

Dative Subject Constructions in Hindi, Nepali  
and Marathi and Relational Grammar

Sagar Mal Gupta\*

Jyoti Tuladhar\*\*

Masica (1976: 164) states:

"It may well be that this (Dative Subject Construction) is a criterion that sets off the "Indian area" more sharply than any other here examined. As already noted, a high development of this feature is characteristic of Indian-- perhaps slightly more of Dravidian and slightly less of Bengali (and much less of the Munda languages), but nevertheless present in all the major languages to a degree that seems to be unparalleled elsewhere."

Dative Subject Constructions (DSC) being an areal trait, there have been several attempts in the past to characterize them. Kachru (1970), Kachru et al (1975), Sridhar (1976), Verma (1975), McAlpin (1975), Krishnamurthi (1975) have tried to present a systematic analysis of DSC in Hindi, Kannada, Nepali, Malyalam and Telgu respectively. In the present study, we make an attempt to present a systematic description of DSC in Hindi, Nepali and Marathi.

---

\* Mr. Sagar Mal Gupta is working for Ph. D. at the University of Hawaii.

\*\*Ms. Jyoti Tuladhar is working for Ph. D. at Georgetown University.

The questions we address ourselves to are:

- a. What class of predicates occur with DSC? Are there any predicates that obligatorily take DSC?
- b. What are the semantic and pragmatic characteristics of DSC?
- c. What are the behavioral properties of DSC?

. In the last section, an attempt will be made to characterize DSC in terms of Relational Grammar.

Hindi, Nepali and Marathi belong to Indo-Aryan family. Marathi belongs to the outer group whereas Hindi and Nepali belong to the inner group. One of the investigators is a Hindi Speaker whereas the other one is a Nepali speaker. The Marathi data are due to the courtesy of Dr. Kashi Wali and Dr. Vijya Chitnis.

1.0. In this section, we describe the verbs that generally occur in DSC. These verbs include experiences denoting liking, disliking, states of health or sickness, happiness and unhappiness, dreaming, feeling, remembering, thinking, embarrassment, pity, doubt, pain, thirst, hunger, sleepiness, anger, urgency etc. We divide these verbs into four categories:

- (i) Verbs of sense-perception
- (ii) Verbs of mental and emotional experiences
- (iii) Verbs denoting health conditions, and
- (iv) Verbs obligatorily taking DSC.

#### 1.1 VERBS OF SENSE-PERCEPTION:

Verbs of sense-perception include verbs such as dikha:i. paRna: 'to be seen' or suna:i. paRna: 'to be

heard' etc. The subject of these verbs is an experiencer of the action of seeing or hearing though he is not the initiator of the action. Consider the following:

- H (1) usko sher dikha:i: paRa:  
 he+DAT lion seen fell  
 'He saw the lion.'
- H (2) usko shor suna:i: paRa:  
 he+DAT noise heard fell  
 'He heard the noise.'
- M (3) mala: jha:R dislã  
 me+DAT tree seen-NEUTER  
 'I saw the tree.'
- M (4) mala: à:wa:j a:iku a:la:  
 me+DAT noise heard past  
 'I heard the noise.'

In Nepali, DSC with verbs of sense-perception are marginal. These verbs more readily occur in Nominative Constructions, for example:

- N (5) mai-le ba:gh la:i dekhẽ  
 I+ERG tiger DAT/ACC saw-past  
 'I saw the tiger.'

However, a word of caution will be in order. The Nepali investigator feels that this statement about Nepali verbs of sense-perception needs further investigation. Note that the verb in (3) in Marathi has a neuter agreement marker.

## 1.2 VERBS OF MENTAL AND EMOTIONAL EXPERIENCES

Dative subjects occur with nominals showing

emotional experiences such as fear, shame, shyness, liking, disliking, anger, laughter, crying, happiness, sorrow, regret etc. plus a verb. The verbs of cognition that generally occur with Ds are: ma:lu:m hona: 'to be known', accha: lagna: 'to feel good', pata: hona: 'to be known', bura: lagna: 'to feel bad', ya:d a:na: 'to remember', etc. The verbs that generally follow the nominals showing emotional and mental experiences are: lagna: 'to seem', a:na: 'to come', hona: 'to happen', rahna: 'to live', etc. Consider the following sentences:

- H (6) ra:m ko Dar laga:  
 Ram DAT fear felt  
 'Ram felt the fear.'
- H (7) si:ta: ko gussa: a:ya:  
 Sita DAT anger came  
 'Sita became angry.'
- N (8) ra:m la:i: ri:s uThyo  
 Ram DAT anger rose  
 'Ram became angry.'
- N (9) si:ta: la:i: la:j la:gyo  
 Sita DAT shyness attached  
 'Sita felt shy.'
- M (10) mala: la:j wa:tli:  
 I+DAT shyness felt  
 'I felt shy.'
- M (11) mala: ra:g a:la:  
 I+DAT anger came  
 'I became angry.'

The agreement in Hindi and Marathi is between the nominative and the verb whereas in Nepali the verb always carries neuter agreement marker.

Notice a few co-occurrence restrictions between the kind of verb and the nominative preceding it. In Hindi, for example, lagna: 'to feel' is used with Dar 'fear', bhu:kh 'hunger', pya:s 'thirst', accha: 'good', burā: 'bad', whereas hona: 'to happen' is used among others with khushi: 'happiness', dukh 'sorrow', pashca:ta:p 'regret'; a:na: 'to come' occurs with gussa: 'anger', sharm 'shyness', hāsi: 'laughter' and rula:i 'crying'. In Nepali, however, with anger and laughter, we use uThna: 'to rise'; with fear, sorrow, regret, surprise, happiness etc., we use la:gnu 'to feel'.

### 1.3 VERBS DENOTING HEALTH CONDITIONS

Under this category we discuss two kinds of verbs:

- (i) verbs denoting reflex actions such as chī:kna: 'to sneeze', khā:si: a:na: 'to cough', and
- (ii) verbs denoting physical conditions such as bukha:r a:na: 'to suffer from fever', sardi:hona: 'to suffer from cold', sardi:/garmi: lagna: 'to feel cold/hot', bhukh lagna: 'to feel hungry', pya:s lagna: 'to feel thirsty'.

It would be worthwhile to make a distinction between transient states and rather permanent ones. So usko khā:si: a:i: means 'he coughed once', whereas usko khā:si: hai means 'he is suffering from cough'.

Consider:

H	(12)	usko	chī:k	a:i:
		he+DAT	sneeze	came
			'He sneezed.'	

N (13) mala:i: ba:nta: a:yo  
 me+DAT vomit came  
 'I vomitted.'

M (14) tya:la: khokla: a:la:  
 him+DAT cough came  
 'He coughed!'

The transient/permanent meaning distinction is coded in the verbs a:na: 'to come' and hona: 'to happen' respectively, which can be characterized as stative and inchoative verbs; but the verbs denoting reflex action such as chĩ:k a:na: 'to sneeze' cannot occur with hona: 'to happen' because 'to sneeze' refers to a temporary state.

#### 1.4 VERBS OBLIGATORILY TAKING DATIVE SUBJECT CONSTRUCTIONS

Consider the following:

H (15) ra:m ko coT lagi:  
 Ram DAT hurt attached  
 'Ram got hurt.'

N (16) ra:me ia:i: coT la:gyo  
 Ram DAT hurt attached  
 'Ram got hurt.'

N (17) tya:la: Thetsa la:gli:  
 him+DAT hurt attached  
 'He got hurt.'

Above is given a verb that obligatorily takes DS. The verb lagna: 'to feel', can also occur with concrete objects such as ti:r lagna: 'to be hurt with an arrow', goli: lagna: 'to be hurt with a bullet'. lagna: can also take a sentential complement such as mujhe lagta: hai ki a:j ba:rish hogi: 'it seems to me that it will rain today. Other verbs that can take sentential complements are: ma:lu:m hona: 'to be known', pata: hona: 'to be known', ya:d hona: 'to remember', a:sha: hona: 'to be hopeful' wishwa:sh hona: 'to believe'; verbs of saying such as khabar hona: 'to be informed', etc. All these constructions with the verb lagna: can also occur in Nepali and Marathi.

1.4.1. The other verb that obligatorily takes DS is milna: 'to be obtained' e.g.:

H (18) ra:m ko patra mila:  
 Ram DAT letter received  
 'Ram received the letter.'

H (19)\*ra:m patra mila:  
 'Ram received the letter.'

H (20) ra:m ko shya:m mila:  
 Ram DAT Shyam met  
 'Ram ran into Shyam.'

H (21) ra:m shya:m se mila:  
 Ram Shyam with met  
 'Ram met with Shyam.'

Sentence (19) is ungrammatical because milna: takes DS. (21) is not a counterexample because it illustrates a volitional act of meeting on the part of Ram. Sentence (20) shows that the meeting was accidental. Notice, however, that in Nepali there are two ways to express the verb milna: i.e. pa:unu 'to get' and milnu 'to be obtained' with the restriction that pa:unu can be used only in nominative subject constructions such as:

I+NOM letter received  
'I received the letter.'

The Nepali verb milnu can be used with DSC:

N (23) usla:i ma ba:Te dherai paisa: milyo  
him+DAT me from lots of money got  
'He obtained lots of money from me.'

1.4.2. The interaction between modality and dative subject is very interesting in Hindi and Marathi. As far as we know, the modal meaning of necessity, obligation, requirement, etc. are expressed in these two languages with DS+INFINITIVE+COPULA/ca:hiye/paR+COPULA in neuter forms. INFINITIVE+ COPULA/paR+COPULA generally expresses necessity whereas INFINITIVE+ca:hiye expresses obligation, advice, requirements, etc.

In Nepali, however, these expressions expressing modality can occur in both nominative and dative subject constructions. To illustrate:

N (24) mala:i: ghar cã:Rai ja:nu paryo  
me+DAT home quickly to go had to  
'I had to go home quickly.'



N (25) maile ghar cã:Rai ja:nu paryo  
 I+NOM home quickly to go had to  
 'I had to go home quickly.'

It is not clear to the investigators whether these dative-nominative constructions in Nepali are in free variation or restricted by semantic and or pragmatic conditions.

1.4.3. Further, DSC are also used with the verb a:na: 'to come' to show ability:

H (26) usko paRhna: a:ta: hai  
 him+DAT to read come is  
 'He can/is able to read.'

However, there is an alternative way of expressing the same meaning with the verb sakna: 'be able to' in all these three languages. Compare:

H (27) wah paRh sakta: hai  
 he read can is  
 'He can read.'

1.4.4. The verbs that occur obligatorily in DSC are: jacna: 'to appeal', suha:na: 'to appeal' and rucna: 'to appeal'.

2.0. In this section, we investigate some of the semantic and pragmatic properties of DSC. Dative subjects are typically experiencers or recipients of the action or state denoted by the verbs discussed in part 1. As we discussed in 1.4. the modal expressions obligatorily take dative subjects. Some other verbs denoting emotional states (such as gussa: a:na: 'to become angry')

and sense-perception (such as dikha:i: paRna: 'to be seen') can occur in both dative and nominative subject constructions. For example:

H (28) ra:m ko gussa: a:ya:  
Ram DAT anger came  
'Ram became angry.'

H (29) ra:m ne gussa: kiya:  
Ram NOM anger did  
'Ram became angry.'

The main difference between DSC and Nominative Subject Constructions is that the dative subject is the experiencer or recipient of the action or state denoted by the verb as in sentence (28) i.e. Ram is the experiencer of the emotional state of anger, whereas the corresponding nominative subject is the volitional agent of the action or state denoted by the verb as in (29) i.e. Ram deliberately does the anger. In this regard a word of caution is in order. Notice that not all verbs with nominative subjects in these languages express volitional agents. To give an example from Hindi:

H (30) mujhko bhu:kh lagi:  
me+DAT hunger felt  
'I became hungry.'

H (31) mai bhu:kha: hu:  
I hungry am  
'I am hungry.'

(30) expresses the inchoative meaning whereas (31) is stative. No volition is involved in the nominative

construction as exemplified in sentence (31). Apart from the stative (31), inchoative (30) distinction, the use of one over the other is determined by the pragmatic conditions. It seems that sentences (30) and (31) both can be used in a situation where a person is asking another person to prepare or serve some food, but only (30) can be used in a situation where the host asks the guest to have some more food. The typical reply of the guest if he is already full would be:

- H (32) nahĩ:, nahĩ: maĩ aur nahĩ: lũ:ga:  
           no      no      I      more     not      take+will  
 (i) mujhko      bhu:kh      nahi:      hai  
           me+DAT      hunger     not      is  
 (ii)\*maĩ      bhu:kha:     nahĩ:      hũ:  
           I          hungry     not      am  
           'No, no, I won't take any more, I am not  
           hungry.'

This generalization does not apply to Nepali because Nepali does not have a corresponding sentence to mujhko bhu:kh nahĩ: hai.

2.2. One way to determine whether a particular nominative subject construction has volitional agent or not would be to use it with certain volitional adverbs such as ja:n bu:jh kar 'knowingly' and/or volitional verbs such as koshi:sh karna: 'to make an attempt.' Consider:

- H (33) maĩne      ja:nbu:jhkar      gussa:      kiya:  
           I+NOM      knowingly      anger      did  
           'I got angry knowingly.'
- H (34)\*mujhko      ja:nbu:khar      gussa:      a:ya:  
           me+DAT      knowingly      anger      came  
           'I became angry knowingly.'

H (35) maine khush hone ki: koshish ki:  
 I+NOM happy to happen GEN attempt did  
 'I tried to be happy.'

H (36) maile ja:ni: ja:ni: gari ri:s gare  
 I+NOM knowingly anger did  
 'I got angry knowingly.'

N (37)\*mala:i: ja:ni: ja:ni: gari ri:s uThyo  
 me+DAT knowingly anger came  
 'I became angry knowingly.'

N (38) maile ja:ni: bujhi gari khushi: hune koshish gare  
 I+NOM knowingly happy to be attempt did  
 'I tried to be happy knowingly.'

N (39)\*mala:i: khushi: hune koshish cha  
 me+DAT happy to be attempt is  
 'I am trying to be happy.'

M (40) mi: tya:t̃sa: war mudda:m ra:ga:w̃lõ  
 I him on knowingly angry got  
 'I got angry with him deliberately.'

M (41)\*mala: mudda:m ra:ga:la:  
 me+DAT knowingly anger came  
 'I knowingly became angry.'

M (42) mi: sukhi: Vha:yaca: prayatna kela:  
 I happy become to attempt did

'I tried to be happy.'

M (43)\*mala: sukhi: Vha:yaca: prayatna kela:  
me+DAT happy become to attempt did  
'I tried to be happy.'

Sentences (34), (37), (39), (41) and (43) are ungrammatical because the adverb ja:nbujhkar and the compound verb koshish karna: cannot occur with stative-inchoative DSC.

Sentences (33), (35), (36), (38), (40), and (42) are acceptable because the adverb ja:nbujhkar and the compound verb koshish karna: can occur with nominative and causative subjects (see also 2.3).

2.3. There seems to be a correlation between stative-inchoative verbal expressions and dative subjects on the one hand and active and causative verbal expressions and nominative subjects on the other. It must be made clear, however, that every construction cannot have all the four possibilities as the starred sentences **as** the gaps in the following table would show:

	STATIVE	INCHOATIVE	ACTIVE	CAUSATIVE
H(44)	usko gussa: hai him+DAT anger is	usko gussa: a:ya: him+DAT anger came	usne gussa: kiya: he+NOM anger did	maine usko gussa: I+NOM him+DAT anger dila:ya: give+CAUSE 'I made him angry.'
N(45)	usla:i: ma ma:thi: him+DAT I on ri:s cha anger is 'He is angry with me.'	usla:i: ri:s uThyo him+DAT anger rose 'He became angry.'	u risa:yo he+NOM got angry ri:s uTha:ẽ anger rise+CAUSE 'I made him angry.'	maile usla:i: I+NOM him+DAT ri:s uTha:ẽ anger rise+CAUSE 'I made him angry.'
M(46)	tya:la: tya:ca:var he+DAT him on pha:r ra:g a:he very anger is 'He is angry with me.'	tya:la: ra:g a:la: he+DAT anger came 'He became angry.'	to ra:ga:vala: he anger did a:Nle brought 'He got angry.'	tya:ne tila: ra:ga: he by her+DAT anger a:Nle brought 'He made her angry.'
H(47)	mujhko bhu:kh hai me+DAT hunger is	mujhko bhu:kh lagi: me+DAT hunger came	*maine bhu:kh ki: I+NOM hunger did	*maine usko I+NOM him+DAT bhu:kh: kara:ya

L S L S L S

STATIVE	INCHOATIVE	ACTIVE	CAUSATIVE
'I am hungry.'	'I became hungry.'	*I did the hunger.'	hungry did+CAUSE 'I made him hungry.'
N(48) *mala:i: bhokh cha me+DAT hunger is	mala:i: bhokh la:gyo me+DAT hunger came	*maile bhokh garé I+NOM hunger did	*maile usla:i: I+NOM him+DAT bhokh gara:ẽ hunger did+CAUSE 'I made him hungry.'
'I am hungry.'	'I became hungry.'	'I got hungry.'	
M(49) mala: khu:p bhukh me+DAT very hunger is	a:he mala: bhukh la:gi: me+DAT hunger begin	*mi: bhukh keli: I hunger made	*mi: tya:la: I him+DAT bhukele kele hungry did+CAUSE 'I made him hungry.'
'I ma very hungry.'	'I became hungry.'	*I made myself hungry.'	
H(50) *mujhko hãsi: hai me+DAT laughter is	mujhko hãsi: a:i: me+DAT laughter came	mãĩ hãsa: I laughed	mãĩne usko hasa:ya: I+NOM him+DAT laugh +CAUSE 'I made him laugh.'
*'I have laughter.'	'I laughed.'	'I laughed.'	

	STATIVE	INCHOATIVE	ACTIVE	CAUSATIVE
N(51)	*mala:i: hã:so cha me+DAT laughter is	mala:i: hã:so uThyo ma hã: se me+DAT laughter rose	I laughed	maile usla:i: I+NOM him+DAT hãsa:ẽ laugh+CAUSE 'I made him laugh.'
M(52)	*mala: hãsne a:he me+DAT laughing is	mala: hasũ:a:le me+DAT laughter came I laughed	mi:hãslõ I laughed.	mi: tya:la: I him+DAT hasavale laugh+CAUSE 'I made him laugh.'
H(53)	mujhko ja:na: hai/paRa: me+DAT to go is/had to	*mujhko ja:na: me+DAT to go a:ya came	mãl गया: I went	maine usko bheja: I+NOM him+DAT go+ CAUSE 'I sent him.'
N(54)	mala:i: ja:nu cha me+DAT to go is	*mala:i: ja:ne a:yo me+DAT to go came	ma gayẽ I went	maile usla:i: I+NOM him+DAT paTha:yẽ go+CAUSE 'I made him go.'
	'I have to go.'	'Going came to me.'	'I went.'	

L S L S L S



	STATIVE	INCHOATIVE	ACTIVE	CAUSATIVE
M(55)	mala: ja:yacēa:he me+DAT to go is 'I have to go.'	*mala: ja:ie a:la: me+DAT going came *'Going came to me.'	mi: gelo I went 'I went.'	mi:tya:la: pa:Thavlē I him+DAT go+CAUSE 'I made him go.'
H(56)	-----	mujhko sher dikha:i: me+DAT lion came paRa: into sight 'I saw the lion.'	maine sher ko I+NOM the lion dekha: saw 'I saw the lion.'	maine usko sher I+NOM him+DAT lion dikha:ya: see+CAUSE 'I showed him the lion.'
N(57)	-----	mala:i: bā:gh me+DAT lion dekha:i diyo came into sight 'I saw the lion.'	maile ba:gh I+NOM lion dekhē saw 'I saw the lion.'	maile usla:i I+NOM him+DAT ba:gh dekha:ē lion see+CAUSE 'I showed him the lion.'
M(58)	-----	mala:va:gh disla: me+DAT lion came	mi:va:gh pa:hila: I lion saw	mi:tya:la: va:gh I him+DAT tiger

	into sight	da:khavi:la:
		see+CAUSE
'I saw the	'I saw the	'I showed him
tiger.'	tiger.'	the tiger.'

The above table illustrates the semantics of dative subjects. Dative subjects occur only with stative and inchoative verbs where they are experiencers or recipients and not initiators or volitional agents.

On the basis of the above table, we propose the following VERB HIERARCHY, which applies to these three languages and our hypothesis is that it will apply to most of the languages having DSC.

VERB HIERARCHY can be stated as follows:

(59) VERB HIERARCHY

CAUSATIVE > ACTIVE > INCHOATIVE > STATIVE

Condition: Except modal constructions

The VERB HIERARCHY states that if there is a causative construction in a language, the tendency is that it will also have active, inchoative and/or stative. The converse is not true. Modal constructions behave differently.

3.0. In this section, we discuss some syntactic processes of DSC in all the three languages. Kachru (1970) and Davison (1968) have argued that dative subjects are in fact subjects which transformationally get dative marker attached to them. The position we are going to

take in this paper is that dative subjects are in fact subjects in several syntactic processes though in terms of coding properties (i.e. agreement and case marking) and semantic properties (i.e. not being initiators or volitional agents) they function as affected. But the syntactic evidence in favour of regarding them as subjects is overwhelming as it would be clear from the following discussion. We owe the conceptualization and some of the Hindi examples to Kachru et al (1975).

### 3.1. REFLEXIVIZATION

In Hindi, a reflexive is formed by changing the co-referential NP by apna: or apne a:p in a simple sentence. In Nepali, a:phnu and a:phāĩ are used for coreferential NP and the clause mate condition also holds. In Marathi, a:plyā: or swatah are used for coreferential NP and the condition of clause-mate also applies. Further, it is only the subject that controls reflexivization in these three languages:

H(60)	ra:m	apne	ghar	gaya:
	Ram	REFL	house	went

'Ram went to his own house.'

H(61)	ra:mne	mohan	ko	apne	ghar	bheja:
	Ram+NOM	Mohan	DAT	REFL	house	sent

'Ram sent Mohan to his own house.'

N(62)	ra:m	a:phno	ghar	gayo
	Ram	REFL	house	went

'Ram went to his own house.'

N(63)	ra:mle	mohan	la:i:	a:phno	ghar	paTha:yo
	Ram+NOM	Mohan	DAT	REFL	house	sent

'Ram sent Mohan to his own house.'

M(64) ra:m            a:plya: ghari:        gela:  
 Ram                REFL        house to    went  
 'Ram went to his own house.'

M(65) ra:mane    mohan    la:    a:plya: ghari:    pa:Thawla:  
 Ram NOM    Mohan    DAT    REFL        house to    sent  
 'Ram sent Mohan to his own house.'

In (60) apne refers to Ram, which is the subject. In (61) apne is ambiguous; it can refer either to Ram or Mohan but the primary meaning refers to Ram. If one has to refer to Mohan exclusively, one would prefer to use a pronoun uske 'his' instead of apne.

The same generalization holds true for Nepali and Marathi. If we accept this generalization, it follows that subject is the controller of the reflexive. In the light of the above generalization, let us look at DSC and see how reflexivization works in them:

H(66) laRke        ko        apne        dost    ya:d        a:ye  
           boy            DAT        REFL    friends memory    came  
 'The boy remembered his own friends.'

N(67) ra:m    la:i:    a:phno    bha:i:ko    samjhana:    a:yo  
           Ram    DAT        REFL    brother+GEN memory    came  
 'Ram remembered his own brother.'

M(68) mala:        a:plya:    mitrachi:        a:thvaN        a:li:  
           me+DAT    REFL        friends+GEN memory    came  
 'I remembered my own friends.'

In (66) apne refers to laRke ko, which is a dative subject. In (67) a:phno refers to ra:m la:i: and a:plya: in (68) refers to the dative subject mala:. This shows that dative subjects control reflexivization in the above sentences as nominative subjects do in (60-65).

### 3.2. CONJUNCTION REDUCTION

The second syntactic process that we want to examine with reference to DSC is conjunction reduction. In conjunction reduction one of the two or more clauses retains the main verb and others are reduced to participial constructions (depending upon the logical sequence, meaning etc.). There is no limit on the clauses thus conjoined. All but one subject are deleted as they are coreferential.

H(69) ghar a:kar ra:mne kha:na: kha:ya:  
 home having come Ram+NOM food ate  
 'Having come home, Ram ate food.'

N(70) ghar gayera ra:mle kha:na: kha:yo  
 home having gone Ram+NOM food ate  
 'Having gone home, Ram ate food.'

M(71) ghari: yewun ra:m jewala:  
 home-to having come Ram ate-food  
 'Having come home, Ram ate food.'

H(72) \*mohan ghar a:kar ra:mne kha:na: kha:ya:  
 Mohan home having come Ram+NOM food ate  
 'Mohan having come home, Ram ate food.'

In (69), the underlying structure is: ((ra:m ghar a:ya:) <sub>S</sub> aur (ra:m ne kha:na: kha:ya:) <sub>S</sub>). Then the

coreferential NP deletion rule applies which deletes the first occurrence of ra:m and changes a:ya: into a participial construction a:kar. The same rules apply to Nepali and Marathi. (72) is ungrammatical because the subject of the participial construction is not coreferential with the subject of the main clause and hence cannot be deleted. The ungrammaticality of (72) further proves that coreferential NP deletion in such constructions applies only to subjects. Let us now examine DSC vis a vis conjunction reduction transformation. Consider:

H(73) uma: ko dekhkar usko apni:

Uma DAT having seen him+DAT REFL

patni: ki: ya:d a:i:

wife GEN memory came

'Having seen Uma, he was reminded of his own wife.'

The above sentence can be derived from: ((usne uma: ko dekha) usko apni: patni: ki: ya:d a:i: ).

In this case the dative subject usko triggers the deletion of the nominative subject usne and functions as a controller of coreferential NP deletion in such reduced constructions. Consider the following sentences from Nepali and Marathi where the same generalization holds true:

N(74) si:ta: la:i: dekhera shya:m la:i:  
Sita DAT having seen Shyam DAT

aphni: swa:sni: ko samjhana: a:yo  
REFL wife DAT memory came

'Having seen Sita, Shyam was reminded of his own wife.'

M(75) uma: la: pa:hun tya:la: a:plya:  
 Uma DAT having seen him+DAT REFL

ba:i kotsi: a:thvaN a:li:  
 wife+GEN memory came

'Having seen Uma, he was reminded of his  
 own wife.'

In (74), DS shya:m la:i: triggers the deletion of shya:m le in the underlying sentence: (shya:m le si:ta: la:i: dekhyo<sub>s</sub>).

Similarly in (75), the dative subject tya:la: brings about the deletion of tya:ni:.

These examples prove that it is the dative subject that controls the deletion of coreferential NPs in the underlying structures. Thus we can say that dative subjects behave like subjects with respect to conjunction reduction transformation.

### 3.3. EQUI-NP DELETION

Equi-NP deletion in these languages is governed by a certain class of predicates such as ca:hna: 'to want', ira:da: karna: 'to intend', su:cna: dena: 'to inform', a:sha: karna: 'to hope', ya:d a:na: 'to remember', etc. The NP of the higher clause triggers the deletion of the coreferential NP of the lower clause and the ka:-na: type complement is created. Consider:

H(76) ra:m ne phal kha:ne ki: ba:t  
 Ram NOM fruit to eat GEN statement

swi:ka:r ki  
 accept did

'Ram accepted to have eaten the fruit.'

N(77) ra:m le phalphu:l kha:yeko kura:  
 Ram NOM fruit to eat GEN statement  
 swika:r garyo  
 accept did.

'Ram accepted to have eaten the fruit.'

M(78) ra:ma ne phal kha:Nya:tse ma:nya kele  
 Ram NOM fruit to eat+GEN accept did  
 'Ram accepted to have eaten the fruit.'

In (76) ra:mne in the higher clause triggers the deletion of ra:mne in the lower clause which acts as subject of ra:mne phal kha:ya:. The same generalization holds true for Nepali and Marathi. Now consider Equi-NP deletion with respect to DSC:

H(79) ra:m ko uma: ka: dil toRne ki:  
 Ram, DAT Uma GEN heart to break GEN  
 ba:t ya:d a:i:  
 statement memory came

'Ram remembered to have broken Uma's heart.'

N(80) ra:m la:i: uma: ko chitta-dukha:eko  
 Ram DAT Uma DAT to hurt feelings+GEN  
 kura: ya:d a:yo  
 statement memory came

'Ram remembered to have hurt Uma's feelings.'

M(81) ra:ma: la: uma: la: dukkha  
 Ram DAT Uma DAT sorrow

dilya:ci: a:ThvaN: li:  
 having given+GEN memory came

'Ram remembered to have caused sorrow to Uma.'



Notice (79) has the following deep structure: (ra:m<sup>s</sup> ko ((ra:m ne uma:--ka: dil toRa:) ba:t) ya:d a:i:).  
 NP<sub>s</sub> NP<sub>s</sub> NP<sub>s</sub>

The dative subject ra:m ko then causes the deletion of ra:m ne in the lower clause because they are identical. Nepali and Marathi data follow the same pattern.

### 3.4. RAISING

Raising in Hindi is restricted only to a small number of predicates such as dekhna: 'to see', pa:na: 'to find', samajhana: 'to understand', prati:t hona: 'to seem' etc. The same seems to be true about Nepali and Marathi, though this needs further investigation. In Raising, the subject of the lower clause is raised to the object position of the higher clause and it acquires object properties to some extent. Consider:

H(82) māĩ ne ra:m ko wahã: ja:te hue dekha:  
 I+NOM Ram DAT there going saw  
 'I saw Ram going there.'

This sentence can be derived from: (maine  $\Delta$  ((ra:m wahã: ja: raha: tha:) dekha:))<sup>s</sup> Then ra:m is raised to the object position shown by the delta. The same happens in Nepali and Marathi.

N(83) maile ra:m la:i: ghar gai: raheko dekhẽ  
 I+NOM Ram DAT house going saw  
 'I saw Ram going home.'

M(84) mi: ra:ma: la: tikRe ja:ta:na: pa:hila:  
 I Ram DAT there going saw  
 'I saw Ram going there.'

These examples show that it is the subject of the lower clause that is raised in the object position of the higher clause. If the dative subject (This does not apply to the derived dative subjects as in maine ra:m ko piTte dekha:.) of the lower clause can be raised in the object position of the higher clause, it would be an evidence to show that the dative subject originated as subject in the underlying structure. But the evidence for raising with respect to dative subjects is not conclusive. We get sentences where Raising seems to have applied but there are sentences where Raising gives us ungrammatical sentences. For example:

H(85)	māine	ra:m ko	itna:	gussa:	a:te
	I+NOM	Ram DAT	so much	anger	having
	hue	pahle	kabhi:	nahi:	dekha:
	come	before	never	not	saw
	tha:				
	was				

'I had never seen Ram being so angry before.'

H(86)	*maine	ra:m ko	bhu:kh	lagte-hue
	I+NOM	Ram DAT	hunger	being affected
	dekha:/pa:ya:			
	saw/found			

\*'I saw/found Ram being affected by hunger.'

H(87)	maile	ra:m la:i:	yattiko	ri:saeko
	I+NOM	Ram+DAT	so much	angry
	aghi:/pahila:		kahilye	dekheko
	before		never	seen
	thi:na			
	was not			

'I had never seen Ram so angry before.'

N(88)\*maile      ra:m      la:i:      bhokh  
 I+NOM      Ram      DAT      hunger  
 la:gdai-gareko      dekhē/pa:yē  
 being affected      saw/found  
 \*'I saw Ram being affected by hunger.'

M(89) mi:      ra:ma:la: itka:      ra:g  
 I      Ram      DAT      so much      anger  
 a:lya:t̃sa      purvī: kadhi:      pa:hilē      navhte  
 having come before never      saw      not  
 'I never saw Ram being so angry.'

M(90)\*mi:      ra:ma:la: bhu:kh      la:gta:na:  
 I      Ram      DAT      hunger      being affected  
 kadhi:      pa:hila:  
 never      saw  
 \*'I never saw Ram being affected by hunger.'

To summarize the arguments in this section, we can say that dative subjects behave like subjects in controlling Reflexivization, Conjunction Reduction and Equi-NP Deletion in all these three languages. The evidence with regard to Raising is marginal.

4.0. In this section, we make a few remarks about Relational Grammar and then suggest a solution of DSC in the framework of Relational Grammar. "The fundamental tenet of Relational Grammar", says Johnson (1977:153) "is that grammatical relations such as "subject of" and "direct object of" play a central role in the syntax of natural languages." Grammatical relations such as 'subject of', 'direct object of', 'indirect object of' (often referred to as terms) are primitives in linguistic theory.

Grammatical relations being pivotal in Relational Grammar, it is natural that it will address itself to the question of nature and role of these relations in possible human languages and thereby in Universal Grammar. Grammatical relations are distinct from discursual notions such as topic and focus as well as semantic notions such as agent, experiencer, etc. The second thing about grammatical relations is that they are universal. Grammatical relations play an important role in syntactic processes like relativization (cf. Noun Phrase Accessibility Hierarchy as discussed by Keenan and Comrie, 1977), reflexivization, passivization etc. In the initial stratum the underlying relations that are unordered are specified in terms of relations. Because of this, it is possible to state universal transformational rules. Since underlying representations are unordered, there are relation changing rules (such as passivization) that apply to the underlying representations cyclically and the rules change grammatical relations. For example, in passivization the object is promoted as subject and the subject is demoted as a *chômeur*. A second category of rules called Linearization Rules assign order such as S+V+DO+OO based on grammatical relations. The third type of rules, sensitive to 'precedence', 'dominance' etc. apply as in Question Inversion etc.

4.1. In the present analysis, we give a very informal account of Relational Grammar. But before we discuss how to provide a model for DSC, it will be worthwhile to review the previous treatments of DSC. Sridhar (1976) discusses four hypotheses regarding dative subject constructions: (i) Null Hypothesis (ii) Dative Subject Hypothesis (iii) Nominative Subject Hypothesis and

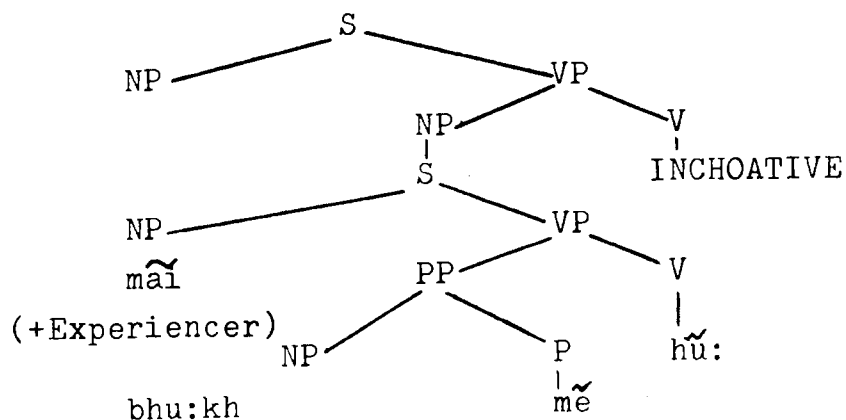
(iv) Squishy Hypothesis. He weighs merits and demerits of each and ultimately chooses Dative Subject Hypothesis over others. Null Hypothesis and subjectless hypothesis are parallel. Some scholars think that there is no subject as such in D.S.C. They would like to support their argument by citing neuter agreement in Nepali and in Hindi modal constructions and in some of the Marathi constructions (see sentence 3). But as we know this hypothesis fails to account for some of the syntactic processes such as Reflexivization, Equi-NP Deletion, Conjunction Reduction etc. that are controlled by subject. Dative Subject Hypothesis accounts for the above syntactic processes but fails to account for coding properties such as agreement (in most Hindi and Marathi sentence the agreement is between the verb and the nominative subject) and case marking. Nominative Subject Hypothesis will account for case marking and agreement but fail to take into account the syntactic processes. The Squishy Subject Hypothesis takes preponderance of subject properties (Keenan: 1976) into consideration. This notion of subject becomes vacuous because it is possible to choose subject in different languages on different criteria depending upon the preponderance of features. Sridhar decides in favour of Dative Subject Hypothesis, thus giving more weightage to syntactic properties of subject.

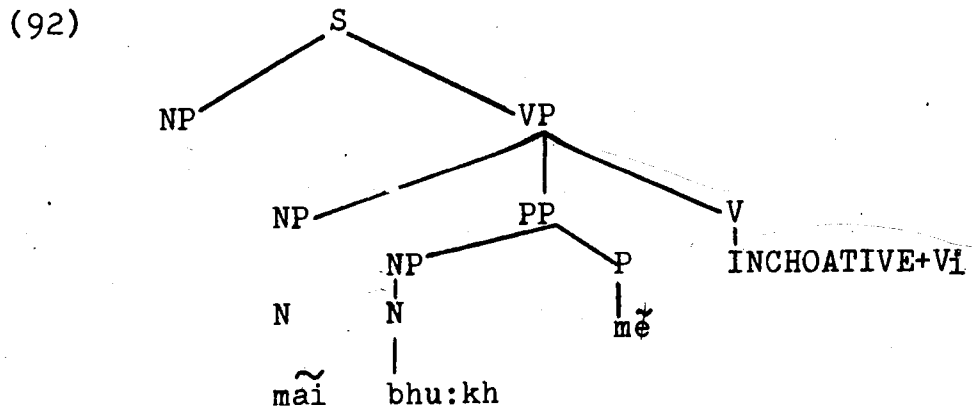
#### 4.3. CLAUSE UNION SOLUTION

In our analysis, we look at DSC from a different point of view. We essentially accept the hypothesis that dative subjects are subjects in the initial stratum and they become indirect objects in their canonical and final strata by a relation changing rule. We further suggest that the other argument in the dative subject

construction is OO in the initial stratum and it is promoted as subject in the canonical and final strata again by a relation changing rule. So far there is no difference. But then, we suggest that these grammatical relations are definable in terms of 'agent', 'experiencer' etc. and we suggest that the dative subject originates as subject but at the same time as an experiencer or recipient of the state or action of the verb in the underlying structure. We suggest a bisentential input to a dative subject construction and then these clauses are reduced to one by INVARIANT OUTPUT HYPOTHESIS (Postal: 1974). Postal and Perlmutter (1974) claim that Invariant Output Hypothesis as exemplified in Clause Union specifies the derived grammatical relation of the complement subject in the same way in all languages (Cole et al: 1976). Comrie (1976) states, on the other hand, that the output of the clause union varies from language to language. If our analysis of dative subject constructions is accepted, this supports Comrie's position because the underlying complement subject (UCS) in intransitive verbs instead of becoming direct object as predicted by IOH becomes indirect object. Let us now present the analysis. Consider the following initial stratum:

(91)





(92) represents an intermediate stratum after the clause union has applied. Low level transformational rules apply that attach ko to māi and delete mē from bhu:kh and the readjustment rules convert INCHOATIVE+VI into lagi: and we get the surface form mujhko bhukh lagi.

The theoretical implications of this solution are:

- (i) It nicely captures the semantic properties of the sentences. The experiencer of dative subject originates as experiencer in the initial stratum.
- (ii) It also accounts for syntactic processes that are governed by subject such as reflexivization, conjunction reduction etc. In our analysis, these operations will presumably take place before the clause union. This needs further investigation.
- (iii) The solution also accounts for case marking and agreement in that the locational NP becomes nominative subject by losing its post position, so the verb agrees with the least marked NP.
- (iv) The solution neatly ties with the VERB HIERARCHY suggested by us in section 2.3 in that the predicate INCHOATIVE occurs in every Dative Subject Construction.

However, there are two major weaknesses in the solution: (i) It is not clear how a copula becomes another lexical verb when attached to INCHOATIVE. (ii) The solution treats every DSC as intransitive in the underlying structure. It seems to us that these two problems can be solved if we are able to decompose verbs like lagna:, a:na: etc. in a satisfying manner. We do not know at the moment as to how it can be done. Needless to say that this solution is much better than the four hypotheses proposed by Sridhar (1976) because it accounts for all the semantic, syntactic and morphological facts in a principled way.

#### 5.0. CONCLUSION

We have shown that dative subject constructions in Hindi, Nepali and Marathi occur with verbs denoting sense-perception, health conditions, mental and emotional experiences. Then, they obligatorily occur with certain modal constructions expressing obligation, necessity, etc. Concerning agreement, we have shown that except modal constructions (where there is neuter agreement), Hindi verb shows agreement with the nominative subject. Marathi almost shows the same pattern as Hindi except some verbs of sense-perception such as dislā 'to be seen' (see sentence 3) where neuter agreement is used. Concerning modal constructions we further noticed that Nepali can use both dative and nominative constructions for them. We have also discussed some of the semantic and pragmatic properties of dative subject constructions. We noticed that Nepali does not have a corresponding stative dative construction mujhko bhu:kh hai. Nepali uses a nominative construction instead. In terms of syntactic processes all the three languages behave almost alike. In all the



three languages processes like reflexivization, conjunction reduction, Equi-NP and raising are controlled by dative subjects. Some of the examples of Equi-NP for Marathi cut across conjunction reduction though. Lastly we have shown that dative subject constructions can be best accountd for in terms of Clause Union Hypothesis.

#### ACKNOWLEDGEMENT

We thank Dr. Yamuna Kachru, Dept. of Linguistics, University of Urbana-Champaign for giving useful comments on the earlier version of this paper. We, however, absolve her of any responsibility for the mistakes that may still remain in the paper.

#### REFERENCES

- Cole, Peter et al. 1976. Clause union and relational grammar: evidence from Hebrew and Kannada. Studies in the Linguistic Sciences 6: 1. 216-227.
- Comrie, B. 1976. The syntax of causative constructions: cross languages similarities and divergences. Syntax and Semantics vol. 6, ed. by Masayoshi Shibatani, 261-312. New York: Academic Press.
- Johnson, David E. 1977. On relational constraints on grammars. Syntax and Semantics vol. 8, ed. by Peter Cole and Jerrold M. Sadock. New York: Academic Press.

152 CNAS Journal, Vol. VII, No. 1 & 2 (Dec.'79 & Jun.'80)

Kachru, Y. 1970. The syntax of ko-sentences in Hindi-Urdu. Papers in Linguistics 2. 299-316.

Kachru, Y. et al. 1975. The notion 'subject', a note on Hindi-Urdu, Kashmiri and Punjabi. The notion of subject in south Asian languages, ed, by Manindra K. Verma. University of Wisconsin, publication 2. 79-108.

Keenan, Edward L. 1976. Toward a universal definition of subject. Subject and topic, ed. by Charles N. Li. New York: Academic Press.

Keenan, Edward L. and Bernard Comrie. 1977. Noun phrase accessibility and universal grammar. Linguistic Inquiry 8. 63-99.

Krishnamurthi, Bh. 1975. Verbs of cognition in Telgu. Osmania papers in Linguistics 1:1. Hyderabad: Osmania University.

Masica, Colin P. 1976. Defining a linguistic area: South Asia. Chicago: University of Chicago Press.

McAlpin, David. 1975. Dative subjects in Malyalam. In Manindra K. Verma ed.

Postal, P. M. 1974. Report of work done as part of the MSSB on constraints on grammars, duplicated IBM Thomas J. Watson Research Center Yorktown Heights, New York.

Postal, P. M. and Perlmutter D. 1974. Relational grammar.

LSA. Mimeographed.

Sridhar, S. N. 1976. Dative subjects, rule government and relational grammar. Studies in the Linguistic Sciences 6:1. Urbana: University of Illinois.

Verma, M. K. 1975. The notion of subject and the data from Nepali. In Manindra. K. Verma ed.