSTWIT
 'Ali was still engaged in beating himself.'

The affective construction, however, provides a surprisingly different picture with respect to reflexivization. If the coreferential noun phrases do not form an experiencer-stimulus pair, as in (33), then the experiencer is the antecedent.

- (33) *fali-r nesā nesi-de puho t'aq̣ r-ikway-si.*
 Ali-LAT REFL-APUD beside knife IV-see-PSTWIT
 'Ali saw a knife beside him.'

However, if the coreferential noun phrases do form an experiencer-stimulus pair, then it is the stimulus that acts as trigger and the experiencer that acts as target for reflexivization, as in (34); moreover, the preferred word order shifts, with preference for the stimulus to precede the experiencer.

- (34) *pat'i nelā nelo-r y-eti-x.*
 Fatima.ABS REFL-LAT II-love-PRS
 'Fatima loves herself.'

Overall, reflexivization presents a particularly complex picture. The trigger for reflexivization is the single absolutive argument noun phrase of the intransitive construction and is preferably the ergative noun phrase of the ergative construction (although the absolutive noun phrase is not excluded as trigger, under rigid conditions), while the affective construction behaves in Janus-like fashion, with the experiencer being the trigger when not coreferential with the stimulus, but the stimulus being the trigger when there is coreference between experiencer and stimulus. The unusual interaction of reflexivization and the affective construction in Tsez makes it unlikely that a uniform semantic explanation can be given for the patterns of antecedent-reflexive relations. At least in the case of the affective construction, there seems to be a degree of syntactic arbitrariness.

The last construction known to be usable as a test for grammatical relations in Tsez is obligatory coreferential noun phrase deletion. In Tsez, as noted in Section 2, it is possible to omit noun phrases, including argument noun phrases, that are retrievable from context. In addition to this optional omission, however, there are certain circumstances under which omission of a noun phrase is obligatory. Such examples always involve a main clause and a dependent, converbal (roughly: adverbial) clause. The obligatorily omitted noun phrase is always in the dependent clause. But where syntactic distinctions potentially corresponding to grammatical relations come into play it is the syntactic role of the coreferential noun phrase in the main clause that is decisive. If that noun phrase is the single argument of an intransitive clause, or the ergative argument of an ergative clause, or the agent-like

argument of a biabsolutive clause, or the experiencer of the affective clause, or the possessive noun phrase in the potential clause, then the coreferential noun phrase in the dependent clause must be omitted. Some of these possibilities are illustrated in (35)–(38), with commas indicating the clause boundaries.

- (35) keč' qʰaʎi-x, kid idu-γor y-ik'i-s.
 song.ABS sing-IPFCVB girl.ABS home-VERS II-go-PSTWIT
 'Singing a song, the girl went home.'
- (36) is-xo rok'u-n r-exu-n, ʃomoy-ā neʎo-r
 bull-AD heart-and IV-die-PFVCVB donkey-ERG it-LAT
 sis ʃaq'lu b-oy-no.
 one advice.ABS III-do-PSTWIT
 'Feeling sorry for the bull, the donkey gave it a piece of advice.'
- (37) keč' qʰaʎi-x,
 song.ABS sing-IPFCVB
 kid uži žek'-xo y-ič-āsi.
 girl.ABS boy.ABS beat-IPFCVB II-become-RES
 'Singing a song, the girl is still engaged in beating the boy.'
- (38) ʃali-r, guz pʰoʎi-r-ʎ'orey, aho Ø-esu-s.
 Ali-LAT rock.ABS explode-CAUS-DURCVB shepherd.ABS I-find-PSTWIT
 'While [he_{i/γ} was] blowing up a rock, Ali_i found a shepherd_j.'

Obligatory noun phrase omission thus seems to group together essentially the noun phrases that would be subjects in the English translation equivalents. But as with word order, one needs to bear in mind that one of the pragmatic factors necessary for coreferential noun phrase omission is topic continuity, i.e. the noun phrase in question should be a topic. And as with word order, the noun phrases that are triggers for coreferential noun phrase omission are also the noun phrases that are likely to be highest in topicworthiness, so that even if coreferential noun phrase deletion cannot be reduced to this pragmatic condition, nonetheless this pragmatic condition may be at the origin of the syntactic constraint.

Summarizing the discussion of this section, one can say that the tests that can be applied to identify grammatical relations do not give an unequivocal result in Tsez. If one excludes the morphological tests, given that morphology is known often to go against grammatical relations crosslinguistically, and if one excludes examples where the test is completely neutral (as with the impossibility of imperatives of affective clauses), then there is a clear tendency for the nonabsolutive/nonpatient-like noun phrase of a clause to be treated like the absolutive noun phrase of the intransitive clause, rather than the absolutive/patient-like noun phrase. However, there is one clear counterexample in the behavior of the affective construction when experiencer and stimulus are coreferential (example (32)), and at least some speakers have a secondary interpretation in the ergative clause with the absolutive patient as

trigger, though under more restrictive conditions than apply to the ergative agent as trigger. And with several of the constructions, there are pragmatic or semantic factors that go at least some way towards explaining the syntactic patterns. Thus, while there is some justification for speaking of subjects in Tsez — and more specifically of oblique subjects — the evidence for this syntactic analysis is not so overwhelming as in a language like English.

4. Conclusions

In this chapter, I have tried first to give data concerning constructions that provide *prima facie* evidence in favor of oblique subject constructions in Tsez, in particular constructions that have a noun phrase in an oblique case that corresponds to a subject in the English translation equivalent (Section 2). In the ensuing detailed analysis of syntactic properties of the relevant constructions, I have tried to show that a case can be made for indeed identifying these constructions as instances of oblique subject constructions, but that exceptions (especially with the affective construction) and the relevance of semantic-pragmatic factors mean that the case for identifying the oblique noun phrases as syntactic subjects is less clear-cut than in many other languages.

Notes

1. The following abbreviations are used: ABL: ablative, ABS: absolutive, AD: ad(essive), APUD: apud(essive) [location near], CONT: cont(essive) [location in or among], DURCVB: durative converb, ERG: ergative, FUTDEF: future definite, FUTIND: future indefinite, IN: in(essive), INF: infinitive, IMPR: imperative, IPVCVB: imperfective converb, LAT: lative, PFVCVB: perfective converb, POSS: possessive, PRS: present, PSTWIT: past witnessed, REFL: reflexive, RES: resultative, SUPER: super(essive), VERS: versative.

References

- Comrie, Bernard. 1989. *Language Universals and Linguistic Typology*, Second edition. Oxford: Blackwell and Chicago: University of Chicago Press.
- Comrie, Bernard. 2000. "Valency-changing derivations in Tsez". In *Changing Valency: Case Studies in Transitivity*, R. M. W. Dixon and Alexandra Y. Aikhenvald (eds), 360–74. Cambridge: Cambridge University Press.
- Comrie, Bernard. 2001. "‘Love your enemies’: affective constructions in two Daghestanian languages". In *Perspectives on Semantics, Pragmatics, and Discourse: a Festschrift for Ferenc Kiefer*, István Kenesei and Robert M. Harnish (eds), 59–72. Amsterdam: John Benjamins.
- Imnajtšvili, D. S. 1963. *Didojskij jazyk v sravnenii s ginuxskim i xvaršijskim jazykami*. Tbilisi: Izdatel'stvo Akademii nauk Gruzinskoj SSR.

- Kibrik, A. E. 1981. *Materialy k tipologii èrgativnosti: 13. bežtinskij jazyk, 14. gunzibskij jazyk, 15. cezskij jazyk, 16. ginuxskij jazyk*. Moscow: Institut russkogo jazyka AN SSSR, Problemnaja gruppa po èksperimental'noj i prikladnoj lingvistike.
- Polinsky, Maria. 2000. "Tsez beginnings". In *Papers from the Twenty-Fifth Annual Meeting of the Berkeley Linguistics Society: Special Session on Caucasian, Dravidian, and Turkic Linguistics*, Jeff Good and Alan C.L. Yu (eds), 14–29. Berkeley: Berkeley Linguistics Society.
- Polinsky, Maria and Comrie, Bernard. 1999. "Agreement in Tsez". *Folia Linguistica* 33: 109–30.
- Polinsky, Maria and Comrie, Bernard. 2003. "Constraints on reflexivization in Tsez". In *Current Trends in Caucasian, East European and Inner Asian Linguistics: Papers in Honor of Howard I. Aronson*, Dee Ann Holisky and Kevin Tuite (eds), 265–89. Amsterdam: John Benjamins.
- van den Berg, Helma. 1995. *A Grammar of Hunzib (with Texts and Lexicon)*. Munich and Newcastle: Lincom Europa.

CHAPTER 6

Some non-nominative subjects in Bangla

Probal Dasgupta

1. Scope of the chapter

The Eastern Indic language Bangla (also known by its colonial name Bengali) has several non-nominative subject constructions. The present description covers the Obligational Dative Construction, the Experiencer Subject Construction, the Generic Locative Construction, and the Reciprocity Locative Construction. There may well be other congeners that certain linguists will discover, or are already familiar with and wish to distinguish from the types given in my classification. Hence the openness of the title. This chapter focuses on empirical description and offers a partial theoretical account interwoven with the presentation of the data. Fuller discussion of the framework employed is available elsewhere, especially in Dasgupta *et al.* (2000). For conventions, see the endnotes for transcription¹ and glossing.²

2. The obligatory dative construction

The Obligational Dative Construction examples (1) and (2) are a useful place to start.

- (1) apnake roj SOhore aSte hOe
you.DAT daily town.Loc come.INF is
'You have to come to town every day.'
- (2) rinake aj paMcTa dokane jete holo
Rina.DAT today five.Cla shop.Loc go.INF was
'Rina had to go to five shops today.'

We can tell that the /*ke*-/ marked nominals are Datives here because even an inanimate nominal replacing them bears this marking consistently, as in (3):

- (3) jekono phulkei SeS porjonto jhore jete hOe
any flower.DAT.Emph end in wither AUX.INF is
'Any flower has to wither in the end.'

In contrast, it is usual in Indo-Aryan studies to designate as Accusatives those nominals that bear *ke* if animate and zero if not, as in (4):

- (4) a. brotin rinake khuMje pelo
 Brotin Rina.DAT search.CONJ got
 'Brotin found Rina.'
 b. brotin kOekTa joruri boi khuMje pelo
 Brotin some crucial books search.CONJ got
 'Brotin found some crucial books.'

3. The experiencer-subject construction

In contrast to many other languages in and outside South Asia, Bangla does not use the Dative Case to mark Experiencer Subjects, however. The initial impression is that it uses the Genitive for this purpose. What looks like the Genitive in (5) and (6) does indeed seem to contrast with the clear Dative in the examples (1) and (2) given earlier:

- (5) apnar/rinar bhai
 you.??/Rina.?? brother
 'your/Rina's brother.'
 (6) apnar/rinar aro Taka lagbe
 you.??/Rina.?? more money will.need

However, the plurals *apnader* and *chatroder* do what looks like Genitive work in (7a, b) but Dative work in (8a, b):

- (7) a. apnader baRi
 you.?? house
 'your house.'
 b. chatroder Taka
 students.?? money
 'the money of students.'
 (8) a. ora apnader EkTa baRi dEkhabo
 they you one.CLA house show.FUT
 'They will show you a house.'
 b. ora chatroder kichu Taka paThabo
 they students some money send.FUT
 'They will send the students some money.'

In general, Bangla animate nouns and pronouns *X* appear in the Nominative plural format *Xra*. Inanimates use instead a classifier based system whose collective aggregation, marked by the *gulo* in *boigulo* 'the books', combines cardinality with definiteness. The semantic nonsingularity marked by the *Xgulo* format should not be confused with the true grammatical plurality of *Xra*. Now, animate nouns and pronouns that appear in the *Xra* format also appear in the other plural format *Xder* exhibiting a syncretism of the Dative with the Genitive Case.

Thus, quite generally, a typical singular noun like *chele* ‘boy’ corresponds to the Nominative plural *cheler* ‘boys’ and this syncretic Genitive-Dative plural *cheleder* ‘to/of boys’. All Bangla nouns and pronouns that have a grammatical plural at all use the same inflectional form for Genitive and Dative functions in the plural, namely, the *Xder* format. This is a clear fact and encourages us to postulate a neutralized Case that can be called the Indirect Case, neutralizing the Genitive vs Dative distinction, for the Bangla plural subsystem.

I shall continue to take the position, elaborated in Dasgupta *et al.* (2000), that even the singulars such as *rinar* in (5) and (6) above that have long been regarded as Genitive forms actually instantiate, not a Genitive proper, but rather an underspecified Case here termed the Indirect. There are no Genitives in this language, but only Indirect Case forms which syntactically play a possessor role in (5) and an experiencer role in (6) without varying their morphological Case. These nouns are in the Indirect Case throughout.

In examples like (6), then, Bangla instantiates the Experiencer Subject Construction (ESC) by endowing the experiencer with an Indirect Case not too far removed from the cross-linguistically frequent Dative. We are not forced to describe the Bangla ESC as a typologically bizarre genitive subject construction, then. The facts of the language allow us to assume instead an “indirect subject construction” built around the Indirect Case, an archi-case consisting of whatever features the Dative and the Genitive have in common:

- (9) *rinar* *Dim bhalo lage*
 Rina.IND egg/s good feels
 ‘Rina likes eggs.’

As we find by comparing (9) with (10), the patient in an ESC bears the Accusative Case in Bangla, with the typical alternation of *ke* in (10) and zero in (9):

- (10) *rinar* *Timke bhalo lage*
 Rina.IND Tim.DAT good feels
 ‘Rina likes Tim.’

My own theoretical wrap-up of the material covered so far emerges in dialogue with the data presented in the following sections. So I withhold an immediate conceptual account of Dative and Indirect subjects. Sengupta, in this volume, provides a more focused analysis of the Bangla ESC per se.

4. The locative case in Bangla

I turn next to the constructions where the non-nominative subject is in the Locative Case. The Locative in Bangla is yet another Case whose usability interacts with the animacy and humanness of the noun or pronoun involved. It is important to look at this interaction in some detail before we take up those clausal constructions (the

Generic Locative Construction and the Reciprocity Locative Construction) where the subject appears in the Locative Case.

While only animate nouns have plurals in the *Nra*, *Nder* formats, in contrast it is only inanimates that have a Locative declension in Bangla:

- (11) Eto choTo EkTa ghOre kOjon otithi boSte parbe?
so small one.CLA room.LOC how.many guests sit.INF will.be.able
'How many guests will be able to sit in a room so small?'
- (12) e baRir ghOrgulote/ ghOrguloe bODDo beSi aSbab
this house.IND room.CLA.LOC/ room.CLA.LOC too much furniture
'There is too much furniture in the rooms of this house.'

Straightforward Locatives for animates, available in restricted contexts in Hindi-Urdu, are excluded in Bangla:

- (13) tujh meM kaafii himmat hai? Hindi-Urdu
you LOC enough courage is?
'Do you have enough courage (in you)?'
- (14) [from here on, only Bangla examples again:]
a. *tomae/ *tomate jOtheSTo SahoS ache?
you.LOC you.LOC enough courage is
'*Is there enough courage in you?'
b. tomar jOtheSTo SahoS ache?
you.IND enough courage is?
'Do you have enough courage?'

What the normal morphology of, say, the Locative *jamae* or *jamate* of the inanimate noun *jama* 'shirt', would lead us to expect are pronominal forms like *tomate*, *tomae* in example (14), and correspondingly *amate*, *amae* for the Locative of *ami* 'I'. Of these, the expected variants *amae*, *tomae* are in fact available, but for a rather surprising non-Locative function:

- (15) ami tomae/ tomake Taka debo
I you."LOC"/ you.DAT money give.FUT
'I will give you money.'
- (16) tumi amae/ amake Taka debe
you me."LOC"/ me.DAT money give.FUT
'You will give me money.'

These are the only instances in the language of formally transparent true Datives alternating, and alternating unconditionally, with forms reserved for another Case. The facts invite Word Formation Strategy morphological treatment, obviously. I have no trouble stating the generalization as a Strategy:

- (17) [Xmake]_{Pron, Dat} ↔ [Xmae]_{Pron, Dat}

But that is not the point. The point is that such an alternation is possible only because a pronoun ending in /ae/ has no serious work to do. For Bangla has no Locative declension for animate nominals. Exactly how do we unpack this absence?

The first point to note is that animates, which alone morphologically have a plural proper, lack a Locative plural. Recall that their Nominative plural format *Nra* and Dative-Indirect plural format *Nder* are irregularly related to each other and leave us unable to predict what their Locative counterpart would look like if they had one: *Nrae*, *Nrate*, *Ndere*? These formats turn out not to exist; nor does any other take their place. The animate plural Locative as such does not occur in the language.

The phenomenon is not confined to the animate declension in the formal sense. To see this, consider an animacy-ambiguous word like *patro* 'pot; potential bridegroom'. A disparaging use of the word in the second sense yields an inanimate-format definite plural as in (18b) in contrast with the regular animate plural in (18a):

- (18) a. bangali patrora ciThir uttor dEe na
Bengali grooms letter.IND answer give NEG
'Bengali bridegrooms don't answer letters.'
b. bangali patrogulo ciThir uttor dEe na
Bengali groom.CLA letter.IND answer give NEG
'Those Bengali bridegrooms don't answer letters.'

Now, a true inanimate plural as in (19a) has a Locative counterpart as in (19b). But the b-labelled counterpart to the animate noun that wields an inanimate plural format in (20a) must use not the direct Locative, despite its evident morphological availability, but a circumlocution (to save space, we shall stop repeating the unconditioned *gulote* ~ *guloe* alternation observed at (12)):

- (19) a. patrogulo 'the pots.'
b. patrogulote ekTu dhulo poRlo
pot.CLA.LOC some dust fell
'Some dust fell on the pots.'
(20) a. patrogulo 'the (deprecated) bridegrooms.'
b. patrogulor gaye/*patrogulote ekTu dhulo poRlo
groom.CLA.IND body.LOC/*groom.CLA.LOC some dust fell
'Some dust fell on the (deprecated) bridegrooms.'

The same paradigm can be reproduced in the (classifier-expressed) definite singular:

- (21) a. patroTa 'the pot.'
b. patroTate ekTu dhulo poRlo
pot.CLA.LOC some dust fell
'Some dust fell on the pot.'
(22) a. patroTa 'the (deprecated) bridegroom.'

- b. patroTar gaye/ *patroTate ekTu dhulo poRlo
 groom.CLA.IND body.LOC/ *groom.CLA.LOC some dust fell
 ‘Some dust fell on the (deprecated) bridegroom.’

In general, the starred forms in (20b), (22b) simply do not exist. An animate noun followed by a classifier followed by a Locative affix is not possible as a form, even if one is willing to take into account forms of the right shape but with the ‘wrong’ (not prototypically locative) interpretation.

However, some bare animates do occur in the Locative singular, as generics, and using the Case features to convey a true Dative sense. These bare animate Locatives settle down in typical fixed expressions with an archaic flavour, but still within the active repertory of the colloquial modern language, and therefore not dismissable as falling outside the system we are studying:

- (23) jibe dOya
 creature.LOC kindness
 ‘charity towards creatures.’
- (24) SOt patre konna dan
 good groom.LOC daughter giving
 ‘marrying (one’s) daughter to a suitable bridegroom.’

These animates are crucially bare in their morphology. In other words, they must be telling the Locative features what to do at the level within the lexical feature grid where the N features interact directly with Case features, going through no mediation whatever.

Noun features do interact with Locative Case features in this direct fashion. There is some morphological similarity between (25a), a strategy that handles Adverbs, and the first member of the set that drives Bangla’s nominal Locative system, (26):

- (25) a. The Denominal Adverb Strategy:
 $[X]_{N, Abstract} \leftrightarrow [Xe]_{Adv}$
- b. Examples of (25a):
- | Nouns | Adverbs |
|---------------------|-------------------------------------|
| hat ‘hand’ | hate ‘manually.’ |
| jor ‘force’ | jore/jore jore ‘loudly, fast.’ |
| Onahar ‘starvation’ | Onahare ‘by starvation.’ |
| proyjon ‘necessity’ | proyhone ‘if necessary.’ |
| bhOe ‘fear’ | bhOye bhOye ‘hesitantly.’ |
| dhar ‘loan’ | dhare ‘on credit.’ |
| tOphat ‘distance’ | tOphate ‘(to stand) at a distance.’ |

- (26) The Locative Strategies:
- a. $[XC]_{N, Inanim, Nom} \leftrightarrow [XCe]_{N, Inanim, Loc}$
- b. $[XV]_{N, Inanim, Nom} \leftrightarrow [XVte]_{N, Inanim, Loc}$
- c. $[X[V, -high]]_{N, Inanim, Nom} \leftrightarrow [X[V, -high]e]_{N, Inanim, Loc}$

This perspective helps us then to understand why the willingness of bare animates like the personal pronouns of (17) or the nouns listed in (23) and (24) to make quirky use of Locatives can be compatible with a general Locative prohibition on all animate nouns that try to work through regular feature systems. Clearly, animates can go plural only by exercising the systematic format options *Nra*, *Nder*. Equally clearly, some idiosyncratic animates can use Locative features for quirky purposes, but animates have no general access to the Locative option. It is as if the plurality option and the Locative option are mutually exclusive for animates. In contrast, inanimates have no plurality option as such: they display classifiers, i.e. they use the general feature system shared by nouns with the numeral and quantifier system and negotiate with the functional neighbourhood where they have to operate in a given sentence, with plurality as an occasional outcome. And inanimates do have a Locative option as such. This is why the chips fall where they do.

The intensity of the interaction between Case and other typologically interesting phenomena in Bangla makes it imperative to examine carefully the configurations in which Case is licensed in this language. It is of special interest to consider the ones available for subjects.

Nominative Case licensing can be set aside. The Obligational Dative seems to instantiate a familiar cross-linguistic pattern. Our focus is on the Indirect Case of Experiencer Subjects and on certain Locatives. Let us consider Experiencer Subjects first, with their Indirect Case, on the basis of the following examples:

- (27) a. tomar khide pabe
 you.IND hunger feel.FUT
 ‘You will feel hungry.’
 b. tomar cinebadam bhalo lage
 you.IND peanut good strikes
 ‘You like peanuts.’
 c. tomar kake mone poRlo
 you.IND who.Acc memory.LOC fell
 ‘Who did you remember?’
 d. tomar kake cai
 you.IND who.Acc want
 ‘Who do you want?’
 e. tomar kar ranna bhalo lage
 you.IND who.IND cooking good feels
 ‘Whose cooking do you like?’

Recall that I choose to take at face value the Case conflation visible in the plural declension, to extend it to the singular and, now, to inquire how this neutralized Indirect Case and its congeners are licensed in this range of constructions.

I offer only the kernel of an answer here, leaving the task of working out viable implementations to specialist forums. My proposal is that Experiencer Subjects in the Indirect Case and Generic Subjects in the Locative Case, exemplified above and

below respectively, are licensed through negotiation between a quirky predication on the one hand and an appropriate non-nominative argument, on the other. The outcome of this negotiation registers the Case of the Subject, as an Indirect here and a Locative there, and seals its pact with the quirky predication as a bond of substantive rather than formal agreement. What normal grammatical research calls Agreement is of course a matter of identity with respect to formal features, several of them assigned to nodes by arbitrary processes or non-natural choices. I am suggesting that substantive agreement is different, in ways that deserve inquiry.

Now it is time we turned to the Locative Subjects.

5. The generic-locative and reciprocity-locative constructions

The locative arguments in question occur singly, as in the clearly generic examples of (28), or in couples, as in the reciprocal or interactive arguments of (29):

- (28) a. gorute ghaS khæe
cow.LOC grass eats
'Cows eat grass.'
- b. pagole ki na bOle chagole ki na khæe
madman.LOC what NEG say goat.LOC what NEG eat
'What would a madman not say, or a goat not eat?'
- (29) a. bhaie bhaie jhOgRa kOre
brother.LOC ditto quarrel do
'Brother quarrels with brother.'
- b. rajæ rajæ juddho hOe
king.LOC king.LOC war is
'King fights with king.'
- c. tomae amae milOn hObe
you.LOC I.LOC union be.FUT
'You and I will unite.'

My proposal is based on the regular co-occurrence of isolated locative generics with transitives as in (28) and of coupled reciprocity locatives as in (29a) with experiencer predicates as in (29b, c). The Word Formation Strategy responsible for a generic Locative, I suggest, characterizes it as a potential agent argument in a transitive typification such as (28a, b). The Phrase Formation Strategy which, working in the reduplication prone context of Bangla, licenses Reciprocity Locative couples fits them for the role of an interactive argument in either an active or an experiential portrayal of interaction.

Substantive Agreement between such nominal arguments and appropriate predicates involves matching interpretable features on the argument side and on the predicate side. The earlier literature already records the observation that the generic

agentive use of the Locative on animate nouns next to transitive predicates as in (28) is in complementary distribution with the Locative's instrument use on inanimate nouns next to nonvolitional predicates, as in (30), to be contrasted with the true instrument phrase normally found with a volitional predicate as in (31):

- (30) ei cabite SObgulo dOrja khole na
 this key.LOC all.CLA door open NEG
 'This key doesn't open all the doors.'
- (31) paharawala *ei cabite (OK: ei cabi diye) SObgulo dOrja khole na
 watchman this key.LOC this key with all.CLA door open NEG
 'The watchman doesn't open all the doors with this key.'

We need to note that reciprocity reduplication is independent of the locative, as becomes apparent in such nominative examples as (32) and (33), but that then the clause must be built around a volitional, not an experiencer predicate:

- (32) tumi ami dEkha korbo
 you I meet do.FUT
 'You and I will meet.'
- (33) raja rani jhOgRa korten
 king queen quarrel used.to.do
 'King and queen used to quarrel.'

Evidently several factors (reciprocity reduplication, the generically instrumental Locative for inanimates, and the generically agentive Locative for animates) co-determine the patterns of compatibility with predicates, volitional and nonvolitional. I propose that a Locative marked nominal argument, in its outermost structural shell, houses the features that the Locative argument employs to seal its compatibility with the predicate which in turn projects its own relevant features up to Tense.

In such a setting the nominal epsilon (in the sense of Dasgupta *et al.* 2000) negotiates or matches with this Tense the key semantic features of animacy, humanness, volitionality, and reciprocity. I propose that the Tense projection in quirky predication clauses is associated with the nominal argument's outermost shell that houses Locative Case and these substantive features. This analysis describes as quirky any predication whose lexical content compels it to either take an expletive null subject, a solution I adopt here (this solution leaves the non-nominative argument technically predicate-internal, although I continue to call it a subject for thematic hierarchy reasons), or alternatively move the non-nominative argument to the specifier of Tense, covertly if not overtly.

The Experiencer Subject Construction interacts with reciprocity reduplication in the same fashion. Compare (32) and (33) with:

- (34) tomar amar dEkha hObe
 you.IND I.IND meeting will.be
 'You and I will meet.'

- (35) rajar ranir jhOgRa hoto
king.IND queen.LOC quarrel used.to.be
'King and queen used to quarrel.'

I find it likely that my proposal of a Substantive Agreement package treating Locative and Indirect Case arguments alike in a quirky predication context will turn out to be one ingredient in a future account of quirky subject phenomena. Another, equally important ingredient may come from a proper redescription of the material Jayaseelan (1999) provides from Malayalam and English.

If, as Jayaseelan shows, Experiencer Subject Constructions are impersonal constructions, then we need to rework his account on the basis of the observation (not recorded in the literature so far) that an English predicate endowed with only an impersonal argument structure prohibits control. To make the observation more explicit, a predicate that alternates between an impersonal and a regular argument structure as in (36) and (37) does permit control.

- (36) a. It bothers John to work for Bill
b. The work bothers Tom
- (37) a. It won't occur to John to buy Bill a drink
b. The thought occurred to Jim

But one that, as in (38), has exclusively an impersonal argument structure excludes control, as seen in (39):

- (38) a. It seems to John that she is happy
b. *Her happiness seems to John
- (39) *It seems to John to be happy

Contrary to Jayaseelan's proposal that nonsubjects can, logophorically or otherwise, generally control embedded PRO, the observation I provide here shows that one pertinent type of nonsubject control is robustly prohibited.

That French patterns with English on this matter against Italian, which permits the equivalent of (39), shows that the Null Subject Parameter is decisive here. With a subject both expletive in LF and null in PF, an Experiencer Subject Construction in a null subject language on Jayaseelan's expletive analysis adopted in this chapter (with the experiencer in the VP) allows Tense to associate with the Mood head of the proposition, thus merging Tense's and Mood's argument Case licensing properties in impersonal constructions of this subtype. The Tense-Mood association can be implemented in terms of movement or any other suitable device.

If this Jayaseelan ingredient is added, the Substantive Agreement proposal made above can be suitably revised, replacing Tense with a Tense-Mood complex in the Experiencer Subject instance of the Substantive Agreement phenomenon. It is still possible under this revised analysis to unify all the non-nominative subject phenomena of Bangla considered here under a common umbrella of Substantive Agreement.

I conclude with some remarks that may serve as a conceptual elaboration of the umbrella proposal of Substantive Agreement, in the sense intended here, as a phenomenon distinct from Formal Agreement. My suggestion is that, in a language that exhibits not formal gender and number but numeral /quantifier-associated nominal classifiers, there will be, at the outer edge of the syntactic structure of a Cased nominal, maximally transparent negotiation with its grammatical neighbourhood. It is useful to call this syntactic Integration, in contrast to the formal process of Agreement that does the corresponding work in the better studied gender and number languages familiar to us all.

In this skeletal outline of the operative content of the proposal, I first approach the problem itemwise. If an Asp[ect] integrator deals with a nominal, it imposes an Asp association feature whose details depend on the structure served by that Asp. This feature completes the nominal's Case specification, allowing it to access the phonology. As a second instance, suppose a nominal meets, instead, an argument integrator that seeks to situate it as a possessor within a nominal argument; then that argument integrator imposes a nominal association feature. This completes the nominal's Case specification, as in the first instance. The third option is for a nominal to fail to find any integrator of this sort. It must then seek Substantive Agreement. This involves movement to the specifier of Tense and negotiating the terms of some agreement that will obtain Full Interpretation clearance for it. I have called such agreement Substantive Agreement in my discussion of locative and indirect case subjects. Note its neutrality between the Formal Agreement strategy of gender and number languages and the Syntactic Integration strategy of classifier languages.

Under all three options of this itemwise listing, a nominal must move to a position enabling the appropriate type of syntactic accommodation. This is obvious to all readers for the third option. Although linguists have reached no consensus on exactly how Experiencer Subjects are licensed, I tentatively take it that either the Experiencer Subject itself, or some empty pronominal closely associated with it (as in the concrete proposal I have operated with here), moves to or is merged at the specifier of Tense.

At the first option, where the syntactic integrator that imposes a clinching association feature on the nominal to complete its Case matrix is an Asp, and at the second option, where the integrator is the relevant functional head of a nominal, we must ensure that it is the need for proper integration that propels nominals to their standard positions, leaving Integration-focused Bangla superficially just as head-final as its Agreement-focused sister language Hindi-Urdu.

But the exact syntax of Integration-focused languages with classifiers has been explored less thoroughly than that of their Agreement-focused sisters that display gender and number. Thus my broad strategy is to assume that the Asp head of a verbal (or adpositional, a point argued for in the fuller unpacking provided by Dasgupta *et al.* 2000) structure, and some relevant head H of a nominal structure, are responsible, respectively, for licensing some precise set of Case features for a nominal argument, and thereby integrating it into the structure headed by Asp or by this H.

The broad position sketched above embodies my basic stand on issues of agreement and integration in syntax. I will have an opportunity to articulate this stand into more domain-specific conjectures, in perhaps a sharper polemical relation with alternatives, once other linguists address in their own frameworks the empirical concerns that shape this chapter.

Notes

- 1 Transcription conventions: E O denote low vowels, M is for vowel nasalization, T D R are retroflex, S is palato-alveolar, the digraph ng symbolizes a velar nasal, and sequences of vowels are to be read with the second segment semi-vocalized if and only if the second vowel is at least as high as the first.
- 2 Glosses use the following abbreviations: AUX[iliary], CLA[ssifier], CONJ[unctive], DAT[ive], FUT[ure], GEN[itive], IND[irect], INF[initive], LOC[ative], NEG[ation].

References

- Dasgupta, P., Ford, A., Singh, R. 2000. *After Etymology: Towards a Substantivist Linguistics*. München: Lincom Europa.
- Jayaseelan, K.A. 1999. *Parametric Studies in Malayalam Syntax*. CIEFL Akshara Series vol. 4. New Delhi: Allied.

CHAPTER 7

Non-nominative subjects in Hindi–Urdu: VP structure and case parameters

Alice Davison

Introduction

Languages differ from one another in the cases which mark arguments. Languages also differ in how the arguments of a verb are projected syntactically, as subjects or objects or oblique arguments. Verbal agreement is normally associated with subjects, and with nominative case. But in many languages, including Hindi–Urdu, the subject grammatical role cannot be defined as crucially involving nominative case and verbal agreement. In these languages, more importance is given to the basic sentence requirement that there is a subject projected in the clause, specifically the Extended Projection Principle (Chomsky 1995). Hindi–Urdu has subjects with postpositional case markers, mainly ergative and dative. Its grammar selects different parameter values from other languages with only nominative subjects.

This chapter seeks to define in concrete detail exactly what subject properties are in Hindi–Urdu, and what parameter values account for these properties. We will use Ura's (2000) extension of the theory in Chomsky (1995), specifically to account for 'split' subject properties in terms of parameters for checking case. The central differences are concerned with the distinction between a structural case (ergative) and lexical cases (dative and other cases selected by lexical items), which in turn will follow in our analysis from a difference of the verbal projection. The verbal projection contains all the arguments, including the subject, which then raises a VP-external position. The verbal projection itself may consist of a minimal VP projection, or a complex vP (light verb projection with internal VPs). The internal structure of the VP projected by a lexical item in this analysis reflect the aspects of its semantic composition which determine case selection and also the grammatical function which each argument may assume.

Nominative case and agreement

In many languages, subject properties coincide without exception with nominative case on the nominal phrase and person/number (gender) agreement on the finite verb. Hindi–Urdu conforms partially to this pattern. Finite verb agreement in Hindi–Urdu is found only with nominative DPs. This is not an uncommon restriction in languages with a single set of agreement features (number, gender, person, or

AGR features), reflected on the verbal complex consisting of V and TENSE/aspect inflection. But Hindi–Urdu diverges from the pattern which is common in languages with nominative case associated with agreement. Subjects in this language are not uniquely identified by nominative case and agreement. In the following sentences (1)–(4) the AGR features are determined by some factor other than the PNG of the syntactic subject. The AGR features are determined by a nominative subject, as in (4):

- (1) *bacooN-nee_i apnii_{i/*j} billii deekh-ii*
 children-ERG self's cat.FS see-PF.FS
 'The children_i saw/looked at self's_{i/*j} cat.'
- (2) *bacooN-koo_i apnaa_{i/*j} kuttaa dikhaai di-yaa (hai)*
 children.MPL-DAT self's dog.MS sight.FS give-PF.MS be.PRES.3s
 'The children_i (have) caught sight of /seen self's_{i/*j} dog.'
- (3) *baccee-nee apnee maaN-baap-kii yaad kii*
 children.MPL-ERG self's mother-father.MPL-GEN memory.FS do.PF.FS
 'The children remembered/recalled their parents.'
- (4) a. *baccee apnii billii-koo khooj-tee rah-tee*
 children.MPL.NOM self's cat-DAT search-IMPF.MPL stay-IMPF.MPL
 haiN
 be.PRES.3PL
 'The children keep on searching for their cat.'
- b. *Daakuu haveelii-kaa darwaazaa tooR cal-ee thee*
 thieves.MPL mansion-GEN door.MSG break go-PF.MPL be-PST.MPL
 'The thieves were about to break into the door of the mansion.' (Nespital 1997: 677)

The DPs which control agreement (in bold) are all nominative, including direct objects (2), and the N component of a N-V complex predicate (3). The sentence may have no nominative argument, if all DPs have postpositional marking (5).

- (5) *bacooN-nee_i apnii_{i/*j} billii-koo deekh-aa*
 children-ERG self's cat.FS-DAT see-PF.MS
 'The children_i saw/looked at self's_{i/*j} cat.'

In that case, the verbal complex has the default 3ms inflection. Agreement is licensed even without a nominative argument, but a nominative argument will always control inflection, possibly in competition with other nominatives. The sentences (1)–(4) show that preference is given to subjects over objects.

Overview of case and subject properties of Hindi–Urdu

In this section, I focus on the crucial properties of case and grammatical function marking in HU. This language has dative case, ergative case, and other postpos-

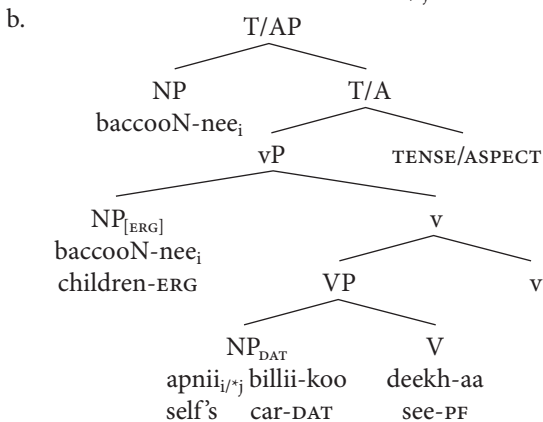
itional cases, as well as unmarked nominative case. Nominative case occurs only on arguments, which may be direct objects and predicate N, not just subjects. For this reason, agreement associated with nominative case refers to subjects, direct objects and predicate N, so that agreement is not a sufficient condition for identifying subjects.

Both nominative and ergative subject case are associated with finite TENSE. Ergative case is also associated with perfective aspect. Both TENSE and aspect are functional categories. Dative case marks specific or human (or animate) direct objects in some types of transitive verb. These are just the verbs which allow or require ergative subjects. We may postulate a functional projection within the verbal projection which licenses dative case on direct objects (such as AGR in Koizumi 1995, or Pred in Bowers 1993, or ASPECT in Travis 1997, Slabakova 2000). Structural case will be licensed by functional projections (Chomsky 1995). Other kinds of case are associated with specific lexical items, and are related to the theta role of a specific argument—for instance, experiencers and goals are associated with dative case. Lexical case is assigned by specific lexical items, verbs or event nominals, and checked at the same time as theta roles are checked (Chomsky 1995, Ura 2000).

Clause structure-basic assumptions for Hindi–Urdu

In the formation of clauses in HU, grammatical functions are defined both by movement for checking structural case and also by the Extended Projection Principle, which requires a subject in the specifier of TENSE. Because DPs with lexical case do not have to move for case checking, there are multiple possibilities for derivation in Hindi–Urdu. I will assume the basic clause projection in Hindi–Urdu looks like (6b).

- (6) a. *bacchooN-nee_i apnii_{i/s_j} billii-koo deekh-aa*
 children-ERG self cat.FS-DAT see-PF.MS
 ‘The children_i saw/looked at self’s_{i/s_j} cat.’



I adopt the general assumption that all types of structural case licensing involve feature checking, so that case features are associated with the DPs which are merged into the syntactic structure, such as [Erg] and [Dat] in (6b), as in Chomsky 1995. Ura 2000 refines this approach to account for a wide range of syntactic variants in the ways which languages may define grammatical functions. Instead of a unitary conception of grammatical functions such as subject, Ura proposes to reduce the subject relation to a number of syntactic relations to functional projections, which may refer to the same DP, or be divided between two DPs. Below, I sum up the basic assumptions underlying (6b), which will be translated into feature values for HU in (25).

- (7) a. Theta roles are assigned in the verbal projection by verbal heads.
- b. HU requires a specifier of TP in overt syntax (though the Spec/TP may be null *pro*).
- c. Nominative case [Nom] and agreement features are associated with each other — only nominative DPs control agreement, as in examples (1)–(4) above.
- d. There are default agreement features 3ms if the sentence contains no nominative argument, as in (5).
- e. Nominative case is found on internal arguments, direct object and complex predicate arguments (1)–(3), as well as on the external argument in Spec /TP. So nominative case is not associated exclusively with the position Spec/TP.
- f. Lexical case (and some component of ergative case) is checked with theta role assignment within VP a. HU requires a specifier of TP in overt syntax (though the Spec/TP may be null *pro*).

Subject properties

In this section, I review subject properties, and show that these properties are associated with ergative and dative subjects as well as those with nominative case. Subject properties in Hindi–Urdu are based on coindexing relations: reflexive binding, control of PRO in the conjunctive participle, and on construal relations: ‘subject orientation’, or selective reference to the subject argument of the main verb.

The subject properties of DPs with these cases have been documented for HU in many earlier works. The subject properties of ergative DPs is the topic of Pandharipande and Kachru 1976, Kachru, Kachru and Bhatia 1976, Verma 1976, Davison 1985, Mohanan 1994, etc. The subject properties of dative DPs has been argued for by Davison 1969, Kachru 1970, Davison 1988 and Mohanan 1994. Mohanan 1994 has a more extended review of subject properties, including passive sentences, and the full range of lexical cases (dative, instrumental, locative), which I omit here.

Subject-oriented reflexive binding

Reflexive anaphors in Hindi-Urdu are not inflected for PNG features (like English *themselves, itself*), and are subject oriented. Anaphors are locally complementary with pronouns (8) with respect to their antecedents. Reflexives have only subject antecedents, while pronouns may not be coindexed with a local subject. If more than one antecedent is semantically possible, only the subject is coindexed with the reflexive (9). These principles govern both the possessive reflexive (8) and the argument reflexive (9). The reflexive SELF is coindexed only with the subject, but the pronoun is disjoint from the local subject (8):

- (8) **baccee_i-nee** [duusree baccee_j-see] **apnee_{i/*j}** us_{i/*j/k}-kee khilaunee chiin
 child-ERG second child-from self's/ 3SG-GEN toys snatch
 li-ee
 take-PF
 '[One child_i] snatched from [another child_j] [self's_{i/*j} /his_{i/*j/k} toys].'
 (Davison 2001: 51)
- (9) **woo_i** baccee_j-koo apnee-aap_{i/*j}-see kaisee alag-kar sak-tii hai?
 3s child-DAT self's-self-from how separate-do be.able-IMPF is
 'How can she_i separate/remove the child_j from self_{i/*j}?' (herself/*itself)

Ergative subjects consistently serve as antecedents for reflexives (10)–(11). The subject orientation extends to long-distance (11) as well as local antecedents (10).¹

- (10) **bacchooN-nee_i** apnii_{i/*j} billii deekh-ii
 children-ERG self's cat.FS.NOM see-PF.FS
 'The children_i saw/looked at self's_{i/*j} cat.'
- (11) **maaN_i-nee** raam_j-koo [PRO_j apnee-aap_{i/*j}-koo gumnaam patr
 mother-ERG Ram-DAT self-(self)-DAT anonymous letter
 likh-nee]- kee liyee manaa kiyaa
 write-inf -GEN sake forbid do.pf
 'Mother_i forbade Ram_j [PRO_j to write self_{i/*j} anonymous letters].'
 [Simplex] *apnee-koo* = Ram(preferred)/mother
 [Complex] *apnee aap-koo* = Ram/*mother

Dative experiencer DPs may also bind reflexives (12)–(13), with some other possibilities for the sentence type in (13) to be explored below (36)–(41):

- (12) **bacchooN-nee_i** apnii_{i/*j} billii-koo deekh-aa
 children-ERG self's cat.FS-DAT see-PF.MS
 'The children_i saw/looked at self's_{i/*j} cat.'
- (13) **bacchooN-koo_i** apnii_{i/*j} billii dikhaai dii (hai)
 children.MPL-DAT self's cat.FS sight give-PF.FS be.PRES.3s
 'The children_i (have) caught sight/seen self's_{i/*j} cat.'

If reflexive binding of uninflected non-phrasal anaphors is confined to subjects, then we can conclude that the ergative and dative DPs are both in Specifier of TENSE position, or whatever functional projection which is outside the V projection and which hosts the reflexive clitic and its antecedent. One such analysis proposes that non-phrasal reflexives cliticize at LF to a clausal head and agree with the DP specifier, in phi features (Cole, Hermon and Sung 1990, Cole and Sung 1994, for Chinese) or in referential indices, for Hindi–Urdu (Davison 2001).

Controlled PRO as subject, and subject oriented

The null category PRO is obligatory in certain embedded clauses where coindexation with a matrix constituent is required. One such context is the conjunctive participle marked by the suffix *-kar* on a bare (TENSEless) verb stem.² The null embedded subject in this construction must be coindexed with the matrix subject, and not with some other referential phrase in the matrix (14)–(15). Though there are two plausible semantic antecedents in (14)–(15), only one, the subject (in bold) counts as the controller antecedent of PRO.

- (14) [PRO_{i/*j} is-baat-koo sun-kar] **pita_i-nee** apnee_{i/*k} beeTee_j-koo
 this matter-DAT hear-prt father-ERG self's son-DAT
 maaf kar di-yaa
 pardoned do give-PF
 '[PRO_{i/*j} having heard this news], father_i forgave self's_{i/*k} son_j.'

- (15) [PRO_{i/*j} is baat-koo sun-kar] **pita_i-koo** apnee_{i/*k} beeTee_j-par taras
 this matter-DAT hear-Prt father-DAT self's son-on pity
 aa-yaa
 come-PF
 [PRO_{i/*j} having heard this news, father_i felt pity for self's_{i/*k} son_j.'

This requirement refers specifically to subjects, not topics or thematically prominent DPs. Hindi–Urdu specifies possible subjects lexically. For example, the goal argument for the verb *mil-naa* 'to get' is a subject, and may bind a reflexive (16). The language does not allow a new grammatical subject to be created by a process like passive (17):

- (16) us_i-koo apnii_{i/*j} Daak nahiiN mil-eegii
 3s-DAT self's mail.FS not receive-FUT.3fs
 'He/she will not receive self's mail.'
- (17) *[PRO_{*i/*j} ghar badal-kar] us_i-koo apnii_{i/*j} Daak_j pahuNc-aa-ii
 house change-PRT 3s-DAT self's mail arrive-cause-PF.FS
 nahiiN ga-ii
 not go-PF.FS
 '[PRO_{*i/*j} having moved], he/she_i couldn't be forwarded self's_{*i/*j} mail.'
 (Grammatical as 'Because I moved, I couldn't forward him/her/my mail.')

The indirect object goal in (17) does not have the binding and control properties of a subject even though it is the 'highest' argument expressed in the matrix clause. It cannot be the controller of PRO or the antecedent of *apnii*. The grammatical function of subject, as we have seen, is not defined by case alone, but rather by specific syntactic relations, which will be clarified in more detail below. Since no such subject DP is available in (17), it is ungrammatical with a 3rd person antecedent, though for some speakers the sentence has a well-formed interpretation in which the unexpressed agent of the passive sentence, with a default first-person meaning, is indexed with PRO and *apnii*.

Control of PRO by a subject antecedent is required for the conjunctive participle. PRO itself is confined to subjects if the complement clause is infinitive. There are some interesting consequences for the subject properties of dative experiencers in controlled PRO constructions; they will be explored below (39)–(41).

Subject-oriented auxiliaries

A third category of subject definition which has not received much notice, as far I am aware, involves auxiliary verbs. While the familiar 'vector' verbs *lee-naa* 'take', *dee-naa* 'give', etc. refer to ergative as well as nominative subjects (Hook 1973), there are others with an auxiliary meaning which are possible with both ergative and dative subjects, as well as nominative subjects. These auxiliaries include *paa-naa* (Lit. 'find') 'manage' (18), *sak-naa* 'be able' (20), and *baiTh-naa* (Lit. 'sit') 'to do inadvertently, to not be able to help doing' (19) and (21).

- (18) usee duhkh thaa [ki woo apnee parivaar waalooN-kee liyee
 3s.DAT sorrow was that 3s.NOM self's family-GEN for
 bas itnaa hii kar paa-yaa
 enough so much EMPH do manage-PF
 'He was sad that he managed to do only so much for his family
 members.' (Nespital 1997:804)

- (19) maiN aap-kii Daak paRh baiTh-aa huuN
 I.NOM you-GEN mail read sit-PF am
 'I read your mail inadvertently (before realizing it was not addressed to
 me); I couldn't help reading your mail.'

- (20) maiN yah taaraa deekh nahiiN sak-ii (huuN)
 I.NOM this star see not be able-PF am
 'I wasn't able to see that star.'

The particular meaning contributed by the auxiliary verb refers to the properties of the referent of the subject phrase rather than the direct object referent. This is redundantly true when the direct object DP refers to something inanimate and inert, as in (18)–(21), but also when the referent is animate. If both the experiencer and theme refer to animate entities, then there two possible arguments which could have the

properties expressed by the auxiliary. But these auxiliaries are selective, picking out only the subject. A morphological feature of these auxiliaries is that subjects may not be ergative (19)–(20). Some speakers allow the subject to be dative (21):

- (21) *mujhee us-par kroodh aa baiTh-aa*
 I.DAT 3s-on anger come sit-PF
 ‘I couldn’t help getting angry at him/her.’

For the speakers who accept sentences such as (21), these auxiliaries cut across subject case possibilities. They combine with verbs which otherwise require ergative subjects as well as those which require nominative subjects, and for some speakers, also verbs which require dative subjects.

Summary of subject properties

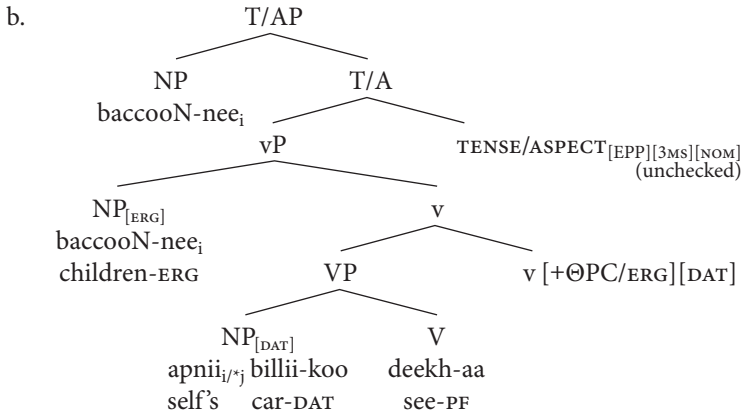
The focus of this section has been to define which syntactic relations are related to the grammatical function of subjects, and what case marking a subject may have. Only ergative case is specific to subjects. Verb agreement is associated with nominative direct objects or predicate N as well as nominative subjects.

- (22) Subject, coindexing and construal properties:
- Local/long-distance reflexives (animate, 3p antecedents are only subjects)
 - Controller of PRO — V -kar is only a matrix subject; PRO is only a subject.
 - Subject-oriented auxiliary verbs: *sak-naa* ‘to be able’; *paa-naa* ‘to find, to manage’; *baiTh-naa* ‘sit, do something inadvertently which ought to have been avoided.’

Feature values and subject properties

Returning to the derivation of a typical sentence with an ergative subject (24a), I propose that the structure which derives it has the feature values as in (25b). The Case feature on DP subjects is checked by functional heads (TENSE and ASPECT, here combined) which have with those features. This example shows a sentence with default agreement because there is no nominative argument. The [NOM] feature on TENSE need not be checked because Hindi–Urdu belongs to the class of languages which allow ‘impersonal’ sentences. HU is a language which requires a syntactic subject in Spec/TENSE, whether or not the subject triggers agreement. Agreement is blocked by postpositional case, as in (24), which has an ergative subject and dative direct object:

- (24) a. *baccooN-nee; apnii_{i/*j}; billii-koo deekh-aa*
 children-ERG self’s cat.FS-DAT see-PF.MS
 ‘The children_i saw/looked at self’s_{i/*j} cat.’



Sentence derivation

These parametric choices affect the derivation of the sentences in (24a). Theta roles are assigned as the arguments are merged in the verbal projection (a), and the external argument DP in the specifier of the vP projection moves to the Specifier of TENSE to satisfy the [D] categorial feature of TENSE (25b).

- (25) Feature parameters (expressing the generalizations in (7):
- Theta roles are assigned when DP is merged with the verbal projection.*
Theta roles are assigned in the verbal projection by verbal heads.
 - The Extended Projection Principle [D] category feature (EPP) is strong.*
HU requires a specifier of TP in overt syntax (though the Spec/TP may be null pro).

In sentence (24a), there is no nominative argument, but default agreement features are licensed without [Nom] (25d). But if there were a nominative argument, its feature and AGR features would be checked together (25c).

- (25) c. *[Nom] and phi features [AGR] are checked together.* (Ura 2002: 54)
Nominative case [Nom] and agreement features are associated — only nominative DPs control agreement. (as in examples (1)–(4) above),
- d. *The Impersonal Parameter holds; the [Nom] feature of TENSE need not be checked.* (Ura 2002: 36–8)
There are default agreement features, 3ms, if the sentence contains no nominative argument, as in (5).

HU is consistent in that whatever DP has nominative case can also control agreement features.³ The features are weak, meaning that they features can be checked covertly (by movement or agreement of features), without necessitating overt movement of

the full object phrase. Nominative objects remain in place, nominative subjects are in Spec/TENSE because of the strong EPP category feature (25b).

- (25) e. *[Nom] and phi features [AGR] are both weak, not requiring overt movement to subject position.* (Ura 2000: 121)
 Nominative case is found on internal arguments, direct object and complex predicate arguments (1)–(3), as well as the external argument in Spec/TP. So nominative case is not associated exclusively with the position Spec/TP.
- f. *The Theta Position Checking Parameter holds.* (+ΘPC, Ura 2000: 36)

Lexical case (and some component of ergative case) is checked with theta role assignment within VP). In addition, some specific assumptions need to be made about the postpositional cases of Hindi–Urdu (26):

- (26) a. The Dative case on experiencers and goals is theta-related, and selected by specific predicates. So it is a lexical case assigned by V and checked by V (25f). The same is true for other postpositional lexically selected cases (see Mohanan 1994 for a range of case uses for subjects and objects).
- b. Ergative case associated with transitive subjects is a structural case, dependent on finite TENSE and perfective aspect in functional projections (see Davison 1999a,b, to appear, for support for these conclusions, and Appendix I, III).
- c. Dative case on direct objects is a structural case, checked by the v head of VP (Davison 1999b).

If structural dative is possible on the direct object, then ergative is possible on the subject in finite, perfective sentences. Some exceptional verbs allow a dative object, but do not require an ergative subject (Davison 1996). Here I will assume that the light v has a weak [dat] feature, so that it can check dative direct object case without overt phrasal movement.

In sentence (24a) above the ergative case is partially checked by the main verb (+ΘPC/ERG). This looks like a lexical selection property, but I will suggest below that it is actually a structural fact which is a consequence of lexical properties. The subject properties summarized in (22) hold for all subjects regardless of case and agreement. This fact suggests that Hindi–Urdu very consistently defines subjects as the DP associated with TENSE, a result of the strong EPP feature.

Lexical parameters

In the preceding section I have outlined a basic head-final structure for Hindi–Urdu sentences (25b), which reflects the feature values for case checking and subject movement in this language. Hindi–Urdu resembles many languages in having

a strong EPP feature, requiring a surface subject (which may be null *pro*), and weak features relating to the direct object case and verbal agreement. It differs from other languages in having ergative case on subjects, as well as nominative and dative case on direct objects instead of accusative case. It resembles many languages, though not English, in allowing nominative case not to be checked, resulting in an impersonal structure with only default agreement. Perhaps for this reason it lacks overt expletives, unlike English and German (Bayer, this volume).

What sets Hindi-Urdu apart from many other languages is not just the feature parameter values defined above (25), but also some lexical choices, for example the choice of ergative case as a transitive subject case, and the association of lexical cases with both internal and external arguments. A consequence of those choices is a language internal difference among transitive predicates in Hindi-Urdu. For transitive predicates, we may assume a basic bivalent argument structure $\langle 1, 2, e \rangle$, with two arguments and the Davidsonian event argument. To this may be added some additional specification, which I will take to be aspectual, specifying event type (Travis 1997, Slabakova 2000). It corresponds to the light verb *v* forming a *vP* shell, adding case licensing features as well as aspectual meaning.

VP structure

An important alternative in Hindi-Urdu is that this event specification may be absent, so that the basic argument structure $\langle 1, 2, e \rangle$ is not specified for event type. This choice, to add or not add aspectual specification has consequences for case checking, and can be summarized in (27):

$$(27) \quad \left\{ \begin{array}{c} \text{Argument structure } \langle 1, 2, e \rangle \\ \text{plus} \\ \text{Aspectual specification/0} \end{array} \right\} \begin{array}{l} \text{entails VP structure} \\ \text{Case [structural/lexical]} \end{array}$$

The schema in (27) encompasses two distinct possibilities:

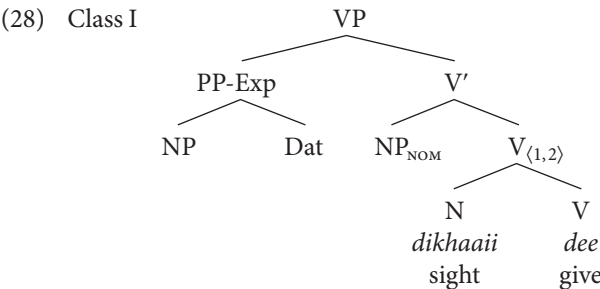
- (28) a. $\langle 1, 2, e \rangle$ is projected as VP, with lexical case on the external argument. The internal argument may have only nominative case, or another lexical case.
 b. $\langle 1, 2, e \rangle$ in VP is the complement of *vP*, which selects ergative subject case and licenses dative structural case on direct objects.

These two structural possibilities produce different classes of verbs, with different case arrays, as well as different possibilities of subject selection. The VP alone is underspecified for aspect. In combination with imperfective sentence aspect (or viewpoint aspect as in Smith 1997), the interpretation is stative. In combination with perfective sentence aspect, the interpretation is perfective, change of state or resulting state. With the light verb projection *vP*, the verb is specified for \pm *dynamic* (state versus event), \pm *durative* (activity, accomplishment vs. achievement, semelfactive) and \pm *telic* (states and activities versus accomplishments and achievements).

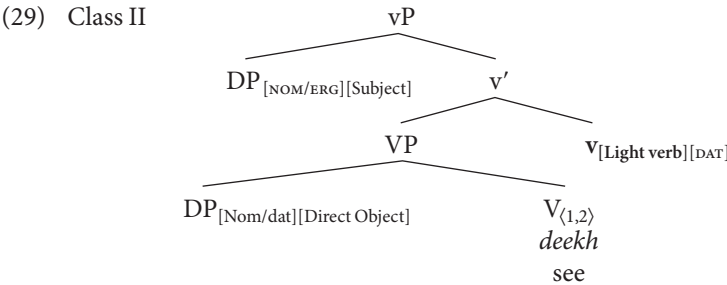
In addition, the light verb *v* projects the external argument as Specifier. It assigns its specifier a theta role (Agent, experiencer, patient, goal). In addition *v* may have a [dat] structural case feature which licenses dative direct objects.

Verb classes and case arrays

There are at least four lexical classes resulting from this lexical parameter, which I have discussed elsewhere (Davison to appear). Here I will focus on two classes, whose verbal projections are (28) and (29).



The N-V predicate is an ‘unaccusative’ predicate *V'* plus a lexically cased 2nd argument. There is no case-licensing functional head which checks the case of the object.



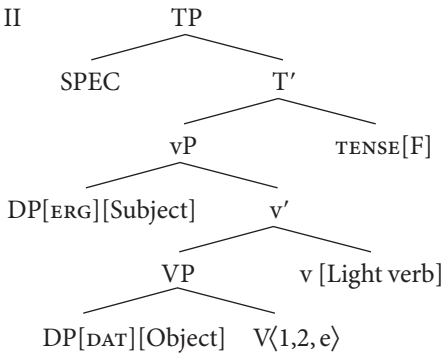
VP class I predicates have the case array in (30a), while vP Class II predicates have a different case array (30b):

(30)	a.	VP	Dative subject	lexical case object or nominative [Class I]
		dikhaaii	dee-naa	‘be visible, see, glimpse’
		suujh	-naa	‘see, come to mind’
		pasand	aa-naa	‘like, be pleasing’
		khiijh	hoo-naa	‘irritate, annoy’
		Dar	hoo-naa	‘fear, be afraid of’
		maaluum	hoo-naa	‘know’
		yaad	aa-naa	‘remember, miss someone’

- b. vP Ergative/nominative subject dative/nominative object [Class II]
- | | |
|----------------|--------------------|
| deekh-naa | 'see, look at' |
| sun-naa | 'hear, listen to' |
| pasand kar-naa | 'like' |
| bhuul-naa | 'forget' |
| jaan-naa | 'know' |
| yaad kar-naa | 'remember, recall' |

Class II predicates are associated with structural case on both subject and object. These cases are checked by functional projections. As the tree structure (24b) shows, I assume that the functional projections which assign the subject theta role (v) and subject case (TENSE /ASPECT) are different from the projection which licenses the direct object theta role (V) and case (v). The separation of projections for Class II is shown in (31).

(31) Class II



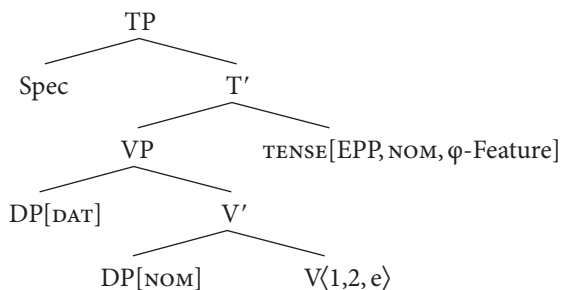
Subject selection

This structure (31) places restrictions on which DP argument of a bivalent predicate may be raised to Spec/TENSE to satisfy the strong EPP feature.

The subject DP (Nom/Erg) is in a different syntactic domain (vP) from the object DP (V). Only the subject DP can be moved to Spec/TP, and serve as an antecedent for reflexives and PRO. In addition, a DP with ergative case must be licensed by finite TENSE and perfective aspect, so that if it is not raised to Spec/TENSE, some part of the case licensing process will be lost, and a case feature will remain unchecked.⁴

In contrast, class I predicates form a clause as in (32). The VP projection contains both the subject and the object DPs. This structure suggests that either DP could in principle raise to Spec/TP for the EPP feature. Dative lexical case does not require checking outside of VP. Nominative case can be checked without overt movement. Movement of either DP in (32) to Spec/TP is allowed by the locality condition in (33).

(32) Class I

(33) *Equidistance* (Chomsky 1995: 335–6, Ura 2000: 31–2).

α and β are equidistant from Γ iff α and β are in the same minimal domain.
 If α and β are equidistant from Γ , movement of α to Γ and movement of β to Γ are equally economical; head movement does not extend domains.

Since DP[Dat] and DP[Nom] are in the projection of the V head in (32), they are equidistant from TENSE[EPP]. On the other hand, in (31), DP[Erg] and DP[Dat] are not in the same minimal domain. DP[Dat] is not the closer of the two DPs, because there is another DP in a domain which includes the domain of the object DP. The object DP would move to Spec/TENSE only by crossing over the higher head and its domain. This restriction explains in part the difference between the Class I predicate *mil-naa* ‘get, receive’ in (16) from the Class II predicate *pahuNcaa-naa* ‘forward, cause to receive’ in (17). The predicate in (17) is made up of a complex vP projection, containing the indirect object in a different projection from the external argument. This structural contrast of (31) and (32) makes different predictions for subject properties:

(34) Class II (31)

- a. The vP projection with a light verb separating the subject and object allows only the Spec/vP to be moved to Spec/TP.
- b. These subjects bind only reflexives, and cannot bind pronouns.
- c. Only the external argument can be controlled PRO.

(35) Class I (32)

- a. The Dative experiencer can check the Subject/EPP feature of TENSE.
- b. The Nominative theme can check the EPP feature, Nom/AGR features.
- c. Either the experiencer or theme argument can bind reflexives.
- d. Either argument can be controlled PRO.

Reflexive binding

These predictions are supported by evidence from Hindi–Urdu constructions which refer to subjects. The strongest and most general evidence comes from reflexive binding. Ergative subjects bind only reflexive pronouns; pronouns are obligatorily disjoint in references from local subjects (36).

- (36) a. moohan_i-**nee** apnee_i/***us-kee**_i maaN-baap-kii yaad
 Mohan.MS-ERG self's/3s-GEN mother-father-GEN memory.FS
 kii
 do.PF.FS
 'Mohan_i remembered self's_{i/*j} /***his**_{i/j} parents.'
- b. maalik_i apnaa_{i/*j}/**us**_{i/j/k}-kaa kuttaa pasand kar-taa hai
 master.MS.NOM self's/3s-GEN dog.MS liked do-IMPF.MS is
 'The master likes self's_{i/*j} /***his**_{i/j} dog.'

As Saxena (1985) and Gurtu (1992) observed, dative subjects bind either a reflexive or a pronoun (37).

- (37) moohan_i-**koo** apnee_{i/j}/**us-kee**_i maaN-baap-kii yaad
 Mohan.MS-DAT self's/3s-GEN mother-father-GEN memory.FS
 aa-ii
 come-PF.FS
 'Mohan_i remembered self's_{i/*j} /**his**_{i/j} parents.' (cf. Saxena 1985)

As the binding evidence in (36) shows, if a DP is a subject, it cannot locally bind a pronoun. So if dative DP locally binds a pronoun, it is not a subject. The dative DP in (37) is either a subject binding a reflexive or not a subject, binding a pronoun. Lexically cased dative DPs have the option, therefore, of not raising to Spec/TP to satisfy the EPP requirement. This option of subjects to remain in VP is forced by a language-specific constraint, that reflexives cannot have nominative case. The internal argument of a dative experiencer predicate has nominative case (38a).

- (38) a. ***raam**_i-**koo** sirf **apnaa aap**_{i/*j} acchaa lag-taa hai
 Ram-DAT only self's self.NOM good strike-IMPF is
 'Ram likes only himself.' (Yamabe 1990:117)
 [Experiencer as subject]
- b. raam_i sirf **apnee (aap)**_{i/*j}-koo acchaa lag-taa hai
 Ram.NOM only self's self-dat good strike-IMPF is
 'Ram likes only himself.' (Ibid) [Theme as subject]
- c. [kumaar **apnee aap-koo/khud-koo** acchaa lag-naa]
 Kumar.NOM self's-self-DAT/self-DAT good strike-INF
 swabhaavik hai
 natural is
 'It is natural [for Kumar to like himself].' (Ibid) [Theme as subject]

To avoid this constraint on nominative reflexives, the internal argument or theme may raise to Spec/TP for the EPP feature, while the dative argument stays within VP. The reflexive argument is therefor dative in (38b-c), bound by the nominative subject.

Subject control and the ‘dative effect’

A second class of evidence comes from control. Only subjects can be controlled PRO. There is a language-specific constraint that dative experiencer subjects cannot be PRO in contexts of obligatory control (the ‘Dative Effect’). The class I verb *bhaa-naa* ‘like, suit’ requires a dative experiencer (39a):

- (39) a. un loogooN-koo yah laRkii bhaa-tii hai
 these people-DAT this girl.NOM please-IMPF is
 ‘These people like this girl.’
 b. *vee loog [PRO yah laRkii bhaa-naa] nahiiN caah-tee haiN
 3MPL.NOM people this girl please-inf not want-IMPF are
 ‘These people don’t want [this girl to be pleasing to PRO]’, or
 ‘These people don’t want [/PRO to like this girl].’
 c. (?)yah laRkii [PRO un loogooN-koo bhaa-naa] nahiiN caah-tii hai
 this girl.NOM those people-DAT please-inf not want-IMPF is
 ‘This girl doesn’t want [PRO to be pleasing to those people.]’ or ‘this
 girl doesn’t want [those people to like PRO.]’ [cf. Hook 1990]

If the dative experiencer is put in an embedded infinitival context where subjects must be coreferent, the results are robustly ungrammatical, a judgement which is widely shared by speakers of Hindi and Urdu (39b). For some speakers, it is possible to embed a sentence like (39a), but with the nominative theme NP as the PRO controlled subject (39c) (Hook 1990).

This possibility is not available for any speakers if the embedded verb is of class II, with a vP projection. The sentence (40a) is robustly ungrammatical for all speakers consulted. Objects in vP projections are not controlled, because they cannot move for the EPP feature to Spec/TP (40b) without violating Equidistance (33):

- (40) a. baccaa [PRO billii deekh-naa] caah-taa hai
 child.MS.NOM cat.FS.NOM see-inf want-IMPF.MS is
 ‘The child wants [PRO to see the cat].’
 b. *billii [baccaa PRO deekh-naa] nahiiN caah-tii hai
 cat.FS.NOM child.MS.NOM see-INF not want-IMPF.FS is
 ‘The cat doesn’t want [the child to see PRO].’
Note: possible as ‘the cat doesn’t want [PRO to see the child], with
 dative case on the direct object.

The Class II verb *deekh-naa* ‘see’ has Class I near synonyms *dikhaaii dee-naa*, *dikh-naa* ‘be seen, see, glimpse’. With the VP projection containing both arguments, the dative control restriction can be avoided, for some speakers, as in (41):

- (41) billii [PRO baccee-koo diikh-naa/dikhaaii dee-naa] nahiiN
 cat.FS child.MS-DAT be.visible-INF/be.seen-INF not
 caah-tii hai
 want-IMPF.FS is
 ‘The cat doesn’t want [the child to see PRO/PRO to be visible to the child].’

Subject-oriented auxiliaries

Subject-oriented auxiliaries are also sensitive to subject status, and allow some variation as to what the subject is, at least for some speakers. These auxiliaries refer to some property of the subject (18)–(21), such as ability, success in carrying out an intended act, and in failing to avoid an unfortunate event. The auxiliary *baiTh-naa* ‘sit’ conveys the meaning that the subject inadvertently did something which should have been avoided (19) and (21). Class II vP verbs select just one subject, so that the sentence (42a) is unambiguous — the speaker should go along with the child’s game of hiding, but can’t avoid seeing the child.

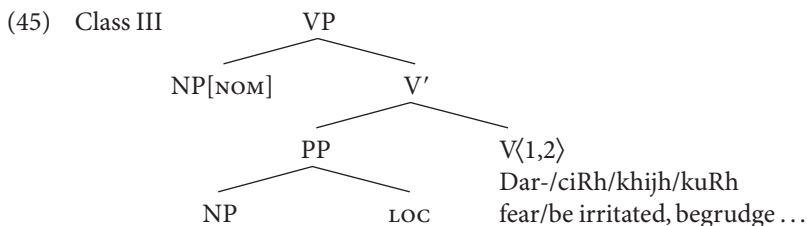
- (42) a. maiN pardee-kee piichee chip-ee hu-ee baccee-koo **deekh baiTh-ii**
 I.NOM curtain-GEN back hide-PF be-PF child-DAT see sit-PF
 ‘I couldn’t help seeing/looking at the child hidden behind the curtain.’
 b. mujhee pardee-kee piichee chip-aa hu-aa baccaa **dikhaaii dee**
 I-dat curtain-GEN back hide-PF be-PF child sight give
baiTh-aa
 sit-PF
 (i) ‘I couldn’t help seeing the child hidden behind the curtain.’
 (ii) ‘The child hidden behind the curtain couldn’t help being seen by me.’

But Class I VP projections have two choices of subject, and so there are two interpretations (42b), one involving referent of the experiencer and inability to avoid seeing, and the other referring to the theme, and inability to avoid being seen. (This judgement is not universally shared, however.)

Other class options for VP

The same VP structure I have proposed for Class II offers other case possibilities. Another case array is possible, what I call Class III (43)–(44), which has the VP structure (45). Like Class I verb, these verbs are underspecified for verbal aspect/ Aktionsart. They get a default interpretation from the sentence aspect- they are telic with perfective aspect or stative with imperfective aspect. Class III sentences have nominative subjects and an oblique theme or source.

- (43) baccee kuttee-see Dar ga-ee
 children.NOM dog-from fear go-PF.MPL
 ‘The children got frightened of the dog.’ [change of state, resulting state]
 (44) maiN apnee (aap)-see ciRh-tii huuN
 I.NOM self’s-self -from be.irritated-IMPF am
 ‘I have an aversion to myself, I am irritated with myself.’ [stative]
 also *khiijh-naa* ‘be irritated (at)’, *kuRh-naa* ‘begrudge, resent’



Both arguments are equidistant from TENSE and its [D] category EPP feature, so that either argument could be selected as a subject in Spec TP. But there is no advantage to selecting the theme/source as subject. If the arguments are coindexed, there is no violation of a constraint if the locative DP is a reflexive (44). The experiencer DP may be controlled PRO, the locative DP may not, so there is no advantage to be gained by raising it to satisfy the EPP feature.

Summary of subject selection and verbal projection

In summary, we have seen in this section that Class II verbs projected as complex vP shells (31). Subject selection is stable; there is only one choice of subject which can bind a reflexive, be controlled PRO, and be related to a subject-oriented auxiliary.

On the other hand, Class I verbs projected as a simple VP show variability of subject choice. Either the experiencer (the default) or the theme can have the subject properties of binding a reflexive, be controlled PRO and be related to a subject-related auxiliary. The experiencer *can* therefore fail to be a subject. If the theme is selected as subject, then the experiencer DP can bind a pronoun, be lexically projected rather than PRO, and not be related to the auxiliary.

Subject fluidity in the Class I verbal projection is a consequence of a single VP projection which contains both the experiencer and theme arguments. The VP contains nothing which could license structural case. V assigns a lexical case to one argument, leaving the other argument to get NOM case licensed by TENSE (with or without overt movement).

The Class II complex vP projection has an internal projection ('light' verb(s)) which check the structural case on the direct object. Lexical cases may be assigned to the indirect object (not discussed in this chapter) or other oblique arguments. Some part of the 'light' verb complex assigns case, and some component of it adds aspectual meaning. There are some indications about what that specification might consist of, indicated in the following minimal pair of Class I and Class II verbs which overlap in meaning (46)

- (46) a. woo ghooRee jaan-taa hai (class I)
 3sm horses know-IMPF is
 'He knows horses (intuitively, just by experience).'

- b. usee ghooRee maaluum haiN (class II)
 3s-DAT horses known are
 ‘He knows horses (through systematic and concerted learning).’

The paraphrase of the Class I predicate *maaluum hoo-naa* ‘know, be acquainted with’ suggests a kind of intuitive state or change of state meaning for the aspectually underspecified VP, while the vP class II version *jaan-naa* ‘know, come to know’ seems to involve incremental stages of knowledge. This evidence is only suggestive, and clearly far more systematic study of Class I/Class II contrasts is needed.

The Dative-subject parameter

The choices of ergative structural case on transitive subjects and of dative lexical case on experiencer external arguments has been characterized in an earlier section as choices of lexical parameters. The principal difference is that dative case in Hindi–Urdu is a lexical or inherent case, associated with a specific semantic role goal/experiencer, while ergative and nominative case are structural cases, sensitive to position and functional heads like TENSE, and not restricted to specific semantic roles. I have argued that ergative DPs must be subjects, while dative DPs *may* be subjects. If structural case checking of ergative DPs necessarily involves movement to TENSE, then ergative DPs are necessarily subjects. If checking of lexical or inherent case is different from structural case checking, and does not require movement to TENSE, then there are two options: (a) Dative experiencer DPs move to the Specifier of TENSE for some other reasons — to meet the requirement of TENSE for a syntactic subject — or (b) dative DPs do not move to the Specifier position of TENSE and are never syntactic subjects. I argue that Hindi–Urdu and many other languages make the first choice, while other languages may make the second.

Jayaseelan (this volume) argues that Malayalam is among the latter, because it is a verb-final language, with freedom of constituent order, and a null category may occupy the syntactic subject position. Many other languages have these parametric choices, including Hindi–Urdu, and other languages of South Asia. In fact dative subjects are a feature of the South Asian linguistic area (Masica 1976). Jayaseelan’s parametric choices may not be sufficient to narrow down just the languages which do or do not have dative subjects. But in the spirit of his arguments, I want to propose a Universal Grammar parameter for languages with inherent dative case. The proposed parameter is the following:

(47) *Dative-subject parameter*

Lexical dative case may/may not move to Spec/TENSE to check a Formal Feature such as EPP. Formally, DP[DAT] does/does not match the [D] feature on TENSE.

Languages like Hindi–Urdu, Icelandic (Sigurðsson this volume), and Russian (Kon-drashova 1994, Kallestinova 2002) have a positive value for (47). These and many

other authors, show that reflexives and participles treat dative experiencer DPs as subject.

Languages which are very similar may show a positive or negative value. Hindi–Urdu is head final, has freedom of word order and allows null subjects. It also has ergative case on transitive subjects in finite, perfective sentences. Very close counterparts are Georgian, with ergative subjects in finite aorist sentences (Harris 1981), and Basque, which has ergative case in finite clauses (Ortiz de Urbina 1989). Georgian has dative subjects of transitive verbs in the aorist TENSE, and dative experiencer subjects in all tenses (48a), while Basque does not allow the dative experiencer DP to be a subject at all. In Georgian, dative experiencers antecede subject-oriented reflexives (Harris 1981:205–8):

- (48) Georgian
- a. vanos uqvars tavis tavi
 Vano-DAT he.loves.him.I.4 self's self.NOM
 'Vano loves himself.' (Harris 1991:208)
 - b. *tavis tavs uqvar vano
 self's self-DAT he.loves.him Vano
 'Vano loves himself.' (Ibid.)

Georgian allows nominative reflexives (48a), and does not allow the nominative DP to be subject (48b), so that Georgian seems not to have the fluidity of subject selection found in Hindi–Urdu Class I predicates.

Basque, in contrast, requires the nominative DP to be subject, and does not allow dative experiencers as subjects (49):

- (49) Basque
- mere buru-ari (ni) nazgagarri natzaio
 my head-DAT I.abs disgusting be.PRES.1sabs.1sdat
 'I am disgusting to myself.' (Ortiz de Urbina 1989:37; Oihane Barrenetxea p.c.)
- (50) Basque
- ez diot [PRO nire burua-ri nazkagarri izan] nahi
 not 1s.ERG.3SDAT my head-DAT disgusting be.PART want
 'I don't want [PRO to be disgusting to myself.]
 (Oihane Barrenetxea, p.c.)

The absolutive DP *ni* 'I' is the subject, c-commanding the reflexive dative DP in (49). The absolutive DP refers to the theme of the predicate 'be disgusting'. Some additional confirmation comes from (50), in which the absolutive theme corresponds to the controlled PRO, which is a subject — on the assumption that only subjects of non-finite clauses may be controlled PRO. Note that the dative experiencer remains within the embedded VP.

Sanskrit is of particular interest. Dative, accusative or genitive case may be selected by experiencer verbs such as *ruc* 'like, please', *tap* 'burn, cause pain'. There are several different devices for reflexive coindexation including the noun *ātman* 'soul, self', which seem not to be consistently coindexed with a subject antecedent. The conjunctive participle marked with *-tvā* or *-ya* 'having V-ed' requires a nominative or instrumental subject antecedent in the main clause. Tikkanen (1987) cites sentences from the Rgveda in which a participle subject is coindexed with a matrix non-nominative subject, such as (51), and others (Hook 1985, Tikkanen 1987: 147–52, Hock 1991).

- (51) Sanskrit
[PRO striyam dr̥ṣtvāya] kitavam tatāpa
 woman-ACC see-PRT player-ACC causes pain
‘[PRO having seen (this) woman] it distresses the player; the player feels
pain.’ (RV 10.43.11a; Tikkanen 1987: 150)

Hook (1985) notes that the grammar defined in the Paninian tradition does not allow for such a combination, but attested sentences of this type occur. In fact there could be ambiguous coindexing with either the experiencer or the theme (Hook 1985). Tikkanen and Hock show that there was much inconsistency in Sanskrit in these 'subject' oriented processes, perhaps reflecting dialect variation. It would be interesting to correlate the values of (47) with other formal properties of a language, such as strict subject orientation of reflexives and participles, the absence of a nominative reflexive, etc., but resolving this question is beyond the scope of this chapter.

Conclusion

The starting point of this chapter has been a proposal by Ura (2000) to state the parameters by which languages vary in defining grammatical functions. These parameters are expressed as conditions on the checking of case, agreement and EPP features, assuming that these features are checked in a syntactic relationship to various functional heads, particular TENSE and the light verb in the vP projection. The checking relation to these functional heads defines a subject or object property.

In this chapter, I have surveyed the subject properties of non-nominative subjects in Hindi–Urdu, a language which has ergative subject case, and dative and other lexical cases on subjects. Subject properties involve coindexing relations, with subject-oriented reflexives, and the null subject of the conjunctive participle; subject-oriented auxiliaries also refer to non-nominative subjects. Agreement, however, is not a subject-defining relation, as it broadly covers all nominative DPs, objects as well as subjects. I have defined the values for Hindi–Urdu for Ura’s repertory of feature-checking parameters.

Most of these values are not very different from other languages of South Asia and elsewhere. What distinguishes Hindi-Urdu are some lexical parameters. One lexical

parameter is the presence of ergative and dative postpositional case. Another lexical parameter is a possibility of projecting a bivalent V as a simple VP projection, rather than a complex vP which merges the subject and object in different maximal projections. This parameter choice allows several different types of V projection. The vP projection has a fixed subject, while the VP projection contains both arguments in the same maximal projection. Some latitude is possible in subject selection. Either argument may move to TENSE to satisfy the [D] requirement/EPP requirement on TENSE, which requires a specifier/subject.

Finally, a larger, perhaps lexical, parameter determines whether a dative DP may move to Spec. TP. Hindi–Urdu, Georgian, Icelandic, Russian and many other languages have a positive value, while languages like Basque prohibit dative subjects. Sanskrit shows many different coindexings for reflexives and conjunctive participles, though the traditional Paninian grammar disallows oblique subjects as antecedents (except for instrumental subjects). The syntactic coindexing principles in Sanskrit may not have been consistently fixed. The variation among languages described above leads to further questions, not answered in this chapter, about what other properties of a language may entail a positive or negative value for this parameter.

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Appendix I. Ergative as a structural case

Here I present additional semantic and morphological arguments for the conclusion that ergative case in Hindi–Urdu is a structural case. It can be associated with a non-agent role, as in (1). The main verb is a complex predicate: N + *kar-naa* ‘do N’, *mahsuus kar-naa* ‘to feel, experience’. This combination requires the ergative subject, because of the light verb *kar-naa* ‘do’. But the semantic role of the subject is contributed by *mahsuus* ‘feeling’, which specifies an experiencer, not an agent.

- (1) **kanyaa-nee** mahsuus ki-yaa [ki woo jiivan-meeN pahlii baar kisii puruS-kee
 Kanyaa-ERG feeling do-PF that 3s life-in first time some man-GEN
 aakarSaN-paash-meeN puurii taur-par bandh gaiihai
 attraction-snare-in full state.in tied go.pf
 'Kanya felt for the first time in her life that she was completely snared in the trap
 of attraction to some man.' (Bahl 1974: 253).

A morphological argument rests on the use of imperfective aspect for counterfactual conditionals, even with perfective meaning. If the clause in (2) with obligatory ergative case is combined with a consequent clause as in (3), the ergative case is ungrammatical.

- (2) tum *(nee) mujhee bataa-yaa ki tum-koo meeraa kah-naa buraa lag-aa
 you.*NOM/ERG I-DAT tell-PF that you-DAT my say-INF bad strike-PF
 'You told me [that you didn't like] what I was saying.'
- (3) *Counterfactual conditional-imperfective aspect in both clauses.*
 tum (*nee) mujhee bataa-taa ki tum-koo meeraa kah-naa buraa lag-aa
 you.NOM/*ERG I-DAT tell-IMPF that you-DAT my say-INF bad strike-PF
 too maiN kahnaa band kar dee-tii
 then I.NOM say-INF shut do give-IMPF

'If you had told me that what I was saying annoyed you, then I would have shut up.'

A perfective dative-subject sentence (4) can be made into an imperfective conditional without change of subject case (5):

- (4) *Counterfactual — dative subject*
 agar usee meerii baat burii lag-ii hai, too woo mujhee bataa-ee-gii
 if 3s-DAT my matter bad strike-PF is then 3s I.DAT tell-FUT-3fs
 'If she was bothered at what I said, then she will tell me.'
- (5) (agar) usee meerii baat burii lag-tii, too woo mujhee bataa-tii
 if 3s.DAT my matter bad strike-IMPF then 3s I.DAT tell-IMPF
 'If she had been bothered at what I said, then she would have told me.'

This contrast follows from the fact that ergative case is sensitive to values of ASPECT, while lexical dative case is independent of the values of the functional projections outside of VP.

Appendix II. Dative experiencer, accusative theme

The VP/vP projections proposed for verb classes in Hindi-Urdu make the prediction that the dative direct objectcase (licensed by the light verb *v*) is impossible with a dative experiencer, licensed by VP without vP. This prediction is correct for Hindi-Urdu, which does not have a distinct accusative case and for Japanese (Ura 2000: 104ff), which does have accusative case.

- (1) a. John-ga Mary-ga/-o shimpai-da Japanese
 John-NOM Mary-NOM/ACC anxious-COP
 'John is anxious about Mary.' (Ura 2000: 106)
- b. John-ni Mary-ga/*-o shimpai-da
 John-DAT Mary-NOM*/ACC anxious-COP
 'John is anxious about Mary.' (Ura 2000: 107)

Tamil, however, has accusative case on the theme of a dative experiencer predicate (Ura 2000, K. Paramasivam 1979):

- (2) kumaar-ukku raajav-aip pitikk-um Tamil
 Kumar-DAT Raja-ACC like-IMP
 'Kumar likes Raja.' (Lehmann 1993: 184).

Bangla also has accusative objects of predicates with genitive experiencer subjects:

- (3) amar o-ke bhOy lage Bangla
 I-GEN 3-ACC fear feel
 'I am afraid of him.' (Sengupta, p.c.)

Ura accounts for sentences like Tamil (2) as the result of a parameter choice for the vP projection, a structure like (29), which has the option of assigning lexical dative case to its specifier (2000: 118–25), and either nominative or accusative object case. In language like Dutch, this vP structure may undergo reanalysis, yielding a single V projection which has the consequence that the two arguments are in the same minimal domain and equidistant from TENSE (Ura 2000 139–42). So far, however, it has not been shown that the sentences in Tamil and Bangla which have accusative case (2)–(3) have the same kind of subject fluidity shown for Hindi–Urdu Class I predicates. But it is logically possible that these languages have Class I predicates (DAT-NOM), and two varieties of vP projections, which we can call Class IIa, 'standard' transitive verbs, and IIb. One Class II has NOM-ACC, the other DAT-ACC, with reanalysis a possibility for Class IIb. I have chosen to express the difference among transitive verbs as a basic structural difference which entails different case arrays. This approach avoids the intermediate step of reanalysis for a language like Hindi–Urdu, in which accusative case is not possible with dative subject. Reanalysis in Hindi–Urdu would have no independent motivation, other than it results in the correct surface cases. If further investigation gives a fuller account of the [dat-ACC] verb classes in Tamil and Bangla, then the new class IIb with a vP projection will be supported, especially if some independent factor motivating reanalysis can be found which is so far absent.

Appendix III. Licensing ergative case in perfective finite clauses

It is necessary in Hindi–Urdu for ergative case to be the subject case within a finite perfective sentence. Both finiteness and perfective sentence aspect are required; otherwise the subject must be nominative. Finiteness is required because perfective aspect also marks non-finite participles. These participles are used as DP modifiers, or as the complement selected by certain verbs, such as *deekh-naa* 'see' and *jaan paR-naa* 'seem, appear', in which ergative case is not possible (though see Mahajan 1990 for an exception). (See also Davison 1999a for further cases involving V–V compounds, which also affect subject case.)

Ergative case is not possible, even when the sentence is perfective and finite, if there is an auxiliary verb which intervenes between V and the sentence aspect. Examples include (18) and (42a). The core generalization is that ergative subjects are possible only when the sentence perfective aspect is directly adjacent to the main verb:

- (1) a. tumharee puurvaj (*nee) ghaas chiil-aa ki-ee
 your ancestors.MPL.NOM *ERG grass.f scrape-PF do-PF.MPL
 'Your ancestors were in the habit of cutting grass.' (McGregor 1995: 151)

- b. niinaa-nee apnee-liyee bhii santaraa chiil li-yaa/chiil-aa
 Nina-ERG self-for also santra peel take-PF/peel-PF
 'Nina peeled a santra for herself as well.' (Nespital 1997:515)

The combination of the ergative subject verb *kar-naa* 'do' with V-pf in (1a) expresses an aspectual meaning 'to be in the habit of V-ing, without an ergative subject. With the same main verb, the subject in (1b) is ergative because the sentence aspect is directly linked to *chiil* 'peel, cut, scrape'. This is not the case in (1a), in which the aspectual verb intervenes between the sentence aspect as V. The perfective on *chiil* is selected by *kar-naa* to form the aspectual verb. It is not the 'real' sentence perfective aspect, which expresses a relation between the event time E and reference time R (Giorgi and Pianesi 1997).

Ura (2000:205, 218–9) proposes an account of split ergative licensing which depends on a selection relation between sentence aspect and the feature properties on vP, expressed as features of the v head of vP. He propose a parameter allowing case to be checked (without movement) in the same position as the theta role, or Θ Position Checking parameter (25f). I have used the feature $+\Theta$ PC as a property of V to account for lexical dative case. For ergative subjects, it would make sense to put this feature on vP which is selected by perfective aspect, especially of the semantic contents of v can be specified for telicity and duration. The vP distinguishes between the verbs which have nominative subjects and those which have ergative subjects.

Abbreviations

ABS: absolutive; ACC: accusative; AGR: agreement features; DAT: dative; [D]: Determiner phrase feature; DP: Determiner Phrase; EPP: Extended Projection Principle; ERG: ergative; f: feminine; GEN: genitive; HU: Hindi-Urdu; IMPF: imperfective; INF: infinitive; m: masculine; PART: conjunctive participle; PF: perfective; PL: plural; PNG: person-number-gender; PRES: present TENSE; PRO: Pronominal anaphor; pro: Null pronominal; s: singular; VP: Verb Phrase; vP: 'Light' verb phrase; Θ PC: Theta Position Checking parameter

Notes

- 1 Pronouns may also have a subject antecedent, provided that the subject is non-local. For a more extensive overview of coindexing/binding conditions for Hindi-Urdu see Davison 2000a, and Wali *et al.* (2000) for extensive data on a number of South Asian languages.
- 2 A small number of exceptions is found in which there is a lexical subject distinct from the matrix subject (Davison 1981). The default judgement of HU speakers is that PRO is required, and it is coindexed with the matrix subject.
- 3 The nominative DP which actually controls agreement is the highest argument — subject if available, direct object if the subject is not nominative, the predicate N if both the subject and object are non-nominative, otherwise default agreement, illustrated in (1)–(5).
- 4 For class II verbs, ergative case is required for DP subjects if the sentence aspect is per-

factive and the clause is finite. Finite tense may be overt in the form of a present/past tense copula or future tense suffix. tense may be implied in sentences in which perfective aspect is used alone as an aorist/simple past (Davison 2002). The sentences discussed here are all of this type. Even if the TENSE/ASPECT conditions are met, nominative case is required on the subject if the main verb is combined with an auxiliary, such as the subject-oriented auxiliaries in (18)–(21), a verb compound (Hook 1973) or a main verb used as an aspectual verb (Bailey 1968, Shapiro 1989, Barz and Yadav 1993). The crucial condition for ergative subject case is that the sentence aspect is combined with the main verb in a finite context. I will leave these issues aside here. The crucial condition seems to be that the main verb (or V-Vector Verb compound) and the perfective sentence aspect must be adjacent and form a word (see Appendix III).

References

- Bahl, K. C. 1974. *Studies in the semantic structure of Hindi*. Delhi: Motilal Banasidass.
- Bailey, T. G. 1967. *Urdu*. London: The English Universities Press.
- Barz, R., and Y. Yadav. 1993. *An introduction to Hindi and Urdu*. Delhi: Munshiram Manoharlal.
- Bowers, J. 1993. "The syntax of predication." *Linguistic Inquiry* 24: 591–656.
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Cole, P., Hermon, G. and Sung, L.-M. 1990. "Principles and parameters of long-distance reflexives." *Linguistic Inquiry* 21: 1–22.
- Cole, P. and Sung, L.-M. Sung 1994. "Head movement and long-distance reflexives." *Linguistic Inquiry* 25: 355–85.
- Davison, A. 1969. "Reflexivization and movement rules in relation to a class of Hindi psychological predicates." *Chicago Linguistic Society* 5, 37–51.
- Davison, A. 1981. "Syntactic and semantic indeterminacy resolved: a mostly pragmatic account of the Hindi conjunctive participle." In P. Cole (ed) *Radical pragmatics*. New York: Academic Press, 101–28.
- Davison, A. 1985 "Experiencers and patients as subjects in Hindi–Urdu." In A. Zide, E. Schiller and D. Magier (eds.) *Proceedings of the Conference on Participant Roles: South Asia and Adjacent Areas*. Bloomington: Indiana University Linguistics Club, 160–78.
- Davison, A. 1988. "The Case Filter as motivation for Move Alpha." *Cornell Working Papers in Linguistics*, 8: 17–38.
- Davison, A. 1999a. "Ergativity." In: E. Moravcsik and M. Noonan (eds.) *Proceedings of the symposium on formalism and functionalism*. Amsterdam and Philadelphia: John Benjamins.
- Davison, A. 1999b. "'Dependent structural case' as a consequence of VP structure." Paper presented at the Texas Linguistic Forum, March 1999.
- Davison, A. 2000. "Lexical anaphors in Hindi–Urdu." In: K. Wali, K. V. Subbarao, B. Lust and J. Gair (eds.) *Lexical anaphors and pronouns in some South Asian languages: a principled typology*. Berlin: Mouton de Gruyter, 397–470.
- Davison, A. 2001 "Long-distance anaphora in Hindi–Urdu." In P. Cole, G. Hermon and J. Huang (eds), *Long distance anaphors*. Irvine, Calif.: Academic Press, 47–82.
- Davison, A. 2002. "Agreement features and projections of TENSE and ASPECT", in R. Singh (ed.) *Yearbook of South Asian Languages and Linguistics*. Delhi: Sage Publications, 27–57.

- Davison, A. To appear "Structural case, Lexical case and the verbal projection." In V. Dayal and A. Mahajan (eds.) *Clause structure in South Asian Languages*. Dordrecht: Kluwer.
- Giorgi and Pianesi, F. 1997. *Tense and aspect*. Oxford: Oxford University Press.
- Gurtu M. 1992. *Anaphoric relations in Hindi and English*. Delhi: Munshiram Manoharlal.
- Harris, A. 1981. *Georgian: a study in Relational Grammar*. Cambridge: Cambridge University Press.
- Hock, H. H. 1991. "Possessive agents in Sanskrit?" In H. Hock (ed.) *Studies in Sanskrit syntax*, Delhi Motilal Banarsidass. 55–70.
- Hook, P. E., 1973. *The compound verb in Hindi*. Ann Arbor: University of Michigan Center for South and Southeast Asian Studies.
- Hook, P. E. 1985 "Coexistent analyses and participant roles." In A. Zide *et al. Proceedings of the conference on participant roles: South Asia*. Bloomington, Ind: IULC, 264–83.
- Hook, P. E. 1990. "Experiencers in S. Asian languages: A gallery". In M. K. Verma and K. P. Mohanan . (eds) *Experiencer subjects in South. Asian languages*. Stanford: CSLI. 319–334.
- Jayaseelan, K. A. 2001. "Malayalam non-nominative subjects". This volume.
- Kachru, Y. 1970. "The syntax of -ko sentences in Hindi." *Papers in Linguistics* 2.2, 299–316.
- Kachru, Y., B. Kachru and T. Bhatia. 1976. "The notion 'subject': a note on Hindi-Urdu, Kashmiri and Panjabi." In M. K. Verma (ed.) *The notion of subject in South Asian languages*. Madison: South Asian Studies 2, 79–108.
- Kaltestinova, E. 2002. "Dative experiencer constructions in Russian." U. of Iowa unpublished paper.
- Koizumi, M. 1995. *Phrase structure in minimalist syntax*. M. I. T. unpublished dissertation.
- Kondrashova N. 1993. "Dative subjects in Russian" In *Proceedings of FLSM* 4, 200–19.
- Lehman, T. 1993. *A grammar of modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.
- Mahajan, A. 1990. *The A/A-bar distinction and movement theory*. MIT unpublished dissertation.
- Masica, C. P. 1976. *Defining a linguistics area*. Chicago: University of Chicago Press.
- McGregor, R. S. 1995. *Outline of Hindi grammar*. (Third grammar). Oxford: Oxford University Press.
- Masica, C. P., 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Mohanan, T. 1994. *Argument structure in Hindi*. Stanford: CSLI Publications.
- Nespal, H. 1997. *Hindi verb dictionary*. Allahabad: Lokbharati Prakashan.
- Ortiz de Urbina, J. 1989. *Parameters in the grammar of Basque*. Dordrecht: Foris.
- Pandharipande, R. and Y. Kachru. 1976. "Relational grammar, ergativity and Hindi-Urdu." *Studies in the Linguistic Sciences* 8(1): 82–99.
- Paramsivam, K. 1979. *Effectivity and causativity in Tamil*. Trivandrum: Dravidian Linguistics Association.
- Saxena, Anju, 1985. "Reflexivization in Hindi: a reconsideration." *International Journal of Dravidian Linguistics* 14, 225–37.
- Shapiro, M. C. 1989. *A primer of modern standard Hindi*. Delhi: Motilal Banarsidass.
- Slabakova, R. 2000. *Telicity in the second language*. Amsterdam: John Benjamins.
- Smith, C. S. 1997. *The parameter of aspect*. Second edition. Dordrecht: Kluwer Academic Publishers.
- Travis, L. 1997. "The syntax of achievements". *Proceedings of AFLA*.
- Tikkanen, B. 1987. *The Sanskrit gerund: a syntactic, diachronic and typological analysis*. Helsinki: Studia Orientalia 62.

- Ura, H. 2000. *Checking theory and grammatical functions in Universal Grammar*. Oxford: Oxford University Press.
- Verma, M.K. 1976. *The notion of subject in South Asian languages*. Madison: South Asian Studies 2.
- K. Wali, K. V. Subbarao, B. Lust and J. Gair (eds.) 2000. *Lexical anaphors and pronouns in some South Asian languages: a principled typology*. Berlin: Mouton de Gruyter.
- Yamabe, J., 1990. *Dative-subject constructions in Indic languages*. University of Tokyo, Department of Linguistics, unpublished Master's thesis.

CHAPTER 8

Experiencer objects in Iwaidjan languages (Australia)

Nicholas Evans

1. Introduction to the phenomenon*

This chapter deals with the Iwaidjan languages, a family of half-a-dozen languages spoken in the Cobourg Region of the Northern Territory, Australia; I will be focussing particularly on Ilgar, Iwaidja and Maung.¹ These languages do not have structural analogues of the experiencer subject constructions found in Icelandic, Russian, Hindi, Malayalam etc. Instead, the closest semantic analogue of ‘dative subject’ constructions involves a transitive verb in which the experiencer is the grammatical object, and in which the grammatical subject, whose person, number and gender is fixed, denotes the stimulus for the experienced state. My procedure in this chapter will thus be the standard one in semantically-based typology: (a) to look at what happens with verbs expressing meanings that would be represented by non-nominative subjects in Russian, Hindi, etc, (b) identify the construction type used for this in the Iwaidjan languages, then (c) examine the semantic range of predicate lexemes used in this construction in these languages. An endemic temptation in linguistics, particularly generative approaches, is to look at structural features of particular familiar languages, and then give reasons why the structures have to be the way they happen to be there. Bringing in other language types that do things very differently is a salutary reminder that things do not have to be done that way, and allows us to see the complex of factors to which ‘exotic’ languages can supply very different engineering solutions.

In the Iwaidjan languages, as in many ‘role-dominated languages’, factors of reference and ontology such as topicality, animacy and person have no effect on the projection of semantics into grammar: rather, any cause- or agent-type role projects directly into a subject-type slot, while the experiencer projects into an object-type slot. I use the hedges ‘subject-type’ and ‘object-type’ because, as we will see, giving a convincing cluster of language-specific tests that picks out subject and object independently of actor- and undergoer-semantics is difficult in the Iwaidjan languages, though for expository purposes we can regard the subject and object as the arguments represented by agreeing pronominal prefixes to the verb. Determining the exact denotation of the subject is also not always straightforward, and the subject may range from subcategorized, to frozen, to dummy.

The basic organizing principle that we shall see at work in experiencer object constructions, then, is thus very simple: project the chain of causation directly such that causes or agents are represented by the subject, and effects or patients are represented by the object, without being distracted by the ontological or discourse properties of the cause or agent (human, topic, speech act participant, etc.). These latter can be represented by other means, such as the paradigmatic patterning of the subject/object prefix paradigm, word order, or various discourse-sensitive pronoun or demonstrative forms.

A first impression of how such constructions work can be obtained by seeing how one says 'I got ashamed' (1a), 'he got leprosy' (1b), 'I got sick' (1c), 'I am full (sated)' (2), 'she has a headache' (3a), 'he is sweating' (3b) and 'I am hungry' (3c) in Ilgar, one of the languages of this group. In each example the English subject is represented by the object prefix; in each case the subject prefix is third-person singular masculine.

(1) *Subcategorized nominal subject*

- a. Ngani-miny wurrwiny.² Ilgar
 Ngan-ni-mi-ny wurrwiny
 1O-3mA-do-P shame
 'I got ashamed.' [lit. 'shame did me']³
- b. Yi-marlkarrkbi-ny i-ni-mandung aliwi,
 3mS-get.thin-P 3mO-3mA-get-P.HAB bad
 i-ni-ma-ndung namuwarri.
 3mO-3mA-get-P.HAB leprosy
 'He got sick, he has had leprosy.' (Lit. 'he became thin, illness has gotten him, leprosy has gotten him')
- c. Nga-ni-ma-ny wunyarru.
 Ngan-ni-ma-ny wunyarru
 1O-3mA-get-P sickness
 'I got sick.' (lit. 'sickness got me')

(2) *Frozen nominal subject*

- Nga-ni-mi-ny ngok. Ilgar
 Ngan-ni-mi-ny ngok
 1O-3mA-get-P [meaning unclear]
 'I'm full.'

(3) *Dummy subject*

- a. Inyi-ngardbanbu-n. Ilgar
 Iny-ni-ngardbanbu-n
 3fO-3mA-cause.headache-NP
 'She has a headache.'
- b. I-ni-marruku-n.
 3mO-3mA-make.wet-NP
 'He is sweating.'

- c. Ngani-ldarrururrkbu-n.
 Ngan-ni-ldarrururrkbu-n
 1O-3A-make.hungry-NP
 'I am hungry.' (Lit. 'It is making me hungry')

In each of the above examples the causer of the state predicated of the experiencer by the verb is represented by the transitive subject prefix (and will be glossed with 'A' accordingly, in the usage of Dixon (1979)); it is doubled in some cases by an external nominal. Throughout (1)–(3) the experiencer is an object and is encoded by the relevant object prefix. The object slot is open, and can vary over all person and number combinations, whereas the subject slot is fixed to third singular masculine. The restriction of subject slot to third singular, in combination with an open object slot, is the crucial morphosyntactically defining property of what I will call a 'fixed-A' construction type. The set of 'fixed-A' verbs given by this morphosyntactic test in the Iwaidjan languages yields a set of verbs that is somewhat wider than those we would call 'experiencer object', since it also includes a number of verbs of ambient effect and land-person relationships. We return to the semantic range of this construction in §3.3.

To show how these examples compare with normal transitive constructions in the language, (4a) illustrates a canonical transitive clause and (4b), for comparison, a canonical intransitive clause. Note that the presence of external nominals is normally optional, with the pronominal prefixes sufficing to achieve a well-formed clause; (4c, d), with just an inflected verb, are perfectly good alternatives to (4a) and (4b).

- (4) a. Raka wurruwajba yi-nga-ldalku-n raka yirradad Ilgar
 DEM woman 3mO-3fA-cut-NP DEM meat
 'The woman is cutting up the meat.'
- b. Raka arrkbi yi-wani ajbud.
 DEM man 3mS-sitNP beach
 'The man is sitting on the beach.'
- c. Yi-nga-ldalku-n
 3mO-3fA-cut-NP
 'She is cutting it.'
- d. Yi-wani ajbud.
 3mS-sitNP beach
 'He is sitting on the beach.'

Note also that for third-person forms the object (O) and intransitive subject (S) prefix forms are identical, and contrast with the transitive subject (A) form — cf. (y)i- for third-person masculine O or S, vs *ni-* for third-person masculine A. Parts of the subject/object paradigm are thus organized on an ergative/absolutive basis, though other parts of the paradigm are not.⁴ The prefix ordering in most subject/object combinations is O before A. This is only departed from when overridden by

a person-based ordering constraint that places first- and second-person argument morphemes before those of third-person arguments, as in (5).

- (5) A-ny-jalku-n. Ilgar
 1A-3fO-cut-NP
 'I am cutting her.'

Another way of putting this is that with first- or second-person subjects, the subject morpheme precedes the object, while with third-person subjects, the ergative precedes the absolutive. So there are many traits within the subject/object prefix paradigm of a mixed ergative/accusative system, both in terms of form and in terms of ordering, and it is here in the shape of morphological paradigms that we see played out the privileges that reference-dominated languages assign to speech act participants through mapping to subject positions. In other words, in the Iwaidjan languages the special status of speech act participants in the grammar shapes the prefixal morphology but does not affect the projection of semantic roles into the syntax, whereas in a language like English or Japanese, with no trace of mixed ergative and accusative traits in the case or pronominal morphology, they show up in the actual syntactic organization.

Returning to our first examples, if the experiencers in these examples are objects, what are the subjects? Groups 1 to 3 represent a cline from regular inanimate subjects in (1) to dummy subjects in (3). In each of (1a–c) the subject is a regular noun, attested outside the construction at issue (in the case of *aliwi* also with an adjectival use) — respectively *wurrwiny* 'shame, ashamed' in (1a), *aliwi* 'bad, badness' and *namuwarri* 'leprosy' in (1b), and *wunyarru* 'sickness' in (1c).

In (2) the word *ngok* is not attested (in Ilgar) outside this construction, though it has likely cognates in many other languages with meanings like 'belly', 'guts' or 'excrement, contents of guts' (e.g. Jawoyn *ngan-nguk* 'guts, excrement', Warray *nguk* 'excrement, guts', Ngalakan *ngo?* 'intestines, excrement', Ngandi *nguk* 'guts, bowels, excrement'). It therefore appears to be an etymological noun that has become restricted to this particular construction in Ilgar; given the meaning of 'said, did' that the verb *-miny* has in other contexts, the original literal meaning of the construction is likely to have been something like '(my) stomach said to me, (my) guts did me'.

Note that all of the subject nouns in these constructions — *wurrwiny*, *aliwi*, *namuwarri*, *wunyarru* and *ngok* — directly follow the verb, and are not normally modified by any sort of demonstrative (in contrast to the word *raka* 'that; the' employed with *wurrwuwaiba* in (4a)). Ilgar, like most Australian languages, is relatively free in its word order, with subjects able to precede or follow the verb (I do not give examples illustrating this flexibility here), so the fixed position of the 'subject' nominal is striking. The qualification of nominals by demonstratives like *raka* is also normal, so again the appearance of a bare noun is unusual.

In (3a, b) there is no free nominal. Nor do free nominals occur with the cognate verbs in the closely related languages Iwaidja (see Pym and Larrimore 1979: 87) and Maung (Capell and Hinch 1970). For *-ngardbanbun* Capell and Hinch (1970: 187)

suggest a plausible etymology as a N+V compound made up of *ngard* ‘head’ plus *manbun* ‘bite’, with regular denasalization of the initial *m* of *manbun*. This would give an original formation as ‘it-me-head-bites’ or ‘it is biting my head’, which still leaves the reference of the subject unspecified.⁵ (No comparable analyses are at present available for the other two verbs.) I shall refer to this subset of fixed-A verbs as having dummy subjects.

Though I shall use the terms ‘subject’ and ‘object’ through this chapter, some reservations about the employment of this term must be expressed. Various features of the typology of the Iwaidjan languages mean that many tests used to identify subjects in languages like English, Hindi, Malayalam or Russian cannot be applied (see Verma and Mohanan 1990, for example, on tests for subjecthood in Hindi and Malayalam).

Firstly, word order in the Iwaidjan languages is extremely free; the only significant restriction is that the directly post-verbal position attracts certain types of unmodified nouns such as the inanimate subjects in (1), but we shall also see examples below of it attracting comparable types of object.

Secondly, we note that there are no rules of clausal coordination, omission under control, or complementation that could be used to identify subjects. All verbs are obligatorily inflected for person and number of their subject and, if transitive, of their object as well. There is also inflection for gender of subject and object — the number of genders ranges from five in Maung (masculine, feminine, vegetable, neuter and miscellaneous) to two in Ilgar (masculine and feminine) and only one in Iwaidja (etymologically the miscellaneous). In addition, Ilgar and Iwaidja retain morphological residues of some of the other genders in ways that we will return to below; these frozen gender prefixes are glossed here simply as ANG and MA (see Evans 1998, 2000a for more discussion). This means there is no ‘privileged’ syntactic position of subject that serves as a pivot for various types of clause combinations — verbs are simply chained together with all their argument affixes filled, and according to the construction type this might involve a chain of coreferential subject prefixes, in ‘want’ constructions like (6), or the chain of coreference may move from object to subject, as in causative constructions like (7) but also in perceptual complements.

- (6) Yinimiyarrma-ng anilda. Ilgar
 Yi-ni-miyarrma-ng ang-ni-lda
 3mO-3mA-want-NP ANG.O-3mA-eat
 ‘He wants to eat it.’ [lit. ‘He wants it, he eats it.’]
- (7) a. Yi-w-artudba-n yi-yaldi. Ilgar
 3mO-3plA-leave-NP 3mS-lieNP
 ‘They leave it be.’ [lit. ‘They leave it, it lies.’]
- b. Any yingardbuning.
 A-i-a-ny yi-ngardbuni-ng.
 1A-3mO-shoot-P 3mS-fall-P
 ‘I shot it down.’ [lit. ‘I shot it, it fell.’]

Thirdly, there is no reflexive possessive comparable to Russian *soj* or Hindi *apne* that can be used to test for which argument is the syntactic subject. There are reflexive constructions, it is true, formed by replacing the A plus O prefix combinations of transitive verbs with an S prefix, and optionally adding a form of the root *-yirrak* ‘self’ that has been prefixed for person, gender and number, as in (8), but logically one cannot be sure whether this is a matter of disposing of the O and replacing the A prefix with an S, or of disposing of the A and replacing the O prefix with an S (in fact the latter would mostly involve fewer morphological changes, because of the absolutive/ergative patterning of most of the paradigm).

- (8) a. Nga-ldalku-n (nga-yirrak). Ilgar
 1S-cut-NP 1-self
 ‘I am cutting myself.’
 b. Raka wurruwajba iny-jalku-n (iny-jirrak).
 DEM woman 3fS-cut-NP 3f-self
 ‘That woman is cutting herself.’

Despite the lack of many of the usual tests for establishing subject and object as syntactic relations, it is still useful to employ these relations. Passive constructions exist; they are formed in a similar way to reflexives, by substituting the intransitive prefix, but without the option of adding the ‘self’ word which disambiguates passives from reflexives if necessary. From the transitive root *any* ‘shoot, spear’, for example, one can form the passive by prefixing an exponent from the intransitive prefix series:

- (9) Iny-a-ny. Ilgar
 3fS-shoot-P
 ‘She got shot.’

There are also a number of other argument alternations signalled by a shift from transitive pronominal prefixes to intransitive, or vice versa: causatives (signalled by replacing the intransitive series with transitives as in (10a, b)), reflexives (as already mentioned), and a number of more lexically-specific alternations. These various alternations can be captured well by statements referring to grammatical relations.

- (10) a. Rakabara iny-malkba-ny murrhalal. Ilgar
 then 3f.S-emerge-P outside
 ‘Then she came outside.’
 b. Yi-nga-malkba-ny.
 3mO-3fA-take.out-P
 ‘She took him outside.’

An analytic alternative, in the style of Role and Reference Grammar use of ‘macro-roles’ instead of grammatical relations, could be made to work in many cases, through a direct mapping of thematic roles onto pronominal argument positions on the verb, such that the more actor-like argument maps onto what I have been calling the ‘subject’ prefix and the more undergoer-like argument maps onto what

I have been calling the 'object' prefix. Accordingly, these prefixes could be renamed as 'actor' and 'undergoer' prefixes. For all straightforward constructions this would work well; what I have been calling 'experiencer' object constructions would be seen simply as cases where the undergoer macro-role is occupied by an experiencer rather than a patient, theme etc.

However, this RRG-style analysis works less well once we encounter various constructions in which there is either a dummy subject or a dummy object, since it is not clear how you would get a thematic role out of something that lacks denotation. We have already encountered dummy subjects above (1). But the Iwaidjan languages also have dummy objects, as exemplified by (11a, b): the *ma-* here, though etymologically a vegetable-gender object prefix (which presumably motivated the link to the 'bush' being burned off in the case of this verb), is no longer a functioning part of the gender system in Ilgar, and here is simply a dummy prefix, subcategorized for by the verb, occupying the object morphological slot. Since grammatical relations are a more abstract level of representation than semantic macro-roles, it is easier to assimilate such cases to an analysis in terms of grammatical relations by stipulating that certain verbs have dummy objects occupied by the *ma*-prefix.

- (11) a. ma-n-urru-n b. ma-ng-urrun Ilgar
3.MA.O-3mA-make.fire-NP 3.MA.O-3fA-make.fire-NP
'He's burning off (the bush).'
'She's burning off (the bush).'

In a few cases the subcategorized dummy object prefix combines with an external nominal directly after the verb. Two examples are (12), in which the dummy MA object is doubled by the external nominal *mali* ‘idea, thoughts’, and (13), in which a dummy ANG object is doubled by the external nominal *kuwa* ‘true’. In each case the nominal is restricted to a single lexical item.

- (12) Ngabi nga-waharl a-ny-bana-mi-n raka mali. Ilgar
1sg 1-head 1A-3.MA.O-FUT-do-NP DEM idea
'I can understand this idea.'
- (13) Yiharlu a-ni-ma-ng kuwa
Yiharlu ang-ni-ma-ng kuwa
NEG 3.ANG.O-3mA-grasp-NP true
'He doesn't believe it.' [lit. 'He doesn't grasp it as true.']

The need to deal with these prefixes as dummy fillers of grammatical relations is even clearer for certain verbs with active/medio-passive alternations. Like the other transitivity alternations discussed above, these substitute intransitive for transitive prefixes on an unchanged verb root. As one would expect, the *ma*-prefix shifts from object argument in the transitive construction to the subject argument in the intransitive:

- (14) a. m-irrkura-ng b. ma-n-irrkura-ng Ilgar
3_{MA}.S-close-P 3_{MA}.O-3_{MA}-close-P
'It is closed.' 'He has closed it.'

Let us briefly review the sketch of Ilgar grammar introduced so far; similar remarks apply to Iwaidja and Maung. Subject and object relations are marked as prefixes to the verb. These prefixes are obligatory in all contexts; there are no infinitives. Alternations such as active-passive, active-reflexive, active-mediopassive, and intransitive-causative, are all marked by substituting intransitive for transitive prefix sets or vice versa. Argument prefixes are normally sufficient to achieve reference and there is frequently no external nominal, though these may be added for greater precision. Word order is relatively free.

However, there are constructions in which the set of possible referents is greatly restricted. Arguments may be subcategorized to the point where there is just a restricted or even a single possible external nominal, as with the transitive subjects *wunyarru*, *waliwi* and *namuwarri* in (1), and with the objects *mali* and *kuwa* in (12) and (13). They may take frozen satellite nominals, as with *ngok* in (2). Or there may be no external nominal at all, as was the case with the transitive subjects in (3) and the objects in (11). In other words, both subject and object positions may be denotationally unrestricted, or there may be various levels of restriction placed on them.

Experiencer objects occur with all these types of construction. We shall return to a fuller examination of the semantic range of these constructions in §3, but first it will be helpful to survey what is known of comparable constructions in other Australian languages.

2. Experiencer-object constructions in other Australian languages

Experiencer-object constructions are widespread in Australian languages, particularly in the many head-marking families of the north-west, known collectively as non-Pama-Nyungan. There are around twenty non-Pama-Nyungan families, while a single family known as Pama-Nyungan occupies the rest of the continent. There is a strong, though not perfect, correlation between these genetic groups and a number of typological traits. Most importantly, non-Pama-Nyungan languages are largely head-marking with extensive use of prefixation, while the Pama-Nyungan languages are largely dependent or double-marking with suffixation only.

To date there has only been one study of the phenomenon, by Michael Walsh (1987),⁶ who goes into considerable detail for Murrinh-Patha, a language of the south-western Daly River region.⁷ Murrinh-Patha is typologically similar to the Iwaidjan languages in many ways, including the basic structure of its verbal morphology, with prefixing of subject and object pronominals to the verb. Three significant differences from Iwaidjan are

- (a) that Murrinh-Patha allows the productive incorporation of affected body parts, and this is found in several of the examples given by Walsh (reproduced below as (16); (17b); (17c));
- (b) Murrinh-Patha employs an optional ergative suffix that is particularly common in cases of low-animate subjects

- (c) pronominal prefixes in Murrinh-Patha are organized on a straightforward nominative/accusative paradigm.

Murrinh-Patha exhibits a cline similar to that seen for Ilgar in §1. Moving from less to more central members of the construction type, this cline takes in:

- verbs normally taking overt inanimate subjects (15a), which can, however, be omitted (15b), and allowing an open class of animate subjects when used in a related sense (15c)

- (15) a. lalingkin-te dam-ngi-winhimardaparl Murrinh-Patha
 sea/tide-ERG 3SUB-1O-oppose
 'I went against the tide; the sea opposed me.'
 b. dam-ngi-winhimardaparl
 3SUB-1O-oppose
 'I went against the tide.'
 c. nukunu-re dam-ngi-winhimardaparl
 3sg-ERG 3SUB-1O-oppose
 'He opposed me; I went against him.'

- verbs whose subject must be inanimate; the subject is normally omitted (16a), but may be inserted (16b):

- (16) a. dem-ngi-darri-lerrkperrk Murrinh-Patha
 3SUB-1O-back-heat
 'My back feels hot; something heats my back.'
 b. thungku dem-ngi-darri-lerrkperrk
 fire 3SUB-1O-back-heat
 'The fire makes my back feel hot.'

- verbs with which no subject NP is possible:

- (17) a. pa-ngi-rlung-nu Murrinh-Patha
 3SUB-1O-cause.to.shiver-FUT
 'I will shiver.'⁸
 b. dam-ngi-ngka-lak
 3SUB-1O-face/eye-??
 'I am good-looking.'
 c. dam-ngi-bu-rla
 3SUB-1O-thigh-cause.cramp
 'I have a cramp in my upper leg/thigh.'

Walsh mentions a couple of cases where there are alternative ways of referring to the same corporeal process, such as coughing — one with a simple intransitive verb, and one with an experiencer-object construction.⁹ Where such contrasts exist, the experiencer-object construction indicates that the activity is involuntary. (18) gives such a pair for the activity of coughing; and a comparable contrast is found with 'vomit'.

- | | | | | |
|---------|---|----|--|---------------|
| (18) a. | ngi-kulurrk-nu
1SUB-cough-FUT
'I'll cough.' | b. | dam-ngi-kule
3SUB-1O-?
'I feel like coughing; I'm going to cough.' | Murrinh-Patha |
|---------|---|----|--|---------------|

He also comments that expressions at the end of the cline where no overt subject is possible 'are essentially involuntary or unintentional; there is then a progression towards expressions which are essentially voluntary or intentional' (Walsh 1987:429). He gives a substantial list of examples of each type as an appendix to the chapter.

For the type that disallows overt subjects he lists 53 verbs. The list includes

- verbs of external physical characteristics: 'have no eyebrows'¹⁰, 'be bald-headed', 'have a bung eye', 'have skin coming off one's fingers', 'be starting to acquire a moustache', 'be fat', 'be good looking', 'be glamorous',
- verbs of perceived internal corporeal state: 'have wind in one's stomach', 'have a bellyache', 'be in pain', 'be cramped in the arm', 'have a toothache', 'feel queasy', 'be thirsty', 'be full, sated', 'feel hungry', 'be hungry (for meat)', 'have indigestion', 'be tired in the legs', 'be resting', 'have one's foot feel soft', 'have an itchy foot', 'feel cold in the hand', 'feel hot', 'feel cold',
- verbs of emotion and emotionally coloured cognition: 'be sorry, sad', 'be terrified', 'be upset', 'be astonished/preoccupied', 'feel like something is going to make one feel unpleasant', 'be sweating', 'feel mixed up', 'feel exhausted', 'have a headache', 'have a headache in the temple area around one's eyes', 'expect or hope to see someone', 'sense something behind one's back', 'have bad luck'.

The 'implicit agent' type, for which 57 verbs are listed, overlaps substantially with the preceding list in its semantic range, though there are more cases where an external agent can be identified, or where the physical effect is more external or extrinsic. Examples from this set include:

- verbs of external physical characteristics or sensation concentrated on one's exterior: 'be wet', 'have one's hair flattened', 'have something in one's hair (e.g. dust)', 'have one's hair ruffled', 'be hot all over', 'have a hot back', 'have something (e.g. flies) on one's shoulder(s)', 'have one's eyes reddened (e.g. by water)', 'have a shock (e.g. from electricity)', 'feel warm (e.g. from sun)', 'have one's knees twisted', 'have one's hand go white', 'have one's nose blocked', 'have something come over one's feet', 'have something stuck in one's foot', 'have a bad pain in one's body', 'have a bad pain in one's belly',
- verbs of perceived internal corporeal state: 'something make one want to urinate', 'feel hot while urinating', 'have something go down the wrong way', 'have an itchy throat', 'have phlegm caught in one's throat', 'have something (e.g. bone) caught in one's throat', 'not be able to hear; have one's ears blocked',
- verbs of emotion and emotionally coloured cognition: 'feel drowsy; something (e.g. fire) make one drowsy', 'feel drunk, dizzy', 'feel angry, upset', 'feel disappointed by/with something', 'feel ashamed', 'feel ill-disposed towards something (e.g. a job)',

- verbs of external effect perceived by the body: ‘something scratch one’, ‘something rattle in one’s ear’, ‘something keep one awake’, ‘be nearly sunk up to one’s nose’, ‘something make one back warm’, ‘something turn one over’, ‘something shine in one’s eyes (e.g. sun)’, ‘something sweet makes one’s throat feel good’, ‘something hot (e.g. fire) cause one to jump’, ‘something burn one’, ‘something scorch one’s hair’, ‘something burn one’s tongue’, ‘something burn a hole in some possession (e.g. trousers)’, ‘feel fresh, good from swim or bath’.

In addition to his detailed discussion of Murrinh-Patha, Walsh surveys the occurrence of comparable constructions in other Australian languages: other languages of the Daly family, Bardi (Nyulnyulan), Miriwung (Djeragan), Mangarrayi (isolate), Ngalakgan, Warray and Jawoyn (Gunwinyguan). In these languages the phenomenon is present in a much more restricted form: it may involve just a couple of verbs, or it may be possible to insert an explicit subject.

Further Australian languages could be added to those mentioned by Walsh. An interesting example is the isolate Tiwi (Osborne 1974: 40), in which the verb ‘die’ encodes the English subject as indirect object, with a fixed feminine singular subject prefix:

(19)	a.	thi-mə-kuɪa	b.	thi-məɪ ə-kuɪa	Tiwi
		3fsUB-3mIOBJ-die		3fsUB-3fIOBJ-die	
		‘He died.’		‘She died.’	

Many further languages have fixed-subject constructions in which explicit nominals naming the cause of the experience may be added. In Ndjébbana (McKay 2000: 272), ‘I sneezed’ is literally ‘sneeze threw me’ and ‘I’ve got a headache’ is ‘my head throws me’. In Bininj Gun-wok (Evans 2003) and Dalabon (Evans, Merlan and Tukumba forthcoming) a common way of saying ‘I have a toothache’ is ‘toothache gets me’; another way of discussing toothaches in Bininj Gun-wok is to use incorporated body parts with an experiencer object and a dummy subject of the type ‘it-me-tooth-chases’ in Bininj Gun-wok (Evans 2003). Structurally similar constructions are used to discuss various types of pain in Kunparlang and Nunggubuyu, which have experiencer-object constructions with incorporated nouns denoting the suffering body part for ‘[OBJ] have a headache’ and ‘[OBJ] be afflicted with sores on the head’ (Heath 1982: 174, Heath 1984: 473).

Although most reports of languages with experiencer-object constructions have been for non-Pama-Nyungan languages with verbal agreement for subject and object, comparable constructions are not completely absent from certain Pama-Nyungan languages without any form of verbal agreement. Dyirbal (Dixon p.c.) and Yidiny (Dixon 1991) are clear examples.¹¹ In addition to a number of expressions for types of bodily discomfort which combine an ergative/instrumental-marked body part with an experiencer in the accusative (e.g. (20a, b)), there is one example (21) which combines an accusative experiencer with a noun for the relevant bodily state, both in the accusative, but no overt ergative NP.¹²

- (20) a. Ngaygu ginya jarra jirambu-ru dadi-ny Dyirbal
 1sgGEN DEM:NEUTR:ACC thighACC cramp-ERG cover-NFUT
 'I have a cramp in this thigh of mine.'
 [lit. 'Cramp is covering this thigh of mine.'] (Mamu dialect)
- b. Bayi yagin baygu-ngu waguli-gu
 DET:MASC:ACC temple:ACC bash-REL blood-ERG
 'I have a headache.' [lit. 'Blood is bashing my temple.'] (Jirrbal dialect)
- (21) Ngayguna digirr baygu-n Dyirbal
 1sgACC headache:ACC shake/bash-NFUT
 'I have a headache.'

It may be that experiencer-object constructions have been under-reported for Australian languages without double agreement on the verb. In a language like Ilgar or Murrinh-patha it is impossible not to notice the agreement patterns on such verbs, because they are obligatory. Even though it can be difficult to determine whether an external nominal subject is implied, optionally omitted, or impossible, at least the basic existence of fixed-A constructions is clear. In dependent-marking constructions with frequent zero anaphora, on the other hand, verbs with no overt subject are not particularly remarkable, so that the phenomenon may only become evident after quite detailed investigation. On the other hand, it may also be the case that obligatory registration of third-person singular subjects on the verb then makes it much easier to drop external nominals, so that the emergence of constructions with true dummy subjects is encouraged in head-marking languages. We cannot decide which of these explanations is the correct one until we have much more complete and systematic data on semantically equivalent constructions in a properly structured sample of Australian languages.

3. More detail on Iwaidjan experiencer-object constructions

We now return to a more detailed consideration of experiencer-object constructions in the Iwaidjan languages, focussing on their ubiquity in the Iwaidjan family in §3.1, further aspects of their morphosyntax in §3.2, and on the semantic extent of the constructions in §3.3.

3.1. The ubiquity of experiencer-object constructions in the Iwaidjan family

All Iwaidjan languages for which we have even basic descriptive data exhibit examples of the experiencer-object construction, though we do not yet have a comprehensive list for any Iwaidjan language.¹³ We have already given examples from Ilgar and Iwaidja in §1 and will give many from Maung in §3.2; here is an example each from Amurdak (22) and Marrgu (23).

- (22) A-yirrga-ngarlu irrmundjag, a-yirrga-ngarlu nga-nginjdl. Amurdak
 3A-bite-1O toothache 3A-bit-1O 1-tooth
 'I have a toothache.' (Lit. 'Toothache is biting me, my tooth is biting me.')
 (Handelsmann 1998)
- (23) Man-mayi wurgam ngurnu Marrgu
 3/1-grab.PST shame DEM
 'I got ashamed.' (Lit. 'shame grabbed me.') (Evans, field notes)

For expressing pain or physical discomfort, all Iwaidjan languages also have an alternative construction in which an intransitive word meaning 'be sick; die; suffer' is combined with a nominal referring to the site of pain or the desired object (e.g. water in the case of thirst, woman in the case of lust). Examples from Iwaidja, Ilgar, Marrgu and Amurdak are illustrated in (24)–(27).

- (24) a. baju kuyak b. baju walij. Iwaidja
 K-maju kuyak K-maju food
 3S-sufferNP sickness 3S-sufferNP food
 '(S)he is sick.' '(S)he is hungry.'
- (25) a. Ang-maju ang-baharl. b. Nga-maju yirlak. Ilgar
 2S-sufferNP 2-head 1S-sufferNP hunger
 'You have a headache.' 'I am hungry.'
- (26) A-yunan anak. Amurdak
 1-die breath
 'I'm out of breath, I'm short of breath.' (Handelsmann 1998)
- (27) Dhuwan ngarda wubaj. Marrgu
 1.suffer 1sg water
 'I am thirsty.' (Evans, field notes)

3.2. More on the morphosyntax of Iwaidjan experiencer objects

In many ways the morphosyntax of Iwaidjan experiencer-object constructions closely parallels what is found in Murrinhpatha. However, some additional complexities are introduced by the existence of voice alternations and, particularly in Maung but also to a lesser extent in Ilgar, the existence of gender agreement on the verb.

As discussed in §1, many Ilgar verbs combine with both transitive and intransitive prefix sets. According to the case, this may be analysed as an active/reflexive, active/passive or intransitive/causative alternation. The same possibilities are found in Iwaidja and Maung. A few experiencer-object verbs have corresponding intransitive constructions. Consider the way to say 'he is sneezing'; my Ilgar teacher, Charlie Wardaga, gave (28a) as the translation of this, and (28b) as the translation of 'she is sneezing'.

- (28) a. I-nga-mardalkanyi-ny arrkbi. Ilgar
 3mO-3fA-sneeze-P man
 'He is sneezing, he has the flu.' [lit. 'it has made him sneeze']
 b. Iny-nga-mardalkanyi-ny.
 3fO-3fA-sneeze-P
 'She is sneezing, she has the flu.'

However, he later gave the following intransitive alternatives with the same verb:

- (29) a. I-mardalkanyi-ny Ilgar
 3mS-sneeze-P
 'He is sneezing, he has got the flu.'
 b. Ang-mardalkanyi-ny.
 2S-sneeze-P
 'You are sneezing, you have got the flu.'

When asked about the difference in meaning between these pairs, he suggested for the transitive constructions, 'like flu come from overseas', suggesting there is greater emphasis on a known external cause such as an epidemic in the case of the transitive. He did not, however, paraphrase it using any external nominal to denote the external cause. A tempting analytic move would be to treat the transitive constructions here as causative versions of the corresponding intransitives, i.e. 'it (unspecified) made him/her sneeze', 'it (unspecified) gave them the flu'. Parallels for such alternations are found with normal verbs (see (8a,b)). However, on present evidence it does not appear that such pairs are found with many other experiencer-object verbs, so this analysis cannot be applied to all verbs in the experiencer-object set.

Example (28) illustrates a further morphosyntactic issue. Unlike the sentences in (1) to (3), the transitive subject here is fixed as third feminine rather than third masculine (though without any known feminine noun being able to appear as subject). With the exception of this example, the only other cases of fixed feminine transitive subjects in Ilgar involve weather verbs, particularly those involving the sun and lightning. In Maung, with its five genders, the possibilities are even broader, though neutralization of all the non-masculine genders to the feminine A form means that other genders of fixed subject can only be identified if there are actual free nouns permitted.

A further analytical complication in identifying fixed-A feminine-subject verbs comes from the fact that the feminine A-prefix, *nga-*, as the last prefix before the verb stem, is liable to merge morphologically with vowel-initial roots as a result of vowel coalescence. Faced with a verb form like *yingartalwan* 'it lightnings; lightning is striking', for example, how does one decide between parsing (30a), as a transitive verb with fixed feminine subject, and (30b), as an intransitive verb which happens to begin with *nga-*?

- (30) a. Yi-ng-artalwan b. Yi-ngartalwa-n Ilgar
 Yi-nga-artalwan 3mS-lightningNP
 3mO-3fA-lightningNP
 'It lightnings; lightning is striking.'

This problem arises because of the absolute patterning of third-person singular prefixes, which means that the prefix *yi-* here can be either an object or an intransitive subject prefix. In the case of fixed-A verbs denoting physical states, such as ‘sneeze’, we can sort this out by using a first-person subject, since this distinguishes the O form *ngan-* from the S form *nga-*. However, with ambient verbs it may not be possible to set up examples with first- or second-person subjects, making this test unworkable (we don’t know yet whether this verb could be used, for example, to say ‘lightning struck me’, for which we would predict the form *nganngartalwan* if it is really a transitive verb with feminine A). Another test can be used if a passive form is available: if it turns out that this verb can be used in a passive, ‘she was struck by lightning’ would be *iny-artalwan* on analysis (a) and *iny-ngartalwan* on analysis (b). At this stage of analysis, there are lots of verbs for which we simply do not have the relevant data to decide on their correct treatment in any Iwaidjan language. This means that any discussion of the full semantic range of fixed-A constructions is still provisional.

3.3. Semantic range

The experiencer-object verbs we have considered for the Iwaidjan languages so far have focussed on various involuntary physical states: sneezing, headache, sweating, and hunger for the clearest cases, with dummy subjects; satiation with a frozen nominal subject, and shame and various types of sickness for verbs that allow a subcategorized nominal object. Depending on how example (28) is to be analysed, the verb 'to strike (of lightning)' may also qualify as a fixed-A verb, though without examples of human objects it would not count as an 'experiencer-object' verb.

To get a fuller idea of the semantic range found with fixed-A verbs, we now consider further data from Maung, which is the Iwaidjan language closest to having a dictionary, in the form of an electronic data file deposited with ASEDA; it was compiled by Heather Hewett over a lengthy period and keyboarded by Anne Dinneen. Although verbs of the type under discussion are not given a consistent label, and the roots are not segmented off (meaning that it can be difficult to distinguish *nga*-initial verbs from verbs with a fixed feminine A), the dictionary at least cites verbs with subject and object prefixes attached, mentions the gender of subjects when this is fixed, and exhibits a fine sensitivity in its definitions. (These entries require further checking in the field, and it would also be interesting to check their Iwaidja equivalents with Maung-Iwaidja bilinguals.) As pointed out in §1, we need to distinguish the syntactic class of fixed-A verbs (including dummy-subject verbs, but also verbs with frozen or closely subcategorized subjects) from the semantic class of experi-

encer-object verbs. As we shall see, there is considerable overlap between these two classes, but also other semantic categories of verb in the fixed-A syntactic class.

Below I exemplify the semantic categories of fixed-A verb found in Maung. As with many experiencer-object verbs, translating these into English is not always easy if one wants to suggest the grammatical structure through the definition. Here I first give the closest translation regardless of syntactic considerations (also the translation I use in glosses), then (separated off by a '|') a second definition which attempts to reflect the Maung structure. Fixed-A subjects in these second types of definition will be shown in square brackets in the form [A:x] where x is the subcategorized gender. Where a subcategorized external noun N also forms part of the expression, this is shown as follows [A:x + N]. Since verbs do not occur unprefixed for subject and object, I give them in citation form preceded by '√' for 'root'.

Verbs of involuntary physical activity or internal sensation

Verbs in this class are √*martalkanyi* 'sneeze | [A:masc] make O sneeze' (31), √*ngartpanpun* 'have headache | [A:masc] give O a headache, hurt O's head' (32), √*rajpun* with the two meanings '1. hurt, ache | [A:fem] cause O to ache' (33) and '2. [female turtle] to come up on beach but not lay eggs | [A:fem] cause O [female turtle] to come up on beach but not lay eggs' (34), √*arnekan* 'have one's beard starting to come through (youth) | [A:neut] cause beard to start sprout through O's face' (35) — here the structure suggests some internal endocrinological force is sewing the bristles through the youth's face.

- | | | |
|------|--|-------|
| (31) | Ngani-martalkanyi.
1O:3mA-sneeze-PR
'I am sneezing.' | Maung |
| (32) | Ngani-ngartpanpun mira.
1O:3mA-have.headache-PR very
'I have a bad headache.' | Maung |
| (33) | Ngapi ngan-nga-rajpu-ning.
1sg 1O-3fA-ache-PI
'I was aching, it was causing me to ache.' | Maung |
| (34) | K-iny-nga-rajpu-n jita manpiri.
PR-3fO-3fA-frustrate.egg.laying-PR f:DEM greenback.turtle
'That greenback turtle dug a hole but is not laying eggs.' | Maung |
| (35) | I-ng-arnaken-ang maryak-ut yirrka.
3mO-3fA-beard.sprout-PI fresh.growth-PL beard
'His beard was beginning to come through.' | Maung |

Verbs of caused emotion and affect

Note that in many cases it is unclear whether the translation should focus on the external cause as agent (sorrow struck him; the old man made me feel pity) or on an

internal response (he felt sorry; I felt sorry for the old man). Clearly the structure of the Maung expressions favours the first type of translation. Though in many cases the most idiomatic English equivalent is of the second type, I regard it as a still-unanswered question whether this is simply a structural fact about the languages, or reflects a different emphasis in the psychological conception of the event.

Members of this class include the following: \sqrt{wun} *wurlk* 'feel sorry; | [A:fem + *wurlk* 'sorrow'] strike O' (36); $\sqrt{ralkinka}$ 'feel annoyed, fed up or tired of talking about something | [A:fem] cause O to be annoyed, fed up or tired of talking about something' (37); $\sqrt{wurlpungku}$ 'feel pity | [A:m (only?) cause O to feel pity for A' (38).

- (36) I-nga-wun-ing wurlk ta karrkpin i-wararrken-ang. Maung
3mO-3neutA-hit-PI sorrow neut:DEM big 3mP-cry-PI
'Sorrow filled him and he was crying.'

- (37) Wularrud kanga-ralkinka. Marrik ku-ni-u ja
already PR:3nO:3fA-annoyPR NEG 2O-3mA-givePR m:DEM
kapala.
boat
'He is annoyed (about the treatment of the boat). He will not lend you the boat.'

- (38) Ara kurr-ayan-ti naka nu-warlkparrakan Maung
Q 2plA/3mO-see-IMP 3mDEM 3m-old.person
la nge-yan ngani-wurlpungkun.
and 1A/3mO-seePR 1O/3mA-feel.pityPR
'See that old man, he makes me feel sorry (for him).'
OR 'See that old man, I feel sorry for him.'

In two rather complex cases the object prefix does not directly represent the experiencer. Rather, its gender is selected for by, in the one case, the vegetable-gender noun denoting 'thoughts, mind' and, in the other, by the miscellaneous-gender noun denoting 'heart'; the experiencer in both cases is represented by an oblique pronoun directly after the verb. The relevant verbs are $\sqrt{mirlkpunga}$ '[A:m] bring back [3v + (mata) mali : memories] to OBL'¹⁴ (39) and $\sqrt{yukpung}$ '[A:misc] cause [3misc + *marurturt*: heart] of OBL to be deeply moved, broken' (40).

- (39) Ma-ni-mirlkpungany nuyu mata mali. Maung
3vO-3mA-turn.overPR 3mOBL v:DEM thoughts
'It turns his memories back (as he looks at the area and remembers an old ceremony).'

- (40) Ng-alyungan a-mirawning pata warra-kamumu Maung
1/3mO-hearP 3pl-hear-P 3pl:DEM pl:women
la atj-ukpung ngartu marurturt.
DEM 3miscO+3miscA-turn.around-PP 1sgOBL heart
'I heard the women singing and my heart was deeply moved.'

Environmental verbs

Some of the difficulties in identifying these verbs clearly in Ilgar were discussed in §3.2; similar difficulties are found in Maung. Three verbs that appear to be in this class are $\sqrt{\text{artakpin}}$ ‘be overhead | [A:f] be overhead above O’ (41), $\sqrt{\text{wartpalwan}}$ ‘be developing a thunderhead | [A:m] be causing thunderclouds to develop [O:m]’ (42), and $\sqrt{\text{waywun}}$ ‘to take back under full sail | [3:m] take O under full sail’ (43). The understood subject with $\sqrt{\text{artakpin}}$ is presumably $\sqrt{\text{muwarn}}$ ‘sun’, which is feminine, and with $\sqrt{\text{waywun}}$ is some sort of wind term.

- (41) Arrun-pa-ng-artakpi-n la arrk-pan-a. Maung
1plO-FUT-3fA-be.overhead-PR and 1plS-FUT-goPR
‘When the sun is overhead (lit. above us) we will go.’
- (42) I-ni-wartpalwani-ny k-i-wani turuy. Maung
3mO-3mA-thunderhead.develop-PP PR-3mS-sitPR distant.rumbling
‘A thunderhead has developed from which there is distant thunder and lightning.’
- (43) Pa awu-ni-waywu-ning parak a-murnanga-nyang
and.so 3plO-3mA-take.under.full.sail-PI far 3plS-return-PI
parak tuka wanat pu kunak pata Mangkajarra.
far n:DEM 3pl 3pOBL country 3plDEM Macassans
‘And so it took the Macassans under full sail back to their own country.’
Maung

Verbs of ownership

There is a single clear example in this category; from the point of view of English (and in fact all other languages I am familiar with) it is the most intriguing and difficult mapping to grasp.

The verb $\sqrt{\text{warlka}}$ basically means ‘sit on top of’, as in (44), but it can be used with a fixed neuter A and an experiencer object to mean ‘be based on, be in control of (land) | [A:neut] be the homeland of O’, as in (45).¹⁵ In this latter case the agency relations implied by the syntax are the inverse of what the English translation in the dictionary suggests: literally the Maung means ‘this (clan) land is on top of me’. The most likely explanation for this wording is something like ‘this land dominates who I am, dominates my identity’, but further work is needed on the semantics of this verb.

- (44) K-arr-pani k-arr-i-warlka ja purrpurruka.
PR-1plS-sitPR PR-1plA-3mO-sit.on.top.ofPR m:DEM bag
‘We are sitting on top of the material bag.’ Maung
- (45) Wularrut ngapi ngan-nga-warlka ta kunak. Maung
long.ago 1sg 1O-3nO-be.on.top.ofNP n:DEM country
‘I am based on this land; I am in control of this land.’

The above survey is likely to be far from complete, but it already shows some interesting differences from the Murrinh-Patha situation. The first two categories, of involuntary sensation and physical state, and of caused emotion, are rather similar (if less numerous) to those in Murrinh-Patha, but the fixed-A constructions in Maung extend to a range of environmental verbs (some of which can be considered experiencer-object verbs to the extent that they impact on human objects, as with 'be over-head, above [human]' and 'take under full sail') and also to one verb of land-person relationship. Comparing the semantic range of the construction to better known languages with non-nominative subjects, there are some familiar semantic classes (internal state and feelings), but also some quite unfamiliar ones.

Nonetheless, in each case the Maung examples, like those from other Iwaidjan languages that we have considered, make clear sense in terms of the single straightforward principle mentioned in the introduction: follow the chain of causation in mapping roles onto subject and object.¹⁶ A corollary is that the available lexical structures do not overstate the role of humans as agents or other types of cause: examples like 'the wind took them' in (43) (rather than 'they caught the wind') and 'the land dominates me' (45) (rather than 'I own/control the land') downplay the construal of human agency compared to their equivalents in English or other European languages.

4. Conclusion

The dominant typological factor underlying the development of experiencer-object constructions in the Iwaidjan languages seems to be a high tolerance for active clause structures in which inanimate subjects act upon human (and usually first person) subjects. Unlike in many other languages, Japanese being an extreme example (Nariyama 2000) but English still reflecting this tendency, the widespread tendency of languages to recognize the topicworthiness of humans and especially speech act participants by favouring them as subjects does not translate into an avoidance of active transitive clauses to express the 'inverse' combinations of inanimate agents acting upon first-person patients or experiencers. Certainly, Australian languages possess many ways of expressing the markedness of such combinations, through manifestations of the Silverstein hierarchy in case marking: ergatives on inanimate transitive subjects, overt accusative marking on first-person objects, ergative/absolutive patterning of the relevant parts of subject/object prefix paradigms, and ordering constraints either on free NPs or on pronominal prefixes which place arguments higher on the Silverstein hierarchy before those that are lower. But these strategies affect rather superficial aspects of the clause — case marking, paradigmatic syncretisms, and ordering of elements — rather than affecting the projection of thematic roles into argument structure.

The experiencer-object construction in Australian languages contrasts with the case in languages with non-nominative subjects, in which the experiencer argument

acquires some subject-like properties (typically order and control of possessive reflexives) while failing to acquire others, e.g. canonical subject case-marking, control of verb agreement. Viewed in terms of competing motivations leading to a syntactic compromise, the experiencer misses out on some prototypical subject properties because it is not an agent¹⁷, but it gains other prototypical subject properties because of its topic-worthiness as a human and typically first-person argument. It also contrasts with the case of a language like English, in which the experiencer in clauses like 'I remember John' or 'I have a headache' ends up with a nominative and close to canonical subject (though still lacking certain canonical subject properties here, such as demotability in passives). These different typological responses to a universal coding problem reveal the need to take 'cast' properties — i.e. ontological properties of the argument itself¹⁸ — into account as well as 'role' properties (i.e. thematic roles) in analysing the projection of semantics into syntax.

Abbreviations

A: transitive subject (in prefix); ACC: accusative; ANG: frozen neuter gender prefix with form *ang* or variant thereof; DEM: demonstrative; ERG: ergative; f: feminine; FUT: future; IMP: imperative; IOBJ: indirect object; m: masculine; MA: frozen vegetable gender prefix with form *mam* or variant thereof; misc: miscellaneous; n: neuter; NOM: nominative; NP: non-past; O: object; OBL: oblique; P: past; P.HAB: past habitual; PI: past imperfective; pl: plural; PP: past perfective; PR: present; S: intransitive subject; sg: singular; SUBJ: subject (where there is no A/S distinction); v: vegetable; 1: first person; 2: second person; 3: third person; /: acting upon (e.g. 1/3 'first-person singular subject acting upon third-person singular object') Note that number in bound pronominal prefixes is only marked in glosses if non-singular, so that 3 means 'third-person singular'.

Notes

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1. For a recent overview of this language family see Evans (2000a).

2. Examples are given in the practical orthographies currently used in writing these languages. Vowels have their Latin values, symbols significantly different from their standard value are ng = /ŋ/, ny = /ɲ/, r = /ɹ/, rr = /r/, rn = /ɹ/, rd (Ilgar and Iwaidja) and rt (Maung) = /t/, rt (Ilgar and Iwaidja) = /ɾ/, h = /ɣ/, ld = /l/ and rld = /l/. There is no voicing distinction in stops; in the Maung orthography only voiceless symbols are used while in the Iwaidja/Ilgar orthography the relevant symbols are voiced, except the velar stop which is written *k*.

3. In a question to the oral presentation of this chapter at ILCAA, Peter Hook asked if it would be possible to analyse these construction as three-place verbs, with the 3 masculine A subject a true dummy, the IO subject a sort of indirect object, and *wurrwiny* 'shame' an object, i.e. something like 'it did shame to me'. While in principle such structures exist in the language, i.e. three place predicates in which the indirect object is represented by the 'object' prefix and a further object by an external nominal, there is no evidence that this is happening with this verb, or even less with the verb 'get' which behaves throughout the rest of the grammar like a prototypical transitive verb. Maung is a more convenient language to test this claim in, because the five-gender system means that coreference between the prefixal argument and an external noun is easier to determine. We consider the Maung data in §3.3; there we see that in some cases the gender on the verbal prefix corresponds well to the external nominal, while in others it does not. (37) is a clear case of a Maung three-place predicate for this sort of construction, but there are few others that fit Hook's proposal clearly. Note also that, even for verbs where this analysis held, we would not be dealing with non-nominative subjects, but with indirect object (rather than strictly object) experiencers.

4. See Evans (2000: 106–8), as well as Curnow (1999) and Donohue (1998) for discussion of similar issues in Maung.

5. Pym's unpublished dictionary materials on Iwaidja give 'wet with water' as another meaning for this verb, but unfortunately no example sentences, so I have yet to verify whether the person and number of both subject and object can be freely varied when denoting one person wetting another with water. When used to denote a person perspiring the subject is fixed as third-person singular, and not specified by any noun, while the object is free to vary — this case is exemplified by Pym and Larrimore (1979: 87), whose examples are reproduced below.

- (i) ri-marrukun
3mA/3O-make.wet
'He/she is sweating.' [lit. 'It is making him/her wet.']
- (ii) ngandu-marrukun
3A/1O-make.wet
'I am sweating.' (Lit. 'it is making me wet.')

6. See also Pawley *et al.* (2000) for discussion of rather similar constructions in the Papuan language Kalam.

7. Though McGregor (1990) discusses an 'impersonal construction' in the Kimberley language Gooniyandi, this is a quite different type of construction, involving the use of third non-singular subject prefixes on verbs where the agent is suppressed, but where the event expressed by the verb is in the control of an unspecified human agent. See §5 of McGregor's article for further discussion of the differences.

8. My gloss of the first morpheme here as '3SUB' corrects a misprint in example (10) Walsh's (1987) paper; I thank Michael Walsh (p.c.) for confirming this.

9. Walsh uses the term 'impersonal verb constructions' in his paper. I prefer the terms 'experiencer object' and 'fixed A' because (a) in most cases the relevant verbs are not impersonal if one is examining the object inflection, and in the case of one of the verbs considered by Walsh (17) a. the subject is actually first person (b) adopting the term 'impersonal verb' leads one to focus on languages which happen to have inflectional agreement for subject and/or object, whereas it may well be the case — Dyirbal is an example — that structurally parallel constructions are found in languages without verbal agreement but exhibiting the same denotational limitations on subjects combined with an open set of objects.
10. Walsh cites the verbs, and their translations, with first-person subjects, e.g. 'I have no eyebrows', and indeed all his examples have first-person experiencers. For the sake of brevity I give the meanings here in a person-neutral fashion. However, it remains an interesting question whether these expressions can legitimately be used of non-first-person experiencers, given the growing literature on the restriction of private predicates to first-person experiencers (at least in declaratives; the 'epistemic authority' and preferred person value shifts to second person in polar interrogatives) — see, among others, Hargreaves (1991) on Newari, Chun and Zubin (1990) on Korean, and Iwasaki (1993) on Japanese. According to Walsh (p.c.), non-first-person singular experiencers 'are at least possible if not downright common given the right context', but we await a systematic study across all verbs of this type.
11. Tasaku Tsunoda (p.c.) points out that the Ngumpin-Yapa language Djaru furnishes a further Pama-Nyungan example: to say 'the bag is heavy' one says 'the bag is pressing me', and to say 'it is becoming cloudy' one says '[\emptyset -subject] is throwing clouds'.
12. I thank Bob Dixon for furnishing me with these examples, and for checking them on a recent field-trip to North Queensland with one of the last surviving speakers, who was adamant that no overt ergative NP can be included in (21).
13. No Iwaidjan language has yet been described to a level of detail comparable to the standard reference grammars of Australian languages. For Iwaidja and Maung we have some grammatical materials and unpublished electronic word lists (with example sentences only in the case of Maung); for Amurdak we have a short sketch grammar and a very provisional electronic dictionary, for Ilgar a sketch grammar in preparation by the present author, for Marrgu incomplete fieldnotes with brief word-lists and paradigms, and for Wurrugu practically nothing. Only Iwaidjan and Maung have speech communities of more than a handful of old people, Wurrugu is extinct, and Ilgar, Marrgu and Amurdak nearly so. See Evans (2000a) for a survey of materials and sources.
14. This verb can also mean simply 'to turn something over', in which case both agreement positions are open.
15. See Evans (2000b: 163) on another possible verb with a fixed neuter subject, which seems to denote the relationship between 'mother's mother's country' and the object argument.
16. Australian languages certainly are not unique in exhibiting this structure. Bickel (this volume) mentions very similar examples from the Sino-Tibetan languages Hayu, Belhare and Maiva-Meva Limbo.
17. An early recognition of agent-like role of inanimates in the sorts of constructions of interest to us here was in the *Kāś ikāvṛtti* commentary on Panini (P.1.4.33), cited in Deshpande (1990: 150): *devadatta-sthasya abhilāṣasya modakaḥ kartā* 'the sweets [in the sentence 'the sweets appeal to Devadatta'] are the cause of the desire in Devadatta'.

18. See Evans (1997) on a quite different problem that also requires us to pay attention to ontological properties as well as role properties.

References

- Capell, A. and Hinch, Heather. 1970. *Maung Grammar, Texts and Vocabulary*. The Hague: Mouton.
- Chun, Soon Ae and Zubin, David A. 1990. "Experiential vs Agentive constructions in Korean narrative." *Berkeley Linguistics Society* 16: 81–93.
- Curnow, Tim. 1999. "Maung verbal agreement revisited: a response to Donohue (1998)." *Australian Journal of Linguistics* 18: 73–89.
- Deshpande, Madhav M. 1990. "Some features of the Sampradana Karaka in Panini." In *Experiencer Subjects in South Asian Languages*, K. Verma Manindra and K. P. Mohanan (eds), 147–60. Stanford: CSLI.
- Dixon, R. M. W. 1979. "Ergativity." *Language* 55: 59–138.
- Dixon, R. M. W. 1991. *Words of Our Country*. St Lucia: University of Queensland Press.
- Donohue, Mark. 1998. "A note on verbal agreement in Maung." *Australian Journal of Linguistics* 18: 73–89.
- Evans, Nicholas. 1997. "Role or cast? Noun incorporation and complex predicates in Mayali." In *Complex Predicates*, Alex Alsina, Joan Bresnan and Peter Sells, (eds), 397–430. Stanford: CSLI.
- Evans, Nicholas. 1998. "Iwaidja mutation and its origins." In *Case, Typology and Grammar: In Honour of Barry J. Blake*, A. Siewierska and J. J. Song, (eds), 115–49. Amsterdam: John Benjamins.
- Evans, Nicholas. 2000a. "Iwaidjan, a very un-Australian language family." *Linguistic Typology* 4.2: 91–142.
- Evans, Nicholas. 2000b. "Kinship verbs." In *Approaches to the Typology of Word Classes*, Petra M. Vogel and Bernard Comrie, (eds), 103–72. Berlin: Mouton de Gruyter.
- Evans, Nicholas. 2003. *Bininj Gun-wok: A Pan-Dialectal Grammar of Mayali, Kunwinjku and Kune*. Canberra: Pacific Linguistics.
- Evans, Nicholas, Merlan, Francesca and Tukumba, Maggie. Forthcoming. A first dictionary of Dalabon.
- Goddard, Cliff. 1982. "Case systems and case marking in Australian languages: a new interpretation." *Australian Journal of Linguistics* 2.2: 167–96.
- Handelsmann, Robert. 1998. Draft Amurdak dictionary. Unpublished report to Environment Australia — Parks North.
- Hargreaves, David. 1991. "The conceptual structure of Intentional Action: Data from Kathmandu Newari." *Berkeley Linguistics Society* 17: 379–89.
- Heath, Jeffrey. 1982. *Nunggubuyu Dictionary*. Canberra: Australian Institute of Aboriginal Studies.
- Heath, Jeffrey. 1984. *Functional Grammar of Nunggubuyu*. Canberra: Australian Institute of Aboriginal Studies.
- Hewett, H., Dinneen, A., Tainsby, D. and Field, R. 1994. *Maung Dictionary*. Electronic data file deposited in the Aboriginal Studies Electronic Data Archive (ASEDA), Australian Institute of Aboriginal and Torres Strait Islander Studies.

- Iwasaki, Shoichi. 1993. *Subjectivity in Grammar and Discourse. Theoretical Considerations and a Case Study of Japanese Spoken Discourse*. Amsterdam: John Benjamins.
- McGregor, William B. 1990. "An impersonal construction in Gooniyanti." *Word* 41: 161–84.
- McKay, Graham. 2000. "Ndjébbana." In *Handbook of Australian Languages, Volume 5*, R. M. W. Dixon and B. J. Blake (eds), 155–355. Melbourne: Oxford University Press.
- Nariyama, Shigeko. 2000. *Referent identification for ellipted arguments in Japanese*. Unpublished Ph.D. Thesis, Department of Linguistics and Applied Linguistics, University of Melbourne.
- Pawley, A., S. P. Gi, I. Majnep and J. Kias. 2000. "Hunger acts on me: the grammar and semantics of bodily and mental process expressions in Kalam." In Videia de Guzman and Byron Bender (eds.), *Grammatical Analysis: Morphology, Syntax and Semantics. Studies in Honor of Stanley Starosta*, 153–85. Honolulu: University of Hawaii Press.
- Pym, Noreen and Larrimore, Bonnie. 1979. *Papers on Iwaidja Phonology and Grammar* [Series A, Volume 2]. Darwin: SIL-AAB.
- Osborne, C.R. 1974. *The Tiwi Language*. Canberra: Australian Institute of Aboriginal Studies.
- Verma, Maninda K. and Mohanan, K.P. 1990. "Introduction to the experiencer subject construction." In *Experiencer Subjects in South Asian Languages*, K. Verma Manindra and K.P. Mohanan (eds), 1–12. Stanford: CSLI.
- Walsh, Michael. 1987. "The impersonal verb construction." In *Language Topics: Essays in Honour of Michael Halliday. Volume 1*, R. Steele and T. Threadgold (eds), 425–38. Amsterdam: John Benjamins.

CHAPTER 9

The diachronic relationship between quirky subjects and stylistic fronting*

Susann Fischer

1. Introduction

Quirky Subjects, syntactic subjects with a lexically selected non-nominative Case, have long been observed for Icelandic. Some authors even argue that quirky subjects exist in Icelandic only (cf. Faarlund 2001). However, during the last few years non-nominative subjects have been argued for in a variety of languages (cf. Aikhenwald, Dixon and Onishi 2001). The existence and behavioral properties of quirky subjects have often been seen to depend on factors such as lexical case phenomena and on how nominative case is assigned, via Spec-head agreement or via canonical government. In this chapter I will argue that the phenomenon of quirky subjects does not depend on the subject properties or case properties of these oblique NPs, but is highly dependent on the given (active) functional material in a sentence. I will compare Old and Modern Icelandic that have been argued to always have had quirky subjects, to other Germanic languages that used to have quirky subjects and that do not allow them anymore. I will propose an account in terms of grammaticalization, more precisely, I will argue that those Germanic languages that exhibit quirky subjects possess an additional (active) functional category if compared to those Germanic languages that do not allow quirky subjects. In particular there seems to be a correlation between the occurrence of quirky subjects and the availability of Stylistic Fronting in a given language, i.e., as long as we find quirky subjects we also find Stylistic Fronting. I will argue that quirky subjects and stylistically fronted elements target the same functional category in a language.

The chapter is structured as follows: Section 2 illustrates that Icelandic quirky subjects behave like ordinary nominative subjects with respect to various syntactic phenomena. In Section 3 I will briefly discuss the well-known fact that there seems to be a difference between Icelandic and other languages concerning the subject status of oblique NPs in subject position. Section 4 will consider the diachronic perspective of oblique subjects in Icelandic and other Old Germanic languages. Section 5 will compare the changes that can be perceived within the languages under discussion, and finally in Section 6 I will propose an analysis that accounts for the availability and the loss of quirky subjects and Stylistic Fronting in the languages under discussion.

2. Subject-hood of quirky subjects

Quirky subjects carry idiosyncratic case that cannot be derived from thematic roles.¹ These oblique NPs behave like ordinary subjects with respect to different syntactic phenomena, even though they do not agree with the verb in phi-features (1c).

- (1) a. **Hana** þyrstir.
her.ACC.F.SG thirsty
'She is thirsty.'
- b. **Hennar** var saknað.
her.GEN.F.SG was.3SG missed.NOM/ACC.N.SG
'She was missed (by someone).'
- c. **Stelpunni** voru gefnir hestarnir.
girl.DAT.F.SG were.3PL given.NOM.M.P horses.NOM.M.PL
'The girl was given the horses.' (Sigurðsson 2000)

Different tests have been proposed in order to prove the subject status of these oblique subjects. Even though four of the originally ten proposed tests have been dismissed, the following are still in use: reflexivization, subject-verb inversion, subject position in ECM infinitives, raising, control (i.e. being a controllee), and conjunction reduction. With respect to Modern Icelandic all tests have been proved to hold, i.e., quirky subjects behave like nominative subjects and not like fronted objects (cf. among many others Sigurðsson 2000; Moore and Perlmutter 2000, Barðhal and Eythórsson 2002).

In Modern Icelandic nominative subjects obligatorily trigger reflexivization inside their minimal clause, provided that the phrase that contains the reflexive is the predicate of the subject. This also holds for quirky subjects in contrary to objects where object-controlled reflexivization is optional.

- (2) **Honum**_i finnst bókin **sín**_i skemmtileg.
him_i.DAT found book self_i amusing
'He is amused by his book.' (Barðhal 1997:30)

Regular nominative subjects either precede the verb or immediately follow it when something else is preposed, and they also immediately follow the finite verb in interrogative clauses. Quirky subjects behave the same. Compare example (3) a nominative subject with example (4) a quirky subject.

- (3) Hefur **hún** séð myndina?
has she.NOM seen picture
'Has she seen the picture?'
- (4) Hefur **henni** leiðst bókin?
has her.DAT bored book
'Has she found the book boring?' (Sigurðsson 1992:6)

In ECM constructions the subject of the subordinate clause behaves as the object of the matrix predicate and changes its morphological case from nominative to accusative as in (5). However, when the verb in the subordinate clause selects a lexically case-marked subject, this subject keeps its lexically inherent case as in (6).

- (5) Ég tel [hanna hafa séð myndina].
I believe her.ACC have seen picture
'I believe her to have seen the picture.'
- (6) Ég tel [henni hafa leiðst bókina].
I believe her.DAT have bored book
'I believe that she has found the book boring.' (Sigurðsson 1992:6)

Any raising predicate in Icelandic allows raising of both nominative and oblique subjects. Consider examples (7) and (8).

- (7) Ólafur byrjaði að lesa bókina
Olaf.NOM began to read book
'Olaf began to read the book'
- (8) Ólafi byrjaði að leiðast
Olaf.DAT began to bore
'Olaf began to get bored.' (Sigurðsson 2000: 10)

In control constructions the subject argument of the infinitive, independently of its morphological case in a corresponding finite clause, is controlled by an NP in the matrix clause.

- (9) Hann lofar [að PRO lesa bókina]
he promised [to PRO.NOM read book
'He promised to read the book.'
- (10) Hún lofar [að PRO finnast bókina skemmtilega]
she promised [to PRO.DAT find book entertaining]
'She hopes not to be bored by the book.' (Barðhal 1997:40)

The subject of a coordinated clause can be omitted if it is coreferential with the subject of the main clause. The subject can be omitted if it is coreferential with a nominative subject in a preceding conjoined clause, and a nominative subject is also omitted if it is coreferential with a quirky subject in a preceding conjoined clause. Consider examples (11) and (12).

- (11) Ég_i var svangur og (mig_i) langði í mat.
I was hungry and (me.ACC) wanted in food
'I was hungry and wanted some food.'
- (12) Mér_i leiddist og (ég_i) fór því heim
me.DAT bored and (I.NOM) went thus home
I was bored and therefore went home. (Rögnvaldsson 1995:371)

It was shown that the oblique subjects of Modern Icelandic behave alike to the nominative subjects. Therefore, it seems to be the correct assumption to treat them as syntactic subjects.

3. Other languages with oblique subjects

It is worth emphasizing that oblique subjects have been argued to exist in a variety of languages, for instance Faroese (Barnes 1986), Japanese and Korean (Shibatani 1977), South Asian languages (Verma and Mohanan 1990), American Indian languages (Hermon 1985), Georgian (Anderson 1984), Bengali (Klaiman 1980), Spanish (Masullo 1993), Italian (Belletti and Rizzi 1988), Russian (Schoorlemer 1994; Moore and Perlmutter 2000), as well as German (Wunderlich 2000). However, if we apply the tests to the non-nominative subjects of the different languages, it becomes clear that different languages possess different types of non-nominative subjects. Consider the following examples (13) that display subject-like NPs in Modern German.

- (13) a. **Mir** ist kalt
me.DAT is cold
'I'm cold'
b. **Mich** dürstet
me.ACC thirst
'I thirst'
c. **Mir** wurde geholfen
me.DAT was helped
'Someone helped me.'

At first sight, these subjects are not different from the quirky subjects of Icelandic. However, Modern German oblique subjects do not participate e.g. in coordination reduction (14), and they cannot be embedded under control verbs (15).

- (14) **Ich** war ziemlich überarbeitet und (***mir**) wurde trotzdem
I was quite overworked and (me.DAT) was nevertheless
nicht geholfen
not helped
'I was pretty overworked and nevertheless no-one helped me.'
(15) ***Ich** hoffe **PRO** geholfen zu werden.
I hope PRO.DAT helped to be

Thus, there seems to be little doubt that these subjects are not syntactical subjects like the ones of Modern Icelandic, but should rather be analyzed as logical subjects.

Moore and Perlmutter (2000) applied the above tests to subject-like NPs in Russian and concluded that these show even a diverse behavior. Consider the examples in (16) and (17).

- (16) a. **Borisu** ne rabotat' u sebja doma.
 Boris.DAT not work at self home
 'It's not (in the cards) for Boris to work at his own place (at home).'
- b. **Borisu** ne rabotaetsja u sebja doma.
 Boris.DAT not works+SJA² at self home
 'Boris can't seem to work at his own place (at home).' (Moore and Perlmutter 2000:384)
- (17) a. **Im** ne načat' rabotat' **odnim**.³
 they.DAT not begin work alone.DAT
 'It's not for them to begin to work alone.'
- b. ***Im** ne načat' rabotat'sja lučše.
 they.DAT not begin work'+sja better
 'It's not for them to begin to work better.' (Moore and Perlmutter 2000:399)

For the dative subject in (17a) raising is possible whereas it is impossible for the dative subject in (17b). Since this holds for all tests, Moore and Perlmutter (2000) suggest that Russian has two types of oblique subjects: one group — the infinitival datives — that are really surface subjects, and another group — the impersonal datives — that should rather be analyzed as logical subjects.

If the analysis of the two different subject-types for Russian is true Russian differs from both German and Icelandic in being a mixed language, with both oblique surface subjects like the quirky subjects in Icelandic and logical subjects like the ones in Modern German.

This leads directly to the question of what a subject is? We know that subjects display different behavior across languages (cf. Keenan 1976; Comrie 1989; Primus 1993 among many others), in fact so different that there is no way of giving a theory-independent definition or even a 'loose and general' description of the notion subject that is, in the least, universally valid. This fact has been interpreted differently in the different frameworks, but the most common reaction is in fact by claiming that SUBJECT is a universal entity or relation with such and such properties, and whenever the subjects of a language do not meet the properties there has to be language specific reasons. In a Chomskian syntax the notion of subject is used and claimed to have universal properties: a DP, phonological or 'silent', that either occupies or is co-indexed with the structurally highest DP position. However, even this very loose and general conception meets immediate problems within nominative languages (like e.g. Modern German) not to mention ergative languages (like e.g. Basque).

Sigurðsson (2000:27) correctly points out that the discussion of quirky subjects

has suffered from the fact that there is no well-defined notion of subject. Heading into the same direction, Wunderlich (2000) argues that there is no subject-related difference between Icelandic and German with respect to oblique subjects at all. Fanselow (2001) goes even further in advocating the view that if the concept of a subject plays no role in a theory of grammar, the same must hold of the idea of a subject position. Basically, I approve of this view, but think in order to fully understand why some languages allow quirky subjects and others do not, the phenomenon needs to be investigated from a diachronic perspective. This idea suggests itself since there are languages that used to allow oblique subjects but have lost this property in the course of time.

4. Diachronic perspective of quirky subjects

For some languages it has been claimed that the old stratum possessed quirky subjects whereas the modern language does not anymore: for example this was claimed for Old High German and Old English by Seeffranz-Montag (1983, 1984), for Old English by Allen (1986, 1995), and for all Old Scandinavian languages by Barðhal (1997). Thus, all the Old Germanic languages seem more or less to have allowed quirky subjects, whereas only Icelandic and Faroese of the Modern Germanic languages still show quirky subjects today.

However, only within the Old Scandinavian languages there has been much debate going on, whether these oblique subjects are syntactic subjects or mere logical subjects⁴. In order to get a somewhat clearer picture about whether the oblique subjects of the Old Germanic languages are surface subjects or not, I will discuss some of the old languages with respect to the tests introduced in Section 2. I will focus on Old Icelandic, Old Swedish and Old English. However, similar examples can be found in Old High German (cf. Seeffranz-Montag 1983), Old Danish (cf. Barðhal 1997), and other Old Scandinavian languages (cf. Faarlund 1980).

4.1. Old Icelandic

Most of the tests that test the subject status of oblique subjects in Modern Icelandic are also useful in Old Icelandic. Sentence (18) is an example of subject-inversion, sentence (19) displays an ECM-construction, (20) shows that raising was possible, and (21) exemplifies that oblique subjects control PRO in the subordinate clause.

- (18) Ei mun þig hér mat skorta
 not will you.ACC here food lack
 ‘You are not going to lack food here.’ (cited in Rögnvaldsson 1991:374)

The prototypical AcI-verb of Modern Icelandic is *telja* ‘believe’. Unfortunately, it rarely enters AcI-structures in Old Icelandic. When looking at frequency lists for

Old and Modern Icelandic, it turns out that it is lower on the list in Old Icelandic than it is today; and additionally, in Old Icelandic it usually means ‘count’ (cf. Rögnvaldsson 1991). Rögnvaldsson (1991) did not find any example of a verb taking a dative subject-like NP embedded under *telja*. However, he shows that verbs of saying, *segja* ‘say’ and *kveða* ‘say’ often enter into AcI structures, and they also do so when the subordinate clause has an oblique subject-like NP in initial position (19).

- (19) Ingólfur ... sagði þeim vera mál að setjast um kyrrt ...
 Ingólfur said them.DAT be time to sit on still
 ‘Ingolfur said that it was time for them to settle down ...’ (cited in Rögnvaldsson 1991:373)
- (20) En henni lest bagasamlegt þykja og kvað eigi kvinna vist þar
 but she.DAT acted badly feel and said not women’s place there
 vera
 be
 ‘But she acted as if she felt that it was bad and said that this was no place for women.’ (cited in Rögnvaldsson 1995:17)

Examples of control verbs with quirky subjects are very difficult to find even in Modern Icelandic. With respect to Old Icelandic the typical control verbs like *reyna* ‘try’, *skipa* ‘order’, *vonast til* ‘hope for’, either do not exist or they are not control verbs at all (cf. Rögnvaldsson 1991). Rögnvaldsson (1995) argues that verbs in the medio-passive seem to control PRO-infinitives. Therefore examples of middles with infinitives selecting quirky subjects should count as an argument for the subject-hood of quirky subjects.

- (21) þorgils kvaðst PRO leiðast þarvistin
 þorgils said.refl. PRO.DAT bore there.stay.the
 ‘þorgils said that he was bored by staying there.’ (cited in Rögnvaldsson 1995:17)

One of the arguments that led some scholars to deny the status of a syntactical subject to the oblique subject of Old Icelandic has always been the fact that some of the tests cannot be used because objects behave alike (for an extensive discussion on this fact see Rögnvaldsson 1991). One such test is reflexivization.

- (22) a. Jarl þakkaði honum_i orð sín_i.
 earl thanked him.DAT words self
 ‘The earl thanked him for his words.’ (cited in Rögnvaldsson 1991:371)
- b. það er mér sagt að þú ... grípir fyrir mönnum_i góss sitt_i
 it is me said that you grasp for men.DAT things self
 ‘I am told that you steal people’s properties.’ (cited in Rögnvaldsson 1991:371)

In both sentences it is the object that triggers reflexivization. The same holds for conjunction reduction. Next to the type of conjunction reduction that we find in Modern Icelandic, other types of NP-ellipsis are grammatical in Old Icelandic that do not occur in Icelandic anymore. For instance, the subject is often omitted if it is co-referential with a preceding object (23), and the object is sometimes omitted if it is co-referential with a preceding subject or object (24).

- (23) Hann höggur **sverðinu**_i ... og kom__i í þvertréið.
 he hits sword and came in beam
 'He hits with the sword and it stuck in the beam.'
- (24) og er Egill sá **skipið**_i þá kenndi hann__i þegar.
 and when Egill saw ship then knew he at.once
 'And when Egill saw the ship, he knew it immediately.' (cited in Rögnavaldsson 1991:371–2)

Even though the results of these last two tests do not prove the subject status of oblique subjects in Old Icelandic, they do not speak against it either. The evidence that can be found for the subject-hood of oblique subjects cannot be more conclusive than the evidence one may find for the subject-hood of nominative subjects. It looks more as if the old stratum tolerated objects to act — under certain circumstances — like syntactic subjects.

4.2. Old Swedish

The oblique subjects of Old Swedish seem to behave similar to the oblique subjects of Old Icelandic. They pass the test for subject-inversion (25), ECM (26), raising (27), and control (28).

- (25) mere pina bör **thessom** än hinom
 more pain deserve they.OBL than others
 'they deserve more pain than the others' (cited in Barðhal 1997:32)
- (26) han swarade **thera sidhum** **ok** **simum sidhum** ey sãmia
 he answered their customs.DAT and his customs.DAT not accord
 'he answered that their and his customs were not in accordance' (cited in Falk 1993:203)⁵
- (27) **honon** beynte strotliga ångra at han så dårliga giordt hade
 he.OBL started much regret that he so badly done had
 'he started regretting his bad performance' (cited in Barðhal 1997:37)
- (28) **os** duger ey ther æptir langa
 us.OBL helps not there for long
 'it does not help us to long for that' (cited in Barðhal 1997:41)

With respect to clause-bound reflexivization and conjunction reduction the same

holds as in Old Icelandic. In Old Swedish not only subjects trigger reflexivization but objects do too, and not only subjects can be deleted if coreferential with a preceding subject but objects can be deleted too.

4.3. Old English

Almost all subject tests are useful with respect to the oblique subjects in Old English. (29) is an example of subject inversion, (30) an example for an ECM construction, (31) for raising, (32) for control, and (33) for conjunction reduction.

- (29) þa ongan hine eft langian on his cyþþe
 then started him.OBL to long for his child
 'Then he started to long for his child.' (cited in Seefranz-Montag 1983:39)

- (30) ye me cause so to smertet
 you me.OBL cause so to hurt
 'You cause me to hurt so much.' (cited in Butler 1977:162)

According to Barðhal (1997:39) the example in (31) is a subject to subject raising construction in which the lower verb selects an oblique subject and the higher verb is a modal that does not have an external NP of its own.

- (31) us sholde neither lakke gold ne gere
 us.OBL should neither lack gold nor necessities
 'We should neither lack gold nor necessities.' (cited in Seefranz-Montag 1983:133)

- (32) þa ongan hine eft langian on his cyþþe
 then started him.OBL to long for his child
 'Then he started to long for his child.' (cited in Seefranz-Montag 1983:39)

In contrast to Old Icelandic and Old Swedish conjunction reduction seems to be an almost conclusive subject test according to Allen (1986:393). Consider the following example (33).

- (33) ac gode ne licode na heora geleafleas ac asend him
 but God.DAT not liked not their faithlessness.NOM but send them
 to fyr of heofonum
 to fire of heaven
 'But their faithlessness did not please God, but (he) send them fire from heaven.' (Allen 1986:390)

However, in Old English subject deletion that is controlled by an indisputable object is also possible. Hence, the overall picture with respect to the subject tests seems to be the same for all three languages under discussion.

It was shown that if we apply the usual subject tests to the oblique subjects in Old Icelandic, Old Swedish and Old English most of the tests are useful and indicate that these subjects seem to be best analyzed as surface subjects. However, not all tests are useful, since objects behave similar to subjects with respect to some of the tests, and they do not in the modern languages. So, what we perceive is not only a change with respect to oblique subjects, but also a change with respect to objects. Thus, it might be correct to suggest that what we observe in the course of history is not a change in the subject-status of the oblique subjects, but a change in the function of the position that hosts these NPs, i.e., objects, subjects, oblique subjects. Taking this as a working hypothesis the next step is to see what other similarities, especially with respect to the perceived changes, can be detected in these languages that lead us to a clarification of what kind of a position we are confronted with.

5. Changes in the Germanic languages

All the Old Germanic languages allowed objects to behave like subjects in certain circumstances next to displaying oblique surface subjects. In the Modern Germanic languages we find a diverse pattern. In none of the Modern Germanic languages objects behave like subjects, however, only Modern Icelandic and Modern Faroese (Barnes 1986) still allow oblique subjects. All other Modern Germanic languages have lost this possibility. It stands out that Icelandic and Faroese have something else in common which is generally shared by the old Germanic languages, that is, Stylistic Fronting and other V3 word-orders. In the following section I will first discuss the similarities between Icelandic and Faroese and the Old Germanic languages, and in a next step I will look at what changed in the course of history from Old to Modern Icelandic and from Old to Modern Scandinavian.⁶

5.1. Similarities: Stylistic fronting

Stylistic Fronting (SF) is standardly understood as a rule which moves a category to a position in front of the finite verb in those sentences where the position in front of the verb is not occupied by an overt subject NP. Constructions where SF applies include subject relative clauses, embedded subject questions, or various impersonal sentences. Consider the following examples from Icelandic. (34) represents canonical word order, while (35) illustrates the order after SF has applied.

- (34) a. [Sá sem er fyrstur að skora mark] fær sérstök verðlaum
 he that is first to score goal gets special price
 ‘The first one to score a goal gets a special price’
 b. [Sá sem fyrstur er_ að skora mark] fær sérstök verðlaum
 he that **first** is to score goal gets special price (Jónsson 1991)

With respect to the Old Scandinavian languages it has often been argued that they

all possess Stylistic Fronting (cf. Falk 1993, Platzack 1988). Consider the following examples from Old Swedish (35)–(36), Old Danish (37)–(38) and Old Icelandic (39).

- (35) en (...) [som **likir** war_enom hofman]
 one that **alike** was a courtier
 ‘one that resembled a courtier’
- (36) Tha som **lypt** war_j messone
 when that lifted was in Mass
 ‘when one lifted [i.e. the Host] in the Mass’ (cited in Falk 1993: 156)
- (37) at det skulle fuldkommis, som **sagd** er_ ved Prepheten
 that it should finish as said is by prophet
 ‘that it should be finished as is said by the prophet’
- (38) och haf oc alt thet ther **fødh** ær_i iørderige
 and see and all that which born is in earth-realm
 ‘and sea and all that is born in the realm of earth’ (cited in Vikner 1995: 162)
- (39) at **herjat** var_i ríki hans
 that harried was in kingdom his
 ‘that (he) was tormented in his kingdom’ (cited in Vikner 1995: 161)

Not surprisingly at all, the same examples are attested in Old and Early Middle English (40)–(41).

- (40) wiþþ all þatt lac þatt **offredd** wass_biforenn Cristess come
 with all that sacrifice that offered was before Christ’s come
 ‘with all that sacrifice that was offered before Christ’s coming’ (cited in Trips 2002: 587)
- (41) þatt **timmbredd** wass_abufenn Godess arrke
 that built was above God’s ark
 ‘that was built above God’s ark’ (cited in Trips 2002: 588)

Even though there is still some controversy as to whether SF involves movement of a head or movement of a phrase in Icelandic, it has been agreed upon that SF needs a subject gap in order to apply. This constraint was always taken as clear evidence that the SFed element targets a position within IP. Even though SF is absolutely optional, it has been argued to apply in order to rescue a verb second clause structure (Maling 1990), or in order to check an EPP feature that would normally be checked by an overt subject (Holmberg 2000). However, the evidence that SF applies in order to rescue a verb second clause structure, or in order to check an EPP within IP, does not seem to be that clear cut. Consider the following examples from Old Swedish (42) and Old English (43), and Icelandic (44)–(45).

- (42) *sin kæra guðfaður* [som hon **daghleka** stundaþe tel_]
 her dear godfather [that she **daily** longed for]
 'her dear god father whom she missed daily'. (Falk 1993: 188)
- (43) *þatt Jesuss nohht ne wolle_ ben borenn nowwhar i þe land*
 that Jesus not not would be born nowhere in the land
 'that Jesus would not be born anywhere in that land' (Trips 2002: 592)⁷
- (44) *Hún sagði frá sínum kæra guðföður sem hún daglega leitaði til_.*
 she told from her dear grandfather that she daily searched to
 'She told from her dear grandfather whom she met daily' (Gunnar Hrafn Hrafnbjargarson p.c.)
- (45) *sem hún séð hefur_ daglega*
 that she seen has daily
 'that she has daily seen.' (Gunnar Hrafn Hrafnbjargarson p.c.)

These sentences look much more as if the verb was in third position. Example (42), (44) and (45) display subject clitics and (43) a full NP. Concerning SF together with subject clitics, Platzack (1988) suggests that these clitics are not in SpecIP but right adjoined to C°. Under this assumption the sentences still display a subject gap and the analysis of SFed elements targeting a position within IP can still be maintained.

However, sentence (43) displays a full subject NP and nevertheless the negation is stylistically fronted. This sentence does clearly not have a subject gap, and the finite verb is clearly not in second position. Consider also the following examples: (46) and (47) are examples from English, (48) from Swedish.

- (46) *þonne soðlice Gode licað ure drohtnunge*
 then truly God likes our living
 'then truly does our way of life please God' (cited in Allen 1995: 77)
- (47) *e se cyng him eac wel feaoh sealde*
 and the king him also well property gave
 'and in addition the king gave him much property' (cited in Cardinal-etti and Roberts 1991: 28)
- (48) *at cristet folk mz truldoms listom forvinna alla pinor*
 that Christian people with witchcraft overcome all pains
 'that Christian people overcome all pain with witchcraft' (cited in Falk 1993: 189)
- (49) *at han them thagar buth sænde*
 that he them directly message sent
 'that he directly send them the message' (cited in Falk 1993: 157)

These sentences allow the conclusion that the verb is not in second position. Sentence (46) displays an adverb that is placed between CP and the subject in SpecIP,

sentence (47), a matrix clause, places several constituents in front of the finite verb, sentence (48) is an example of a subject and a preposed object followed by the finite verb, and finally in sentence (49) a subject a pronoun object and an adverb precede the verb. These sentences allow an alternative analysis, an analysis that suggests a further category between CP and IP (see also Cardinaletti and Roberts 1991 for a similar proposal). More specifically, I propose that SFed elements and quirky subjects target the same “additional” position in a sentence. Consider the following difference between nominative subjects (50) and oblique subjects (51) with respect to SF.

- (50) a. *Erfið ákvörðun tekin hefur verið_
difficult decision taken has been
b. Tekin hefur verið_ erfið ákvörðun
taken has been difficult decision
'A difficult decision has been taken.' (Holmberg 2000:446)
- (51) a. *María hefur sagt frá afa sínum,
Mary has told about grandfather her
sem Maríu leiðst hefur_ alla tíð
that Mary.DAT bored have all time
'Mary has told about her grandfather that has bored her all her life.'
b. *María hefur sagt frá afa sínum, sem leiðst hefur_
Maria has told about grandfather her that bored has
Maríu alla tíð
Maria.DAT all time
'Mary has told about her grandfather that has bored her all her life.' (Gunnar Hrafn Hrafnbjargarson p.c.)

The difference between (49) and (50) corroborates the proposal that quirky subjects and SF target the same position and only this position in a sentence. Both nominative and quirky subjects are excluded in a preverbal position as soon as SF applies complying with an analysis along the lines of Holmberg (2000) that SF checks an EPP feature in SpecIP.⁸ However, oblique subjects are also excluded when positioned after the verb, in which position the nominative subject is allowed even though SF applied.

5.2. Differences

In order to find out what actually changed within the languages that used to allow oblique subjects and still allow them today and those that used to allow them but do not allow them anymore, I will compare Old Icelandic to Modern Icelandic and Old Swedish to Modern Swedish⁹. Of special interest for my purpose is the question of what appeared in initial position in the old stratum compared to the modern stratum. Naturally, the following can only be an attempt to select some of the

attested changes in the languages in question hoping that this will lead me in the right direction.

Summarizing the change from Old to Modern Icelandic, we see most notably a change of what could appear in initial position. In Old Icelandic, sentences used to start with either a subject or a topic, or a topic marker, whereas in Modern Icelandic all different constituents can start a sentence. Next to nominative subjects, topics, subject clitics, and stylistic fronted elements starting a sentence, also oblique subjects, and the finite verb can be in absolute initial position. In Old Icelandic all different *pros* were possible, whereas in Modern Icelandic only quasi subjects and expletives can be dropped (cf. Falk 1993: 131ff). Furthermore *það* in Old Icelandic could only be used together with stylistic inversion, as a topic marker, whereas in Modern Icelandic it is used as a referential subject, i.e., if *það* appears in a sentence, it is the only subject of this sentence (cf. Falk 1993: 130).

A summary of the changes from Old to Modern Swedish is a little harder, since a lot more has changed. In Old Swedish Stylistic Fronting of elements was possible: quirky subjects appeared next to all different kind of *pros*, and additionally there was a topic marker *det* comparable to *það* which was used in stylistic inversion constructions (cf. Falk 1993:250ff). In Modern Swedish Stylistic Fronting and quirky subjects do not appear anymore, furthermore *det* transformed from being a topic marker in Old Swedish to being a subject marker in Modern Swedish. In Old Swedish all different kinds of constituents could appear in initial position whereas in modern Swedish it is either a topic or a nominative subject.

Additionally to the changes given in the overview, a major change took place with respect to verb-movement, case and verbal-morphology (cf. Falk 1993, Platzack 1987). In Old Swedish the verb could still be placed in front of the negation, whereas

Table 1. Changes in the initial position from Old Icelandic to Modern Icelandic

Old Icelandic	Modern Icelandic
nominative subject — verb	nominative subject — verb
topic — verb — subject	topic — verb — subject
	quirky — subject — verb
subject — clitic — SF verb	subject clitic — SF — verb
subject clitic — verb	subject clitic — verb
SF — verb	SF — verb
<i>það</i> ¹⁰ — verb — quirky subject	
<i>það</i> — verb — nominative subject	<i>það</i> (referential subject) — verb
	Verb — nominative subject
	Verb — quirky subject
	Verb — Ø ¹¹

Table 2. Changes in the initial position from Old Swedish to Modern Swedish

Old Swedish	Modern Swedish
nominative subject — verb	nominative subject — verb
topic — verb — subject	topic — verb — subject
quirky subject — verb	
subject — clitic — SF	verb subject clitic — verb
subject clitic — verb	
SF — verb	
<i>det</i> ¹² — verb — quirky subjects	
<i>det</i> — verb — nominative subjects	
verb — nominative subject	
verb — quirky subject	
verb — <i>pro</i>	

in Modern Swedish the verb cannot move across the negation anymore. In Old Swedish the verb agrees in number and person with the subject, whereas in spoken Modern Swedish it doesn't anymore. Person agreement is weakened during the late Old Swedish period (15th century), whereas agreement in number remains in written language until the 20th century. In spoken language however, agreement was lost long during the 17th century (see Falk 1993: 155 for a discussion on this).

6. Seeking an explanation

What has become obvious from the tables in the last section is the fact that Modern Icelandic is surprisingly similar to Old Swedish. In Old Swedish as well as in Modern Icelandic we find various constituents all targeting the sentence initial position: the subject, *það/det*, the finite verb, SFed elements, topicalized elements whereas in Old Icelandic quirky subjects do not usually appear in initial position. The first position in a matrix sentence was reserved for topic elements, either topicalized items, adverbs, or the topic marker. The first position in a matrix sentence could not remain empty, it had to be occupied. Only in Modern Icelandic sentences are allowed to start with a verb. With respect to the properties of the initial position in the two languages, a drift can be ascertained from Old Icelandic to Modern Icelandic/Old Swedish and to Modern Swedish. Thus, I will suggest that the "topic" elements of Old Icelandic are situated in SpecCP, the traditional topic position. In doing so, I conform with the general assumption that the Old Germanic languages were topic prominent. The change from Old to Modern Icelandic is thus a change of topic prominence to subject prominence.

Old Icelandic → Modern Icelandic/Old Swedish → Modern Swedish
 topic prominent → subject prominent → subject prominent

Regarding the change from Old Swedish to Modern Swedish, I would like to propose an account in terms of grammaticalization. Those Germanic languages that possess oblique subjects allow during the same period Stylistic Fronting, and other V3 word-orders in embedded and matrix sentences. This holds for Early Middle English, Old Scandinavian, Modern Icelandic and Modern Faroese. I thus propose that the two phenomena should be related and correlated to an additional functional category in the IP domain, in the sense of Cardinaletti and Roberts 1991; Bobaljik and Jonas 1996, and Fischer and Alexiadou 2001. Under this assumption I predict that oblique subjects and Stylistic Fronting disappear at the same time as a consequence of the loss of the extra functional material.

It is a well-known fact that in the history of Swedish oblique subjects and Stylistic Fronting disappeared at about the same time (cf. Falk 1993, Platzack 1988). With respect to Icelandic and Faroese we know that SF is only used in written texts today. So, quirky subjects should have started disappearing as well. And this is indeed the case as has recently been shown by Eythórsson's (2000, 2002). In this study, he investigates the use of different case marking among pupils whose native language is Faroese or Icelandic. The results of his study clearly indicate that oblique subject marking is lost in favour of nominative case morphology. Even though in standard Faroese and Standard Icelandic oblique subjects are still used, they are only marginally used in the spoken language of ordinary pupils.

The loss of SF and oblique subjects can be explained as an effect of grammaticalization, i.e. the loss of the additional functional category along the same lines as has been proposed by Fischer (2001) in order to account for the disappearance of Stylistic Fronting in Old Catalan.

Under this proposal oblique surface subjects should be possible in those languages that provide the extra functional category that also allows Stylistic Fronting. It seems then that whether a language has quirky subjects or not, does not depend on the subject properties of a language, nor on the subject position, but on the availability of extra functional material in the clause. The difference between Modern Icelandic and Modern Faroese compared to, say, Modern English and Modern Swedish would be a difference in functional material.

Furthermore this analysis could easily be extended to explain oblique subjects (cf. Seeffranz-Montag 1983) and SF in Old Romance (cf. Fischer and Alexiadou 2001). It has often been argued that SF depended on verb-movement to I'. This analysis was always corroborated by the data of the Scandinavian languages (cf. Falk 1993) that seemed to show that SF was lost when the verb stopped moving to I'. However, as was argued by Fischer (2001) Old Catalan allowed SF and Modern Catalan does not, even though the verb still moves to I'. The analysis presented here allows a uniform treatment for SF in Romance and in the Germanic languages. SF in Germanic does not stop because of a loss of verb-movement to I', but because of the loss of verb-movement to a higher functional category in the clause structure.

Notes

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1. However, since they never denote the thematic role agent, one could argue that they are semantically determined in a negative sense.

2. *Sja* is a reflexive morpheme used for impersonal constructions or reflexive verbs.

3. In (17a) there is no overt subject, however there is evidence from *odnomu* ‘alone’ which is marked for dative that the covert subject is dative as well.

4. For example, with respect to Old Norwegian, Faarlund (1980) argues that the oblique subjects are surface subjects, while in his more recent work he has changed his opinion and claims that they are not (Faarlund 1990). Regarding Old Swedish Kristoffersen (1991), Mørck (1992) and Falk (1993, 1997) agree that since they cannot find conclusive evidence for the subject-hood of oblique subjects in Old Swedish, these subjects should not be considered surface subjects. Concerning Old Faroese it was claimed by Barnes (1986) that Old Faroese as well as Modern Faroese has oblique surface subjects. With respect to Old Icelandic Sigurðsson (1982) in his master’s thesis doesn’t count the oblique subject-like NPs of Old Icelandic as grammatical subjects, whereas Faarlund (1980) argues that they are actually subjects, while subsequently he has taken a different stand and claims they are not. Barðhal (1997) provides examples showing that the usual tests for subject-hood hold for Old Icelandic, Old Swedish, Old Danish, and she therefore argues that all Old Scandinavian languages show quirky subjects.

5. As argued by Falk (1993: 203) this test is a little complicated by the fact that OV order is possible in Old Swedish. With OV word order, the oblique NP in (26) could also be in the complement position of the infinitive verb. Falk is of course right, the examples can be interpreted in such a way, but that does not entail that such an interpretation should be preferred (see also Barðhal 1997 for a discussion of this).

6. The choice to look in more detail at the change in Icelandic and Swedish is due to the fact, that these two languages are still verb second languages, therefore the change with respect to quirky subjects and SF is easier to detect as in the change of English. However, the claim put forth here is also valid for English, even though Modern English is not a verb second language anymore.

7. Trips (2002) argues convincingly that *nohht* is stylistically fronted in this sentence, its normal position is behind the finite verb.

8. However, according to the analysis proposed here, this would be an EPP feature in a higher category than IP.

9. The change from Old English to Modern English is of course different from the change of Old Swedish to Modern Swedish. However, I would like to suggest that my arguments are still applicable to the change from Old to Modern English as well.

10. *Pað* is no referential subject in Old Icelandic, it is never used with weather verbs (cf. Rögnvaldsson 1991).

11. \emptyset = quasi subject, expletive pro; Old Icelandic allowed all subjects to be dropped: referential, quasi subjects and expletives. Modern Icelandic only allows to drop expletives and quasi subjects.
12. *Det* is a topic marker in Old Swedish. (Falk 1993).

References

- Aikhenwald, A. Y., R. M. W. Dixon and M. Onishi (eds.) 2001. *Non-canonical Marking of Subjects and Objects*. Amsterdam/Philadelphia: John Benjamins.
- Allen, C. 1986. "Reconsidering the history of like". *Journal of Linguistics* 22: 375–409.
- Allen, C. 1995. *Case Marking and Reanalysis: Grammatical Relations from old to Early Modern English*. Oxford: Clarendon Press.
- Anderson, S. (1984). "Case, agreement and inversion in Georgian". *Natural Language and Linguistic Theory* 2: 157–218.
- Barðhal, J. 1997. "Oblique Subjects in Old Scandinavia". *Working Papers in Scandinavian Syntax* 60: 25–50.
- Barðhal, J. and T. Eythórsson. 2002. "The Change that Never Happened: The Story of Oblique Subjects". Ms. University of Manchester.
- Barnes, M. 1986. "Subject, Nominative and Oblique Case in Faroese". *Scripta Islandica* 37: 13–46.
- Belletti, A. and L. Rizzi. 1988. "Psych-Verbs and Theta-Theory". *Natural Language and Linguistic Theory* 6: 291–352.
- Bobaljik, J. D. and D. Jonas. 1996. "Subject Positions and the Role for TP". *Linguistic Inquiry* 27, 195–236.
- Butler, M. 1977. "The reanalysis of object as subject in middle English impersonal constructions". *Glossa* 11.2: 155–70.
- Cardinaletti, A. and I. Roberts. 1991. "Clause Structure and X-second". Ms. University di Venezia.
- Comrie, B. 1989. *Language Universals and Linguistic Typology*. Oxford. Blackwell.
- Eythórsson, T. 2000. "Dative vs. Nominative: Changes in Quirky Subject in Icelandic". *Leeds Working Papers in Linguistics* 8: 27–44.
- Eythórsson, T. 2002. "Change in progress in Faroese: case marking in impersonal constructions". Paper held at DIGS VII in Girona.
- Faarlund, J. T. 1980. "Subject and nominative in Old Norse". *Scripta Islandica* 31: 65–73.
- Faarlund, J. T. 1990. *Syntactic Change. Towards a Theory of Historical Syntax*. Berlin: Mouton de Gruyter.
- Faarlund, J. T. 2001. *Grammatical Relations in Change*. Amsterdam/Philadelphia: John Benjamins.
- Falk, C. 1993. Non-Referential Subjects in the History of Swedish. Phd. Dissertation. University of Lund.
- Falk, C. 1997. *Fornsvenska upplevarverb*. Lund: University Press
- Fanselow, G. 2001. Quirky "Subjects" and Other Specifiers. Ms. University of Potsdam.
- Fischer, S. to appear. "Stylistic Fronting: a contribution to information structure". *MLC-effects*. A. Stepanov, G. Fanselow and R. Vogel (eds.). Amsterdam.
- Fischer, S. and A. Alexiadou. 2001. "On Stylistic Fronting: Germanic vs. Romance". *Working Papers of Scandinavian Syntax* 68: 117–45

- Hermon, G. 1985. *Syntactic Modularity*. Dordrecht: Foris.
- Holmberg, A. 1997. "Scandinavian Stylistic Fronting: Movement of Phonological Features in the Syntax". *Working Papers in Scandinavian Syntax* 60: 81–124.
- Holmberg, A. 2000. "Scandinavian Stylistic Fronting". *Linguistic Inquiry* 31: 445–83.
- Jónsson, J. G. 1991. "Stylistic Fronting in Icelandic". *Working Papers in Scandinavian Syntax* 48: 1–43.
- Keenan, E. L. 1976. "Towards a universal definition of subject". In *Subject and Topic*, Charles N. Li (ed.), 303–33. New York: Academic Press.
- Klaiman, M. H. 1980. "Bengali dative subjects". *Lingua* 51: 275–95.
- Kristoffersen, K. E. 1991. *Kasus, Semantiske roller og Grammatiske funksjonar i norrønt*. Oslo.
- Maling, J. 1990. "Inversion in Embedded Clauses in Modern Icelandic". In *Syntax and Semantics: Modern Icelandic Syntax*, J. Maling and A. Zaenen (eds.), 71–91. London.
- Masullo, P. J. 1993. "Two types of Quirky Subjects Spanish Versus Icelandic". *NELS* 23: 303–17.
- Mørck, E. 1992. "Subjektets kasus i norrønt og mellomnorsk". *Arkiv för nordisk filologi* 107: 53–99.
- Moore, J. and Perlmutter, D. M. 2000. "What does it take to be a Dative Subject?" *Natural Language and Linguistic Theory* 18: 373–416.
- Platzack, C. 1987. "The Scandinavian Languages and the Null-Subject Parameter". *Natural Language and Linguistic Theory* 5: 377–401.
- Platzack, C. 1988. "The Emergence of a Word Order Difference in Scandinavian Subordinate Clauses". *McGill Working Papers in Linguistics, Special Issue on Comparative Germanic Syntax*, 215–38.
- Primus, B. 1993. "Syntactic Relations". *HSK, Syntax* 9.1: 686–705. Berlin: de Gruyter.
- Rögnvaldsson, E. 1991. "Quirky Subjects in Old Icelandic". *Papers from the 12th Scandinavian conference of Linguistics*: 369–78.
- Rögnvaldsson, E. 1995. "Old Icelandic: A non-configurational language?" *Nowele* 26: 3–29.
- Schoorlemmer, M. 1994. "Dative Subjects in Russian". In *Functional Categories in Slavic Syntax*. Annual Workshop on Formal Approaches to Slavic Linguistics. Toman, J. (ed). 129–72. Michigan Slavic Publications. Ann Arbor.
- Shibatani, M. 1977. "Grammatical relations and surface cases". *Language* 53: 789–809.
- Seefranz-Montag, A. 1983. *Syntaktische Funktionen und Wortstellungsver-änderung: die Entwicklung "subjektloser" Konstruktionen in einigen Sprachen*, München.
- Seefranz-Montag, A. 1984. "Subjectless Constructions and Syntactic Change". *Historical Syntax*. Facek Fisiak (ed.), 521–53. Berlin: Mouton.
- Sigurðsson, H. Á. 1982. *Um frásagnarumröðun í forníslensku*. Master's thesis, University of Iceland, Reykjavík.
- Sigurðsson, H. 1989. *Verbal Syntax and Case in Icelandic*. Doctoral Dissertation, Lund.
- Sigurðsson, H. 1992. "The Case of quirky subjects". *Working Papers in Scandinavian Syntax* 57: 1–47.
- Sigurðsson, H. 2000. "To be an oblique subject: Russian vs. Icelandic". *Working Papers in Scandinavian Syntax* 66: 1–32.
- Tomaselli, A. 1995. "Cases of Verb Third in Old High German". In *Clause Structure and Language Change*, Battye, A. and I. Roberts (eds), 345–69. Oxford.
- Trips, C. 2002. *From OV to VO in Early Middle English*. Phd. Dissertation. University of Stuttgart.
- Verma, M. K. and K. P. Mohanan (eds.). 1990. *Experiencer Subjects in South Asian Languages*. Stanford. CSLI.

- Vikner, S. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: University Press.
- Wunderlich, D. 2000. The force of lexical case: German and Icelandic compared Ms. Heinrich-Heine University of Duesseldorf.

CHAPTER 10

Case as agreement

Non-nominative subjects in Eastern Shina,
non-dative objects in Kashmiri and Poguli,
and labile subjects in Kashmiri and Gujarati
intransitive inceptives

Peter Edwin Hook
Omkar N. Koul

Abstract

Some analyses of the ergative in northwestern Indo-Aryan languages (Hindi–Urdu usually, but the analyses are extendible to Panjabi, Marathi, Gujarati, Kashmiri, etc.) have treated it as lexical case, expressing an agentive semantic role (Mohanani 1990, Mahajan 1990). Recently Davison (2001) has proposed that the ergative be treated as non-semantic, structural case. In this chapter we present data which show that not only the ergative marking of transitive subject noun phrases but (in a few northwestern NIA languages) the dative marking of direct object noun phrases can be regarded as kinds of agreement phenomena. We end with another set of data, on the alternation of nominative and ergative case in Kashmiri and Gujarati which, contradicting Davison's view, show that the conditions on assignment of case to the subjects of intransitive inceptive ('begin to') clauses cannot be understood without appealing to semantic and pragmatic information.

In almost all the Indo-Aryan languages that have it, ergative marking is tensually, aspectually, and modally split: It always includes the non-durative aspects of past and perfect tenses of active transitive verbs in the indicative mood and excludes durative aspects, the imperative mood, and at least some non-past tenses. Shina, an Indo-Aryan language spoken in the Northern Areas of Pakistan and parts of Kohistan (Schmidt 1985), in a few places in the extreme northwest of Jammu and Kashmir state in India (Ramaswami 1982), and in a few villages in northeastern Afghanistan (Buddruss 1967), is an exception to this: In many varieties of Shina all transitive subjects, even those of imperatives, duratives, futures, and presents are marked with the ergative case. However, in some dialects whose speakers live in close contact with speakers of Balti or Purki (Western Tibetan languages) the ergative case itself has two alternating sets of forms. Shina of Gultari, along with some other easterly varieties of Shina, has what we may term dual ergativity: In the non-durative aspect of the simple past and the perfect tenses in the indicative mood an "Indic" suffix can

be used. In (1), for example, the ergative suffix *-o* is found with animates ending in *-i* (such as *ali* ‘Ali’) in simple past and in all perfect tenses¹

- (1) *dadii gaa maamad sher aly-o wake dye*
 grandmother and Muhammad Sher Ali-IND.ERG² fight gave
 ‘Grandmother and Muhammad Sher Ali fought.’ (Hook 1996: 134)

In other moods, aspects, and tenses a transitive subject is marked by *-se* (probably a borrowing from western Tibetan). Compare the form *ali-se* in (2) with *aly-o* in (1).

- (2) *mehefil-ijaa maamad sher ali-se noTe dyUU asilo*
 party-LOC Muhammad Sher Ali-Tib.ERG dance giving was
 ‘Muhammad Sher Ali was dancing in the party.’ (Hook 1996: 132)

Defining agreement as the variation in the form of one linguistic element (the *target*) that is conditioned by the class membership (*parameter*) of some other linguistic element (the *controller*), we may regard the alternating forms of the ergative in Eastern Shina as targets controlled by the tense, aspect, and mood parameters of the finite verb. In other words the ergative affix agrees in tense, aspect and mood with the verb. If the values for those three parameters are: 1. past or perfect, 2. non-durative, and 3. indicative, then the ergative affix may be drawn from either the Indic or the Tibetan sets. Otherwise, only the Tibetan set may be used, as in (2) and as in the following example of the imperative mood:

- (3) *tsho-se (*tsho-jaa) shU nush-ek shafat-ejaa wake ne*
 you-TIBERG you-IndERG dog isn’t-a dog.dish-LOC fight NEG
dy-aa
 give-IMPER
 ‘Don’t you fight over a dog dish for which there is no dog!’
 (Nasir Hussain, p.c.)

Establishing agreement as the key notion in accounting for the allomorphs of the ergative case in Eastern Shina opens up agreement as a more generally applicable characterization of alternation in subject case. For example, we may take the Hindi–Urdu ergative marker *-ne* as an audible allomorph of subject case that, in transitive clauses, alternates with an inaudible “zero” allomorph in accordance with the same three parameters of tense, aspect, and mood. The values of these three parameters conditioning *-ne* in Hindi–Urdu happen to be the same that allow the occurrence of the Indic forms of the ergative affix in Eastern Shina. The values conditioning zero for the subjects of Hindi–Urdu transitive clauses are the same as those that determine the obligatory occurrence of the Tibetan *-se* in Eastern Shina.

Accepting this conceptualization of subject marking opens the door to a similar way of analyzing alternations found in Kashmiri and Poguli in the case of direct objects. As in many other Indo-Aryan languages Kashmiri and Poguli use dative case with direct objects that refer to [+human] nouns and pronouns:

- (4) a. tsi an-akh mye taalyi kiny
 you-NOM bring-2ndSG.FUT me.DAT head.DAT toward
 'You'll bring me to the end of my tether ...' (Kashmiri³)

In (4a) the clause is transitive and its verb is in the non-durative future indicative. Its subject *tsi* 'you' is in the nominative and the direct object *mye* is in the dative. When a finite clause like the one in (4a) is converted from the non-durative future indicative to the non-durative past indicative (4b), the subject assumes the ergative form *tsye* — as would also occur in Hindi–Urdu, Gujarati or Marathi. Where Kashmiri differs from these is in the use of *bi*, the nominative form of a pronominal direct object, in clauses in which the subject is in the ergative case:

- (4) b. tsye onu-th-as bi taalyi kiny
 you.ERG brought-2SG.ERG.-1SG.NOM I.NOM head.DAT toward
 'You brought me to the end of my tether ...' (Pompuer 1984: 86)

Compare Hindi–Urdu, Gujarati, and Marathi, where all nouns and pronouns that refer to specific human beings remain in the dative case when functioning as direct object, no matter what the tense, mood, or aspect:

- | | | | | | |
|--------|---------|--------|--------|--------------------------|------------|
| (5) a. | vo | mujhe | kahAA | bhej-egaa | Hindi–Urdu |
| (6) a. | te | mane | kyAA | mokal-ish | Gujarati |
| (7) a. | to | malaa | kuTha | paaThav-il | Marathi |
| | | he.NOM | me.DAT | where send-3SG.FUT | |
| | | | | 'Where will he send me?' | |
| (5) b. | us-ne | mujhe | kahAA | bhej-aa | Hindi–Urdu |
| (6) b. | te-Ne | mane | kyAA | mokal-yo | Gujarati |
| (7) b. | tyaa-na | malaa | kuTha | paaThav-ala | Marathi |
| | | he-ERG | me.DAT | where send-PST | |
| | | | | 'Where did he send me?' | |

Now let us consider in what ways the data on case marking of subjects and direct objects in Eastern Shina, Kashmiri and Poguli support an analysis of non-nominative case as lexical rather than structural. Or, to put the question in terms that better accord with the working assumptions of taxonomists and most typologists, what evidence is there that ergative case for subjects and dative case for direct objects, in addition to showing agreement with independent controllers like the values of the tense, aspect and mood parameters of the finite verb, express meanings not otherwise expressed?

In their morphosyntactic treatment of human direct objects, Poguli and Kashmiri share a phenomenon which, while somewhat complicating the account given above, provides further support for regarding alternation in case marking as a matter of agreement. In both these languages the dative of direct object alternates with the nominative depending on the person of the clause subject. If the subject

outranks the direct object on a hierarchy of persons then the direct object gets the nominative case (8a-9a). If the subject does not outrank the direct object the latter gets the dative case (8b-9b):

- (8) a. aaU tu teru pen-mi-s Poguli field notes
 (9) a. bi tsi toor sooz-a-th Kashmiri
 I.NOM you.NOM there send-1SG.FUT.-2SG.ACC
 'I will send you there.' (direct transition — direct object is in the nominative case)
- (8) b. saa ti teru pen-i(-th) Poguli field notes
 (9) b. swa tsye toor sooz-yi-y Kashmiri
 she.NOM you.DAT there send-3SG.FUT.-2SG.DAT
 'She will send you there.' (inverse transition — direct object is in the dative case)

In effect, in Poguli and Kashmiri non-ergative clauses the case of the direct object is determined by the person of the subject. Since the relation of the action expressed by the verb to the entity denoted by the direct object is in no way affected by the person of the subject, this alternation in case must be counted as another instance of agreement rather than as the expression of thematic or participant role.

In Kashmiri and Poguli the direct objects that get the dative in non-ergative tenses, moods, and aspects are limited to those that refer to sentient beings. All other direct objects get the nominative. Furthermore, from texts it appears that use of the dative case even for sentient direct objects depends not just on the person of the subject but also on there being a finite form of the governing verb. If the verb is not finite then the object may get the nominative case. In (10a), for instance, *jol* is the nominative case form of a name referring to the [+human] direct object of non-finite *soozinas* 'to send'⁴:

- (10) a. jol kaamyi sooz-in-as ees swa khwash
 Jol.NOM work.DAT send-INF.-DAT was she happy
 'She was happy to send Jol off to work.' (Malmohi 1998:68)

If the verb of which *jol* is direct object is made finite (and if the clausal subject is a third person) then the dative case is obligatory (Wali and Koul 1997: 155–6):

- (10) b. swa sooz-yi jelyis kaamyi
 she.NOM send-3SG.FUT Jol.DAT work.DAT
 'She will send Jol off to work.' (Sadaf Munshi, p.c.)

Still, while the conditioned reversion to nominative case for sentient direct objects can be seen as a kind of agreement, the underlying split in "dativity" cannot. The dative case informs the hearer that the direct object is sentient. Its use for sentient direct objects sometimes provides the hearer with additional information about the role of the referent in the action expressed by the verb; sometimes, not.⁵ However,

the split is purely NP-referential, comparable to splits in case-marking of subjects and objects found in many Australian languages.

Subjects of intransitives: In Kashmiri (and other Indo-Aryan languages) the subject of an intransitive clause always gets the nominative, no matter what the tense, aspect or mood may be:

- | | | | | | |
|---------|----------------------|--------------|----|----------------------|-----------------|
| (11) a. | kaanti | nyeer-yi | b. | *kaantaa-yi | nyeer-yi |
| | Kanta.NOM | exit-3SG.FUT | | Kanta.ERG | exit-3SG.FUT |
| | 'Kanta will go out.' | | | 'Kanta will go out.' | |
| c. | kaanti | draayi | d. | *kaantaa-yi | draav |
| | Kanta.NOM | exited.F3SG | | Kanta.ERG | exited.M3SG.DEF |
| | 'Kanta went out.' | | | 'Kanta went out.' | |

However, a few monovalent predicates when used in relevant tenses, aspects and moods, require the ergative case in their subjects⁶: *nats* 'dance', *as* 'laugh', *vad* 'cry', *vu-ung* 'bark', *tsuv* 'quarrel'. All of these are Activity verbs whose subjects are animate:

- | | | | | | |
|---------|------------------|-------------------|----|------------------|--------------|
| (12) a. | kaantaa-yi | os | b. | *kaanti | es |
| | Kanta.ERG | laughed.M3SG.DEF. | | Kanta.NOM | laughed.F3SG |
| | 'Kanta laughed.' | | | 'Kanta laughed.' | |

This set of exceptions to the usual rule of nominative zero-marking of subjects of monovalent predicates has its counterparts⁷ in some Caucasian languages like Georgian (Holisky 1987), in Sumatra's Acehnese (Durie 1985), and in many North American languages (Mithun 1991). While the monovalent predicates that govern the non-nominative of subject are never exactly the same set, they usually include voluntary or controllable activities ('dance', 'jump', 'run', etc.) and usually exclude involuntary states or changes in state ('faint', 'sicken', 'tower', 'thaw', etc.). To the extent that sense can be made of the membership of these lists, the non-nominative marking of subjects of monovalent predicates may need to be accorded a semantic or "lexical" role.

This view of subject marking is even more strongly supported by the data from Kashmiri's inceptive predicate *hye* 'begin (to V), start (to V)'. Depending on a number of semantic and pragmatic factors, monovalent predicates dependent on *hye* may or may not condition ergative case marking of subjects. In addition to the listed predicates expressing activities whose subjects must take the ergative case (*nats* 'dance', *as* 'laugh', *vad* 'weep', etc.) (as in (13)), and those expressing states and changes of state whose subjects never take it (as in (14)) and there are monovalent predicates like *pak* 'walk', *nyeer* 'exit; emerge', *khas* 'go up, climb', *vas* 'descend' whose [+human] subjects may or may not get ergative case (as in (15, 16)):

- | | | | | | |
|------|--|-----|------------|----------------|-------------------|
| (13) | zanaan-av | ti | mard-av | hyot | nats-un |
| | women-ERG.PL | and | men-ERG.PL | began.M3SG.DEF | dance-INF.MSG.DEF |
| | 'Men and women began to dance.' (Mohyuddin 1975:9) | | | | |

- (14) haalath hyetyi-n⁸ gatsh-iny kharaab
 conditions(MPL).NOM began.MPL-3SG.ERG go-INF.MPL bad
 ‘Conditions began to worsen.’ (Raina 1998a: 109)
- (15) dwashvay-av-iy hyot thod veth-yith nyebar
 both-ERG.PL.-EMPH began.MSG.DEF up rise-ConjPart outside
 nyeer-un
 exit-INF.MSG.DEF
 ‘They both got up and began to go out.’ (Saqi 1998: 91)
- (16) mamyii hyetsi-n vaapas nyeer-iny
 Mummy-NOM began.FSG.-3SG.ERG again exit-INF.FSG
 ‘Mummy began to go out again.’ (Jowhar 1998: 74)

Not every sense of *nyeer* displays the variability we see in (15) and (16). If *nyeer* is being used to express a state or change of state, rather than an action, then only the nominative is possible for the subject of its inceptive:

- (17) ti vajuud hyetyi-n neny nyeer-iny
 and realities(MPL).NOM began.MPL-3SG.ERG clear.MPL exit-INF.MSG.DEF
 ‘...and realities began to emerge clearly.’ (Jahangir 1997: 76)

Provisional findings on the fluid marking of inceptive subjects in Kashmiri suggests that point of view may play a part in determining the speaker’s choice of case. When speakers regard the referents of such subjects as being distant from them or external to their interests, they choose the nominative case. If they want to assume a stance that is closer to the presumed viewpoint of the subject they use the ergative. Since a first person is rarely (if at all) able to assume a distant position with respect to him or herself, the use of the nominative case for a first-person subject should be less frequent than its use with third-person subjects of relevant inceptives. Though counterexamples have not been encountered, a final resolution of this question will require a larger dataset than the authors have developed so far.

Animacy, Aktionsart, point-of-view, all are inputs to the speaker’s choice of case for subjects of intransitive inceptives in Kashmiri. There may be other factors as well, waiting to be identified after analysis of a dataset larger than the one presently available. However, evidence already at hand is sufficient to show that the subject marking of intransitive inceptives is semantically as well as structurally determined. Those subjects whose part in the event denoted by the verb most resembles the role of the agent of a transitive predicate are marked (in the appropriate constellations of tense, aspect, and mood) with the ergative case, while those subjects whose role in the event denoted by the verb most resembles the role of the patient or theme of a transitive predicate are marked with the nominative case. The semantically conditioned distribution of subject case may be further modified by pragmatic factors such as speaker’s point-of-view.

In Gujarati there is a formation in *maaND* ‘begin’ (<‘arrange; set up’) structurally parallel to Kashmiri’s inceptive in *hye*. As in Kashmiri there is an argument-structural conflict between inceptive *maaND*, a transitive, and intransitive infinitives dependent on it, leading to variation between nominative [(18) and (20)] and ergative [(19) and (21)] subject case:

- (18) *vaaNiyaa potaanaa gaam taraf vaL-vaa maaNDyaa che*
 Baniyas.MPL.NOM self.GEN. village toward turn-INF.OBL began.MPL are
 ‘The merchants have begun to return toward their villages.’ (Patel 1947:37)
- (19) *tem-ne paachaa vaL-vaa maaNDyU*
 he-ERG back turn-INF.OBL began.NSG.DEF
 ‘He began to turn around.’ (Broker 1972:52)
- (20) *ame caal-vaa maaNDy-aa hat-aa te rokaa-i*
 we.NOM walk-INF.OBL began-MPL were-MPL those halt-ConjPart
 gayaa
 went.MPL
 ‘We who’d begun walking away came to a stop.’ (Chavada 1953:81)
- (21) *bhiD ochi tha.i baapu-e caal-vaa maaNDy-U*
 crowd.NOM less became Bapu-ERG walk-INF.OBL began-NSG.DEF
 ‘The crowd thinned; Gandhi began to move on.’ (Chavada 1953:65)

The intransitive predicates that show fluidity in subject case in Gujarati are of the same kinds that show it in Kashmiri: controllable, volitional activities such as *caal* ‘move; walk’, *aav* ‘come’, *vaL* ‘turn; return’, etc. There is also a substantial degree of overlap in the types of predicate and voice that require the nominative case. Animate subjects that are “sources” of experience (22); those of predicates that express states or changes of state (23), and those of predicates in the passive voice (24) always get the nominative, never the ergative:

- (22) *sushilataa-ne lidhe te sau-ne ghar-naa maaNas jev-o*
 good.behavior-GEN. because he all-DAT house-GEN. person like-MSG
 laag-vaa maaNDy-o
 seem-INF.OBL began-MSG
 ‘With his good behavior he began to seem to all like a family member.’
 (Tripathi 1887:76)
- (23) *Doshi-maa saaj-AA tha-vaa maaNDy-AA*
 old-mother.NOM healthy-HON.NPL become-INF.OBL began-HON.NPL
 ‘The old woman began to get better.’ (Chavada 1953:36)
- (24) *jhap.aa.jhap chokaraa.o pakaD-aa-vaa maaNDy-aa*
 swiftly boys catch-Pass-INF.OBL began-MPL
 ‘Quickly the boys began to be caught.’ (Chavada 1953:240)

Table 1. Case of animate subjects of inceptive verbs of motion.

	Nominative	Ergative
Gujarati	4	20
Kashmiri	6	10

However, here are at least two significant differences: 1. Consider the dataset composed of controllable, volitional acts (mostly predicates of motion). Such predicates are much more likely to get the ergative in Gujarati than they are in Kashmiri (see Table 1). In Kashmiri texts no inanimate subject gets the ergative. In Gujarati, if the predicate denotes an unbounded activity (*caal* ‘move’, *varas* ‘rain’, *vahe* ‘flow’), use of the ergative case for the inanimate subject of an Activity inceptive is not rare (four instances out of ten opportunities):

- (25) kaanaDaa-ni akathy mastii-mAA jayadev-ni kavitaa-e
Carnatic-GEN. ineffable ecstasy-in Jayadev-GEN. poetry-ERG
vahe-vaa maaNDy-U
flow-INF.OBL began-NSG.DEF
‘Jayadev’s poetry began to flow in the ineffable freedom of Rag
Carnatic.’ (Chavada 1953: 107)

Comparison of intransitive inceptives in Kashmiri and Gujarati indicates that even though choice of subject case in each of these languages is influenced by the same factors (animacy and Aktionsart), the overall likelihood the nominative will be used is significantly higher in Kashmiri (79%) than it is in Gujarati (48%) (see

Table 2. Case alternation in subjects of Kashmiri and Gujarati inceptive intransitives of various kinds

Kashmiri			
Animate subjects		Inanimate subjects	
States	Achievements	States	Achievements
NOM 6	NOM 3	NOM 16	NOM 2
NOM 3	NOM 4	NOM 14	NOM 15
ERG 8	ERG 9		79%
Activities	Accomplishments	Activities	Accomplishments
Gujarati			
Animate subjects		Inanimate subjects	
States	Achievements	States	Achievements
NOM 2	(no instances)	NOM 7	NOM 4
NOM 2	NOM 3	NOM 6	NOM 2
ERG 17	ERG 6	ERG 5	48%
Activities	Accomplishments	Activities	Accomplishments

Table 2). Both the similarities and the differences in Kashmiri and Gujarati subject case assignment have consequences for the general question of lexical versus structural case assignment. By positing external versus internal subjects for intransitive inceptive clauses (Hall 1965, Perlmutter 1970), it may be possible to claim that the choice of nominative versus ergative case is a consequence of a single structural difference:

- (26) a. Zeke began to work. << [Zeke[began[(x)[to work]]]]
 b. The medicine began to work. << [(x)[began[[the medicine]
 [to work]]]]

However, the price of such a move is that for many individual intransitive predicates (viz, Kashmiri *nyeer* ‘exit’, *pak* ‘move’, *gatsh* ‘go’, *khas* ‘climb; rise’, etc. and Gujarati *caal* ‘move’, *vaL* ‘(re)turn’, *aav* ‘come’, etc.) we will have to posit two structures and furthermore make the choice between these structures depend in part on animacy properties of the subject as well as other, situational factors that have little or nothing to do with thematic roles. Ultimately the speaker’s decision as to which structure to use in order to assign subject case in Kashmiri and Gujarati intransitive inceptives will include evaluation of all the factors that a purely semantic solution to the problem of subject case assignment would require him or her to consider.

However, when transitive clauses are considered, a structural approach to subject marking seems — by contrast — much less troublesome. We may posit a lexically determined or listable set of bi-actantial predicates that take the dative (or genitive) case for their subjects and a much larger, residual class of transitives for whose subjects, in eastern languages (Bhojpuri, Magahi, Maithili, Bangla, Oriya, etc.) nominative case is the only option. In other languages (Marathi, Sindhi, Gujarati, Marwari, Hindi–Urdu, Panjabi, Kashmiri, Nepali, etc.) nominative for transitive subject alternates with ergative in agreement with the presence/absence of specific constellations of tense, aspect, and mood. For subject case assignment in “poly-actantial” clauses in the languages of South Asia, referential properties of the subject noun phrase, inherent aspectual properties of the verb and other features of the situation denoted by the verb are simply and fully ignored. Thus, even the patient-subject of *khaa*-expressions gets the ergative case in Hindi–Urdu⁹:

- (27) nokheraam-ne itnii gaaliyAA khaaII to zaraa garam ho.kar
 Nokheraam-ERG so.many curses “ate” that a.bit angry becoming
 bolaa ...
 spoke
 ‘Nokheram was the target of so many curses that getting a bit angry he
 said ...’ (Premchand 169: 19)

However, if speakers refer to a complex set of referential and situational properties when making subject case choices for intransitive inceptives, it is counterintuitive to suppose that they (or their brains) do not have access to the same information set when they are formulating other kinds of transitive clauses. That information must

at some point be discarded in favor of a one-case-(or-two-case)-fits-all treatment of the transitive subject.

Postscript: When we first drafted this chapter we believed that the data in it provided strong support for Alice Davison's view that the marking of subjects with the ergative case in Hindi–Urdu was structural, not lexical. However, we recast the issue in terms more familiar to us as working taxonomic linguists: The choice of ergative versus nominative case in Eastern Shina, Kashmiri, Hindi–Urdu, and other northern and western Indo-Aryan languages is a matter of semantically empty, automatic agreement; that is, the case of subject in these languages is not an exponent of meaning. The question of dative versus nominative of case for [+human] direct objects is a narrower one involving only a few languages (Kashmiri and Poguli) but one which seemed to point in the same direction: The case of [+human] direct object in these languages is a dependent variable and not an independent element denoting a specific thematic role.

On further reflection, however, we have decided that the data from the subject marking of Kashmiri and Gujarati inceptives undermines this initial conclusion more seriously than we had at first thought. This change in attitude reflects an emerging conviction that the morphosyntactic idiosyncrasies of individual languages, far from constituting a kind of opaque foam floating on the surface and obscuring a simplicity or uniformity underlying and uniting all human languages, are actually partial indicators of the inherent and ineradicable complexity on which the much simpler grammar of audible language sits like a uniform cap on a knobby head. In thinking about language a great deal depends on how one responds to questions about initial premises: Are languages simpler than they seem? Or complexer than they look? This revision of an earlier position (that the ergative case is a structural rather than a lexical phenomenon) emerges from taking the latter point of view: Languages are complexer than they look. Indeed it may turn out that each human language is underlyingly as complex as the union of all the surface complexities of all the languages presently existing in the world, as well as those that are dead and gone and those that are yet to come.

Notes

1 All the Eastern Shina data cited here comes from Mr. Nasir Hussain, native of Babachan, Gultar, Northern Areas (near the Line of Control) and part-time resident of Skardu. Work on his form of Eastern Shina was carried out in Skardu in the course of two field trips Peter Hook made to the Northern Areas during the early Nineties, one funded by the Smithsonian Institution and the other funded by the American Pakistan Research Organization (now merged with the American Institute of Pakistan Studies).

2 Abbreviations include the following: F: feminine; NOM: nominative; ACC: accusative; FUT: future; OBL: oblique; Conj: conjunctive; Ind: etymologically Indic; PL: plural; DAT: dative; INF: infinitive; PST: past tense; DEF: default; LOC: locative; Part: participle; EMPH: emphatic par-

title; M: masculine; SG: singular; ERG: ergative; N: neuter; Tib: etymologically Tibetan

3 The transcription used for Kashmiri in this chapter is based on the one usually found in the linguistics literature on Indo-Aryan languages. In that system reduplicating a symbol denotes contrastive length. The voiceless palatal fricative is indicated with a digraph *sh*. *T*, *Th*, *D*, *Dh*, and *N* are retroflex stops. Capitalization of vowel symbols indicates nasality. The Kashmiri transcription does not differ except that it uses /i/ to denote a high central/back unrounded vowel and /e/ to render a mid central unrounded vowel. Both of these are fronted by a preceding palatal sound (/y, sh, c, ch/).

4 Example (10a) comes from a short story written by Malmohi and published in Koul, Ed. 1998. ON Koul (p.c.) prefers the dative form *jelyis* in (10a) as well as (10b). This may reflect a dialectal difference: Malmohi and Koul hail from opposite ends of the Valley.

5 For instance, the role of the referent of the direct object *Osama* in the action of sending denoted by the verb *send* in “Will Umar send Osama to America?” is quite different from the role of the referent of money in “Will Umar send money to America?” But there seems to be no difference at all in their respective roles in the actions denoted by *see* in “They will see Osama standing in line at the bank” and “They will see money lying in a bag at the bank.” Yet the presence or absence of a difference in role has no effect on choice of case for direct object in the Kashmiri equivalents of these sentences.

6 See Wali and Koul 1997: 153 for a list of these exceptional predicates. (Note that *pOD* *trav* ‘sneeze’ does not belong in the list.)

7 Counterparts in Hindi–Urdu include three monovalent predicates which take *de* ‘give’ as a vector: *hAs* ‘laugh’, *muskaraa* ‘smile’, and *ro* ‘cry’. A fourth, *cal* ‘depart, set out’, corresponds etymologically to Kashmiri *tsal* ‘flee’ which at one time took ergative subjects. In Hindi–Urdu subjects of these verbs may (a) or may not (b) get the ergative case:

- (a) ... us-ne niile aakaash mE havaa-ke jhOke se uR-te dekh-kar keval
 he-ERG blue sky in wind-’s gusts with fly-ing see-ConjPart only
 muskaraa diyaa thaa ...
 smile GAVE WAS
 ‘... (which) he had seen soaring on the wind and just smiled ...’ (Premchand’s *godaan*, p. 121)
- (b) jhuniyaa AguuThaa dikhaa-kar cal dii
 Jhuniya thumb show-CP depart GAVE
 ‘Jhuniya showed (him) a “fig” and left.’ (Premchand’s *godaan*, p. 55)

For a fuller list of Hindi–Urdu’s ergative-subject intransitives see Tuite *et al.* (1985: 264).

8 In example (14) the third-person singular pronominal suffix *-n* represents a null ergative subject that is required in order to satisfy the predicate argument structure of the bivalent *hye* ‘begin to, start to’ in those instances where the subject of the dependent infinitive cannot also function as the subject of *hye*. Compare (14) with (13) in which the subject of the infinitive is also the subject of *hyot* (the finite form of *hye*) and consequently the pronominal suffix *-n* does not occur.

9 On the other hand, examination of the text of Premchand’s *godaan* suggests that *khaa*-expressions tend to occur in those syntactic environments where ergative case for their subject-patients can be avoided:

- (i) ...ciRiyaa coT khaa-kar bhii kuch duur uR.ii...
bird.NOM injury “eat”-ConjPart also some distance flew
‘...even though injured the bird flew for some distance ...’ (godaan, p. 83)
- (ii) becaaraa pacaasO juute khaa-kar bhii kuch na bol.aa
poor.guy fifties shoe.blows “eat”-ConjPart also anything not spoke
‘Taking dozens of blows the poor fellow still said not a word.’ (godaan, p. 263)

In other words, instances like (27) with *khaa* in a finite form that requires explicit ergative marking seem to be rare relative to the overall textual frequency of idiomatic *khaa*-expressions. A quantitative study is needed.

References

- Abbi, Anvita, R.S. Gupta, and Ayesha Kidwai. 2001. *Linguistic Structure and Language Dynamics in South Asia: Papers from the Proceedings of SALA XVIII Roundtable*. Delhi: Motilal Banarsidass.
- Bailey, T. Grahame. 1924. *Grammar of the Shina language*. Royal Asiatic Society.
- Broker, Gulabdas. 1972. *ubhi vaaTe (On Life's Steep Path)*. Bombay: Trilochan Press. (reprint)
- Buddruss, Georg. 1967. *Die Sprache von Sau in Ostafghanistan*. München: Kitzinger.
- Chavada, Kishansinh. 1953. *amaasnaa taaraa (Stars in a Moonless Sky)*. Ahmedabad: Gurjar Granth Ratna Karyalaya.
- Davison, Alice. 2001. “Ergative case licensing in a split ergative language”. In Abbi *et al.* Pp. 291–307.
- Davison, Alice. 1999. “Ergativity: functional and formal issues”. In Moravcsik and Noonan, Eds. *Functionalism and formalism in linguistics, Vol 1*. Amsterdam: John Benjamins. Pp. 177–208.
- Durie, Mark. 1985. *A grammar of Acehnese on the basis of a dialect of North Aceh*. Dordrecht: Foris.
- Fatima, Munira. 1988. *Poguli: keeshir zabeeny hinz akh aham buly ti amiyky kyenh mwamtaaz lyiseeni pahaluu (Poguli: an important dialect of the Kashmiri language and some of its distinguishing features)*. Srinagar: University of Kashmir. Unpublished M. Phil. dissertation.
- Hall, Barbara. 1965. *Subject and object in modern English*. Unpublished M.I.T. PhD dissertation.
- Hendriksen, Hans. 1986. *Himachali Studies: III. Grammar*. Copenhagen: Munksgaard.
- Holisky, Dee Ann. 1987. “The intransitive subject in Tsova-Tush”. *Lingua* 71:103–32.
- Holisky, Dee Ann. 1981. *Aspect and Georgian Medial Verbs*. New York: Caravan Books.
- Hook, Peter E. 1990a. “A note on expressions of involuntary experience in the Shina of Skardu”. *BSOAS* 67:77–82.
- Hook, Peter E. 1996. “Kesar of Layul: A Central Asian epic in the Shina of Gultari”. In *Studies in Pakistani popular culture*. Wm. Hanaway and Wilma Heston, Eds. Lahore: Sang-e-Meel and Lok Virsa. Pp. 121–83.
- Hook, Peter E, and O.N. Koul. 1998. “Active-stative marking of intransitive subjects in Kashmiri inceptives”. In *vaagbhaaratii: Proceedings of the 1997 International Congress of South Asian linguists*. Khokhlova and Volkonsky, Eds. Moscow State University. Pp. 56–87.
- Jahangir, Nazir. 1997. *pehulun ti dag (Aches and pains)*. Srinagar. (published by the author)

- Jowhar, Ratan Lal. 1998. "rag ti dag (Links)". In Omkar Koul, Ed. Pp. 74–7.
- Kibrik, Alexandr E. 1987. "Constructions with clause actants in Daghestanian languages". *Lingua* 71:133–78.
- Klimov, G. 1974. "On the character of "active" languages". *Linguistics* 131:11–23.
- Koul, Omkar N., Ed. 1998. *gili tuury — afsaani sombran (Little blossoms — A collection of stories)*. Mysore: CIIL.
- Koul, Omkar N., Ed. 1981. *Topics in Hindi Linguistics*. Vol. 2. New Delhi: Bahri Publications Pvt. Ltd.
- Mahajan, Anoop. 1990. *The A/A-bar distinction and movement theory*. Ph.D. diss., Massachusetts Institute of Technology.
- Malmohi, Amar. 1998. "kEDy ti Tuury". In Omkar Koul, Ed. Pp. 67–70.
- Marantz, Alec. 1991. *Case and licensing. Proceedings of ESCOL 1991*. Pp. 234–53.
- Masica, Colin P. 1991. *The Indo-Aryan Languages*. Cambridge: Cambridge University Press.
- Masica, Colin P. 1981. "Identified object marking in Hindi and other languages". In Koul, (Ed). Pp. 6–50.
- Merlan, F. "Split intransitivity: Functional oppositions in intransitive inflection." In J. Nichols and A. C. Woodbury, Eds. *Grammar inside and outside the clause*. Cambridge University Press. Pp. 324–62.
- Mithun, Marianne. 1991. "Active/agentive case marking and its motivations." *Language* 67: 510–46
- Mohanan, Tara. 1990. *Arguments in Hindi*. PhD dissertation, Stanford University.
- Mohyuddin, Akhtar. 1975. "uzbyeekyistaan." In *saphar-naami (Travelogue)*. Mohd. Amin Kamil, Ed. Srinagar: Jammu and Kashmir Academy of Art, Culture, and Languages. Pp. 7–43.
- Perlmutter, David M. 1970. "The two verbs *begin*." In R. Jacobs and P. Rosenbaum, eds. *Readings in English Transformational Grammar*. Waltham, Mass: Blaisdell. Pp. 107–19.
- Polinsky, Maria, and Eric Potsdam. 2000. "Two verbs *begin*, again." *WCCFL* 19.
- Pompur, Rasool. 1984. "tsuuras nay muur aasyi ('If a thief is not beaten . . .')." *Sheeraza*.
- Premchand. 1936. *godaan (Gift of a cow)*. Allahabad: Saraswati Press.
- Raina, Omkar. 1998a. "aalav (The call)." In Omkar Koul, Ed. Pp. 108–10.
- Ramaswami, N. 1982. *Brokskat Grammar*. Mysore: Central Institute of Indian Languages.
- Saqi, Motilal. 1998. *myeegvaahan*. In Omkar Koul, Ed. Pp. 90–4.
- Schmidt, Ruth L. 1985. "Where Have the Shina Speakers Come From? Some Linguistic Clues." *Jrnl of Central Asia*, 8:17–26.
- Shaw, R. B. 1878. "Stray Arians in Tibet." *Journal of the Asiatic Society of Bengal* 47:26–62.
- Strand, Richard. <http://users.sedona.net/~strand/IndoAryan/Indus/Atsaret/AtsaretTexts/AtsaretHistory.html>
- Strand, Richard. 1973. "Notes on the Nuristani and Dardic languages." *Journal of the American Oriental Society* 93: 297–305.
- Subbarao, K. V. and Bhaskararao, Peri. "Non-nominative subjects in Telugu." In this volume.
- Tuite, Kevin, Asif Agha, and Randolph Graczyk. 1985. "Agentivity, transitivity, and the question of active typology." In *CLS 21, Part 2: Papers from the Parasession on Causatives and Agentivity*. Chicago Linguistic Society. Pp. 252–70.
- Wali, Kashi, and Omkar N. Koul. 1997. *Kashmiri: a cognitive-descriptive grammar*. London and New York: Routledge.

CHAPTER 11

The possessor–experiencer dative in Malayalam*

K.A. Jayaseelan

1. Introduction

I shall refer to the sentence type in which an NP with the Possessor–Experiencer theta-role has the dative case, by the neutral term ‘dative construction’. I shall prefer this term to ‘dative subject construction’, because I shall be arguing in this chapter that this is an intransitive sentence type in which a nominative NP is the subject. (The nominative NP can be sometimes nonovert. The only other apparent exception is when, as in certain modal constructions, there is a clausal subject substituting for the nominative NP.) Therefore an imaginable principle that in a nominative–accusative language, there is always a nominative NP which is the subject, is not seriously disconfirmed by the existence of the dative construction.

There has been a good deal of theoretical activity regarding this construction recently. Shibatani (1999) has argued forcefully for the intransitive nature of the dative construction, a position I am in full sympathy with. He also tries to assimilate this construction to the “multiple subject” construction of Japanese; the latter analysis however is not very helpful for a language like Malayalam, in which there is no “multiple subject” construction. Ura (2000) proposes an analysis in the minimalist framework. In his theory, which he calls “grammatical function splitting”, the grammatical functions typically associated with the subject can be realized by different NPs. For example, the triggering of agreement may be done by the nominative NP, and the control of PRO may be done by the dative NP. (It seems to me that we have in effect a “squishy” definition of subject, as a result.) I mention all this recent theoretical activity because it at least shows that this construction is still an actively debated subject of research, and remains a problem for the theory.

It may be useful to note (parenthetically) that the notion of analyzing the dative NP of the dative construction as the subject of the sentence, and (as a result) of seeing this as a “quirky subject construction”, is of comparatively recent origin. In the Indian grammatical tradition, the dative NP was never treated as the subject; see Amritavalli (this volume) for this point. Neither did European historical linguistics treat it this way: for example, the “impersonal construction” of Old English (which we look at later in this chapter) was treated as a “subjectless” sentence, rather than as a sentence with a dative subject. My analysis of the dative construction therefore can be seen as a vindication of the older Indian and European traditions.

2. The contexts of the dative construction

I shall first display the contexts in which the dative construction occurs. These contexts, as is well-known, can be grouped under some rough semantic rubrics (or descriptions).

2.1. Possession (alienable and inalienable)

In a sentence expressing the fact of possession, the possessor is in the dative case:¹

- (1) John-*iṇṇə* raNDə viiDə uNDə
 John-DAT two house be.PRES
 'John has two houses.' (Lit. 'To John, two houses are.')

Malayalam does not allow the option of any other case, e.g. a genitive case, here:

- (1') *John-*iṇṇe* raNDə viiDə uNDə
 John-GEN two house be.PRES

Observe that I have translated the verb *uNDə* in (1) as 'be', and not as 'have'; for it is the same verb that occurs in a sentence like:

- (2) John *iviDe* uNDə
 John here be.PRES
 'John is here.'²

The facts are not different for instances of inalienable possession, cf.

- (3) eṇ-*ik'kə* raNDə kaiyə uNDə
 I-DAT two hand be.PRES
 'I have two hands.'

Again, a genitive possessor is not possible:

- (3') *eṇ-*te* raNDə kaiyə uNDə
 I-GEN two hand be.PRES

When the possessed thing is something which can be carried on one's person (like money), Malayalam also has a construction like (4), in which the possessor is in-side a PP:

- (4) John-*iṇṇe* kaiy-il /pakkal paNam uNDə
 John-GEN hand-in/ side money be.PRES
 'John has money in his possession.' (Lit. 'There is money in John's hands/ at John's side')³

2.2. Experiencer (of mental or physical experience)

In the following sentences, the “experiencer” NP is in the dative case. In (5), the experience is a physical experience; in (6), it is a mental one.

- (5) *avan-ə vis’akk-unnu*
 he-DAT hunger-PRES
 ‘He is hungry.’ (Lit. ‘To him, (it) hungers.’)
- (6) *avan-ə santooSam aayi*
 he-DAT happiness become.PAST
 ‘He was happy.’

However Malayalam seems to make a distinction between physical and mental experience in its diathetic patterns. In the mental experience case, the dative construction alternates with a nominative construction:

- (7) a. *avan-ə santooSam aayi (= (6))*
 he-DAT happiness become.PAST
 ‘He was happy.’ (Lit. ‘To him, happiness became.’)
 b. *avan santooSicc-u*
 he be.happy-PAST
 ‘He was happy.’ (Lit. ‘He gladdened.’)
- (8) a. *avan-ə dukham vann-u*
 he-DAT sorrow come-PAST
 ‘He was sad.’ (Lit. ‘To him, sorrow came.’)
 b. *avan dukhicc-u*
 he sorrow-PAST
 ‘He was sad.’ (Lit. ‘He sorrowed.’)
- (9) a. *avan-ə deeSyam vann-u*
 he-DAT anger come-PAST
 ‘He became angry.’ (Lit. ‘To him, anger came.’)
 b. *avan deeSya-ppeTT-u*
 he anger-?-PAST
 ‘He became angry.’ (Lit. ‘He angered.’)
- (10) a. *kuTTi-k’ə aana-ye iSTam aayi*
 child-DAT elephant-ACC liking become.PAST
 ‘The child liked the elephant.’
 b. *kuTTi aana-ye iSTa-ppeTT-u⁴*
 child elephant-ACC liking-?-PAST
 ‘The child liked the elephant.’
- (11) a. *en-ik’ə avaL-ooDə sneeham uNDə*
 I-DAT she-2DAT love be.PRES
 ‘I love her.’ (Lit. ‘To me, there is love towards her.’)

- b. *ñaan* *avaL-e* *sñeehik'k'-unnu*⁵
 I she-ACC love-PRES
 'I love her.'

The physical experience case shows no such alternation; it can be expressed only by the dative construction:

- (12) a. *avan-ə* *vis'akk-unnu* (= (5))
 he-DAT hunger-PRES
 'He is hungry.'
 b. **avan* *vis'akk-unnu/vis'appə-peT-unnu*⁶
 he.NOM hunger-PRES/hunger(N)-?-PRES
- (13) a. *kuTTi-k'k'ə* *taNukk-unnu*
 child-DAT feel.cold-PRES
 'The child feels cold.'
 b. **kuTTi* *taNukk-unnu/taNuppə-peT-unnu*
 child.NOM feel.cold-PRES/cold(N)-?-PRES
- (14) a. *eni-k'k'ə* *veedanicc-u*
 I-DAT feel.pain-PAST
 'I felt pain.'
 b. (*)*ñaan* *veedanicc-u/veedana-ppəTT-u*
 I.NOM feel.pain-PAST/pain(N)-?-PAST

Sentence (14b) is an interesting case (note the optionality brackets around the asterisk). A sentence like (14b) is actually possible, but only in contexts where the pain is interpreted as a mental pain. Thus (15) is a good sentence:

- (15) *ñaan* *at-ine-ppaṭṭi* *oorttə* *veedanicc-u*
 I that (thing)-ACC-about remembering feel.pain-PAST
 'Thinking about that (incident), I agonized.'

(Example (15) confirms our claimed distinction between physical and mental experience.)

In (13), I have glossed the verb *taNukk* as 'feel cold'; but in fact the verb is neutral between the meanings 'become cold' and 'feel cold'. Mohanan and Mohanan (1990) contrast the following sentences (see their examples (1); I have changed their glossing format):

- (16) a. *caaya/* **caaya-k'k'ə* *taNutt-u*
 tea.NOM/ tea-DAT be.cold-PAST
 'The tea became cold.'
 b. *kuTTi-k'k'ə* *taNutt-u*
 child-DAT be.cold-PAST
 'The child was cold.'

The same verb, *taNukk-/taNutt-*, has the meaning ‘become cold’ when the subject is nominative, and the meaning ‘feel cold’ when the subject is dative.

The alternation of the nominative and dative constructions in the mental experience examples is sometimes claimed to have no effect on the meaning. (Thus, see Verma and Mohanan (1990), pp. 7–8.) But it seems to be the case that the nominative construction can be given an agentive interpretation, which is not possible with the dative construction. We can show this by the test of the Imperative Mood. The Imperative Mood is possible with the nominative construction, but not with its dative alternative:

- (17) a. (nii) *santooSik’k’-uu*
 (you) be.happy-IMP
 ‘(You) be happy!’
 b. **nin-akkə santooSam aak-uu*
 you-DAT happiness become-IMP
- (18) a. (nii) *deeSya-ppeT-uu*
 (you) anger-?-IMP
 ‘(You) be angry!’
 b. **nin-kkə deeSyam var-uu*
 you-DAT anger come-IMP

(Since the subject is normally deleted in imperatives, one can try “dropping” the dative NP in (17b) and (18b) by pro-drop; but it makes no difference to their grammaticality, cf.

- (18) b’. **deeSyam var-uu*
 anger come-IMP

By and large, the dative construction has a “complex predicate” as its verbal, consisting of a noun and what has been called (Mohanani and Mohanan 1990) a “light verb”. Cf. *santooSam aak-* ‘happiness become’ of (6)/(7a), *dukham var-* ‘sorrow come’ of (8a), *iSTam aak-* ‘liking become’ of (10a). But there are exceptions, e.g. *vis’akk-* ‘become hungry’ of (5), *taNukk-* ‘feel cold’ of (13a)/(16b), *veedanik’k’-* ‘feel pain’ of (14a). (Interestingly, all the exceptions signify physical experience.) We shall come back to the question of how the complex predicates are interpreted.

2.3. The ‘know’-class verbs

The ‘know’-class verbs should perhaps not be distinguished from the mental experience class of verbs. For one thing, they are like the latter class in showing systematic dative/nominative alternation.

- (19) a. *eṇ-ik’k’ə itə aRiy-aam⁷*
 I-DAT this know-MODAL
 ‘I know this.’

- b. *ñaan* itə aRiññ-u
I this know-PAST
'I knew (i.e. came to know) this.'
- (20) a. *avaL-kkə* *avan-e* *vis'vaasam* *aaNə*
she-DAT he-ACC belief be.PRES
'She believes him.'
- b. *avaL* *avan-e* *vis'vasik'k'*-*unnu*
she he-ACC believe-PRES
'She believes him.'
- (21) a. *eñ-ik'k'ə* itə *mañass-il* *aay-i*
I-DAT this mind-in become-PAST
'I understood this.'
- b. *ñaan* itə *mañass-il* *aa-kk-i*
I this mind-in become-CAUSE-PAST
'I understood this.'

There is often a difference of meaning in the alternants, however. For example, in the dative construction, *aRiy*- 'know' means a state of one's knowledge; in the nominative construction, it means 'come to know'. Thus, to say (e.g.) that someone 'knows English', we must use the dative construction:

- (22) a. *avan-ə* *ingLiiSə* *aRiy-aam*
he-DAT English know-MODAL
'He knows English.'
- b. **avan* *ingLiiSə* *aRiy-unnu/aRiññ-u*
he English know-PRES/KNOW-PAST

As we remarked when dealing with the mental experience verbs, the nominative construction is consistent with an agentive interpretation, as can be shown by the 'imperative test'. In fact, (21b) seems (fairly clearly) to be a causativized version of (21a).

From among the verbs of propositional attitude, the verb *toonñ*- 'seem'⁸ is the only verb that occurs only in a dative construction:

- (23) a. *eñ-ik'k'ə* [*Mary miDukki* *aaNə* *ennə*] *toonñ-i*
I-DAT Mary clever.person be.PRES COMP seem-PAST
'It seemed to me that Mary is clever.'
- b. **ñaan* [*Mary miDukki* *aaNə* *ennə*] *toonñ-i*
I Mary clever.person be.PRES COMP seem-PAST

(Interestingly, from among the Old English "impersonal" verbs, 'seem' is perhaps the only verb which has resisted the change to the nominative pattern. We look at the Old English "impersonal construction" in Section 4.2.)

2.4. Certain modals

The modal *-aam* ‘may’ occurs in the dative construction when it has the meaning of ‘permission’, and in the nominative construction when it has the meaning of ‘possibility’.

- (24) a. *niṇṇaL-kkə pook-aam*
 you.PL-DAT go-may
 ‘You may go.’ (I.e. ‘You have permission to go.’)
 b. *John caak-aam*
 John die-may
 ‘John may die.’ (I.e. ‘It is possible that John will die.’)

Unlike *-aam* which is morphologically a suffix, the modal *kazhiy* ‘can, or be able’ is an independent verb which takes an infinitival complement; and it occurs only in the dative construction:

- (25) a. *eṇ-ik’kə [PRO mala kayaR-uwaan] kazhiy-um/kazhiññ-u*
 I-DAT mountain climb-INF be.able-FUT/be.able-PAST
 ‘I can/was able to climb a mountain.’
 b. **ñaan [PRO mala kayaR-uwaan] kazhiy-um/kazhiññ-u*
 I mountain climb-INF be.able-FUT/be.able-PAST

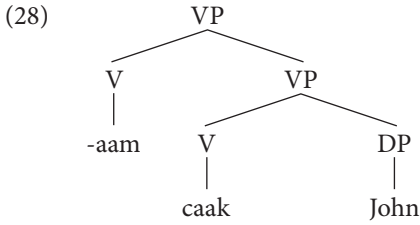
The verb *veeNam* occurs in the dative construction when it means ‘want’ or ‘need’, and in the nominative construction when it means ‘must’. It normally shows up as a suffix *-aNam* on the lower verb:

- (26) a. *eṇ-ik’kə pook-aNam*
 I-DAT go-
 ‘I want to go.’
 b. *nii pook-aNam*
 you go-
 ‘You must go.’

But underlyingly it takes an infinitival complement, a fact which becomes clear when we interpose an emphatic particle between the lower verb and *veeNam*:

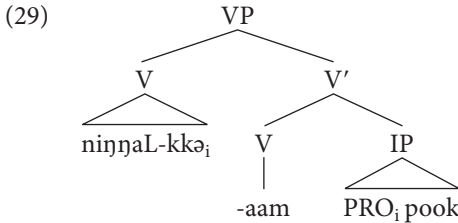
- (27) a. *eṇ-ik’kə pook-uka taṇṇe veeNam*
 I-DAT go-INF EMPH
 ‘I definitely want to go.’
 b. *nii pook-uka taṇṇe veeNam*
 you go-INF EMPH
 ‘You definitely must go.’

We can account for the dative/nominative alternation in (24) in the following fashion. Let us say that *-aam* with the meaning of possibility is a modal. Like all modals, it takes a VP complement:



(*caak* ‘die’ is an unaccusative verb and takes its argument in the object position.) The lower V *caak* adjoins to *-aam* by head-to-head raising; and the DP *John* raises to SPEC,IP and gets nominative case (or alternatively, raises to an IP-internal Topic position and has its nominative case checked by a ‘probe’ from I).

By contrast, *-aam* with the meaning of permission is a ‘full’ verb with two arguments, a Theme and a Goal. The Theme argument is obligatorily clausal for this verb; the Goal argument is marked with dative case:



As shown, the clausal argument has PRO as subject, which is controlled by the dative argument. The same analysis can be extended to the alternation in (26). In (26b), *veeNam* with the meaning of ‘must’ is a modal which takes a VP complement. In (26a), *veeNam* with the meaning of ‘want’ or ‘need’ is a regular verb with a Theme argument and a Goal argument. The Theme argument can be clausal, or it can be nominal; if the latter, it has the nominative case, cf.:

- (30) eṇ-ik'kə oru maṇṇa veeNam
 I-DAT one mango.NOM want
 ‘I want a mango.’

But in (26a), the Theme argument is clausal, with a PRO subject controlled by the dative-case-marked Goal argument, parallel to (29).

The conclusion of this section (on the ‘contexts of the dative construction’) seems to be a good place to point out that there is always a nominative NP in the dative construction. The nominative NP can be non-overt, as in a sentence like (5) (repeated below):

- (5) avan-ə vis'akk-unnu
 he-DAT hunger-PRES
 ‘He is hungry.’ (Lit. ‘To him, (it) hungers.’)

Here, the nominative NP is a pleonastic *pro* (see Section 4 below for this analysis). Or, the position of the nominative NP can be occupied by a clausal argument, as in (24a)/(26a), which has the structure shown in (29). But this is not different from (say) the English sentence [*That pigs fly*] *is true*, where the nominative position is occupied by a clause. Given (then) that there is always a nominative NP, the only debatable point is whether the dative NP is nevertheless the subject in the dative construction.

3. The tests of “subjecthood”

Many tests of “subjecthood” have traditionally been applied to the dative NP of the dative construction, to determine whether this NP is indeed the subject of the construction. In this section we shall apply these traditional tests to the Malayalam dative NP.

3.1. Subject–verb agreement

This test cannot be applied in Malayalam because this language (uniquely among the Dravidian languages) has no subject–verb agreement.

3.2. Control of PRO

The dative NP can control PRO:

- (31) a. avaL-kkə_i [PRO_i paaD-uvaan] kazhiy-um
 she-DAT sing-INF be.able-MODAL
 ‘She can sing.’
 b. John-inə_i [PRO_i Mary-ye cumbik’k’-uwaan] toonn-i
 John-DAT Mary-ACC kiss-INF feel-PAST
 ‘John felt like kissing Mary.’

However, as is well-known, PRO can be controlled also by a non-subject; therefore, control of PRO is not a good test of “subjecthood”.

A better test would be a demonstration (if possible) that the dative NP can be a PRO, since (universally) PRO occurs only as the subject of an infinitival clause. Unfortunately, such a test cannot be implemented; this is because a matrix verb which forces the embedded subject to be a PRO — e.g. a ‘try’-type verb — never allows the embedded clause to have the dative construction. This could be for a principled reason: a ‘try’-type verb requires the embedded subject to have agentivity, but the dative construction lacks an agentive theta role.

3.3. Antecedenthood of anaphors

Some anaphors, it has been claimed, take only a subject as an antecedent; and Dravidian *taan* ‘self’ (a third-person reflexive anaphor) has been claimed to be such an anaphor. Using this as a “subjecthood” test, it has been shown — see (among others) Sridhar (1976) — that *taan* can be anteceded by the dative NP of the dative construction. Here are some Malayalam examples:

- (32) a. John_i-inə ta_n_i-te bhaarya-ye iSTam aaNə
 John-DAT self-GEN wife-ACC liking be.PRES
 ‘John_i loves self’s_i wife.’
 b. John_i-inə toonn-i [Mary ta_n_i-ne sneehik’k’unn-illa ennə]
 John-DAT seem-PAST Mary self-ACC love.PRES-NEG COMP
 ‘It seemed to John_i that Mary does not love self.’

However, as I have argued elsewhere (Jayaseelan 1990, 1997), it is incorrect to claim that *taan* takes only a subject as antecedent. Consider (33):

- (33) a. John_i-inte vicaaram [Mary ta_n_i-ne sneehik’k’unn-illa ennə] aaNə
 John-GEN thinking Mary self-ACC love.PRES-NEG COMP be.PRES
 ‘John’s_i thinking (impression) is that Mary does not love self.’
 b. [ta_n_i-te makaL-uDe vivaaha-kaaryam] John_i-ine alaTTi
 self-GEN daughter-GEN marriage-matter John-ACC bother.PAST
 ‘(The question of) self’s_i daughter’s marriage bothered John.’

In (33a), the antecedent of *taan*, ‘John’, is a possessive NP within the subject noun phrase; and in (33b), it is a direct object.

In Jayaseelan (1998) I have shown that the antecedent of *taan* is determined by considerations of ‘perspective’. It follows (therefore) that *taan*’s taking the dative NP as antecedent in sentences like (32) shows nothing about that NP being syntactically a subject. We must conclude therefore that the “subjecthood” tests which have hitherto been applied to the dative NP are inconclusive.

It seems to me that the strongest reason for our thinking that the dative NP is the subject of the dative construction is that it obligatorily comes first in the word order of the clause:

- (34) a. avan-ə raNDə peNkuTTi-kaL uNDə
 he-DAT two girl-PL.NOM be.PRES
 ‘He has two girls.’
 b. *raNDə peNkuTTi-kaL avan-ə uNDə
 two girl-PL.NOM he-DAT be.PRES

The nominative NP (when there is one overtly) stays close to the verb, and is therefore thought to be “within the VP”; and the dative NP is therefore taken to be in the subject position.

But observe that the nominative NP (in these cases) is indefinite and non-specific;

and the dative NP is definite. In Jayaseelan (1999b; 2001) I have argued for IP-internal Topic positions, to which definite/specific NPs may move. That IP-internal topicalization might be happening in a sentence like (34a) is suggested, when we compare (34) with (35):

- (35) a. *ii viiTT-il raNDə peNkuTTi-kaL uNDə*
 this house-in two girl-PL.NOM be.PRES
 ‘There are two girls in this house.’
 b. **raNDə peNkuTTi-kaL ii viiTT-il uNDə*
 two girl-PL.NOM this house-in be.PRES

The position of *ii viiTT-il* ‘in this house’ in (35a) is parallel to that of *avan-ə* ‘he-DAT’ in (34a); but we would not perhaps wish to say that the locative PP is the subject of (35a). That definiteness/specificity factors are at play here can be further shown by replacing the nominative NP of (35) with a definite NP:

- (36) a. *?*ii viiTT-il avan uNDə*
 this house-in he be.PRES
 ‘There is him in this house.’
 b. *avan ii viiTT-il uNDə*
 he this house-in be.PRES
 ‘He is in this house.’

The point I am trying to make is that the impression created by the position of the dative NP in a sentence like (34a) could be completely misleading.⁹

4. Some theoretical proposals

In this section, I advance some theoretical proposals to explain the dative construction.

4.1. The dative construction and pro drop

In Jayaseelan (1990, 1999a) I argued that the analysis of the dative NP (of the dative construction) as the subject of the sentence, was a misanalysis which was facilitated by pro drop (or rather, pro drop in combination with scrambling). The argument went as follows. Consider the English sentence at (37):

- (37) It seems to me [that Mary is clever]

Here, ‘to NP’ is the English equivalent of what would be realized as a dative case-marked NP in a language with a richer case system. In other words, (37) has a “dative NP” (in a sense), although it is certainly not the subject. Now, imagine that English were a language that allowed scrambling of the verb’s arguments and adjuncts. (37) would now have a perfectly acceptable alternative realization as (37’):

(37') To me it seems [that Mary is clever]

Imagine that English were also a pro-drop language. Pro-drop languages, we know, do not have pleonastic elements such as *it* and *there*; instead, they use a phonetically null pronominal element *pro*. (37') would therefore actually be realized on the surface as (37''), although underlyingly there would be a *pro* in the subject position, as shown in (37'''):

(37'') To me seems [that Mary is clever]

(37''') To me *pro* seems [that Mary is clever]

Looking at (37''), if 'to me' now were a dative case-marked NP, not a PP, this would be indistinguishable from what we have called a dative construction; and linguists would be inclined to say that 'seem' is a "quirky" verb which assigns a dative case to its subject. In fact the equivalent of (37) in Malayalam is considered an example of the dative construction:

(38) eṇ-ik'kə toonn-unnu [Mary miDukki aaNə ennə]
 I-DAT seem-PRES Mary clever person be.PRES COMP
 'It seems to me that Mary is clever.'

4.2. The Old English "impersonal" construction

The claim that the dative construction is an epiphenomenon of pro-drop is supported by some facts about the historical evolution of English. Old English was an SOV language which allowed scrambling; and it was also a pro-drop language. And significantly, it had a construction which apparently had "no subject", and which grammarians consequently referred to as an "impersonal construction". This construction is illustrated in (39)–(40) (all OE examples from Lightfoot 1979):

(39) þam cynge licodon peran
 the king-DAT liked pears
 'The king liked pears.' (Lit. 'To the king, pears liked.')

(40) hin-e hungreð
 he-DAT hungers
 'He is hungry.' (Lit. 'To him, hungers.')

The parallelism with the dative construction here is too obvious to need stressing.

English lost this construction towards the end of the Middle English period.¹⁰ The transition from Middle English to Modern English involved a number of changes. The language lost its case endings and simultaneously changed its word-order from the earlier SOV pattern to the SVO pattern; its word order also became more rigid. In the fifteenth century (as Jespersen points out, see Jespersen 1909–1949, II 10.12), the pleonastic elements *it* and *there* made their appearance, signalling (it seems to me) the fact that English had ceased to be a pro-drop language.

A result of all these changes was that the impersonal construction disappeared from the language. Lightfoot (1979) notes that one of three things happened to the erstwhile impersonal verbs. A verb like ‘seem’ appeared with a pleonastic *it* as subject. From our point of view, what happened was (simply) that the underlying pleonastic pro subject of the impersonal construction (see (37’)) became realized as a lexical pronoun, English having lost its pro-drop property. (The dative NP of Old English now appeared as a PP, ‘to NP’; so we get a sentence like: ‘It seems to NP that ...’) Some of the other impersonal verbs became obsolete (e.g. ‘behave’). The remaining verbs became reanalyzed, with the old dative NP becoming the nominative subject, e.g. ‘To the king, pears liked’ became ‘The king liked pears.’ (Simultaneously, the verb underwent a change of meaning from ‘be pleasing to (somebody)’ to ‘find (something) to be pleasing.’¹¹)

The history of English thus supports my claim about the dative construction being dependent on pro-drop. (It is almost like an experiment set up to test my hypothesis: Take a pro-drop language which has the impersonal (dative) construction, remove pro-drop, and see what happens!)¹² In fact, these historical facts tell us something else also. They show that the construction in question is determined by purely syntactic factors, and that syntax is the area in which we must look for an explanation of it. It is important to stress this last point, because an idea is often entertained that the dative subject/nominative subject choice is determined by how a language (or a group of languages) chooses to ‘view’ certain types of events. Thus Klaiman (1986), speaking about Bangla, says that the choice between a dative and a nominative subject is determined in that language by the non-volitional/volitional distinction. She goes on to claim that the non-volitional/volitional distinction is an important distinction for South Asian languages but not for certain other language types — and that this constitutes a ‘semantic parameter’.

But if this were right, in view of the history of English, one would have to suppose that the volitional/non-volitional distinction was important to Englishmen in the Old and Middle English period, but it ceased to be important to the modern Englishman! (Perhaps implicit in a suggestion like that of Klaiman is a claim about ‘world views’: certain types of events are viewed as volitional in certain cultures, e.g. European cultures, and as non-volitional in certain other cultures, e.g. South Asian cultures. This neo-Whorfian claim seems clearly untenable when we try to imagine that Englishmen changed their ‘world view’ around the fifteenth century.)

4.3. Where does the dative case come from?

I have suggested that the dative NP (of the dative construction) is not the subject of the sentence. In a sentence like (5) (repeated below), in which there is no NP other than the dative NP:

- (5) *avan-ə vis’akk-unnu*
 he-DAT hunger-PRES
 ‘He is hungry.’ (Lit. ‘To him, (it) hungers.’)

I am claiming that there is an underlying *pro*, marked nominative, which is the syntactic subject. As indicated in the translation, it is as if the sentence said, “To him, it hungers”; but since Malayalam has no pleonastic *it*, the language employs *pro* in that position. In a sentence like (6),

- (6) *avan*-ə *santooSam* *aayi*
 he-DAT happiness become.PAST
 ‘He was happy.’

there is a nominative NP, *santooSam* ‘happiness’, which is the syntactic subject.

I am not necessarily claiming that the nominative NP (whether *pro* or lexical) is in Spec,IP. For one thing, it is not at all clear that in SOV languages of the South Asian (or East Asian) type, the subject is ever in Spec,IP. It is more plausible to say that it is in an IP-internal Topic position. (Recall our discussion of IP-internal topicalization earlier.) In fact, if we go along with Kayne’s (1994) suggestion of a “roll-up operation” in the syntax of strictly head-final languages, Spec,IP will be filled by I’s own complement which has moved up, so that it will not be free to accommodate the subject NP.

As we observed earlier, the nominative NP that occurs in the dative construction is invariably non-referential — it is indefinite and non-specific. (Cf. *santooSam* ‘happiness’ in (6).) It is therefore never topicalized. What does get topicalized is the dative NP. Hence the observed word-order: dative NP — other oblique NPs — nominative NP — verb. Cf. (20a) (repeated below):

- (20) a. *avaL-kkə avan*-e *vis’vaasam* *aaNə*
 she-DAT he-ACC belief be.PRES
 ‘She believes him.’

The dative case of the dative NP (we must now say) is an inherent case (i.e. a ‘semantic’ case). Let us adopt the claim of Mohanan and Mohanan (1990) that the dative case is assigned to a goal argument in Malayalam. We shall also assume (following Jackendoff (1983), Mohanan and Mohanan (1990)) that each argument can be associated with a “bundle” of theta-roles; so that sometimes the speaker has a choice of case relations for an argument. Thus we have dative case and instrumental case alternating on the same argument in (41):

- (41) a. *eṇ*-ik’k’ə *kazhiy-illa*, *ninn*-e *nookk-aan*
 I-DAT be.able-NEG you-ACC look.after-INF
 ‘I cannot look after you.’
 b. *eṇ*-ekkoNDə *kazhiy-illa*, *ninn*-e *nookk-aan*
 I-INSTR be.able-NEG you-ACC look.after-INF
 (same as (41a))

Observe how, with a different verb (which has a different semantics), the dative/instrumental alternation is not possible:

- (42) *eṇ-ik'k'e/*eṇṇ-ekkoNDə ninṇ-e iSTam illa*
 I-DAT/I-INSTR you-ACC liking NEG
 'I don't like you.'

This strongly argues that the dative NP is an oblique argument, not a subject; since it is well-known that it is the case-marking of a verb's oblique arguments which are purely semantically determined.

The nominative NP (which I analyzed as the subject of the sentence), when it is not a pleonastic *pro* but has semantic content, combines with the verb to compositionally determine the number and the case relations of the oblique arguments. The nominative NP (as I said) is always non-referential in this construction; it is therefore “predicative”. The verb is a single-argument verb, which takes the nominative NP as its single argument. The oblique arguments are therefore the arguments of the nominative NP.

In Jayaseelan (1990) I suggested that the nominative NP together with the verb should be treated as a “complex predicate”. (A “complex predicate” is an expression like ‘give a kiss’, in the place of a “simple predicate” like ‘kiss’; as illustrated by the parallel sentences ‘John kissed Mary’ and ‘John gave a kiss to Mary’.) I also demonstrated that the system of theta-marking in complex predicates proposed in Jayaseelan (1988) applied unproblematically to these cases. In this system, the unassigned theta-roles of daughter nodes are “promoted” to the immediately dominating phrasal node, where they are amalgamated according to certain principles of congruence; the phrasal node then assigns them. We can briefly outline how this system works, using a sentence like (43):

- (43) *eṇ-ik'k'a avan-ooDə deeSyam uNDə*
 I-DAT he-2DAT anger.NOM be.PRES
 'I am angry with him.'

Here, *uNDə* is the existential copula, which takes a single argument, a Theme, to which it assigns the nominative case; in (43), it assigns that case to *deeSyam* ‘anger’. *deeSyam* ‘anger’ has two unassigned theta-roles, namely the Experiencer of the anger and the ‘target’ of the anger. These theta-roles are “promoted” up the phrase structure tree, and are realized as two types of Goals, with the oblique cases ‘dative’ and ‘second dative’.

While many theoretical questions remain to be addressed,¹³ the treatment of these constructions in terms of complex predicates appears to be on the right track. It may be emphasized (in this connection) that a noun-incorporation analysis — e.g. incorporation of *deeSyam* into *uNDə* — is not tenable. This is because the noun can have modifiers, cf.

- (44) *eṇ-ik'k'a avan-ooDə valiya deeSyam uNDə*
 I-DAT he-2DAT big anger be.PRES
 'I am very angry with him.' (Lit. 'To me, there is big anger towards him.')

Notes

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1. Transcription equivalents are: *t, d, n* are dental; *t̪, d̪, n̪* are alveolar; *T, D, N, L, S* are retroflex; *ɳ* is palatal; *k', s'* are palatalized; *ɸ* is a labio-dental approximant; *ʒ* is a retroflex approximant; *R* is an alveolar tap. The abbreviations used are: ACC: accusative; CAUSE: causative; COMP: complementizer; DAT: dative; EMPH: emphatic; FUT: future; GEN: genitive; IMP: imperative; INF: infinitive; INSTR: instrumental; NOM: nominative; PRES: present; PRES-NEG: present negative

2. The appearance of 'be', and not 'have', here is as expected. Kayne (1993) claims that 'have' is the realization of 'be' which has had a preposition — we can instead say 'case' (for Malayalam) — incorporated into it. In English-type languages, the dative preposition (or case) is incorporated into the copula and realized as 'have'; wherefore the possessor NP must move into Spec,IP and get the nominative case. But in Dravidian, the 'be' stays as it is; and the possessor NP gets the dative case.

3. The genitive case on the possessor in a sentence like (4) is not a counterexample to what I have said above. 'John' is inside a PP here; and the objects of postpositions in Malayalam are normally in the genitive case.

4. The following is also possible:

- (i) kuTTi-k'kə aana-ye iSTa-ppeTT-u
 child-DAT elephant-ACC liking-?-PAST
 'The child liked the elephant.'

Note that (i) and (10b) have the same verb form. This is exceptional, considering that in (7)–(9), the (a) and (b) sentences have different verb forms.

5. Note that in this case of alternation, it is not only the subject's case which changes, but also that of the second argument. (11a) with an accusative in the place of the second dative argument is somewhat marginal (i), while (11b) with a second dative instead of the accusative is totally ungrammatical (ii).

- (i) ?en-ik'kə avaL-e sneeham uNDə
 I-DAT she-ACC love be.PRES
 (ii) *ñaan avaL-ooDə sneehik'k'-unnu
 I she-2DAT love-PRES

6. Apparently, a parallel sentence is grammatical in Telugu and Kannada (as pointed out by K.V. Subbarao and R. Amritavalli). Cf. the following Telugu sentence:

- (i) vaaDu aakali-gaa unnaaDu
 he.NOM hunger(N.)-? be.PRES
 'He is hungry.'

Therefore, the unavailability of the nominative construction in the physical experience case seems to hold with full generality only in Malayalam (and possibly also Tamil).

7. In the dative construction, *aRiy-* always occurs with (what looks like) a modal *-aam*, for reasons which are unclear to me.

8. *toon-* also has the meaning ‘feel (pain, happiness etc.)’ and occurs in a sentence like:

- (i) *en-ik’kə veedaṇa toon-i*
 I-DAT pain feel-PAST
 ‘I felt pain.’

9. If the dative NP (of the dative construction) is itself indefinite, it was suggested in the discussion that the dative and nominative NPs could occur in either order. But on closer scrutiny, I seem to detect either a topicalizing effect on the nominative NP, or a focusing effect on the dative NP, if the order is ‘nominative NP — dative NP’:

- (i) *itRa ahambhaavam oru peNN-inə paaD-illa*
 so.much pride one woman-DAT should not have
 ‘A woman should not have so much pride.’

This seems to suggest that the ‘dative NP — nominative NP’ order is a kind of ‘canonical’ order, with implications for the base order that I will not go into here. (But see Jayaseelan 2001.)

10. As pointed out by Howard Lasnik, the construction survived for some time in expressions like ‘Methinks . . .’, where the agreement shows that the first-person pronoun is not the subject.

11. Possibly some type of agentivity was imported into the meaning of *like*, so that the erstwhile unaccusative verb became a transitive verb. (Thus it is now possible to have — although somewhat marginally — an imperative: ‘Like him!’) As a consequence, the old subject became the direct object. (But why this ‘importing of agentivity’ strategy became the dominant strategy in English for dealing with the impersonal verbs remains to be understood.)

12. Currently, the dative construction in languages like Icelandic is analyzed as involving the dative NP moving into Spec,IP (see Chomsky 1998 and references cited there). (In locative inversion also, it has been claimed that the locative NP moves into Spec,IP. Both constructions involve unaccusative verbs, as pointed out by Anoop Mahajan.) The difficulty about adopting this analysis is that it would lose us the correlation between the dative construction and pro-drop. This correlation was substantiated by the history of English. If an oblique argument can be attracted to Spec,IP, this could happen irrespective of a language being pro-drop or non-pro-drop. One may now ask why present-day English doesn’t have a dative construction.

One may query — by way of probing our analysis — why, if there is a *pro* in the dative construction, its position is never realized by a lexical pronoun. The answer could be that “true” pro-drop languages do not have an expletive *it* or *there*. (In a semi-pro-drop language like German, a lexical pronoun does appear, cf. *Es hungert mich* ‘It hungers to me.’)

13. The theoretical issues have to do with how the “theta-role promotion” analysis can be conceived of within a Larsonian “VP shell” structure (Larson 1988) or within a system like that of Hale and Keyser (1997). I do not address these larger questions in this chapter. (Pertinent also are the many issues raised in Dasgupta (2000).)

References

- Chomsky, N. 1998. Minimalist inquiries: the framework. Ms., MIT.
- Dasgupta, P. 2000. Review of K. A. Jayaseelan, *Parametric Studies in Malayalam Syntax* (Allied, New Delhi, 1999). *Indian Linguistics* 61(1–4): 183–91.
- Hale, K. and Keyser, J. 1997. “On the complex nature of simple predicators”. In *Complex Predicates*, A. Alsina, J. Bresnan and P. Sells (eds). Stanford, California: CSLI Publications.
- Jackendoff, R. 1983. *Semantics and Cognition*. Cambridge, Mass.: MIT Press.
- Jayaseelan, K.A. 1988. “Complex predicates and theta theory”. In *Thematic Relations* [Syntax and Semantics, Vol. 21], W. Wilkins (ed). New York: Academic Press.
- Jayaseelan, K.A. 1990. “The dative subject construction and the pro-drop parameter”. In *Experiencer Subjects in South Asian Languages*, M.K. Verma and K.P. Mohanan (eds). Stanford, Calif.: CSLI Publications.
- Jayaseelan, K.A. 1997. “Anaphors as pronouns”. *Studia Linguistica* 51(2):186–234.
- Jayaseelan, K.A. 1998. “Blocking effects and the syntax of Malayalam *taan*”. In *The Yearbook of South Asian Languages and Linguistics*, R. Singh (ed). New Delhi: Sage Publications.
- Jayaseelan, K.A. 1999a. “The dative subject construction in parametric syntax”. In *Parametric Studies in Malayalam Syntax*, K.A. Jayaseelan. New Delhi: Allied Publishers.
- Jayaseelan, K.A. 1999b. “A focus phrase above vP”. In *Proceedings of the Nanzan GLOW*. Nagoya: Nanzan University.
- Jayaseelan, K.A. 2001. “IP-internal Topic and Focus phrases”. *Studia Linguistica* 55(1):39–75.
- Jespersen, O. 1909–1949. *A Modern English Grammar on Historical Principles*, vols. I–VII. London: Allen and Unwin.
- Kayne, R. 1993. “A modular approach to auxiliary selection”. Included in: *Parameters and Universals*, R. Kayne (2000), 107–20. New York: Oxford University Press.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Klaiman, M.H. 1986. “Semantic parameters and the South Asian linguistic area”. In *South Asian Languages: Structure, Convergence and Diglossia*, Bh. Krishnamurthi, Colin P. Masica and Anjani K. Sinha (eds), 179–94. Delhi: Motilal Banarsidass.
- Larson, R. 1988. “On the double object construction”. *Linguistic Inquiry* 19:335–91.
- Lightfoot, D. 1979. *Principles of Diachronic Syntax*. London: Cambridge University Press.
- Mohanan, K.P. and Mohanan, T. 1990. “Dative subjects in Malayalam: semantic information in syntax”. In *Experiencer Subjects in South Asian Languages*, M.K. Verma and K.P. Mohanan (eds). Stanford, California: CSLI Publications.
- Shibatani, M. 1999. “Dative-subject constructions twenty-two years later.” *Studies in the Linguistic Sciences* 29(2): 45–76.
- Sridhar, S.N. 1976. “Dative subjects, rule government, and relational grammar”. *Studies in the Linguistic Sciences*, 6:1. University of Illinois, Urbana.
- Ura, H. 2000. *Checking Theory and Grammatical Functions in Universal Grammar*. New York: Oxford University Press.
- Verma, M.K. and Mohanan, K.P. (eds). 1990. *Experiencer Subjects in South Asian Languages*. Stanford, Calif.: CSLI Publications.

CHAPTER 12

Acquisition of dative subject in Tamil

B. Lakshmi Bai

1. Introduction

Tamil, one of the major Dravidian languages of India, like other South Asian languages has sentence types which call for a non-nominative form of the nominals as subject instead of the nominative form. Among such non-nominative forms, the most predominantly occurring form is the dative which encodes primarily the indirect object relation, and is marked by the suffix *-(u)kku*, e.g. *goovint-ukku*¹ ‘to Govind’, *ena-kku* ‘to me’ etc. The dative, however, does not function as subject in all its occurrences. For instance, *avan-ukku* ‘to him’ in (1) below is a subject but not in (2). For instance, *avan-ukku* ‘to him’ in (1) below is a subject but not in (2):²

- (1) *avan-ukku pasi-kkar-tu.*
he-DAT hunger-PRES-3N.SG
‘He is feeling hungry.’
- (2) *nii avan-ukku eTam kuTu.*
you he-DAT place give.IMP
‘You give him place!’

The objective of this chapter is to examine acquisition data from Ta(mil) to find out how young children acquire the dative-subject constructions in Ta. More specifically, our aim would be to check if such data provide any clue to the separation of the dative form in subject function from its occurrence in other syntactic and semantic contexts.

2. Dative in Tamil

As mentioned earlier, a dative is used mainly to encode the indirect object of a ditransitive verb. Besides this, a number of other functions are identified for the dative e.g. (1) experiencer of a mental process or state, (2) possessor, (3) goal of motion, (4) purpose, (5) point in time or duration of time, and (6) benefactor of an action or event (Arden 1976, Lehmann 1989). The dative nominals in sentences (1) and (2) above represent experiencer and indirect object respectively. The following sentences exemplify the other functions of the dative identified above:

Possessor

- (3) avan-ukku ammaa illa.
 he-DAT mother be.NEG
 'He has no mother.'

Goal of motion

- (4) nii viiTt-ukku poo.
 you home-DAT go.IMP
 'You go home!'

Point in time

- (5) naan pattu maNi-kku va-r-een.
 I ten clock-DAT come-PRES-1SG
 'I will come at 10 o'clock.'

Duration of time

- (6) nii pattu naaL-ukku veelai sey.
 you ten days-DAT work do-IMP
 'You work for ten days!'

Benefactive

- (7) itu ena-kku itu ona-kku itu yaar-ukku.
 this I-DAT this you-DAT this who-DAT
 'This is for me, this is for you and for whom is this one?'

Although the dative nominal has a wide range of functions, syntactically it serves as the subject of a sentence typically in the case of those predicates that express mental, emotional and physical experiences e.g. *teriy-ar-tu* 'know', *puriy-ar-tu* 'understand', *vali-kkar-tu* 'paining', *pasi-kkar-tu* 'feeling hungry', *piTi-kkar-tu* 'like' etc. Hence the subject of sentences with such a predicate is generally called 'experiencer subject'. Dative subjects also occur with stative predicates expressing existence, possession, availability and finding etc.

As for the subjecthood properties of the dative or experiencer subject, unlike the nominative subject, the experiencer subject does not govern verbal agreement. However, it does share some other syntactic properties associated generally with the nominative subject. For instance, the dative or experiencer subject like the nominative subject can be the antecedent of the reflexive pronoun *taan* 'self'. This is not true of the dative in other functions. This point will be clear from the following examples adapted from Lehmann (1989: 185–6):

- (8) kumaar_x raajaa-kku *tann-ai_x paRRi oru kaTTuraiy-ai koTu-tt-aar.
 Kumar Raja-DAT self-ACC about one article-ACC give-PST-3M.SG
 'Kumar, gave Raja an article about himself'
- (9) *kumaar raajaa-kku_x tann-ai_x paRRi oru kaTTuraiy-ai koTu-tt-aar.
 Kumar Raja-DAT self-ACC about one article-ACC give-PST-3M.SG

- (10) kumaar-ukku_x tann-ai_x puriyav-illai.
 Kumar-DAT self-ACC understand-not
 'Kumar did not understand himself.'

Notice that in the above examples both the nominative subject (8) and experiencer (10) serve as the antecedent of the reflexive pronoun *tann-ai*. But the dative nominal in (9), which encodes an indirect object relation and is not the sentential subject, cannot be the antecedent of the reflexive as indicated by the ill-formedness of the sentence.

Yet another syntactic property of subject relates to conjunction reduction, a syntactic process by which one or more subordinate clauses are conjoined to the main clause when they share a common subject. In conjunction reduction while the verb of the main clause has the finite form, that of the subordinate clause appears as a perfective participle (Krishnamurti and Gwynn 1985: 330). Conjunction reduction also involves the process of equi-NP deletion by which only one of the shared subject NPs appears overtly in the sentence the other occurrence(s) being null. A nominative subject as well as an experiencer subject can be the controller of the null element as can be seen in the following examples:

- (11) naan viiT-ukku pooy-ii pro avan-ukku poon paN-r-eeen.
 I home-DAT go-PART he-DAT phone do-FUT-1SG
 'I will go home and make a telephone call to him.'
- (12) avan-ukku veelai kaTay-ttu pro pattu aayiram ruupaay
 he-DAT job get-PART ten thousand rupees
 sampaa-ti-kkar-aan.
 earn-PRES-3M.SG
 'He got a job and is earning ten thousand rupees.'
- (13) pro kiiZaa viZu-ntu avan-ukku kaal oTai-nc-utu.
 down fall-PART he-DAT leg break-PAST-3N.SG
 'He fell down and broke his leg.'

In the above sentences, the controller of *pro* is the nominative subject in (11) and the dative subject in (12) and (13).

3. Subjects and data

The observations of this study are based on longitudinal data of three children Ramya (R), Deepa (D), and Chetan (C). R is a female monolingual speaker of Ta. C and D, are the author's son and daughter respectively, and were exposed simultaneously to Ta. and Telugu (Te.), another major Dravidian language, and as a result grew up as bilinguals of the two languages in question.

R's speech data (Vaidyanathan Ms), in interaction with her Ta. speaking parents and elder brother, were recorded over fixed sessions from the time she was 9 months

old until she was 2;10. The recordings were done roughly at an interval of two weeks and consisted of about 45 minutes of speech data. As for the two bilingual children, C is a boy, first-born and 4 years 3 months older than his sister D. The children's father is a Te. speaker and spoke to them in Te, while the mother spoke to them in Ta., which is her mother tongue. Systematic diaries of the two children's spontaneous speech development in the form of regular recordings and extensive notes were kept in the case of C since he was 11 months old until he was 4;6, and in D's case from the time she was 10 months old until she was 4;8. Taperecordings of C and D's spontaneous speech were made since they spoke their first word at intervals ranging between 10 and 15 days. The average duration of such recordings was 10 minutes (for details of their early speech development see Lakshmi Bai 2000).

4. Presentation of Data

In this section detailed data relating to the development of datives in the speech of the three children will be presented individually for each child.

4.1. Ramya's data

The first word *TaaTaa* 'bye' occurred in R's speech at around 11 months. Combination of two words in a sentence started at 1;1.7 with a sentence like (14) where the first nominal stands for a locative and the second occupies the predicate position. This was the only syntactic pattern observed in her speech for about three months, of course, with the further development of a few verbs showing up in the predicate position as in (15):

- (14) ammaa kaakaa.
mother crow
'Mother! crow.'
- (15) annaa taa.
brother give
'Brother! give (me).'

From 1;5.15 there occurred two word sentences in her speech which consisted of a nominal and predicate with the nominal being in the subject or object role as in sentences (16) and (17) respectively:

- (16) taNNI koTT-ii.
water spill-PART
'Water spilled.'
- (17) taa tacciip.
give kerchief
'Give hand-kerchief (to me)'

At this phase of her syntactic development, the dative marker *-(u)kku* had not yet emerged in R's speech. In fact, even when such an input was provided in the ongoing speech, she produced the lexical items in question without it as will be clear from the following interaction between R and her father (F) at 1;7.15:

- (18) a. F: *yaar-ukku kuTu-kkar-a kis.*
 who-DAT give-PRES-2.SG kiss
 'To whom are you giving the kiss?'
 b. R: *akkaa.*
 elder.sister
 'Elder sister.'
 c. F: *akkaa-kk-aa.*
 elder.sister-DAT-QUES
 'To elder sister?'
 d. R: *akkaa.*
 elder.sister
 'Elder sister.'

This stage was followed by one in which R would repeat a nominal with the dative marker when supplied in the input. The following interaction with R's mother (M) is an example:

- (19) a. M: *ammaa-kku oru vaay appaa-kku.*
 mother-DAT one mouthful father-DAT
 'To mother a morsel, to father.'
 b. R: *appaa-kku.*
 father-DAT
 'To father.'

From 1;8.15 she started producing sentences with more than two words as in (20):

- (20) *kaakaa mammam saappu-tu.*
 crow food eat-3N.S
 'Crow eats food.'

At this point, verbal inflections, which also included the obligative suffix *-um*, started showing up in R's speech. Her sentences with the obligative verb forms occurred with a subject in the nominative as required in the adult norm as can be seen in the following sentences uttered by her at 1;8.15 when she wanted to be lifted by her mother:

- (21) *ammaa tuukk-ii.*
 mother lift-PART
 'Mother lift.'
 (22) *tuukka-num.*
 carry-OBL
 'Must carry.'

- (23) ammaa tuukka-num.
mother carry-OBL
'Mother must carry.'

From 1;9, R started producing dative nominals on her own. In the one month period between 1;9 and 1;10 her recordings showed 3 occurrences of dative of which two were in the non-subject position encoding benefactive and recipient relations as shown in (24) and (25) below:

- (24) a. R: mammam panna-raa.
food make-PRES-3F.SG
'(She) is cooking food.'
- b. F: yaar-ukku.
who-DAT
'For whom?'
- c. R: rammi-kku.
Ramya-DAT
'For Ramya.'
- (25) a. F: yaar kuTu-kkar-aa maruntu paapaa-kku.
who give-PRES-3PL medicine baby-DAT
'Who is giving medicine to the baby?'
- b. R: paapaa-kku ammaa.
baby-DAT mother
'Mother to baby.'

The third occurrence of dative was noticed in the subject position. However, the interesting point is that contrary to expectation, the dative in the subject position was not used by her for an experiencer subject as licensed in adult norm. Instead she employed it in the place of a nominative subject with a verb of action deviating thus from the adult norm. This can be seen in the following interaction between her and her father.

- (26) a. F: enna tink-ar-a.
what eat-PRES-QUES
'What are you eating?'
- b. R: aayam.
eatable
'Some eatable.'
- c. F: yaar kuTu-tt-aa.
who give-PST-QUES
'Who gave it to you?'
- d. R: *appaa-kku.
father-DAT
'To father.'

The tendency to use a dative form in the place of a nominative subject increased in her speech and continued until she was 2;2. Sentences (27b), (28) and (29) below were recorded on 2;1, 2;1.15 and 2;2 respectively:

- (27) a. F: *yaar vaank-ii kuTu-tt-aa.*
 who buy-PART give-PST-3PL
 ‘Who gave you this?’
 b. R: **Tiicar-kku vaank-ii kuTu-tt-aa.*
 teacher-DAT buy-PART give-PST-3PL
 ‘To teacher bought and gave.’
- (28) **ammaa on-kiTTa TaaTaa annaa-kku soll-a-la.*
 mother you-near bye elder.brother-DAT say-PST-NEG
 ‘Mother, near you to brother did not say bye.’
 (intending to say ‘Mother, elder brother did not say bye to you’).
- (29) **annaa-kku ipTi taLL-ii viTT-aan.*
 elder.brother-DAT like.this push-PST-PART leave-PST-3M.SG
 ‘To elder brother pushed like this.’

What needs to be emphasised here is that at a time of speech development when she tended to wrongly employ dative form in the place of a nominative subject, she failed to dative mark the ‘experiencer’ of mental state or physical affliction which typically require dative marking in Ta. This will be clear from sentences (30) and (31) recorded at 2;0, and (2;2) respectively:

- (30) **paapaa uwvaa paTTu-ttu.*
 baby wound hurt-PST-3N.SG
 ‘The baby got hurt.’
- (31) **iyyanaa uusii pooTT-ir-kkaa DaakTar*
 Iyana-DAT injection put-PST-BE doctor
 ‘Doctor has given injection to Iyana.’

Coinciding with the above development relating to the subject position, many more occurrences of the dative form were observable in her speech in the non-subject position also during the period under consideration. Besides indirect object and benefactive relations, the dative form was now being used for encoding roles such as ‘goal’ and ‘affected object’ as in sentences (32) and (33) respectively:

- (32) *annaa skuul-kku poo-num.*
 elder.brother school-DAT go-OBL
 ‘Brother should go to school.’
- (33) *nammi-kku paNnu.*
 Rammi-DAT do-IMP
 ‘Do it to Rammi!’

As R tended to overextend the dative for a nominative subject on the syntactic plane, she also overextended it in the non-subject position to encode case roles which do not license dative in adult language. For instance, at 2;1 she extended the dative for the associative case as in (34c):

- (34) a. R: annaa saNTa pooTT-aan.
 elder.brother fight drop.PST-3.M.SG
 'Elder brother fought.'
- b. F: yaar-ooTa.
 who-ASS
 'With whom?'
- c. R: *rammi-kku.
 Rammi-DAT
 'To Rammi.'

Use of dative subject in a context permitted by adult grammar could be observed in R's speech only from 2;1 onwards. She first used it with the verb *veeN-um* 'wanted' as in (35). But at the same time she could not use it consistently with all the occurrences of the verb as can be evident from the variation shown below:

- (35) nammi-kku peesT veeN-um.
 Rammi-DAT paste want-FUT.3NSG
 'Rammi wants paste.'
- (36) *paapaa haalis veeN-um.
 baby Horlicks want-FUT.3NSG
 'Baby wants Horlicks.'
- (37) ammaa paapaa-kku haaliks veeN-um.
 mother baby-DAT Horlicks want-FUT.3NSG
 'Mother, baby needs Horlicks.'

An observation of R's recordings of one month between 2;1 and 2;2 showed a total occurrence of 13 dative nominals. Of these, 8 were in the non-subject position with 5 encoding recipient relation, 1 affected object, 1 benefactive and 1 a case of overextension of dative for associative relation. Of the 5 occurrences in the subject position, 3 were correct use with the verb *veeN-um* 'want'. There were 2 cases of overextension of dative for nominative subject. Although at this point there were instances of correct use of dative subject in her speech, she failed to dativemark predicates expressing physical affliction. It was in the next stage of development that R's speech showed the use of dative subject with a number of other verbs including those denoting physical state or affliction and cognitive needs such as 'liking', and 'disliking'. The following sentences recorded in a period of one month between 2;2 and 2;3 illustrate this point:

- (38) appaa-kku oTampu sariyaa illa.
father-DAT health alright not
'Father is not well.'
- (39) appaa-kku ayskiim veeNT-aam.
father-DAT icecream want-NEG.3N.SG
'Father does not want ice cream.'
- (40) paapaa-kku piTikk-um suNTal.
baby-DAT likes-FUT.3NEUT.SG an.eatable
'Baby likes suNTal.'
- (41) uwvaa aayT-um vinoot-ukku.
wound happen-FUT.3NEUT.SG vinod-DAT
'Vinod will get hurt.'
- (42) ammaa enna-kku vayatt-ai vali-kkar-tu.
mother I-DAT stomach.ACC pain-PRES-3N.SG
'Mother, my stomach is paining.'

An increase in the occurrence of dative subjects with different types of verbs such as those of cognition, physical affliction etc. can be interpreted as a realization on her part that a dative subject is licensed only by predicates of specific semantic import. A consequence of this was that her earlier tendency to use dative subject in the place of a nominative subject stopped. From 2;2 onwards she did not show any overextension of dative subject for nominative subject.

However, at the same time another development took place in her speech. Recall that right at the time of emergence of verbal inflections in her speech, she had produced obligative sentences like (22) and (23) correctly with a nominative subject. But now on her obligative sentences started appearing with a dative form instead, indicating thus an overextension of the dative subject. During the period between 2;2 and 2;6.15, there were several instances of obligative sentences in her recordings all of which had a dative subject. The following two sentences were recorded at 2;6 and 2;6.15 respectively:

- (43) *ena-kku kraap veTT-i-kka-num.
I-DAT hairstyle cut-PART-REF-OBL
'I have to have a crew cut.'
- (44) *paapaa-kku goregaon poo-ka-num.
baby-DAT Goregaon go-PRES-OBL
'The baby has to go to Goregaon.'

As far as use of datives in the non-subject position is concerned we have noticed that she had attempted it for benefactive and recipient role as early as 1;9. During the subsequent period her speech showed its employment for roles that do not require a dative. For instance, at 2;3.15 her speech showed instances of a dative form

being employed for a locative relation as in (45b) and for a theme as in sentence (46) at 2;4.15:

- (45) a. F: rammiy-ooTa buk enka.
 Rammi-GEN book where
 ‘Where is Rammi’s book?’
 b. R: *haalukku irkku.
 hall-DAT is
 ‘It is to the hall.’
- (46) *ammaa paapaa-kku vey summaa.
 mother baby-DAT scold just.like.that
 ‘Mother scold the baby just like that.’

In fact even after a year of her using the datives in the subject and non-subject positions correctly in several instances, they were not quite stabilised. For instance, in the same session of recording at 2;8 she used the dative subject correctly in (47) but not in (48) although both the sentences relate to physical condition of an experiencer:

- (47) ena-kku muukku oykar-tu.
 I-DAT nose drip-PRES-3N.SG
 ‘My nose is running.’
- (48) *avan kaatu keekka-la.
 he ear hear-not
 ‘He cannot hear.’

Similarly although she started using the dative form to encode indirect object relation as early as 1;9, we notice that at 2;10, the time of her final recordings, she still failed to use the dative form for an indirect object in sentence (49) below and instead employed the accusative form:

- (49) *ellaar-ay-um sampalam kuTu-pp-aa.
 all-ACC-CONJ pay give-FUT-3PL
 ‘To all the people (they) will give wages.’

4.2. Chetan’s data

C spoke his first word when he was 1;0.19. From 1;4 onwards, when his speech was still at the one-word stage, he could comprehend and correctly express agent, recipient, theme, locative and possessive roles. A few examples of this period can be observed from the following interactions between him and his mother (M) speaking in Ta, and father (F) speaking in Te:

- (50) a. M: *yaar vant-iru-kk-aa-maa.*
 who come.PART-be-PRES-3PL.QUES-dear
 ‘Who has come dear?’
 b. *appaa.*
 father
 ‘Father.’
- (51) a. F: *nuvvu ekkaDa kuurc-uNT-aa-vu.*
 you where sit-REF-FUT-2SG
 ‘Where will you sit?’
 b. *kucci.*
 chair
 ‘Chair.’

However, all the nominals produced by him at this stage lacked postpositions even when the input speech contained them. For instance, note that in the following interaction with his mother, his reply lacks the possessive marker though the sentence addressed to him by his mother (52a) has it:

- (52) a. M: *itu on-t-aa tammu-t-aa.*
 this you-GEN.QUES Tammu-GEN.QUES
 ‘Is it yours or Tammus?’
 b. **nammu.*
 Tammu
 ‘Tammu.’

The first postposition to emerge in his speech was the dative *-(u)kku* of Ta and *-ku* of Te. He contrasted the nominative and the dative forms first in pronominal forms. At 2:0, his speech data showed the nominative forms of the first- and second-person pronouns of Ta, namely, *naa* ‘I’, and *nii* ‘you’. The first-person singular dative pronoun of Te, *naa-ku* ‘to me’ entered his lexicon at 2:0.10. Within a week’s time followed the emergence of *nii-ku* ‘to you’, and *noo-ku* ‘to you’, second-person dative pronominal forms respectively in Te and Ta.

C’s early dative forms were used exclusively for an experiencer subject. For a period roughly of two weeks from the time dative pronominals emerged in his speech, he used them only in the subject position. His recordings of the two week period in question showed 12 utterances in which one of the three dative pronominal forms of Ta, and Te., mentioned above, occurred in the subject position. These utterances had in the predicate position forms such as *piTi-kkar-tu* ‘like’, *eema-yindi* (in Te.) ‘what happened’, *veeN-um* ‘want’, *kaTe-kk-ala* ‘do not find’, *puri-yala* ‘do not understand’, and *irukku* ‘to have’ etc, all of which require a dative subject. Semantically, these predicates can be analysed as expressing mental state, possession, physical affliction and cognitive needs. The following are a few examples from his speech of this period:

- (53) naa-ku pikka-tu.
I-DAT like-3N.SG
'I like it.'
- (54) idi veenum naa-ku.
this wanted I-DAT
'I want this.'
- (55) naa-ku pencil ikku.
I-DAT pencil is
'I have a pencil.'
- (56) naa-ku telusu. (in Te)
I-DAT know
'I know it.'

But along with the correct use of dative subjects with the above mentioned predicate types, his speech also showed a case of overextension as indicated in (57) below. Note that (57) is a capability construction and calls for a nominative subject in adult grammar as against the dative used by C :

- (57) *naa-ku muTiy-ala.
I.DAT be.able-NEG
'I am not able to do it.'

It was only after C had attempted the use of a dative form in the subject position as in the examples listed above, that he started employing it in the non-subject functions. The first use of dative in the non-subject position was to encode a directional relation. His speech data of 2;1.12 and 2;1.13 showed three occurrences of the form *viiTT-ukku* 'to the house' in different utterances as shown in (58) and (59) below. But barring the word *viiTT-ukku*, dative forms occurred in his speech exclusively in the subject position up to 2;1.18 :

- (58) danni viiTT-ukku poo-laam.
Dhanni house-DAT go-HORT
'Let us go to Dhanni's house.'
- (59) adi viiTT-ukku veeNT-aam.
Hari house-DAT want-NEG
'Not to Hari's house.'

The overall pattern of dative in the first three weeks of C's speech immediately following its emergence, showed a total occurrence of 29 different utterances containing a dative form. As mentioned earlier, three of these were the directional expression *viiTT-ukku*. The rest of the 26 showed a dative form in the subject position, of which 23 were correctly used in combination with predicate types that license it. The remaining 3 were instances of overextension of dative subject in the place of

a required nominative in capabilitative sentences. These sentences contained the positive or negative form of the verb in question, namely *muTiy-um* 'will be able to', *muTiy-ala* 'not being able to', and *muTiy-ar-tu* 'being able to' etc.

An interesting corollary to C's preference for using a dative form exclusively in the subject function was that during this period he chose not to express benefactive or recipient roles in his utterances overtly which require dative marking in adult speech. A few examples of such sentences occurring in his speech between 2;0 and 2;1 are the following;

- (60) adi kaaTTu maa.
that show-IMP mother
'Mother, show that!'
- (61) adi taa maa.
that give-IMP mother
'Mother, give me that!'

It was only from 2:3 that C started expressing a dative nominal overtly for encoding a semantic role of a nominal in the non-subject position except the three occurrences of the directional form mentioned above. Sentences (62) and (63) below are instances of his use of the dative form to encode the recipient relation:

- (62) naa-ku tara maaTT-ay-aa.
I-DAT give will.not-2.SG-QUES
'Won't you give me?'
- (63) naa-ku aytiim kuTu.
I-DAT icecream give
'Give me ice cream.'

In the non-subject position, C's speech showed an overextension of dative for locative and vice versa as can be seen in the following two sentences observed respectively on 2;1 and 2;1.12 :

- (64) *ammaa dannii viiTTu-la poolam.
mother Dhanni house-LOC go-Hort
'Mother, let us go to Dhanni's house.'
- (65) *bablu viiTT-ukku aaNTi illa.
Bablu house-DAT aunty is.not
'Aunty is not there in Bablu's house.'

4.3. Deepa's data

Deepa spoke her first word when she was 10 months old and started to combine words into sentences at 1;3. As was the case with C, D also could comprehend and express notions such as agent, recipient, patient, locative and possessive at the one-

word stage itself (for more details see Lakshmi Bai 1985). However, all nominal expressions in her early speech lacked postpositions. For instance, on the same day (1;3.2), she used the word *annaa* 'elder brother' in the following three contexts, (a) to refer to her brother when he arrived, (b) to point out to a drawing made by him, and (c) to indicate that something belonged to him. In the adult norm while the first two situations require the nominative form *annaa*, the third would call for the possessive form *annaa-tu* in Ta or *anna-di* in Te but not *anna*.

As was seen in C's speech, in D's speech also the first postposition to emerge was the dative marker *-kku*. The following sentences recorded at 1;5 show the first use of dative by her:

(66) amma-kku.
mother-DAT
'For mother?'

(67) anna-kku.
elder.brother-DAT
'For elder brother'

The way D used the datives in her early speech indicates clearly that she made a distinction between the different semantic roles of the dative form. This is reflected in her selective use of the dative marker for certain semantic roles while leaving it out from the others during one and the same period of speech development. Note, for instance, that in a period of two months from 1;5.3 to 1;7.3 there were 25 tokens of dative forms in her one-word and larger utterances. Of these 23 forms encoded the benefactive role and 2 the directional role. The following are a few examples of the speech data of this period.

(68) ammaa naa-ki tii.
mother I-DAT tea
'Mother to me tea.'

(69) a. M: laalipaap vaanka-laam.
lollypop buy-HORT
'Let us buy lollypop.'
b. taataaya-ki.
grand.father-DAT
'For grandfather?'

(70) neene allaa iNTi-ki.
I Sarala house-DAT
'I want to go to Sarla's house.'

Note that during the period of speech development under consideration she dative-marked nominals expressing benefactive and directional roles, but left unmarked those nominals which encoded possessive and patient relations although the latter

also call for dative marking in adult speech. In this connection compare sentences (68)–(70) with (71) and (72) the latter two recorded on 1;6.7 and 1;6.9 respectively:

- (71) *paapaa poTTu illa.
 baby dot not
 'The baby does not have the dot on the forehead.'
- (72) *kallamaa paapaa tappal peTTu. (in Te)
 Kamalamma baby sandal put-IMP
 'Kamalamma, put on the sandals to the baby!'

Dative marking on indirect objects could be seen in her speech from 1;7 onwards. The following two sentences recorded on 1;7.2 and 1;7.5 contain an indirect object with dative marking:

- (73) appaa annaa-ki peTTu. (in Te)
 Father elder.brother-DAT put-IMP
 'Father, put it on for elder brother!'
- (74) ammaa naa-ki mandu vey. (in Te)
 mother I-DAT medicine put-IMP
 'Mother, apply medicine to me!'

Dative marking of a subject nominal was observed in her speech only from 1;7.8 as in sentences (75)–(77), all recorded in a week's time:

- (75) naa-ki kaalee. (in Te)
 I-DAT wanted
 'I want it.'
- (76) naa-ki cappal illa.
 I.DAT sandal not
 'I do not have sandals.'
- (77) kamalammaa naa-ki aay os-tun-di. (in Te)
 Kamalamma I-Dat dirt come-PRES-3N.SG
 'Kamalamma, I need to go to toilet.'

In the next one month's speech data covering the period 1;7.15 to 1;8.15, a total of 27 sentences with a dative nominal were observed of which, 15 expressed indirect object relation, 1 benefactive and 2 dative or experiencer subject. The dative subjects were used by her with verbs expressing physical state and cognitive needs like 'want' or 'do not want'. A few examples (all in Te) are:

- (78) ammaa naa-ku tacci mammu oddu. (in Te)
 mother I-DAT curd rice not
 'Mother I do not want curd-rice.'

- (79) ammaa caalu naa-ku. (in Te)
mother enough I-DAT
'Mother it is enough for me.'
- (80) ammaa paTT-in-di naa-ku. (in Te)
mother hurt-PST-3N.SG I.DAT
'Mother I got hurt.'
- (81) naa-ku jodam occ-in-di. (in Te)
I-DAT fever come-PST-3N.SG
'I have got fever.'
- (82) *ammaa naa-ku pen pencil caapnad undi. (in Te)
mother I-Dat pen pencil sharpner be-3N.SG
'Mother I have pen, pencil and sharpener'
- (83) naa-ku muucaa occ-in-di.
I.DAT urine come-PST-3N.SG
'I have to urinate.'

At the next stage, D extended the use of the dative to predicates expressing mental states. From around 1;11 we come across sentences like the following in her speech:

- (84) naa-ku bayam. (in Te)
I.DAT fear
'I am afraid.'
- (85) ena-kku piTikka-la. (in Te)
I-DAT like not
'I do not like it.'
- (86) ona-kku boor aTi-kkar-t-aa? (in Ta)
you-DAT bore beat-PRES-3N.SG-QUES
'Are you feeling bored?'

5. Discussion

A consideration of the three children's data presented so far lead us to the following major observations:

5.1.

Children's early speech is characterized by the absence of dative marking on the nominals whether in subject or non-subject position. In the early stages of speech development they omitted the dative marker even when the same was supplied in the input speech.

5.2.

Once the children started marking the datives, a clear tendency was observed on their part to differentiate the syntactic function of dative as subject of a sentence from its use to encode different case-like roles right from their early speech. To maintain such a differentiation they resorted to different strategies.

We have seen that at a time when R employed the dative form correctly in the non-subject position for encoding indirect object and benefactive relations, on the syntactic plane she tended to use it as a viable substitute for an agentive subject, though erroneously, for as Verma and Mohanan (1990) point out an underived verb does not assign dative case to its agent or instrument. Moreover, although R employed the dative in the subject position, it was not used as subject of psychological verbs in the initial stages of her speech development. In other words, her data indicate that she paid attention to the formal property of subjecthood of a dative form before she could sort out that dative subjects are governed by certain semantic features characteristic of a specific class of verbs and verb complexes in Tamil. We have seen in the data presented above that although she employed a dative form as subject of a sentence from 1;9, not until 2;2 did she use it for an experiencer subject.

This kind of separation of datives in their subject and non-subject functions was also clearly observable in the data of both C and D. D kept this distinction by resorting to the strategy of selective marking of the datives for certain roles and leaving it out from others during one and the same period. At one and the same age she marked nominals encoding recipient and benefactive roles with dative postposition, but left the possessive without such a marking.

C, on the other hand, adopted a different strategy to maintain a distinction between the subject and non-subject functions of the dative. He had a marked preference in his early speech to use datives exclusively for an experiencer subject. To achieve this end he even avoided overt expression of the indirect object encoding recipient or benefactive roles during the period under consideration as has been shown in sentences (60) and (61).

5.3.

Further support to our observation that children perceive datives in their subject function differently from other functions in their early syntax comes from their tendency to overextend dative subject in those syntactic constructions that do not license it. Two such constructions are discussed below:

5.3.1.

In Tamil an obligative sentence expressing obligation, negation of obligation and desideration is formed by placing the verb *veentu* 'want' in its positive finite form *veent-um* and negative finite form *veent-aam* after a main verb in infinitive form (Lehmann 1989). In the spoken language, however, the positive verb form *veent-um*

is condensed into *-Num* and is attached to the main verb as a verbal suffix. The construction in question takes a nominative subject as in the following:

- (87) *nii avan-ai kuppiTa-Num.*
 you he-ACC call-OBL
 'You must call him.'
- (88) *avan anga poo-ka veeNT-aam.*
 he there go-INF need.not
 'He need not go there.'

An examination of the children's acquisition data, however, shows that they tend in their early syntax to extend a dative subject in the place of the nominative subject in such sentences. In this connection R's data turns out to be revealing. We have seen that obligative utterances were observable in her speech both at one-word and two-word stages from 1;8.15 itself as seen in sentences (22) and (23). All such sentences had the nominative subject as required. Sentence (89) recorded at 2;0.15 also illustrates this:

- (89) *annaa skuulu-kku poo-Num.*
 elder.brother school-DAT go-OBL
 'Elder brother has to go to school.'

Recall that R had a tendency in her early syntax to substitute a dative subject for a nominative subject in sentences with action verbs also. What is striking is that her obligative sentences also underwent a reorganisational change and from 2;2 onwards they started appearing with a dative subject thus deviating from the adult norm. As was mentioned earlier, this trend continued in her speech for several months as could be seen from sentence (44) recorded at 2;6.15. No examples of such an extension was noticed in the speech of C and D.

5.3.2.

The second type of syntactic construction in which children tended to overextend a dative subject was the capability sentence. In a capability sentence in Ta., the main verb in infinitive form is followed by the positive verb *mutiy-um* 'be able to' or the negative verb *mutiy-aatu* 'not be able to'. The sentence in question takes an instrumental subject. The following are some examples:

- (90) *ennaa-la itu tuukk-a muTiy-um.*
 I-INST this lift be.able-FUT.3N.SG
 'I can lift this.'
- (91) *avan-aala vara muTiy-aatu.*
 he-DAT come-INF be.able-NEG
 'He will not be able to come.'

An examination of the children's early speech data shows that they tended to substi-

tute a dative subject for the instrumental subject in this sentence type. Instances of such a substitution was seen in D and C's speech data as shown in the following examples. Sentence (92) below was spoken by D at 2;2.15 and (93) by C at 2;1.17 :

- (92) *ena-kku soll-a muTiy-ala-maa.
 I-DAT say be.able-not-mother
 'Mother, I am not able to say it.'
- (93) *idi naaku muTiy-ala.
 this I-DAT be.able.not
 'I am not able to do this.'

In D's recordings of a later period extending over two months, we notice the use of the instrumental subject alternating with the dative subject in such sentences indicating thus, that her grammar was moving towards the adult norm in this respect. The following three sentences were recorded in her speech on 2;3.4, 2;4.4 and 2;4.20 respectively:

- (94) enn-aala caap-a milla.
 I-INST eat-INF not.able
 'I am not able to eat it.'
- (95) enn-aala tuuk-a muTiy-aa-taa.
 I-INST lift-INF be.able-not-QUES
 'Won't I be able to lift it?'
- (96) *ena-kku eTu-kka muTiy-ala.
 I-INST lift be.able-not
 'I am not able to lift it.'

5.4

The next evidence that we will consider to show that children have an early awareness of the difference between a dative serving as a subject from its occurrence in other roles, comes from data relating to lexical separation in bilingual acquisition.

Research relating to simultaneous acquisition of two languages by children (Leopold 1939, Imedadze 1967, Vogel 1975, Volterra and Taeschner 1978, and Taeschner 1983) has shown that such children's early utterances are mixed in nature resulting from their having a unified lexical system consisting of lexical items drawn from both the input languages. Even when children find an equivalent in one language for a given lexical item in the other, they generally maintain a complementary relationship between the parallel lexical terms of the input languages by using them in different semantic or formal contexts. The process of lexical separation of some of the Ta and Te items in C and D's early lexical development are dealt with elsewhere (Lakshmi Bai 2000). Here we will consider one such item in C's lexical development which has relevance for the present discussion.

The singular form of first-person dative pronominal in Te is *naa-ku*. Its Tamil counterpart is *ena-kku* which in colloquial speech alternates with *nee-kku*. C's lexical items at 2;0 included the nominative form of the first-person singular pronoun *naa(n)* 'I' from Ta, which was contrasted by its dative counterpart *naa-ku* 'to me' from Te. Such a contrast can be exemplified with sentences (97) and (98) observed in his speech at 2;0.4 and 2;1:

- (97) naan var-een.
I come-PRES-I.SG
'I will come.'
- (98) naaku pi-kkar-tu (for piTi-kkar-tu).
I-DAT like-PRES-3N.SG
'I like it.'

We have already observed that at one stage of development C used the dative exclusively for a subject relation as in (99) and (100) recorded at 2;1 and 2;1.15 respectively:

- (99) naa-ku veeN-um.
I-DAT want
'I want it.'
- (100) naa-ku buk ikku.
I-DAT book is
'I have a book.'

This was followed by a stage when the dative was also used for an indirect object relation. The dative pronominal *naa-ku* was employed for expressing indirect object by him from 2;1.25. Some examples depicting this are the following:

- (101) naa-ku oru muuTi taa.
I-DAT one lid give-IMP
'Give me a lid!'
- (102) naa-ku aytiim kuTu naa taap-ar-een.
I-DAT icecream give I eat-FUT-IP-SG
'Give me icecream, I will eat it.'

The Ta. dative *ena-kku* 'to me' showed up in his speech on 2;2.13 in indirect object relation in the following sentence:

- (103) nii kaalej-leentu va-ntu ena-kku suup kukk-ala etukku.
you college-from come-PART I-DAT soup give-PST-NEG why
'Why did you not give me soup after coming back from college?'

But even after the emergence of the Ta. form, C tended to use the Te. form *naa-ku* alone in the subject function in both his Ta. and Te. utterances for more than two

months as will be clear from the following Te. and Ta. sentences recorded on 2;4.24 and 2;5.12 respectively:

- (104) eeDava koDdu eeDu-stee naa-ku koopam os-tun-di. (in Te)
cry should.not cry-if I-DAT anger come-FUT-3.N.SG
'(You) should not cry. If you cry I will get angry.'
- (105) naakiy-um var-tu-maa aayi.
I.DAT-also come-PRES-3N.SG-mother toilet
'Mother I am also feeling the need to go to toilet.'

Meanwhile he also paid attention to the alternate Ta. form *nee-kku* 'to me' at 2;4.11. But he restricted it to encode an indirect object alone while sticking to the Te. *naa-ku* for subject function. This function-wise distinction between the Te. and Ta. lexical items, namely *ena-kku* and *nee-ku* for an indirect object, and *naa-ku* for the experiencer subject continued in his speech right up to when he was 2;6.20.

In the next stage of development *ena-kku* was also employed in the subject position. Consider in this respect the following two sentences both recorded on the same day (2;7.11):

- (106) ena-kku teriy-um.
I-DAT know-FUT.3N.SG
'I know it.'
- (107) cinna eyti-naa naa-ku epTi puriy-um.
small write-COND I-DAT how understand-FUT.3N.SG
'If you write it in small letters how can I understand it?'

For a brief period he reserved Ta. *nee-kku* for indirect object and Te. *naa-ku* and Ta. *ena-kku* for subject function. Consider the following examples recorded between 2;7.27 and 2;8.20 in the order in which they appeared in his speech:

- (108) motala naa-ku paTTu-tu.
first I-DAT get.hurt-3N.SG
'First I was hurt.'
- (109) itu paTi-cc-apram nee-kku piikaa tara-yaa.
this read-PST-after I-DAT soother give-PRES-2SG-QUES
'Will you give me the soother after you finish reading it?'
- (110) ena-kku veccu-kka teriy-um.
I-DAT keep-REFL know-FUT.3N.SG
'I know how to keep it on myself.'

Separation of the Ta. and Te. dative pronouns in question took place in his speech around the time he was 2;9.10. From this time onwards *ena-kku* and not *naa-ku* appeared in both subject and non-subject positions in his Ta. speech addressed to his

mother as can be seen in the sentences recorded in the same month on 2;9.13 and 2;9.24:

- (111) ena-kku atu piTi-kk-um.
 I-DAT that like-PRES-3N.SG
 'I like that.'
- (112) nii ena-kku suttu kaaTTu.
 you I-DAT revolve-PART show
 'You revolve it and show it to me.'

6. Conclusion

An examination of the longitudinal data of the three subjects of this study gives us clues indicating that right from an early stage of language development children pay attention to the syntactic-semantic properties of the dative in subject function as distinct from its role in other contexts. These clues show up in the form of different linguistic strategies namely, overextension of dative subject to other subjects, selective and step by step marking of dative nominals in subject and non-subject positions, and other specific strategies such as functional specialization of lexical equivalents in lexical separation in bilingualism as was noticed in C's speech.

Our data, though limited in scope, also indicate both similarities and variations in children's approach to sorting out the linguistic characteristics of the datives. We have seen in the presentation of the data that while R and C attempted the dative form first in the subject position, D did so in the non-subject position although all three of them tried to maintain a difference between the subject and non-subject function of the dative.

However, more broad-based data from a sizable population is required before much could be said firmly about general tendencies and individual strategies that children manifest in learning the grammar of datives in Ta. Further, it should also be noted here that we need experimental data to learn when and how children sort out the other complex details relating to experiencer subject construction namely, antecedent anaphor binding and conjunction reduction in participles since the spontaneous speech data considered for this study did not contain any useful information pertaining to these issues.

Notes

1 Transcription equivalents: /T, D, N, L/ are retroflex counterparts of /t, d, n, l/ respectively; /R/ is a retracted trill; /Z/ is a voiced retroflex approximant.

2 The following abbreviations are used in the glosses: ACC[usative], ASS[ociative], CON[ditional], DAT[ive], F[eminine], FUT[ure], GEN[itive], HORT[ative], IMP[erative], INF[initive],

LOC[ative], M[asculine], NEG[ative], NOM[inative], N[euter], OBL[igative], PART[iciple], PST[Past], PRES[ent], PL[ural], QUES[tion], REF[lexive], SG[Singular], 1[First person], 2[Second person], 3[Third person].

References

- Arden, A.H. 1976. *A Progressive Grammar of the Tamil Language*. Madras: The Christian Literature Society (Fifth reprint, first published 1891).
- Imedadze, N.V. 1967. "On the psychological nature of child speech formations under conditions of exposure of two languages". *International Journal of Psychology* 2. 129–32.
- Krishnamurti, Bh. and J.P.L.Gwynn. 1985. *A Grammar of Modern Telugu*. Delhi: Oxford University Press.
- Lakshmi Bai, B. 1985. "Case relations and case forms in child language". *Osmania Papers in Linguistics* 9–10, 73–101.
- Lakshmi Bai, B. 2000. *Sounds and Words in Early Language Acquisition*. Shimla: Indian Institute of Advanced Study.
- Lehmann, Thomas. 1989. *A Grammar of Modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.
- Leopold, W.F. 1939. *Speech Development in a Bilingual Child: a Linguistic Record*. Vol.1. *Vocabulary Growth in the First Two Years*. Eraston, IL: Northwestern University Press.
- Taeshner, T. 1983. *The Sun is Feminine: a Study of Language Acquisition in Bilingual Children*. Berlin: Springer.
- Vaidyanathan, R. Recordings of Ramya (Manuscripts).
- Verma, M.K. and K.P. Mohanan. 1990. "Introduction to the experiencer subject construction". In M.K. Verma and K.P. Mohanan (eds.), 1990.
- Verma, M.K. and K.P. Mohanan. (eds.). 1990. *Experiencer Subjects in South Asian Languages*. Stanford University: Center for the Study of Language and Information.
- Vogel, I. 1975. "One system or two: an analysis of a two-year old Romanian-English bilingual's phonology". *Papers and Reports on Child Language Development* 10. 43–62.
- Volterra, V. and T. Taeschner. 1978. "The acquisition and development of language by bilingual children". *Journal of Child Language* 5. 311–26.

CHAPTER 13

The position of the accusative subject in the accusative–infinitive construction

Howard Lasnik

Since the earliest detailed investigations of sentential complementation within a transformational framework, the dual nature of the immediately post-verbal (underlined) NP in examples like (1) has been explored. In some ('deep') respects, that NP behaves like the subject of the lower predicate, while in other ('surface') respects, most obviously morphological case, it behaves like the object of the matrix verb.

- (1) I believe *her* to have convinced Bill

Rosenbaum (1967), for example, argues persuasively that at least in underlying structure, *her* in (1) must be the subject of the embedded clause. He observes the synonymy between infinitival embedding and finite embedding, as in (2).

- (2) I believe that she convinced Bill

As Rosenbaum notes, this will be expected if the third-person singular feminine pronoun is the subject of the lower clause in (1) as well as in (2). He also points out the contrast between *believe*-type constructions, on the one hand, and clear instances of NP + S complementation, on the other hand, with respect to semantic import of active vs. passive in the complement. (3) is synonymous with (1), but (5) is not synonymous with (4).

- (3) I believe Bill to have been convinced by her
(4) I compelled the doctor to examine her
(5) I compelled her to be examined by the doctor

As noted in Rosenbaum (1967) and Bach (1974), the underlying subject status of the NP in question is further confirmed by the fact that the pleonastic *there* and idiom chunks associated with the embedded clause can appear in this position. Thus, (6)–(7) contrast with (8)–(9), which are instances of NP + S complementation.

- (6) I believe there to be a man in the garden
(7) I believe advantage to have been taken of John
(8) *I forced there to be a man in the garden
(9) *I forced advantage to have been taken of John

Before discussing the numerous respects in which the subject of the infinitival behaves like an object, and how those phenomena can be captured, I would like to further consider the case property already mentioned. As noted above, the morphological case of the subject of the infinitive in English is an objective case most typically associated with a direct object. And, for English, there is good evidence that the matrix verb, for example *believe* in (1), is responsible for that objective case. Overwhelmingly, the English Accusative–Infinitive construction occurs only as the complement of an otherwise transitive verb which is independently capable of licensing case on its complement. It is well known that when an English transitive verb is made passive, it loses that capability:

(10) I believe him

(11) *It is believed him
cf. He is believed

Compare (11) with a parallel example where the complement of the passivized verb is a clause instead of a nominal expression (and hence, has no case requirements):

(12) It is believed that she convinced Bill

Now notice that the English Accusative–Infinitive construction patterns with (11) rather than with (12):

(13) *It is believed her to have convinced Bill

Similarly, adjectives do not license accusative case, nor do they support the Accusative–Infinitive construction:

(14) *It is likely her to convince John

This strongly suggests that it is the matrix verb that is responsible for the accusative case in the constructions under consideration. Of course, it is rather unusual for a verb to license accusative case on a nominal expression that is not its object. That is why in Chomskian work of the last two decades these constructions are often referred to as ‘exceptional case marking (ECM)’ constructions.

Now transformational grammar is very good at handling this sort of situation — where for some purposes, an expression behaves as if it is in one place in the structure, while for other purposes, it is seemingly in another. Thus, the classic generative analysis of ECM constructions, articulated especially by Rosenbaum (1967), centered on a movement transformation, one which came to be called ‘subject raising to object position’. In fact, it has been plausibly proposed that it is precisely case considerations that provide the driving force for the hypothesized movement. Postal and Pullum (1988), echoing Postal (1974), suggest that raising is necessary in order for the accusative NP to be close enough to the verb that assigns case to it. I assume that Postal and Pullum (1988) follow Chomsky (1980) and Chomsky (1981) in assuming that case is relevant even when it is not overtly manifested (as with non-

pronominals in English). I also follow Chomsky in this regard, and I will henceforth use Chomsky's term 'Case' for this more abstract notion of case.

There are Accusative–Infinitive constructions in some other languages where the accusative subject does not display this dependence on the matrix verb. Rouveret and Vergnaud (1980) provide several examples from Latin where an accusative nominal is possible as subject of an infinitive even when the matrix predicate is one that cannot take an accusative complement.

- (15) Certum est Petrum uenisse
 certain is Peter-ACC come.PAST.INFINITIVE
 'It is certain that Peter came'

Similarly, passive verbs allow Accusative–Infinitive complements:

- (16) Dicitur Petrum uenisse
 it-is.said Peter-ACC come.PAST.INFINITIVE
 'It is said that Peter came'

Presumably, in Latin either accusative is a default Case, or infinitive licenses accusative Case on its subject (as finiteness licenses nominative). One might expect that in Latin, then, there is no raising to object position. Unfortunately, as far as I know, there are no Latin data that could be used to replicate the tests that I will run below for English.

While, as mentioned above, the classic generative analysis was in terms of raising, the analysis became controversial in the early 1970s when Chomsky (1973) rejected it. Chomsky did not actually address issues of Case at all at the time, but proposed alternative treatments of what Postal a bit later called three traditional arguments for higher object status. These arguments were based on passivization, reflexivization, and reciprocal marking. All three of these processes typically establish a relation between an object position and a subject position in the same clause. But they can also establish a relation between the underlying subject of the complement clause and the subject of the matrix in the infinitival constructions under discussion. The following examples are from Postal (1974:40–2). (Co-subscripting indicates intended coreference.)

- (17) a. Jack believed Joan to be famous
 b. Joan was believed to be famous by Jack
 (18) a. *Jack_i believed him_i to be immoral
 b. Jack_i believed himself_i to be immoral
 (19) They believed each other to be honest

This class of arguments centrally involves the nature of the separation between the two linked NP positions. For Postal, any clause boundary would suffice to block the relevant relations, hence the second NP position must have become a clause-mate of the first (via raising to object). Chomsky (1973) offered a somewhat different

perspective on these phenomena. For Chomsky, the relevant structural issue is not *whether* there is a clause boundary separating the two NPs, but rather *what sort of* clause boundary there is. An infinitival clause boundary is in some sense weaker than a finite clause boundary. While the latter is strong enough to block the relations in question, the former is not. Chomsky formulated this relative inaccessibility of material in finite clauses (and of non-subjects of infinitives) in terms of his Tensed Sentence Condition (TSC) and Specified Subject Condition (SSC). Later Chomsky (1980) and Chomsky (1981) gave an account of accusative Case licensing in similar boundary strength terms.

In addition to the much discussed phenomena alluded to above, where boundary strength at least potentially provides the needed distinctions, Postal sketched certain other arguments for raising in which the actual surface structure height of the deep structure subject is implicated. One argument is based on a scope difference between (20) and (21):

(20) The FBI proved that few students were spies

(21) The FBI proved few students to be spies

Postal indicates that *few students* can have wide or narrow scope in (20) while it can have only wide scope in (21), and that this distinction is best described in terms of the hierarchical notion 'command'. The precise semantic difference between (20) and (21) is actually not entirely clear, but there does seem to be some difference, and it is reasonable to assume that it has something to do with scope. Given this, it is plausible to reason, with Postal, that some sort of transformational reorganization is implicated. As Postal notes, notions of hierarchical clause membership, such as command, are independently known to play a role in describing quantifier scope.

Following and elaborating on some of Postal's arguments, Lasnik and Saito (1991) present several other paradigms where the accusative subject displays similar high behavior. The first of these involves a further aspect of the distribution of reciprocal expressions, where relative height is significant. Note that (22) is not noticeably worse than (23).

(22) ?The DA proved [the defendants to be guilty] during each other's trials

(23) ?The DA accused the defendants during each other's trials

They both are considerably better than (24), the finite counterpart of (22).

(24) ?*The DA proved [that the defendants were guilty] during each other's trials

Given usual assumptions, the antecedent of a reciprocal must bear a command relation to the reciprocal, c-command, for example. But an embedded subject does not c-command an adverbial in the matrix clause. This indicates that at the point in the derivation relevant to the licensing of reciprocals, the structure of (22) has changed in such a way that the position of *the defendants* is comparable to what it is in (23), where that expression is a direct object.

Negative polarity item licensing is also known to display asymmetries characteristic of c-command determined relations. Thus, a negative subject of a simple sentence can license *any* in the object, but not vice versa:

(25) No one saw anything

(26) *Anyone saw nothing

Further, a negative object can, to a reasonably acceptable extent, license *any* in an adverbial:

(27) The DA accused none of the defendants during any of the trials

Now notice that to roughly the same extent, a negative subject of an infinitival can license *any* in an adverbial attached to the higher VP.

(28) ?The DA proved [none of the defendants to be guilty] during any of the trials

This is in rather sharp contrast to a corresponding finite complement:

(29) ?*The DA proved [that none of the defendants were guilty] during any of the trials

Once again, there is reason to believe that at the relevant level of representation, the subject of the infinitival complement is approximately as high in the structure as an NP complement would be.

There are also certain word order facts that are suggestive of raising. Postal (1974) discusses the *figure-out* verb-particle construction exemplified in (30).

(30) I figured out it was more than 300 miles from here to Tulsa

Postal observes that there is a good paraphrase of (30) with an infinitival complement:

(31) I figured it out to be more than 300 miles from here to Tulsa

Note that here the pleonastic subject of the complement shows up to the left of the particle portion of the matrix verb. This strongly suggests that *it* has raised into the matrix clause. It is very difficult to run further tests based on this construction, because, as Postal also notes, it is very restricted, only allowing pleonastic *it* in the infinitival version:

(32) *I figured Barbara out to be pregnant
cf. I figured out that Barbara was pregnant

(33) *I figured that out to be wrong
cf. I figured out that that was wrong

And in fact, unstressed accusative pronouns have long been known to display special behavior in verb-particle constructions, among others. Chomsky (1955) already

observed that pronouns, unlike full NPs, are restricted to the position to the left of the particle:

(34) The detective brought him in

(35) *The detective brought in him

Compare

(36) The detective brought the suspect in

(37) The detective brought in the suspect

Thus, while *it* in (31) is no doubt in the higher clause, it likely arrived there not via raising to object position but rather, by a cliticization process. Further, while at first sight it might have seemed that (31) provides evidence that raising is obligatory, given the unacceptability of (38), actually all we have is evidence for the obligatoriness of the cliticization process.

(38) *I figured out it to be more than 300 miles from here to Tulsa

There is another verb-particle construction that is more informative for the issue at hand. The construction was examined by Kayne (1985) then later reanalyzed by Johnson (1991) in terms relevant to the present discussion. Johnson provides an insightful account of examples like (39) involving overt raising of the ECM subject *John*.

(39) Mary made John out to be a fool

Both Kayne and Johnson convincingly treat (39) as an infinitival counterpart of (40).

(40) Mary made out that John is a fool

Note that the kind of word order seen in (39) is completely impossible when the complement clause is finite (and where no raising analysis has any motivation):

(41) *Mary made John out (that) is a fool

Now observe that the raising seen in (39) is optional. For most speakers, (42) is an acceptable alternative to (39).

(42) Mary made out John to be a fool

But, as usual, with an unstressed pronoun, the only acceptable order has the pronoun preceding the particle:

(43) Mary made him out to be a fool

(44) *Mary made out him to be a fool

These observations put another of Postal's important arguments, that raising is obligatory, in a different light. Postal's statement of the argument is based on "a fun-

damental pronominalization constraint” due to Langacker (1969) which states that a pronoun cannot both precede and command its antecedent. There are a number of more recent formulations of this constraint, including the noncoreference rule of Lasnik (1976) and Binding Condition C of Chomsky (1981). Any of these formulations can correctly distinguish Postal’s (45) from (46), but only if the embedded subject in (45) has necessarily raised into the higher clause.¹

(45) *Joan believes him_i to be a genius even more fervently than Bob_i does

(46) Joan believes he_i is a genius even more fervently than Bob_i does

But now we need not conclude that raising *per se* is obligatory. Rather, in this case we again could be witnessing the effects of (obligatory) cliticization. This same line of reasoning extends to the one other phenomenon discussed above that might have implicated obligatory raising. Under the assumption that ‘Condition B’ effects arise only with clause-mates, (18) might have argued that the subject of the infinitive necessarily raised. But since it is a pronoun (and Condition B is, in fact, a condition on pronouns), again cliticization could well be what is at issue. It should also be noted that in this case, unlike (45), Chomsky’s ‘boundary strength’ analysis could also have yielded the correct result.

Examples (39) and (42) strongly suggest that raising is optional, and the major obstacles to this conclusion have been overcome just above. There is further evidence for optionality, though it is somewhat less direct than (39) and (42). The evidence is based on an observation about scope that Zubizarreta (1982) attributes to Noam Chomsky, and that is discussed again by Chomsky (1995). Chomsky presents the following paradigm:

- (47) a. (it seems that) everyone isn’t there yet
b. everyone seems [*t* not to be there yet]

Chomsky (p.327) argues as follows: “Negation can have wide scope over the Q in [(47)a] ... but not in [(47)b]”, concluding that “... reconstruction in the A-chain does not take place, so it appears.” Suppose Chomsky is correct that with ‘A-movement’ (such as subject raising), there is no reconstruction capable of giving the configuration necessary for this scope effect, i.e., capable of having the effect of replacing the raised quantifier back into the lower clause.² The question now arises as to the behavior of ECM constructions with respect to this scopal property. The *make-out* ECM construction behaves exactly as expected. When the word order makes it clear that a universal ECM subject has raised, that subject cannot be interpreted inside the scope of negation in the complement clause, as seen in (48).

- (48) The mathematician made every even number out not to be the sum of two primes

The only reading is the highly implausible one where the mathematician was engaged in the futile activity of trying to falsely convince someone that no even number is the sum of two primes (and not the far more plausible one where she is merely

trying to convince someone that Goldbach's conjecture is false). Thus, even with strong pragmatic bias towards narrow scope for the universal, it still isn't available, consistent with the raising analysis combined with Chomsky's claim. The alternative word order for (48), with *every even number* unraised, does allow narrow scope for the universal, for those speakers who accept the word order in the first place:

- (49) The mathematician made out every even number not to be the sum of two primes

Example (49) has the plausible reading missing in (48).

Now what of 'standard' ECM constructions? Chomsky (1995) already implied that in that circumstance, a universal in subject position can take scope below complement clause negation, giving the following example:

- (50) I expected [everyone not to be there yet]

Chomsky does not explicitly claim that (50) is a standard ECM construction, but I assume that that is his intention. However, the situation is somewhat equivocal, since, as shown by Bresnan (1972), *expect* has multiple subcategorization frames (including one like *want*, which Lasnik and Saito (1991), essentially following Bresnan, argue does not involve raising into the higher clause).³ Chomsky's observation stands, though, since even with unequivocal ECM verbs like *believe* and *prove*, my informants find narrow scope for the universal possible, even if somewhat disfavored, unlike the situation with raising to subject or with the *make-NP-out* construction. Some representative examples are as follows:

- (51) I believe everyone not to have arrived yet
(52) I proved every Mersenne number not to be prime

Those same informants (along with everyone else, I believe) disallow narrow scope for the universal when it undergoes passive/raising to subject position:

- (53) Everyone is believed not to have arrived yet
(54) Every Mersenne number was proved not to be prime

In (54), there is strong pragmatic bias towards narrow scope, but it is still not available. Only the wildly false wide scope reading exists. Since we have seen strong evidence for raising in ECM constructions, and for Chomsky's claim about lack of reconstruction with A-movement, the possibility of narrow scope for the universal in (51) and (52) again indicates that raising to 'object position' is optional.

Thus, it seems that Postal and Chomsky were both right: The accusative subject of an infinitive does, sometimes, occur in the higher clause in surface form; but it also, sometimes, remains in the lower clause. Consequently, both Postal and Chomsky are apparently correct about the licensing of accusative Case. Surely it *can* take place when the ECM subject bears the close structural relation to the verb that an object would. But it can also take place if there is only a 'weak' clause boundary between the

verb and the ECM subject. In addition to the *make-out* construction, there is at least one other word order phenomenon suggestive of raising to object position. Postal (1974) observed that it is sometimes possible for an ECM subject to occur to the left of a higher clause adverb. He gives the following examples, among others:

- (55) ?Somebody found Germany recently to have been justified in the Lusitania sinking
- (56) I can prove Bob easily to have outweighed Martha's goat

In both of these examples, the adverb can be understood, at least marginally, as modifying the matrix verb, even though the understood subject of the embedded clause occurs to the left of the adverb.

There is a sharp contrast with finite complements:

- (57) Somebody found that Germany was recently justified in the Lusitania sinking
- (58) I can prove that Bob easily outweighed Martha's goat

Here, the adverb only has embedded clause construal, as expected if raising is responsible for the word order in (55)–(56). There is, however, an interesting difference between this adverb construction and the particle construction discussed above. While there was evidence for optionality of raising in the particle situation, such is not the case in the adverb situation. In (56), for example, reversing the word order of ECM subject and adverb leads to unacceptability:

- (59) *I can prove easily Bob to have outweighed Martha's goat

The finite analogue is fine:

- (60) I can prove easily that Bob outweighed Martha's goat

Postal gives several more examples:

- (61) *I believe very strongly Tony to be honest
- (62) *Jack proved quite easily Tony to be on hash
- (63) *John found recently the money to be missing

I suggest that although the (acceptable) *make out*-NP order superficially resembles the (unacceptable) V-adverb-NP order, their structures are actually quite distinct. It is reasonable to believe that the former does, indeed, represent a basic word order. The latter, on the other hand, presumably involves extraposition, with the entire infinitive clause moved out of its base position to a position to the right of the adverb, parallel to the derivation for the well-formed (60), with its finite complement. The acceptability difference between the finite and infinitive complements could then well be due to Case licensing. In (60), the subject of the complement has its (nominative) Case licensed completely internal to the complement clause, as subject of

a finite clause is the characteristic position for nominative. But in (61)–(63), the subject of the infinitive must be licensed by the matrix verb. That subject surely has not raised in those examples. Thus, it must be licensed ‘in situ’, and, under reasonable assumptions, that will not be possible here. At least since Ross (1974), it has been known that extraposed constituents are ‘islands.’ And Ross (1967) had already argued that islands inhibit not just movement but also feature changing rules. Thus, accusative Case licensing is expected to be inhibited here, as the licensor, the verb, is outside of the island while the licensee, the subject of the infinitive, is inside. There is therefore no need to stipulate that raising is obligatory in this particular construction. It is just as optional as in the *make-out* case. When raising fails to apply, the resulting structures are out for an independent reason.

Consider now the substantially more acceptable V-NP-adverb order, as in (55)–(56), repeated here.

- (64) ?Somebody found Germany recently to have been justified in the Lusitania sinking
- (65) I can prove Bob easily to have outweighed Martha’s goat

Here, again, extraposition must have taken place, but only after the ECM subject raised. In derived structure, the subject thus bears the usual object-like relation to the verb, so its accusative Case is appropriately licensed. It is worth noting that by Ross’s extraction test, the V-NP-adverb structures do involve extraposition while the V-NP-particle structures do not. Consider the following adverb example, modeled on one from Kayne (1985):

- (66) I have believed Mary for a long time now to have solved the problem

WH-extraction out of the complement is degraded here, and particularly so if the extracted item is an ‘adjunct’:

- (67) ??What problem have you believed John for a long time now to have solved
- (68) ?*How have you believed John for a long time now to have solved the problem

This is in significant contrast to the situation with the superficially similar particle construction:

- (69) What did you make John out to have said
- (70) How did the DA make John out to have committed the crime

In this construction, then, the infinitival out of which the subject raised remains in situ.

To conclude this brief examination of the English Accusative–Infinitive construction, I have provided an answer to the longstanding question of whether the

accusative subject remains in the complement clause or raises into the matrix clause. The answer is ‘yes’.

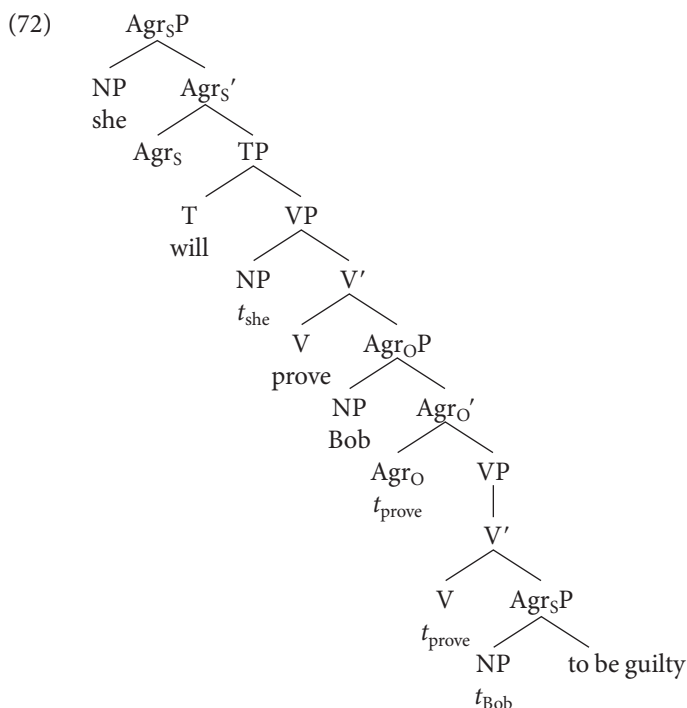
Appendix: What position does the accusative subject raise to?

In the text, I was vague about exactly what position the accusative subject raises to when it raises. The classic analyses had standard direct object position as the target of the movement, a reasonable possibility given the striking similarity in ‘surface’ behavior between ECM subjects and direct objects. However, this possibility has been called into question. For example Chomsky (1981) argues first, that object position must be thematic and second, that movement into thematic positions is always forbidden. Chomsky continues to maintain these two contentions, though the motivation for the latter is less direct now than it was then, since Chomsky’s current minimalist framework lacks deep structure (the linguistic level that transparently represented thematic relations). Lasnik and Saito (1991) suggest another kind of argument that raising is not to object position *per se*. As noted above, Lasnik and Saito developed Postal’s height arguments: An ECM subject, like a matrix direct object behaves as if it is higher than a matrix adverbial adjunct. That is, it can evidently c-command into such an adjunct. But under reasonable assumptions about clause structure, even direct object is not high enough to c-command into an adverbial adjunct. Thus, when we have high binding type effects, under those assumptions, even object raises. The null hypothesis is that object and ECM subject raise to the same higher position (a non-thematic-position, if Chomsky is correct).

An approach to these phenomena can be expressed in terms of raising of object and ECM subject and overt raising of V to a still higher position. The ‘split-VP’ hypothesis of Koizumi (1993) and Koizumi (1995), which I adopt in its essentials, provides the needed structure. This hypothesis, roughly, provides a separate VP for every argument of a verb. These multiple VPs are separated by functional projections, labeled Agreement projections by Koizumi, essentially following Chomsky (1991). The relevant portion of an ECM structure with raising is as in (71)–(72).

(71) She will prove Bob to be guilty

Here the matrix subject raises to Specifier position of the highest Agreement projection (Agr_S), the ECM subject raises to Agr_O , and the verb raises from its base V position to the higher V position (via Agr_O , for reasons that will not concern us here). If the adverbials are attached in the vicinity of the lower matrix VP (perhaps right adjoined to that VP), the binding and licensing seen earlier receive a natural account.



Notes

1. There is a potential interfering factor in (45) (a 'Condition B' non-coreference effect with the pronoun in the elided VP), which Lasnik and Saito (1991) control for by giving the modification in (i), in which *Bob* does not c-command into the elided VP.

(i) *Joan believes himi to be a genius even more fervently than Bobi's mother does

2. In fact, Chomsky argues that there is no A-movement reconstruction at all. See Lasnik (1999) and Lasnik (2001) for extensive discussion, including further arguments for lack of such reconstruction and consideration of arguments to the contrary.

3. Like *believe*, and unlike *want*, *expect* allows passive-raising:

(i) There is expected to be a storm

But unlike *believe*, and like *want*, *expect* allows a PRO subject of its complement:

(ii) Mary expects [PRO to solve the problem]

References

- Bach, E. 1974. *Syntactic Theory*. New York: Holt, Rinehart and Winston.
 Bresnan, J.W. 1972. *Theory of complementation in English syntax*. Doctoral dissertation, MIT, Cambridge, Mass.

- Chomsky, N. 1955. The logical structure of linguistic theory. Ms. Harvard University, Cambridge, Mass. and MIT, Cambridge, Mass. [Revised 1956 version published in part by Plenum, New York, 1975; University of Chicago Press, Chicago, 1985].
- Chomsky, N. 1973. Conditions on transformations. In *A festschrift for Morris Halle*, S. Anderson and P. Kiparsky (ed.), 232–86. New York: Holt, Rinehart and Winston.
- Chomsky, Noam. 1980. “On binding”. *Linguistic Inquiry* 11: 1–46.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1991. “Some notes on economy of derivation and representation”. In *Principles and Parameters in Comparative Grammar*, R. Freidin (ed.), 417–54. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1995. “Categories and transformations”. In *The Minimalist Program*, 219–394. Cambridge, Mass.: MIT Press.
- Johnson, K. 1991. “Object positions”. *Natural Language and Linguistic Theory* 9: 577–636.
- Kayne, R. 1985. “Principles of particle constructions”. In *Grammatical representation*, J. Guéron, H.-G. Obenauer, and J.-Y. Pollock (eds.), 101–40. Dordrecht: Foris.
- Koizumi, M. 1993. “Object agreement phrases and the split VP hypothesis”. In *Papers on Case and Agreement I: MIT Working Papers in Linguistics* 18, 99–148.
- Koizumi, M. 1995. *Phrase structure in minimalist syntax*. Doctoral dissertation, MIT, Cambridge, Mass.
- Langacker, R. W. 1969. “On pronominalization and the chain of command”. In *Modern Studies in English*, D. A. Reibel and S. A. Schane (eds.), 160–86. Englewood Cliffs, N. J.: Prentice-Hall.
- Lasnik, H. 1976. “Remarks on coreference”. *Linguistic Analysis* 2: 1–22. [Reprinted in *Essays on Anaphora*, H. Lasnik, 90–109. Dordrecht, Kluwer, 1989]
- Lasnik, H. 1999. “Chains of arguments”. In *Working Minimalism*, S. D. Epstein and N. Hornstein (eds.), 189–215. Cambridge, Mass.: MIT Press.
- Lasnik, H. 2001. “Subjects, objects, and the EPP”. In *Objects and Other Subjects: Grammatical Functions, Functional Categories, and Configurationality*, W. D. Davies and S. Dubinsky (eds.), Dordrecht: Kluwer Academic Publishers.
- Lasnik, H., and M. Saito. 1991. “On the subject of infinitives”. In *Papers from the 27th Regional Meeting of the Chicago Linguistic Society, Part I: The General Session*, L. M. Dobrin, L. Nichols, and R. M. Rodriguez (eds.), 324–43. Chicago Linguistic Society, University of Chicago, Chicago, Ill.
- Postal, P. M. 1974. *On Raising: One Rule of English Grammar and Its Theoretical Implications*. Cambridge, Mass.: MIT Press.
- Postal, P. M., and G. K. Pullum. 1988. “Expletive noun phrases in subcategorized positions”. *Linguistic Inquiry* 19: 635–70.
- Rosenbaum, P. S. 1967. *The grammar of English predicate complement constructions*. Cambridge, Mass.: MIT Press.
- Ross, J. R. 1967. *Constraints on variables in syntax*. Doctoral dissertation, MIT, Cambridge, Mass. Published as *Infinite Syntax!* Norwood, N. J.: Ablex (1986).
- Ross, J. R. 1974. “Three batons for cognitive psychology”. In *Cognition and the Symbolic Processes*, W. B. Weimer and D. S. Palermo (eds.), 63–124. Hillsdale, N. J.: Lawrence Erlbaum Associates.
- Rouveret, A., and J.-R. Vergnaud. 1980. “Specifying reference to the subject”. *Linguistic Inquiry* 11: 97–202.
- Zubizarreta, M. L. 1982. *On the relationship of the lexicon to syntax*. Doctoral dissertation, MIT, Cambridge, Mass.

CHAPTER 14

On the origin of non-nominative subjects

Anoop Mahajan

1. Introduction

The essential aim of this chapter is to address some theoretical issues concerning the distribution of non-nominative subjects. I will attempt to characterize the contexts that require non-nominative subjects. The results should be of interest to typological linguists since the relevant generalizations relate several syntactic factors, including word order, scrambling and null subjects. The results should also be of interest to theoretical syntacticians since the issue of why only certain languages and certain construction types license non-nominative subjects seems to be resolvable using some very general/universal principles of syntax. One of the outcomes of the proposal that I make is that we will not need any language specific or construction specific principles to account for cross-linguistic or language internal distribution of non-nominative subjects.

I first try to identify the nature of construction types that license non-nominative subjects. The relevant data comes from Hindi though similar data seems to be attested in many other languages. On the basis of this data, I suggest a generalization that appears to cover the relevant empirical domain for Hindi. I then examine at least three of these correlates: word order, scrambling and null subjects and outline a proposal that relates word order and non-nominative subject phenomena.

The most significant aspect of the proposal concerns a correlation between non-accusativity and the non-nominative subject phenomena. This correlation has not received much attention in any of the theories that deal with the relevant phenomena and I suggest that this correlation may play a significant role in bringing out the structural factors that lie behind the non-nominative subject phenomena. Furthermore, the treatment I outline here significantly reduces the role that lexical rules play in controlling the distribution of non-nominative subjects, thus reducing the 'quirkiness' of the phenomena in general.

2. Some non-nominative subject constructions in Hindi

There is a substantial amount of literature on non-nominative subject constructions in Hindi and in many other South Asian languages as well as languages outside South Asia. Verma (1976) and Verma and Mohanan (1990) contain many papers

that deal with such languages. I present below some of the relevant Hindi data below.

2.1. Ergative-subject constructions

These usually have a perfect participle transitive or unergative verbal predicate.¹

- (1) kabiir-ne vah kitaab khariidii
Kabir-ERG that book bought.PERF
'Kabir bought that book.'
- (2) kutte-ne dhiire-se bhōkaa
dog-ERG slow-with bark.PERF
'The dog barked softly.'

An obligational ergative construction is found in some northern Hindi varieties (see Masica 1990 for a description and distribution of this construction). The transitive predicate requirement that is found in the more common ergative constructions is missing in such constructions.

- (3) mē-ne jaanaa he
I-ERG go.INF/GER be.PRES
'I have to go.'

2.2. Dative-subject constructions

These are found in a variety of contexts. Most of these constructions have an experiencer subject.

- (4) mujhe sardard he
I.DAT headache be.PRES
'I have a headache.'
- (5) use kyaa huua
he.DAT what happened
'What happened to him?'
- (6) mujhe sab yaad he
I.DAT all remembrance be.PRES
'I remember everything.'

Another construction that allows dative subjects in Hindi is the obligational dative that looks very similar to the obligational ergative construction. There appears to be a subtle meaning difference between the obligational ergatives and obligational datives, perhaps involving a notion of subject control (see Masica 1990 and Davison 1990 for some relevant discussion).

- (7) mujhe jaa-naa he
 I.DAT go-*INF*/GER be.PRES
 'I must go.'

2.3. Locative-subject constructions

These can be formed using different locative markers like *-me*, *-paas* (requires a genitive) and *-par*.

- (8) us-me bahut taakat he
 he-in much power be.PRES
 'He has much power.'
- (9) us-ke-paas bahut kitaabē hē
 he-GEN-near many books be.PRES
 'He has many books.'
- (10) kabiir-par musibat aaii
 Kabir-upon difficulty come.PERF
 'Kabir got into a difficulty.'

2.4. Instrumental-subject constructions

These come in at least two varieties: the instrumental subject construction noted in Mohanan (1994) and the *active Passive* construction noted in Mahajan (1994a). The *active Passive* variety of this type of construction (12) does not require the capabilityative meaning.

- (11) kabiir-se gaayaa naahī jaa rahaa
 Kabir-INST sing.PERF neg go PROG
 'Kabir is not able to sing.'
- (12) *jikaariyō dwaaraa haathii maaraa gayaa
 hunters by elephant kill.PERF go.PERF
 'The elephant was killed by the hunters.'

2.5. Genitive subject constructions

These also come in at least two varieties, one of which has a standard kinship reading and the other does not.

- (13) us-kii tiin bēhənē hē
 he-GEN three sisters be.PRES
 'He has three sisters.'

- (14) *meraa yah sočnaa hε ...*
 I.GEN this thought be.PRES
 'I have this thought that ...'

This is not an exhaustive list of all the non-nominative contexts in Hindi. The examples here cover many of the contexts that appear in the relevant literature and form the core data that we can start with.

3. Towards a formal account

3.1. Non-accusativity

It has been understood to varying degrees in the literature on non-nominative subjects in Hindi that one can state some generalizations that go beyond listing what contexts require what kind of non-nominative subjects. For example, Pandharipande (1979) and Mohanan and Mohanan (1988) suggest that dative subjects (in Marathi and Malayalam) are associated with abstract semantic notions such as GOAL and POSSESSION. Mohanan (1994) presents a fairly comprehensive picture of the kinds of semantic notions that may be involved in the choice of several non-nominative subjects.

From what I have seen in the relevant literature, it is reasonably clear to me that there are clear links between the shape of the non-nominative case marker and some semantic property of the predicate in the relevant construction. It is also clear that given the non-interchangeability of the case markers (the dative of the dative-subject constructions cannot be swapped with any other oblique case), the shape of the non-nominative case morpheme must be characterized using abstract semantic notions (like GOAL, POSSESSION, CONSCIOUS CHOICE etc.) that have been used in the literature. However, it appears that there is a significant generalization that can cover most (if not all) the contexts in which non-nominative subjects appear in Hindi. All of the non-nominative subject contexts that I listed above lack an accusative-case assigner. That is, the constructions in which the non-nominative subjects appear lack a source for accusative case. I state this as a generalization below:²

- (15) Non-nominative subjects in Hindi arise only in non-accusative contexts.

A quick review of the relevant construction types indicates that the generalization in (15) may be on the right track. Ergative subjects arise in perfect participle constructions and perfect participles in Hindi (and perhaps generally) are arguably unable to assign an accusative case.^{3, 4} The obligational ergative construction lacks a source for accusative Case as well.⁵ *jaa* in (3) cannot assign accusative Case (it is arguably unaccusative in Hindi) and verb *be* does not license accusative either (accusative Case is standardly licensed by transitive verbs). A quick review of the dative-subject constructions reveals that most of these constructions lack a main verb. (7), which looks like (3), has a dative subject but the only verb, *jaa*, does not have an accusa-

tive Case. The locative subject constructions in (8) and (9) lack a verb (and *be* does not assign accusative). (10) has verb *aa* which is an unaccusative. The instrumental subject constructions in (11) and (12) contain perfect/passive participles and these participles are unlikely to be a source of accusative Case. The genitive subject constructions are usually nominal and they also lack a source of accusative Case.

I will assume that it is reasonable to proceed with the assumption that (15) holds to a significant degree in Hindi though it would obviously be desirable to catalogue all types of non-nominative constructions in Hindi and provide a more detailed analysis for each construction to check its validity. (15) is a somewhat surprising/puzzling generalization since it links the ability of a predicate to assign accusative Case with the presence of a non-nominative subject in the clause containing that predicate. Accusative Case is assigned to objects and it is unclear why this property should link up with the (form of the) case on subjects. In the next section, I outline a proposal that will deal with this correlation.

3.2. General proposal

I suggest that the non-accusative nature of non-nominative contexts holds the key to a proper understanding of non-nominative subject phenomena.

I will not argue against the idea that the actual shape of the non-nominative morpheme can be characterized using abstract semantic notions. Thus, I do not argue against the tradition represented by work of Pandharipande (1979) and Mohanan (1994). However, I suggest that we need to separate the structural conditions that license non-nominative case from the conditions that determine the actual morphological shape of the non-nominative case morpheme. Most of the literature in the relevant domain appears to conflate these two aspects of non-nominative case assignment. Most of the work that I have examined in this area captures the distribution of non-nominative subjects using lexical entries (or lexical rules). These entries/rules specify that a particular semantic property (or more than one semantic property) requires a specific non-nominative case. What I am suggesting is that a very general syntactic condition such as (15) is responsible for the fact that certain constructions require a non-nominative subject. The familiar rules that link the shape of the non-nominative morpheme (whether it is dative, locative etc.) with specific semantic features (such as GOAL etc.) can then step in. The role of such (linking) rules is then somewhat more limited than is commonly assumed. These rules simply specify the shape of the non-nominative morpheme.

When a context satisfies a structural description (formulated in the next section), a case morpheme X is attached to the subject, but the actual phonological shape of X is not specified by the syntax. One may think of this process as a process of preposition insertion (comparable to genitive insertion) where the phonological shape of the preposition is left unspecified by syntax. Thus, the non-nominative subject marker is a morpheme whose presence is required in particular (definable) syntactic contexts. The phonological shape of the morpheme is conditioned by the kind

of semantic generalizations that are standardly proposed in the relevant literature. This way of thinking allows us to capture what I think is a significant syntactic generalization covering most (if not all) of the non-nominative contexts.

4. The syntax of non-nominative subjects

In this section, I will propose somewhat more formally a rule that will specify the general context in which the non-nominative subjects originate. Then I ask the question whether these nominals are indeed subjects in a structural sense (be in Spec,TP) or whether they occupy a position that is distinct from the subject position.

4.1. Generating the non-nominative morpheme

The strategy I follow here is relatively straightforward. I examine the contexts where non-nominative subjects appear and then state a rule that cover all the relevant contexts. Following Mahajan (1994b), I will assume that the relevant rule has the following form:

- (16) In the configuration [_{XP} YP [_{X'} X ZP]], assign YP a non-nominative case marker if ZP, the complement of X, does not receive a structural Case from X.

This rule which is employed to deal with Hindi ergativity captures the non-accusative requirement. The transitivity requirement, implemented by the requirement of ZP complement of X, is somewhat more complicated. I discuss this to a limited extent below though a full treatment of this requirement would need a detailed analysis of each of the constructions and that is beyond the scope of this chapter.

Rule (16) handles the ergative-subject constructions straightforwardly. If the subjects in such constructions are merged as specifiers of perfect participles that have an object, we capture the essential distribution of the ergative subjects in Hindi.⁶ The obligational ergative subject construction requires further analysis. I will offer here a speculation concerning a possible underlying source for the ergative marker in such contexts. The relevant sentence is repeated below:

- (17) *mujhe jaa-naa he*
 I.DAT go-INF/GER be.PRES
 'I must to go.'

Assuming that the *naa* forms in Hindi are nominal in these contexts, I suggest the following structure for (17):

- (18) [_{VP} *me -ne* V_e [_{DP} PRO *jaanaa*]] *he*

Here, V_e would be an empty verb that takes a nominal complement headed by

jaanaa. V_e is the obligational empty verb incapable of accusative Case assignment. This provides the context that licenses the ergative *-ne* on the specifier. The ergative DP then moves to Spec, TP.⁷

The instrumental subject constructions cited earlier can perhaps be assimilated into our discussion (though there is a potential wrinkle that needs to be dealt with). The relevant cases are:

- (19) kabiir-se gaayaa nahī jaa rahaa
 Kabir-INST sing.PERF neg go PROG
 'Kabir is not able to sing.'
- (20) jikaariyō dwaaraa haathii maaraa gayaa
 hunters by elephant kill.PERF go.PERF
 'The elephant was killed by the hunters.'

The underlying structure for (20) would be very similar to the ergative construction, with the agent originating as a specifier of the non-accusative Case assigner *maaraa* and *haathii* as the relevant complement. (19) could potentially be treated the same way if one assumes that *gaanaa* 'to sing' is a transitive in (19) with a covert object. However, the facts are somewhat more complicated since *gaanaa* in (19) can be replaced with verbs such as *uthnaa* 'to get up' and *aanaa* 'to come'.

- (21) kabiir-se uthaa nahī gayaa
 Kabir-INST arise.PERF neg go.PERF
 'Kabir was unable to get up.'
- (22) tum-se aayaa nāā/nahī gayaa
 you-INST come.PERF neg go.PERF
 'You were unable to come.'

Interestingly, the *active Passive* constructions like (20) do not allow such predicates:

- (23) *jikaariyō dwaaraa aayaa gayaa
 hunters by come.PERF go.PERF
 'The hunters were unable to come.'

Given this, one could either remove the complement requirement from the rule of non-nominative case assignment to cover certain cases of oblique subjects or proceed with the idea that cases like (21) and (22) have additional structural details that make them consistent with the rule. If one were to pick the latter option (which I am inclined to do), one possibility would be to treat (21) and (22) as control constructions of the sort that I posit for the obligational ergative construction. The difference would be that in these cases the relevant head is a participle form (ending in *-aa*) rather than the infinitival/gerundive forms (ending in *-naa*). The null V that I suggested for the obligational ergative will be present here as well, but this time it will be associated with a meaning of INTERNAL ABILITY which appears to

characterize these constructions (Pandharipande, 1979; Mohanan, 1994). This proposal obviously needs to be worked out in more detail. Nevertheless, the general idea behind it should be clear.

Most dative-subject constructions, the locative subject construction and the genitive subject construction are nominal constructions. Given that nouns do not assign Case, the non-accusative requirement of the rule that we are working with is clearly met. However, not all the contexts that we have listed contain an obvious candidate to meet the complement requirement. Once again, one can either relax the complement requirement or try to reanalyze the relevant contexts in a way similar to the one I have suggested earlier. Just to take one example, let us look at one of the locative subject constructions repeated below:

- (24) us-ke-paas bahut kitaabē hē
 he-GEN-near many books be.PRES
 ‘He has many books.’

Given the possessive meaning of this sentence, a plausible structure underlying (24) would be:

- (25) [_{XP} us ke paas X_{poss} bahut kitaabē] hē

If X_{poss} (a covert head with possessive meaning) is a non-Case assigner, then this context becomes very similar to the ergative subject construction. The specifier of XP gets a non-nominative marker and the poss head gets to specify the actual shape of this morpheme.

I have outlined in this sub-section an approach that relates the inability to assign accusative Case to the licensing of non-nominative subjects. I cannot sketch out the detailed structural analysis of each of the non-nominative case constructions here, but I hope to have demonstrated that at least the non-accusative Case part of the characterization of non-nominative subject constructions is on the right track. The complement requirement (a transitivity requirement) clearly plays a role for the standard cases of ergativity but if one attempts to make this requirement general, we need to posit abstract structures that need to be further justified.

4.2. The shape of the non-nominative subject case morpheme

While the rule that I have formulated specifies the structural context in which non-nominative subjects receive a non-nominative case, nothing in the rule specifies the shape of the non-nominative case morpheme. I see no reason to dispute the commonly held view that the shape of the non-nominative morpheme is lexically stipulated using lexical linking rules. Thus, various ideas that have been mentioned earlier using notions such as GOAL, POSSESSION, CONSCIOUS CHOICE and INTERNAL ABILITY seem to me to be on the right track. I will therefore assume that the head X of rule (16) has the ability to stipulate the shape of the non-nominative case that it licenses on the DP in Spec, XP.

4.3. Subjecthood of non-nominative subjects

This is perhaps one of the most developed areas of investigation within the work on non-nominative subjects in South Asian languages. Many linguists working on South Asian languages have developed and used several tests that appear to establish that the non-nominative subjects of the sort that we have been dealing with are indeed subjects. Many of the papers in Verma (1976) and the work of Mohanan 1994 give extensive arguments for the subjecthood of various types of non-nominative subjects. The relevant tests include binding, control, pronominal obviation and deletion.

Most linguists who have worked on South Asian languages have assumed the validity of the claim that non-nominative subjects are indeed grammatical subjects. Equating the notion of grammatical subject with the structural position Spec, TP, one could assume that the tests that have been used in the relevant literature show that the non-nominative subjects occupy the Spec, TP position in the surface structure of the relevant sentences.⁸ Jayaseelan (1990) proposes an alternative using the Malayalam dative subject construction. Jayaseelan's point is that it is conceivable that the so-called dative subjects are scrambled non-subject arguments. The relevant analysis is sketched below in (27) for a sentence like (26).

- (26) enik'kə talaweedana wannu Malayalam
 I-DAT headache.NOM come.PAST
 'I got a headache.'

- (27) [_{TP} enik'kə_i [_{TP} pro [_{VP} t_i talaweedana war]]]

The general idea is that the so-called dative subject in Malayalam constructions like (26) is an argument of the noun 'headache' and it is base generated internal to the VP containing this noun (the dative on this argument is licensed inside the VP in an unspecified manner). However, it does not occupy the Spec, TP position in the derived structure as is commonly assumed but it is in a TP-adjoined position. The Spec, TP position is occupied by a pleonastic pronoun. In Malayalam, this would be a pleonastic pronoun that is phonetically null. Thus, the central proposal here is that non-nominative subjects are not subjects in the usual sense. This is an interesting proposal though it remains to be shown whether this proposal could be generalized to other contexts/languages. I will come back to some of the relevant issues in the next section.

5. Some formal issues

In this section, I want to address several issues that the proposal I have sketched in the previous section raises, beginning with the non-accusativity restriction. I then discuss the correlation between scrambling, word order and non-nominative subjects.

5.1. Non-accusativity again

While we can write rules whichever way we want, it is reasonable to look for generalizations that may be lurking behind those rules. In the present context, I want to ask why non-accusative case assignment should underlie the non-nominative subject phenomena. In my previous work (Mahajan, 1994a,b, 1997), I used a proposal by Marantz (1991), generalizing it somewhat to fit my requirements. Marantz's proposal was formulated to cover ergative case (as a specific instance of what he called 'dependent case'). As it stands, Marantz's proposal, as well as my proposal, is stipulative. Let me try and state the intuition behind this stipulation. The intuition that I am following is that if a predicate takes two arguments, it tries to distinguish between the two using a single instance of case assignment. The first possibility is that the predicate assigns an accusative to its internal argument and leaves the other argument unmarked. This is what happens with standard transitive verbs. The internal argument gets an accusative and the source of that accusative is the transitive verb. The verb leaves the higher argument unmarked and that argument gets a Case higher up in the structure (usually nominative Case from finite T). The second possibility is that the predicate lacks the ability of assigning accusative (this would be specified lexically, an assumption that is now somewhat standard). The predicate then marks its subject with case leaving the object unmarked. These would be the contexts that give us non-nominative subjects. The case assigned to the subject is not accusative. The object in such a context will be left unmarked and it will then get a Case higher up in the structure. This case is also nominative in many of the examples that we have seen.⁹ The accusative/non-nominative marking is thus a way of establishing an opposition and is why the two seem to be interacting in the way that they do.¹⁰ Thus, the object accusative and the subject oblique are ways of establishing an opposition in transitive contexts. This way of thinking about case/Case is not standard within the principles and parameters approach, which has lacked a satisfactory way of dealing with oblique case phenomena in general.

5.2. Unaccusativity and the pleonastic pro

I now try to relate my overall proposal to Jayaseelan's account that I outlined in the previous section. A crucial ingredient of Jayaseelan's proposal is that the subject position in the dative-subject constructions in Malayalam is occupied by a pleonastic pro, a non-thematic nominal. We know from Burzio's Generalization that the property of non-accusative assignment by a predicate correlates with the inability of that predicate to assign an external theta role. This correlation seems to hold in the analysis that Jayaseelan suggests (though he does not explicitly bring up the correlation). Thus, if Burzio's Generalization is indeed taken to be valid, then one is tempted to adopt a version of Jayaseelan's proposal for non-nominative subjects since that proposal seems to relate the two facets of Burzio's Generalization. My own proposal does not make this link directly and in fact I have argued elsewhere that

Burzio's Generalization does not hold in ergative and *active Passive* constructions in languages like Hindi (Mahajan, 2000).

There is however a complication that arises if we pursue Jayaseelan's idea. Burzio's Generalization was formulated before VP-internal subjects became commonly accepted. Jayaseelan's proposal does not deny that the dative DP is not a VP internal subject (the dative nominal appears to occupy the Spec, VP position in the structure that Jayaseelan posits). It denies that this dative DP moves to Spec, TP, that position being occupied by an expletive *pro*. Thus, if we bring Burzio's Generalization into the equation, we have to state it in such a way that the correlation is between the non-accusativity and the inability of a DP in Spec, TP to get a theta role. However, given that Spec, TP is quite generally taken to be a non-thematic position these days, it is not clear what this would really mean. In fact, in a footnote, Jayaseelan considers an analysis of the construction where expletive *pro* is absent making the dative argument the only daughter of IP (the node equivalent to our TP) under the idea that the IP adjoined dative is the only DP dominated by the IP. The relevant structure that he entertains appears in (28)

- (28) [_{TP} enik 'k'ə_i [_{TP} [_{VP} t_i talaweedana war]]]

This obviously brings Jayaseelan's analysis very close to the standard analysis of non-nominative subject constructions if one assumes the VP-internal subject hypothesis. The only difference is that in Jayaseelan's analysis the surface subject is adjoined to TP and is not a specifier of TP. If one further eliminates the adjunct/specifier distinction (along the lines suggested by Kayne, 1994) then Jayaseelan's analysis is in fact not very distinct from the standard approaches at all: the dative subject is base-generated as Spec, VP (VP-internal subject) and is moved to the SPEC/Adjoined TP position.

One could potentially try to rebuild the analysis, and along with it, the correlation captured by Burzio's Generalization, by claiming that there is an expletive *pro* in the VP-internal subject position in dative-subject constructions in Malayalam and that this *pro* moves to the Spec, TP position with the dative never occupying either the Spec, TP or the Spec, VP positions. The relevant structure would then look as in (29):

- (29) [_θ enik 'k'ə_i [_{TP} *pro* [_{VP} t_{pro} t_i talaweedana war]]]

This solution is perhaps not satisfactory since it places a non-thematic DP within the VP, which is often argued to be a thematic domain (only thematic features are checked for DPs inside the VP).

Furthermore, I take the results of the subjecthood tests that works like Mohanan 1994 to indicate the structural position of a nominal. That is, if the tests are positive for a nominal then this nominal must occupy a subject position, Spec, VP or Spec, TP, somewhere in the derivation. If the dative argument does not occupy the relevant subject position (either as Spec, VP or Spec, TP) it would be unclear why the subjecthood tests work the way they do.¹¹

5.3. Scrambling, word order and non-nominative subjects

The rule that fronted the dative DP to the left edge of the sentence in Jayaseelan's analysis was a rule of scrambling, prompting him to suggest a correlation between scrambling and the dative subject phenomena. In Mahajan (1994b), I tried to correlate the ergative subject phenomena with word order. The general idea that I pursued was that the absence of ergativity in SVO languages may be a significant fact and that SVO languages simply lack the configurations that facilitate the surfacing of ergative subjects. The assumption was that the underlying configurations that license ergative case marking may be available in many (if not all) languages. However, the derivations from underlying input to surface structures in SVO languages are responsible for the suppression of ergative case marking in these languages. I would like to pursue this idea for all non-nominative subject constructions.

Most work on non-nominative subjects in South Asian languages seems not too concerned about the issue of missing dative subjects in languages like Modern English and French. It would appear that the common assumption, when it comes to comparing languages like Hindi/Malayalam with English/French, is that the rules that insert non-nominative subjects are parameterized. Thus, if one formulates the rule of ergative case assignment using a feature such as CONSCIOUS CHOICE, one would have to claim that this feature does not trigger ergative case assignment in French while it does so in Hindi. Since such rules are stated as lexical rules, it is easy to see that such a move is not hard to make.

I will however pursue a different line, and in agreement with works such as Jayaseelan (1990), I would like to investigate whether the correlations such as scrambling and word order are significant in the distribution of non-nominative subjects and, if they are, why they should hold.

Mahajan (1994b) suggests that ergative case licensing is more wide spread than is commonly assumed and that it is conceivable that languages like Italian are ergative as well. The suggestion was that the rule that licensed the ergative case marker is a universal rule of the form that we have already seen. Thus, an ergative case marker is licensed in the contexts specified by our rule in a language like Italian as well. However, in Italian, the ergative case marker is incorporated into the auxiliary verb *be* since this case marker and the auxiliary *be* are adjacent. This is facilitated by the verb-medial order of Italian. The relevant parts of the structure (massively simplified) of Italian and Hindi (greatly simplified) are given below:

(30) Italian ... *be* [erg-DP

(31) Hindi DP-erg ... Object ... [... *be* ...

While it is not possible to go into the relevant details at this point, it should be obvious that in (30), at a stage prior to the subject moving into Spec, TP, auxiliary *be* in Italian is adjacent to and governs the ergative DP. This facilitates erg incorporation into *be* (yielding *have*).¹² Given Hindi word order, this incorporation is not allowed and therefore the ergative marker surfaces in the relevant constructions in Hindi

but not in Italian. Thus, the presence of *have* (as opposed to *be*) in past participle constructions in Italian is indicative of Italian having ergativity except for the fact that the ergativity gets stripped away during the syntactic derivation.

It is not clear to me if the correlation between SOV word order and the presence of non-nominative subjects is significant (ignoring Icelandic which is an obvious exception). If it turns out that the correlation is significant, one may try to expand the proposal made for ergative subjects to all non-nominative domains. The adposition incorporation proposal, of which ergative case incorporation in Italian is a subcase, seems to have some surface appeal since many *be-have* alternations in languages like English correspond to the ergative-nominative subject alternation in Hindi. One just has to look at the translations of the non-nominative subjects that we have seen so far to verify the plausibility of this idea. A couple of relevant contexts are repeated here:

- (32) us-meẽ bahut taakat he
 he-in much power be.PRES
 ‘He has much power.’
- (33) mujhe sab yaad he
 I.DAT all remembrance be.PRES
 ‘I remember everything.’

It is not the purpose of this chapter to defend the proposal that *have* of Germanic/Romance encodes an underlying non-nominative subject that surfaces as a non-nominative subject in many SOV Indo-European languages. However, one can see the direction in which this proposal would take us (see Mahajan, 1994 for a detailed discussion of this topic).

As for the scrambling and non-nominative correlation, one possibility is that given the fact that SOV languages generally have scrambling, the actual correlation is between SOV and non-nominative subjects (and scrambling simply happens to be available quite generally in SOV languages). The other possibility would be that the correlation is much more direct. If my proposal concerning *have* as an oblique case incorporator is on the right track, one could presumably tie scrambling and non-nominative subjects using Jelinek’s (1984) proposal concerning free word-order languages (but see Baker (1996) for important discussion). Under a Jelinek type proposal, the non-nominative subjects (as well as other usual arguments) would occupy adjunct positions (in the type of languages that we are interested in). Therefore, incorporation of the non-nominative case morpheme into a verbal head (like *be*) would simply not be possible since one cannot incorporate out of adjunct phrases. In the type of analysis I am developing here, a Jelinek type proposal could be implemented in the following manner. The arguments of a predicate are base-generated inside the VP in order to make the rule of non-nominative case assignment work (this is not what Jelinek (1984) suggests, though this is parallel to suggestions that are sometimes made for clitic doubling constructions). These

VP-internal arguments then move directly into adjunct positions blocking the possibility of incorporation later in the derivation. Obviously more work is needed to make this sort of idea work.

6. Conclusion

I have suggested that there is a sense in which the non-nominative subject phenomena is unitary in that the essential context within which all sorts of non-nominative subject constructions arise is specifiable uniquely and syntactically. Semantic information is not required to specify the contexts where one would expect to find non-nominative subjects though it plays a role in specifying the shape of the non-nominative morpheme. I have suggested that transitivity and non-accusativity are two key ingredients that go into formulating the rule that will cover the distribution of non-nominative subjects. Furthermore, I think that there may be a correlation between word order and non-nominative subject phenomena or scrambling and non-nominative subject phenomena. Lastly, if the approach outlined in this chapter is on the right track, one would want to look for non-nominative subjects in all sorts of languages since the rule formulated is not language or construction specific. If a particular context in a language meets the non-nominative subject rule specification and that context does not exhibit a non-nominative subject, then the non-nominative case morpheme would be presumed hiding (incorporated somewhere else in the structure). I have suggested an outline of such an approach (*have* as hiding the non-nominative morpheme) that seems to be a plausible starting point for such investigations.

Notes

1. Abbreviations used: DAT: dative; ERG: ergative; GEN: genitive; GER: gerund; INF: infinitive; INST: instrumental; PERF: perfective; PRES: present; PROG: progressive.
2. I do not use the term 'unaccusative' for this purpose since that term is usually used to cover a class of verbs with specific syntactic and semantic properties. The term non-accusative used here is meant to cover transitive contexts with a missing accusative Case. Unaccusatives are intransitives that do not assign accusative to their (only) argument.
3. See Hoekstra (1984; 2000) and Mahajan (1997) for some relevant discussion.
4. I do not treat the *-ko* object marker of Hindi as an accusative marker. I use the term 'accusative' as a form of structural Case that is assigned in a particular structural context by a verb. As is often suggested, Hindi object marker *-ko* has a semantically definable distribution (linked to notions such as 'specificity').
5. The relevant structure underlying the obligatory ergative construction is unclear. One possibility is that the structures that underlie these constructions are complex control structures. I discuss this later.

6. I am making the now standard assumption that unergatives are covert transitives. For Hindi, this suggestion was made in Mahajan (1987) to deal with ergative subjects in some intransitive domains. See also Hale and Keyser (1993).
7. The proposal that the obligational empty verb does not assign an accusative Case is a stipulation. The structure suggested in (18) also needs to be justified. I follow here the strategy of letting the rule decide the structure though one obviously needs to find independent justification for the proposed structures.
8. That Spec, IP/TP = grammatical subject is not assumed by every linguist who has worked on non-nominative subjects.
9. The nominative Case on the object is somewhat of a puzzle. The issue has been addressed to a limited degree within the P&P approaches. For Hindi ergative constructions, Mahajan (1987) suggests that the nominative objects get their Case from finite I (thus there is a unique source for nominative) and thus objects in nominative object constructions are structurally higher than they may be in nominative subject constructions. Certain scope facts briefly discussed in Mahajan (1987) appear to support this idea. Ura (1996) follows the minimalist approach (cf. Chomsky, 1995) in developing a feature checking proposal whereby the nominative on the objects in nominative object constructions can be licensed without the requirement of object movement. There is an obvious connection between many of the non-nominative subject contexts and many nominative object contexts, though there is relatively little in the P&P literature that explains this connection.
10. If accusative and non-nominative case marking is seen as a way of establishing a distinction between two arguments of a predicate, one can perhaps get an insight into the Case marking property of unaccusatives. The fact that unaccusatives do not assign accusative Case is a bit of a puzzle. It is unclear why whatever semantic properties unaccusatives have should correlate with the inability of unaccusatives to assign accusative to the arguments they take. Furthermore, it is also unclear why a set of verbs (even if the set is semantically characterizable) should, as a class, lack the accusative Case assigning property. Under the view that accusative is a Case used to establish an opposition between two arguments of a predicate, the solution to this puzzle is straightforward. Unaccusatives have only one argument, so no opposition needs to be established. Therefore, accusative Case assignment is not required (therefore not available) for the only argument of the unaccusatives. The Case property (lack of accusative Case) of unaccusatives, under this view, is therefore a simple reflex of their intransitivity. This idea by itself does not tell us why some transitives (like passive participles) do not assign an accusative Case, but does indicate why unaccusatives do not. If the Jaeggli (1986) and Baker, Johnson and Roberts (1989) approaches are on the right track then an accusative Case is available in passive contexts (but is absorbed by the *-en* morpheme). Given this, it is tempting (but perhaps premature) to correlate the availability of accusative Case to structural transitivity.
11. Jayaseelan (1990) is aware of the issue and uses the Malayalam *taan* to sketch out a proposal that could deal with binding properties of dative subjects in Malayalam. The comparable issues are somewhat complicated in Hindi. For some dialects of Hindi, the reflexive binding test and the pronominal obviation tests clearly indicate that some oblique subjects are in Spec, TP as opposed to any A or A-bar position. However, in some other cases, the results seem to support Jayaseelan's approach. For instance, I find a difference between dative/locative subjects and ergative subjects with respect to pronominal obviation test. Thus, unlike Mohanan (1994), I find the following acceptable:

- (i) raam_i-par uske_i bhaa_{ii} ka bhaar he
 Ram-upon his brother GEN burden be.PRES
 'Ram has his brother's burden on him.'
- (ii) raam_i-ko uske_i bhaa_{ii} par gussa aayaa
 Ram-DAT his brother on anger came
 'Ram got angry at his brother.'

Examples (i) and (ii) are acceptable when compared to:

- (iii) *raam_i uske_i bhaa_{ii} par gussaa huua
 Ram.NOM his brother on anger be.asp
 'Ram got angry at his brother.'

Ergative subjects behave like nominatives for the obviation test:

- (iv) *raam_i-ne uske_i bhaa_{ii} par gussaa kiyaa
 Ram-ERG his brother on anger do.PERF
 'Ram became angry at his brother.'

It is clear that dative/locative subjects must be distinguished from ergative subjects with respect to pronominal obviation. To the extent that Jayaseelan treats dative subjects as adjoined oblique arguments, the obviation test supports his proposal (for Hindi). However, the reflexive binding facts in many languages (including many dialects of Hindi) that have subject-oriented reflexives are more consistent in identifying the oblique subjects as subjects. While it is not possible to get into the relevant details here, it is possible that although non-nominative subject constructions 'start off' within the VP in a similar way, not all non-nominative subjects end up in exactly the same position.

12. It is often suggested that *have* has an accusative Case as opposed to *be* which does not have an accusative assigning property (cf. Hoekstra, 1984). If *have* and *be* are underlyingly the same as has been suggested by many linguists, then one could ask about the origin of the accusative Case of *have*. The proposal outlined here, which is related to a similar proposal in Hoekstra (2000) has something to offer: the accusative of *have* comes from the (subject) non-nominative morpheme. If one thinks of this morpheme as an adposition (this is how it appears in many languages) and adpositions as being a source of structural case, then incorporation of this adposition into *be* (yielding *have*) provides a ready source for the accusative of *have*.

References

- Baker, M. 1996. *The Polysynthesis Parameter*. New York and Oxford: Oxford University Press.
- Baker, M., K. Johnson and I. Roberts. 1989. "Passive Arguments Raised". *Linguistic Inquiry* 20: 219–51.
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Davison, A. 1990. "Comments on the Papers by Elena Bashir, Peter Hook, Colin Masica, and Arlene Zide". In: *The Notion of Subject in South Asian Languages*, M.K. Verma and K.P. Mohanan (eds), 355–63. Madison, Wisconsin: South Asian Studies, University of Wisconsin.

- Hale, K. and S. Keyser. 1993. "On Argument Structure and the Lexical Expression of Syntactic Relations". In: *The View from Building 20*, K. Hale, K. and S. Keyser (eds), 53–109. Cambridge: MIT Press.
- Hoekstra, T. 1984. *Transitivity*. Dordrecht: Foris Publications.
- Hoekstra, T. 2000. "The Nature of Verbs and Burzio's Generalization". In: *Arguments and Case*. E. Reuland (ed), 57–78. Amsterdam and Philadelphia: John Benjamins.
- Jaeggli, O. 1986. "Passive". *Linguistic Inquiry* 17: 587–622.
- Jayaseelan, K. A. 1990. "The Dative Subject Construction and the Pro-drop Parameter". In: *The Notion of Subject in South Asian Languages*, M. K. Verma and K. P. Mohanan (eds), 269–84. Madison, Wisconsin: South Asian Studies, University of Wisconsin.
- Jelinek, E. 1984. "Empty Categories, Case and Configurationality". *Natural Language and Linguistic Theory* 2: 39–76.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge: MIT Press.
- Mahajan, A. 1987. "Agreement and Agreement Phrases". MIT Generals Paper.
- Mahajan, A. 1994a. "ACTIVE Passives". *Proceedings of WCCFL 13*: 286–301.
- Mahajan, A. 1994b. "The Ergativity Parameter: have-be alternation, Word Order and Split Ergativity". *Proceedings of NELS 24*: 317–31.
- Mahajan, A. 1997. "Universal grammar and the Typology of Ergative Languages". In: *Studies in Universal grammar and Typological Variation* [Linguistik Aktuell 13], A. Alexiadou and T. A. Hall. (eds), 35–57. Amsterdam and Philadelphia: John Benjamins.
- Mahajan, A. 2000. "Oblique Subjects and Burzio's Generalization". In: *Arguments and Case*. E. Reuland (ed), 79–102. Amsterdam and Philadelphia: John Benjamins.
- Marantz A. 1991. "Case and Licensing". *Proceedings of ESCOL 8*: 234–53.
- Masica, C. 1990. "Varied Case Markings in Obligational Constructions". In: *Experiencer Subjects in South Asian Languages*, M. K. Verma and K. P. Mohanan (eds), 335–42. Stanford: CSLI.
- Mohanan, T. 1994. *Argument Structure in Hindi*. Stanford: CSLI Dissertations in Linguistics.
- Mohanan, K. P. and T. Mohanan. 1988. "Dative Subjects in Malayalam: Semantic Information in Syntax". Paper presented at a conference on Experiencer Subjects in South Asian Languages. University of Wisconsin, Madison.
- Pandharipande, R. 1979. "Passive as an Optional Rule in Hindi, Marathi and Nepali". *South Asian Language Analysis* 1: 89–106.
- Ura, H. 1996. *Multiple Feature Checking: A Theory of Grammatical Function Splitting*. Ph.D. dissertation. MIT.
- Verma, M. K. (ed.) 1976. *The Notion of Subject in South Asian Languages*. Wisconsin: South Asian Studies, University of Wisconsin.
- Verma, M. K. and K. P. Mohanan (eds.) 1990. *Experiencer Subjects in South Asian Languages*. Stanford: CSLI.

CHAPTER 15

Southeast-Asian languages

A case for the caseless?

Makoto Minegishi

1. Introduction

Most of discussions in linguistics, whether traditional or modern, when treating case-marking and its semantic role in syntactic structures, share a common view that the existence of the case as part of the linguistic universals is taken for granted. For example, according to Matsumoto (1991), Pāṇinian Sanskrit grammar discusses 'kāraṇa' (semantic role) of a nominal argument which is substantialized as 'vibhakti' (morphological case marking) in relation to its predicate. Both the case grammar by Fillmore and Chomsky's discussions on case assignment assume the existence of case in the deepest semantic or syntactic level of languages.

However, these discussions seem to neglect the existence of 'isolating' languages, which are spoken mainly in the mainland Southeast Asia and East Asia. These languages have no case marking nor any inflection. They have, therefore, been 'isolated' in the discussions on linguistics. The aim of this chapter is to present a view from the opposite side of the world: a case for the caseless, by taking examples of Thai and Khmer (Cambodian).

In the following section, we will see firstly a brief grammatical sketch of these languages. Their syntactic characteristics, such as basic word order, topic-prominency in relation with ellipsis, semantic roles of verbal complement are outlined. In these languages, the same complement position directly after the verb bears various semantic roles: patient, object, goal, and instrument of an event according to the lexical meaning of verbs and nouns.

Then, a new type of formalization suitable for describing the serial verbs in the isolating languages will be proposed: a non-hierarchical **centipede model** $\text{Pred}_1 (C_1, (C_2)), \text{Pred}_2 (C_3, (C_4)), \text{Pred}_3 (C_5, (C_6)), \text{Pred}_4 (C_7, (C_8)), \dots$ contrasted to a **cephalopod model** $\text{Pred}(\text{Case}_1, \text{Case}_2, \text{Case}_3, \text{Case}_4, \text{Case}_5, \text{Case}_6, \text{Case}_7, \text{Case}_8)$ for the case marking languages.

In view of the significance of serial verb construction in these languages, a formalization is proposed for the semantic representation of an event as a whole and its mapping into the syntactic level.

As the syntactic level, a cephalopod model for case-marking languages and a centipede model for isolating languages are proposed, whose possibility is further suggested to be generalized into the multiple predicate model.

Finally, we will see that the differences in the two models are superficial in that both centipede and cephalopod models can be special cases of a more generalized **multiple predicate model**, $\text{Pred}_n(\text{Arg}_1, \text{Arg}_2, \dots \text{Arg}_m)$.

2. Thai and Khmer as isolating languages

Mainland Southeast Asia and East Asia form a language area where Sino-Tibetan, Mien-Yao, Tai-Kadai, Mon-Khmer languages are concentrated. Among them, Thai (Siamese) belongs to Tai-Kadai language family, Khmer to Mon-Khmer, a subgroup of the Austroasiatic language family. In spite of the genetic difference, Thai and Khmer share various syntactic characteristics, partly because they have had a long history of contact, and partly because they are both classified as ‘isolating’ language type according to the traditional typology.

An outline of Thai and Khmer is given below.¹

2.1. Outline of the languages

2.1.1. *Word-order principles*

Both Thai and Khmer are isolating languages: they have no declension nor case marking. Thus, according to the notation by Comrie (1989), both are languages whose case marking for S, A, P is ‘neutral’, where S denotes the subject of the intransitive predicate, A the actor and P the patient of the transitive one, respectively.

In Thai and Khmer, the subject generally precedes the verb, forming SV word order in the sentence with the intransitive predicate.

- (1) chán pay
kɲom tàv
1sg go
I go.

Thai
Khmer

As both languages have no syntactic agreement, word order is the only way to distinguish A and P in the sentence with the transitive predicate. Compare the following examples.

- (2) chán tii kháw
kɲom vèəj kɔət
1sg hit 3
I hit him.

Thai
Khmer
- (3) kháw tii chán
kɔət vèəj kɲom
3 hit 1sg
He hit(s) me.

Thai
Khmer

In these cases where both A and P are explicitly represented, general word order is AVP. Also, it should be noted here that time is not denoted as a grammatical category, but is usually represented by lexical adverbs like ‘yesterday’, ‘today’ or ‘tomorrow’, etc. or is understood by the context. In the above cases, time of the occurrence of the events could be either past, present or future depending on the context. Besides, there are three principles in word order in these languages.

Head–Modifier Principle: The head of a noun phrase precedes the modifying noun or the adjective.

Numeral–Classifier: The numeral may be followed by the classifier.

Thai has rich number of classifiers, whereas Khmer has very few of them. In case we regard the classifier as a kind of modifier of the numeral, this principle would be included in the ‘Head-Modifier’ principle.

Preposition–Noun: The preposition precedes the noun to form prepositional phrase, although most of the prepositions in these languages would be regarded as ‘grammaticalized’ nouns or verbs. The prepositional phrases have therefore structures similar to a compound noun phrase made of ‘noun-noun’, or a verb phrase ‘verb-patient’. Consequently, the order of the prepositional phrase follows the ‘Head-Modifier’ principle.

If we regard the patient of the transitive predicate as a modifier of the predicate, VP structure would conform to the ‘Head-Modifier’ principle. According to the characteristics given above, those languages may look like a French minus its conjugation and agreement. We will see below how they are different from European languages in general.

2.1.2. *Topic prominency*

Thai and Khmer are ‘topic prominent languages’: a topic is placed at the beginning of the sentence, with or without any topic marker. Thus, the following sentences are all acceptable under proper contexts. Note that the topic of each sentence is underscored and that an optional element is shown in parentheses.

- | | | |
|-----|--|-------|
| (4) | khàw rian phaasāa yīpùn thīi nīi | Thai |
| | kəət riən phèəsaa capon nəv kənlaen̄ nih | Khmer |
| | 3 learn language Japanese at place this | |
| | He learns Japanese language here. | |
| (5) | phaasāa yīpùn khàw rian thīi nīi | Thai |
| | phèəsaa capon kəət riən nəv kənlaen̄ nih | Khmer |
| | language-Japanese 3 learn at place-this | |
| | As for Japanese language, he learns here. | |
| (6) | thīi nīi khàw rian phaasāa yīpùn | Thai |
| | (nəv) kənlaen̄ nih kəət riən phèəsaa capon | Khmer |
| | (at) place this 3 learn language Japanese | |
| | Here he learns Japanese language. | |

The word order of the sentences above is almost fixed from the viewpoint of discourse informational structure. The topic is placed at the sentence initial position, which is followed by the comment in which the positions of the nominal constituents indicating the agent, the object and the place in the predicate phrase are fixed.

Topic functions as a 'reference point' in discourse information, as to which other information is added. In most cases, a noun phrase is selected as a topic among the 'old' information which is easily accessible via its preceding context, or the common knowledge shared by the speaker and the hearer.

In other cases, adverbs or prepositional phrase are selected as a topic which functions as a 'scene setter' indicating a new time and/or space, regarding which the following comment is given.²

2.1.3. *Ellipsis or absence of information*

In topic prominent languages, the existence of a topic in a sentence is significantly related with the so-called 'ellipsis', absence of some information that is obviously understood by both the speaker and the hearer.

The absence of the topic in a sentence indicates that the reference point of the sentence is in the previous sentence; therefore we should refer to the previous sentences in order to know as to what the following comment is given about. It follows that the absence of the topic in itself has a cohesive function in the discourse to indicate that the previous topic is continuously effective in the current utterance. In other words, the absence has the same anaphoric function as explicit pronouns do in other languages.

In Thai and Khmer, the following question without explicit subject is naturally accepted when the speaker asks the hearer whether the latter has an intention to go, because the subject of the action is reconstructable due to the common knowledge that a question is mostly made by the speaker to the hearer whose intention is usually not apparent to the speaker, and that speaker obviously knows his own intention.

- | | | |
|-----|--------------|-------|
| (7) | pay máy? | Thai |
| | tàv tèe? | Khmer |
| | go INT | |
| | Will you go? | |

In the following case where the subject is explicitly given as the topic, the subject has a connotation that 'as far as he or she is concerned'.

- | | | |
|-----|---|-------|
| (8) | khun pay máy? | Thai |
| | nèak tàv tèe? | Khmer |
| | 2 go INT | |
| | Will you go? (apart from the other person.) | |

As for the absence of any information in the comment, it also has a cohesive function that the information without any overt linguistic form should be identified from the previous context or from the common knowledge.

Thus in both topic and comment, the absence of any information in a sentence has a positive function that there is some information shared in the communication that is not overtly expressed, which should be accessible via the previous context or via the common knowledge. The absence should not be regarded as the ellipsis of any linguistic form such as pronouns or definite noun phrase, since some information must be reconstructed from the common knowledge that has not appeared in the previous context. Also the function of the absent information can explain why some topic prominent languages such as Japanese lack determiners marking the definiteness of a linguistic form: simply they are not necessary ‘in the presence of absence’.

Conversely, in case that part of information is explicitly given that is already accessible by either the preceding context or by the common knowledge, it would bear a special connotation that the ‘psychologically repeated’ information has a meaning of special focus contrasted to the preceding context. The function of absence and psychological repetition of information in the discourse can be generalized as follows:

(9) *Principle of Absent Information*

Avoid repetition, overt or psychological, so as not to add unnecessary connotation of contrast.

Thus, in case of replying to the above questions (7) and (8), the subject should not be given to avoid unnecessary connotation ‘as far as I am concerned’. Obviously the repetition of the verb is the exception to this principle, for not repeating any given information would result in mere silence, not a meaningful reply.

- | | | |
|------|---|---------------|
| (10) | pay
baat, tɔ̀v
yes go
Yes I will (go). | Thai
Khmer |
|------|---|---------------|

2.2. Verb and complement structure

In modern European languages such as English or French, ‘direct object’ directly follows the transitive verb without any case marker. In typical cases, the direct object denotes a patient of an action shown with the verb. This is also the case with Thai and Khmer as has already been shown in (2) and (3). But in the isolating languages a verb is followed directly by a noun phrase with different semantic roles: there is no one-to-one relationship between the syntactic position and the semantic role. It would therefore be appropriate to describe the noun directly after the verb as its ‘complement’, using the more general and transparent term. Consider the cases below.

2.2.1. *Goal or Instrument*

- (11) pay nakhɔɔn wát Thai
 tən ʔəŋkɔɔ vət Khmer
 go Angkor Wat (PropN)
 (I) go to Angkor Wat.
 (I/you/we/they, go/went/will go, to Angkor Wat, according to the context.)

In (11) the complement of the verb ‘to go’ is GOAL of the action. It should be noted that the sentence without any complement such as (1) is also acceptable. Therefore it would not be a proper description if we think the verb is used as ‘transitive’ one in (11) and as ‘intransitive’ one in (1). We should think that the same verb is used with or without a complement according to the context. The existence or absence of the complement (or incomplete or complete usage of a verb) can be explained by the principle of absent information (9), therefore not to be regarded as subcategories of verbs. Remember also that the distinction between ‘transitive’ and ‘intransitive’ verbs is generally supported with the existence of the case marking system. In the case of isolating languages, the use of such terminology would bring unnecessary complexity in language description.

The complement of the verb can also denote INSTRUMENT of an action as follows.

- (12) pay rɔtmee Thai
 tən laankroŋ Khmer
 go bus
 (I) go by bus. (I/you/we/they go/went by bus, according to the context.)

Sentences (11) and (12) cannot be considered as examples of sentences whose complement is deleted. Consider the following cases which show that there is a constraint as to the number of the complements: only one complement is allowed to one verb.

- (13) *pay nakhɔɔn wát rɔtmee Thai
 *tən ʔəŋkɔɔ vət laankroŋ Khmer
 go Angkor Wat bus
 (I) go to Angkor Wat by bus.
- (14) *pay rɔtmee nakhɔɔn wát Thai
 *tən laankroŋ ʔəŋkɔɔ vət Khmer
 go bus Angkor Wat
 (I) go to Angkor Wat by bus.

2.2.2. *Object or instrument*

As is already described, the complement of the verb can denote OBJECT of an action.

- (15) kin khâaw Thai
 nam baaj Khmer
 eat food
 (I) eat food.

But it is interesting to see the following cases, where the complement means INSTRUMENT by means of which the action is done.

- (16) kin taklap Thai
 nam cəŋkəh Khmer
 eat chopstick
 (I) eat with chopsticks.
- (17) kin muru Thai
 nam dəj Khmer
 eat hand
 (I) eat by hand.

Those sentences are acceptable due to the common knowledge that generally speaking a human will not eat chopsticks or human hands. Although some native speakers do not accept these sentences, more people would accept them if they are given in the proper context such as below.

- (18) khon yīpùn kin taklap, khon ?india kin muru Thai
 cəncəət capon nam cəŋkəh, cəncəət ?əndia nam dəj Khmer
 Japanese eat chopstick, Indian eat hand
 Japanese eat with chopsticks, Indians eat with hands.

As is the case with (13) and (14), the following sentences with double complements are also unacceptable.

- (19) *kin khâaw taklap Thai
 *nam baaj cəŋkəh Khmer
 eat food chopstick
 (I) eat food with chopsticks.
- (20) *kin taklap khâaw Thai
 *nam cəŋkəh baaj Khmer
 eat chopstick food
 (I) eat food with chopsticks.

We will later examine the constraint in relation with the serial verb construction.

2.2.3. *Idiomatic verb phrase*

So far we have seen the relationship between the verb and complements varies according to the lexical meaning of both the verb and the complements. The noun phrase in the same complement position can be either PATIENT, OBJECT, GOAL, or

INSTRUMENT. In addition, sometimes even the most basic verb such as with ‘pay (to go)’ in Thai cannot simply be analyzed as ‘Action and Goal’. Consider the case below.

- [illegible]

We can also say 'to go there' by adding the noun phrase 'thị trấn (place that)' which consists of a noun and a determiner as follows.

- (22) pay thì năn Thai
go place that
(I) go there.

However, if we make a nominal compound with 'thii (place)' and 'roon rian (school)', it would be somewhat unacceptable.

- (23) ?pay thiï roon rian Thai
go place school
I go to (the place of) school.

On the other hand, under a certain context, the compound 'thii (place)' and 'roon rian (school)' would be acceptable as follows.

- (24) khun pay thii roon rian tham aray? Thai
 you go place school do what
 You went to the school in order to do what? (As in 'For what purpose did
 you go to the school, as you have already graduated?')

This is because 'to go to school' in (21) already forms an idiomatic expression in that the phrase not only denotes the action of moving to a certain place, but also means that usually 'to go to school' includes an additional meaning 'in order to learn, or to teach'. Or more generally speaking, 'to go' has a connotation 'to go somewhere for some purpose.' Thus (24) is acceptable only in the context that the phrase 'the place of the school' refers to the moving aspect of the action.

3. Structures of the predicate

3.1. Cephalopod model

Defining a case is done in relation to their role in the predicate in the sentence. Thus, defining the case means how you define the predicate and the sentence. As isolating languages have no case marking system, they have no inflection in the predicative verb. If more than two verbs are in one sentence, they are in most cases arranged in temporal order without any change in their forms. This type of syntactic structure

is called ‘serial verb construction’ or ‘verb serialization’ which is prevalent in East and Southeast Asia. So far we have seen semantic roles of the arguments of a predicate. We will turn to the structures of the predicate phrase and examine the model for representing them.

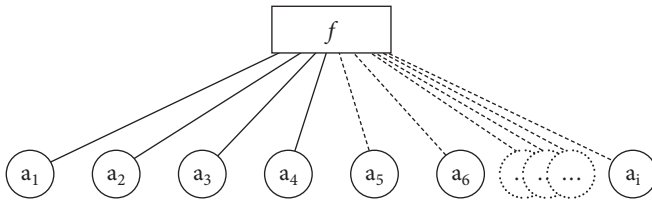
Here I propose the most generalized formula for describing the semantic relations representing an event as a whole.

$$(25) f(a_1, a_2, a_3, a_4, a_5, a_6, \dots, a_i)$$

where $f()$ is a function representing an event as a whole, which can be differentiated into a set of successive events, a_1, a_2, \dots, a_i are arguments relevant to the event. The total number of arguments indicated with i shows that it is indefinite.

The above formula can be shown by the following schema.

(26) Model for the Semantic Structure for an Event



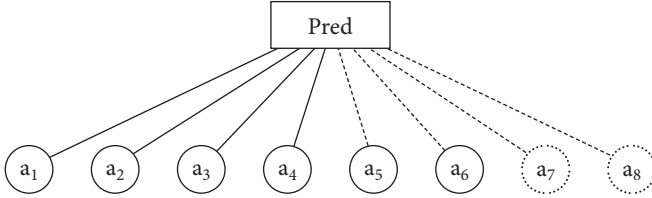
Semantic roles of each arguments are, for example, AGENT, EXPERIENCER, PATIENT, OBJECT, GOAL, INSTRUMENT, CAUSER, etc., according to the characteristics of the event. It should be noted here that the schema is not for semantic representation of one sentence, but for that of an event as a whole. By focusing on particular aspect of the event, we can make semantic propositions, monadic such as $f(\text{Subject})$, dyadic $f(\text{Agent, Patient})$, triadic $f(\text{Subject, Object, Benefactive})$, etc. This focusing can be metaphorically called ‘**semantic differentiation**’, as it is an operation to extract minimum propositions out of an event as a whole that is essentially continuous and inseparable.

The extracted propositions indicating part of the event can be mapped into either one predicate, or more than two predicates such as complex or compound sentences in the syntactic level according to the characteristics of each language.

The broken lines connecting $a_1, a_2, a_3, \dots, a_i$ and the function f shows that the arguments are potential candidates for the function f : whether they are realized as real arguments or not depends on what aspect of the event is focused.

Examine the following cephalopod schematization of a sentence, which represents the result of mapping from the semantic level into the morphosyntactic level, where solid lines indicate that the arguments are selected to form constituents in the morphosyntactic level—see (27). In this schema, six arguments a_1 to a_6 in the semantic level are selected, thus marked with solid line circles, and four of them a_1 to a_4 are mapped into morphosyntactic levels as C_1 to C_4 respectively, marked with some case markers, thus connected to the predicate with solid lines. The other a_5 and

(27) Cephalopod Model for the Case Marking Language



a_6 which are selected as syntactic elements C_5 and C_6 respectively, marked with solid line circles, are realized as prepositional adjuncts or adverbs, which is indicated by broken lines. a_7 and a_8 corresponding C_7 and C_8 are out of focus and suppressed in both semantic and syntactic levels, thus marked with broken circles and lines.

The cephalopod model (27) can be regarded as a generalized syntactic model of four-case-marking languages, such as German. In case the eight arguments in the semantic level are all realized as cases in the morphemic level, thus marked with solid lines only, (27) can be a model for Sanskrit, whose formalized representation is as follows.

(28) $\text{Pred}(\text{Case}_1, \text{Case}_2, \text{Case}_3, \text{Case}_4, \text{Case}_5, \text{Case}_6, \text{Case}_7, \text{Case}_8)$

Even English can be formalized similarly, in which case Case Nominative and Case Accusative are represented by zero morphemes with syntactic information, such as the former is a sister of a verb phrase and the latter is a sister of a verb; rest of the Cs are either a prepositional adjunct or an adverb.

Thus, Indo-European languages have a common characteristic that they can be represented with the same ‘Cephalopod’ formula (27) where every argument is related to only one predicate.

Problems such as ‘non-nominative subjects’, then, can be described in terms of the above two schema (26) and (27) as a matter of inconsistency that occurs in the process of mapping from the semantic level (26) into the morphosyntactic level (27).

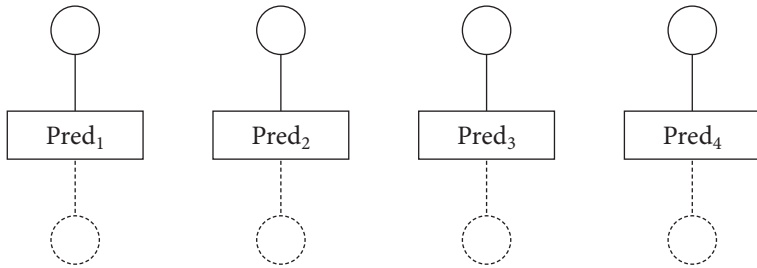
3.2. Centipede model

Let us examine the isolating languages, where a proposition consists of serial verbs, a set of predicate phrases as follows. The following formula correlates with the same semantic model (26), but in this case, one or two of the arguments in an event are selected to form the first monadic or dyadic predicate, another one or two are selected to form the second predicate, etc.³

(29) $\text{Pred}_1(C_1, (C_2)), \text{Pred}_2(C_3, (C_4)), \text{Pred}_3(C_5, (C_6)), \text{Pred}_4(C_7, (C_8)), \dots$

This formula is equivalent to the following diagram.

(30) Centipede Model for the Caseless Language



This schema can be applied to the following sentences with serial verbs that have two arguments.⁴

- (31) nân rôtmee pay nakhwôn wát Thai
 cih laankronj tøn ʔəŋkəw vət Khmer
 get on bus go Angkor Wat
 (I) go to Angkor Wat by bus. (Lit. I get on a bus and go to Angkor Wat.)

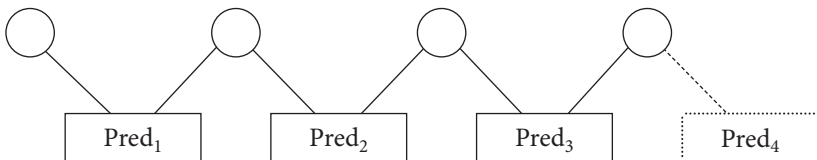
In (31) the first verb forms a dyadic predicate f_1 (Agent, Location), and the second one, also a dyadic f_2 (Agent, Goal).

- (32) chây taklap kin khâaw Thai
 praə cəŋkəh nam baaj Khmer
 use chopstick eat food
 I eat food with chopsticks.

In (32) the first verb forms a dyadic predicate f_1 (Agent, Object), and the second one, also a dyadic f_2 (Agent, Object).

The constraint that the maximum number of the argument is one can be schematized as follows.

(33) Final Chain Model for the Isolating Language



The schema at (33) means that a complement can appear between two predicates only when it has proper semantic relationship to both predicates. Along with the principle of absent information that information should not even be ‘psychologically repeated’ in order to avoid any unnecessary connotation, the above schema will be represented with the following compound proposition.

- (34) $a_1 (Pred_1) \cap a_2 (Pred_1, Pred_2) \cap a_3 (Pred_2, Pred_3) \cap a_4 (Pred_3, Pred_4) \dots$

where the relationship between the arguments and functions is reverted to form a new proposition such as ‘ABOUTNESS’, meaning that ‘what the function is related to is about the argument.’

3.3. Scope of the multiple predicate model

In Thai and Khmer, a predicate phrase can be generalized as in the formula given below.

$$(35) \text{ Predicate Phrase} = \text{Pred}_n (\text{Arg}_1, (\text{Arg}_2)) = \text{Pred}_1 (\text{Arg}_1, (\text{Arg}_2)), \text{Pred}_2 (\text{Arg}_1, (\text{Arg}_2)) \dots \text{Pred}_n (\text{Arg}_1, (\text{Arg}_2))$$

Thus, a predicate phrase that has only one verb is a special case, $n=1$ in the above multiple predicate model. This formalization might seem odd from the traditional linguistic viewpoint, but it should be emphasized that an event should correspond to one proposition is an Eurocentricism which dates back to the classic logic.

The generalization of the number of predicates in a sentence as above would give a proper explanation for the following phenomena in Thai and Khmer.

In Thai and Khmer the distinction between ‘intentional’ and ‘unintentional’ plays a significant role in verb serialization. In case a verb in the predicate is an ‘unintentional’ one as below, it is acceptable without any other verbs.

- (36) chán hěn kháw Thai
 kɲom khəən kɔət Khmer
 I see 3
 I see him (incidentally).

If a verb is ‘intentional’, however, as in the following case, some ‘unintentional’ verb indicating the result is required to form the serial verbs.

- (37) chán duu kháw hěn Thai
 kɲom məəl kɔət khəən Khmer
 I watch 3 see
 I watch him (intentionally).

In (37) the first verb forms a dyadic predicate f_1 (Agent, Object), and the second one, also a dyadic f_2 (Experiencer, Object).

If only one ‘intentional’ verb is selected to form a sentence, the result is somewhat unacceptable, though not completely ungrammatical.

- (38) ?chán duu kháw Thai
 ?kɲom məəl kɔət Khmer
 I watch 3
 I watch him (intentionally).

It means that in some cases, more than two verbs are necessary to form a sentence, where the verbs should be arranged to show the intentional action and its result.

Consequently, forming a sentence referring only the intentional action would give insufficient information as to the result of an action. Thus, in the case of 'action and result', serialized verb structure must be the basic sentence framework.

It should be noted that in some cases, the object of the first predicate functions as the subject of the second predicate as follows.

- (39) chán tii mǎa taay Thai
 kɲom vèəj ckae slap Khmer
 I hit dog die
 I hit the dog to death.

In (39) the first 'intentional' verb forms a dyadic predicate f_1 (Agent, Patient), and the second 'unintentional' one, a monadic f_2 (Experiencer).

Moreover, multiple predicate model will give appropriate description to the following phenomena, though we will not look into in detail in the present chapter.

Pseudo-modality A pseudo-modal 'auxiliary' verb, such as (Th) 'dây (can, to be possible)' and (Kh) 'baan (can, to be possible)' which occurs after verbs should be analyzed as resultative verbs in a verb serialization, instead of the auxiliary verb which exceptionally appears after verbs.

- (40) khun pay dây Thai
 nèək tǎv baan Khmer
 2 go can
 You can go. (It is permitted, or you have the ability to go.)

Compare (40) to the one of the typical resultative verb structure below.

- (41) pay wan níi dii kwàa Thai
 tǎv tɲaj nih lʔɔɔ cèəŋ Khmer
 go today good than
 It would be better to go today.

Negation A negative constituent in Thai and Khmer appears just before the verb which is in the scope of negation. Concerning the scope of negation, verbs in a series have equal status. Discussion as to which one of the verbs is a main verb or a subsidiary verb would be meaningless in that it will posit an unnecessary hierarchy against the verbal coordinate structure.

- (42) chán mây duu kháw Thai
 kɲom mun mǎəl kɔət Khmer
 I NEG watch 3
 I will not see him.

- (43) chán duu kháw mây hǎn Thai
 kɲom mǎəl kɔət mun khəəŋ Khmer
 I watch 3 NEG see
 I can't see him, or I couldn't see him.

Compound sentences Most of the structures, such as causative, passive, which would otherwise need an embedded sentences for their description can be analyzed as examples of verb serialization. As a result there would be no need to postulate matrix sentence structures, voice, modality as grammatical categories, etc., which would be regarded as part of language universals. Furthermore, the above model (35) for the multiple predicate phrase can be generalized as follows.

$$(44) \text{ Predicate Phrase} = \text{Pred}_n(\text{Arg}_1, \text{Arg}_2, \dots \text{Arg}_i)$$

According to the multiple predicate model above, the cephalopod model is the specific case the number of the predicates $n=1$ and the number of the arguments $i \geq 1$, similarly the centipede model is the case the number of the predicates $n \geq 1$ and the number of the arguments $i \leq 3$. Using the above generalized formula, the complex sentence which includes an embedded clause would be analyzed as the case of $n=2$ in a verb serialization as follows.

$$(45) \text{ Predicate Phrase} = \text{Pred}_1(\text{Arg}_1, \text{Arg}_2, \dots \text{Arg}_i), \text{Pred}_2(\text{Arg}_1, \text{Arg}_2, \dots \text{Arg}_j)$$

This formalization is a counterplan for analyzing the English sentence as follows.

$$(46) \begin{array}{l} \text{I} \quad \quad \quad \text{saw} \quad \text{him} \quad \quad \quad \text{walking.} \\ \text{EXP of Pred}_1 \text{ Pred}_1 \text{ PAT of Pred}_1 = \text{AG of Pred}_2 \text{ Pred}_2 \\ \text{I saw him walking.} \end{array}$$

Instead of connecting two full-fledged sentences together (thus making two individual cephalopods hand in hand), the above analysis provides a viewpoint that a 'compound' sentence consists of two subordinate (unfledged) predicates which forms a proposition together. This analysis can avoid complicated problems such as θ -role assignment and case marking in the generative grammar, which results from the assumption that embedded S is a full-fledged S. Likewise, most of the 'movements' in the generative grammar would be regarded as essentially theory internal issues.

4. Conclusion

We have outlined the isolating languages, such as Thai and Khmer, as topic-prominent languages. In these languages, absence of information plays a significant role in forming a proper information structure of the discourse.

Examining the verb-complement structure shows that semantic roles such as patient, object, goal, instrument are assigned to the complements without any case markers, purely on the basis of the semantic relationship between the verb and the complement.

A formula is proposed for representing the semantic level of an event as a whole, process of its mapping to the cephalopod model for the case marking languages, and the centipede model for the isolating languages in the syntactic level. Further-

more the possibility is suggested to generalize the latter two syntactic models into the multiple predicate model $\text{Pred}_n(\text{Arg}_1, \text{Arg}_2, \dots \text{Arg}_m)$.

Whether the discussion above is sufficiently convincing or not, it should be kept in mind that any linguistic theory which naively assumes the case system as one of the linguistic universals would neglect existence of the isolating languages in mainland Southeast Asia and Chinese languages, which are spoken by nearly one quarter of the world’s population.

Notes

1. See appendix for the notation of the languages. In the sentence examples Thai is marked with (Th), Khmer with (Kh).
2. There is no clear-cut distinctions between nouns, adverbs and prepositions, since most of adverbs and prepositions in these languages can be regarded as ‘grammaticalized’ nouns which have lexical meaning related with time and space.
3. There are very few number of triadic predicates in Thai and Khmer: (Th) *hây* (‘to give’), *sǎn* (‘to teach’), (Kh) *ǰaaj* (‘to give’), *bǰǰriən* (‘to teach’), *sǰǰ* (‘to return’) which form Subject–Verb–Object–Benefactive’ construction. Even though they are used within the serial verbs, two arguments do not appear together between two verbs.
4. Instead of using serialized verbs, using a preposition such as (Th) *dǰay* and (Kh) *nuuŋ* (‘by means of’) to form sentences below is also possible.

- (i) pay nakhǰǰn wǎt dǰayrǰtmee

tǎv ǰǰkǰǰ vǰǎt nuuŋ laankroŋ

(I) go to Angkor Wat by bus.

Thai

Khmer

Both are well formed but with some stress on the means of transportation. In Southeast-Asian languages, using serial verbs is more prevalent than using prepositional phrases.

Appendix 1: Notation for Thai and Khmer

Thai five-tonal system

aa (mid level); ǎa (low level); ǎa (falling); ǎa (high level); ǎa (rising)

Thai vowel system

	Front	Mid	Back	Diphthong
Close	i, ii	u, uu	u, uu	ia, ua, ua
Half close	e, ee	ə, əə	o, oo	
Open	ɛ, ɛɛ	a, aa	ɔ, ɔɔ	

Thai consonant system

Manner of articulation	Labial	Dental	Palatal	Uvular	Glottal
Unaspirated stop	p	t	c	k	ʔ
Aspirated stop	ph	th	ch	kh	
Voiced stop	b	d			
Nasal	m	n		ŋ	
Fricative	f	s			h
Liquid		r, l			
Semivowel	w	y			

Khmer register (two-level tone)-system

- ee (head register, lowered tongue position)
- èe (chest register, or higher tongue position)

Khmer vowel system

	Front	Mid	Back	Diphthong
Close	i, ii	u, uu	u, uu	iə, uə, uə
Half close	e, ee, è, èe	ə, əə, ə, əə	o, oo, òo	
Open	ɛ, è, èɛ	a, aa	ɔ, ɔɔ, ɔ, ɔɔ	ɛə, ae, aə, ao, ɔa

Khmer consonant system

Manner of articulation	Labial	Dental	Palatal	Velar	Glottal
Unaspirated stop	p	t	c	k	ʔ
Aspirated stop	ph	th	ch	kh	
Voiced stop	b	d			
Nasal	m	n	ɲ	ŋ	
Fricative	(f)	s			h
Liquid		r, l			
Approximant	v	j			

Abbreviations

1sg: first-person singular pronoun; 2: second-person pronoun; 3: third-person pronoun; AG: Agent; EXP: Experiencer; INT: interrogative particle; NEG: negation; PAT: Patient; PropN: proper noun

References

- Bach, E. and Harms, Robert T. (eds.) (1968). *Universals in Linguistic Theory*, New York: Holt, Rinehart and Winston
- Comrie, B. (1989), *Language Universals and Linguistic Typology — Syntax and Morphology*, 2nd ed. Oxford: The University of Chicago Press.
- Fillmore, Charles J. (1968) : “The case for case”, in Emmon Bach and Robert T. Harms (eds) pp.1–88.
- Hale, K. (1983), “Warlpiri and the Grammar of Non-Configurational Languages.” *Natural Language and Linguistic Theory*, 1, pp.5–47.
- Li, C. N. (ed.) (1976), *Subject and Topic*, New York: Academic Press.
- Matsumoto, K. (1991), “Shugo-ni tsuite [On “Subject”]”, *Gengo Kenkyu*, 100, pp.1–41.
- Minegishi, M. (2000a), “Ruikeron-kara mita bunpou riron [Linguistic theories as viewed from linguistic typology]”, *Gengo Kenkyu*, 117, pp.101–27.
- Minegishi, M. (2000b), “Koritsugo kenkyuu-no houkousei-ni tsuite [Towards a Descriptive Study of ‘Isolating Languages’]”, *Journal of Asian and African Studies*, 60, pp. 237–47.
- Minegishi, M. (2001), “Morphological typology from Southeast Asian viewpoint”, *Papers from the Eleventh Annual Meeting of the Southeast Asian Linguistics Society*, 11 (in press).
- Perlmutter, D. (1978), “Impersonal passives and the unaccusative hypothesis”, *Proceedings of the fourth annual meeting of the Berkeley Linguistics Society*, vol.4, pp.157–89.

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