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THE HINDI PARTICLE *N-E*

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RÉSUMÉ

Il est proposé que le hindi ne possède que des verbes statifs, et que seul le verbe «être» du hindi possède de véritables caractéristiques verbales, notamment l'accord en personne. En effet, toute proposition en hindi est constituée par deux arguments, le Site et la Cible.

Les expressions dynamiques en hindi dépendent donc de syntagmes nominaux complexes événementiels (Grimshaw 1990), des participes ne pouvant exprimer que des actions simples. L'expression des actions complexes ou «causatives» requiert des moyens supplémentaires, d'où le rôle de la particule-sujet *n-e* dans certaines utilisations des participes perfectif et gérondif, en raison de leur aptitude présumée à évoquer la partie «causée» des actions complexes. Il est proposé en outre que le sujet *n-e* en fournit le sens de la partie «causative».

SUMMARY

It is proposed that Hindi has only stative verbs, and that the only item in the language to show fully verbal traits, person agreement in particular, is the verb for 'be'. Every clause of Hindi is composed of two arguments, namely the Figure and the Ground.

The expression of dynamic meanings in Hindi therefore requires the use of Complex event Nominals (Grimshaw 1990). These are participles which can only express simple Actions. The expression of complex or 'causative' Actions requires supplementary means, which is why the particle *n-e* is required with the subjects of certain clauses based on perfective and gerundive participles. It is proposed that these participles express the 'caused' portion of a complex Action, while the *n-e* subject expresses the 'causative' portion.

ABBREVIATIONS USED IN THE GLOSSES

ms.	masculine
fem.	feminine
sg.	singular
pl.	plural
dist.	distal (deictic)
prox.	proximate (deictic)
prf.	perfective
imprf.	imperfective
pres.	present
DC	direct case, <i>i.e.</i> , noun with no case inflection (and usually no post-position)
OC	oblique case, <i>i.e.</i> , inflected form, usually followed by a post-position
‘xyz’	‘approximate meaning in context’, <i>e.g.</i> , the meaning of post-positions in context, rendered as ‘in’, ‘into’, ‘from’, ‘out of’, ‘with’, ‘by’, ‘by means of’, ‘through’, and so on
neg.	negation marker used with indicative and non-indicative modes
neg.(+‘be’)	negation marker used with indicative modes, a compounded form of the basic negation marker and the verb of existence
loc.	refers to the locative meaning of suppletive pronominal forms traditionally considered allophones for oblique pronoun + post-position <i>ko</i>

CHAPTER I

The distribution of *n-e*

1.1 The problem of the distribution of the particle *n-e*

This thesis proposes an account of the composition, meaning, and distribution of the Hindi particle *n-e*, which plays a central role in the Hindi clause. Hindi is said to be an *aspectually-conditioned morphologically ergative language* (cf., Trask 1979). In clauses in the perfective aspect, the *subject* of an *intransitive* expression and the *direct object* of a *transitive* expression are typically realized with the same morphology, *i.e.*, in the direct case (or ‘nominative’). In contrast, the *subject* of a *transitive* expression in the perfective generally appears in the oblique case with the particle *n-e*, often called the ‘ergative’ case. The subject of the intransitive expression in 1-1 is in direct case. The verb agrees with this argument in the direct case in number and in person, and the participle agrees in number and gender:

intransitive, perfective

Example 1 1

billaa daR- ϕ -aa h-ai
tomcat-ms.sg. **direct case** fear-prf.ms.sg. be-3sg.pres.
‘The tomcat was afraid (*specific incident*).’

However, in the related transitive in 1-2, it is the direct object *billii* ‘she-cat’ that is in the direct case. The subject *bille* ‘tomcat’ is in the oblique case, followed by the particle *n-e*. The verb and the participle agree with the object, when it is in the direct case:

transitive, perfective

Example 1 2

bille	n-e	billii	Dar-aa-y-ii	h-ai
tomcat-ms.sg.	Action-oblique case ¹	she-cat-fem.sg.	fear-cause-prf.fem.sg.	be-3sg.pres.
oblique		direct case		

‘The tomcat frightened a/the she-cat.’

In this example, the object may receive a specific or a non-specific interpretation. However, the object can also appear in the oblique case with the particle *ko*. The reading is then unambiguously definite, as in 1 3. In clauses like this one that contain no argument in the direct case, there is masculine singular agreement:

transitive, perfective

Example 1 3

bille	n-e	billii	ko	Dar-aa-y-aa	h-ai
tomcat-ms.sg.OC	Action-OC	she-cat-fem.sg.	End-	fear-cause-prf.ms.sg.	be-3sg.pres.
		oblique case	Point		

‘The tomcat frightened the/*a she-cat.’

In general, the particle *n-e* appears with the subjects of clauses based on the perfective of transitive participles. The *n-e*-subject never appears in clauses based on participles in the imperfective, progressive, or frequentative aspects, nor in the passive construction. In these clauses, most Hindi expressions follow the *morphologically accusative* pattern, as in 1 4:

transitive, progressive

Example 1 4

billaa	billii	Dar-aa-t-aa	h-ai
tomcat-ms.sg.DC	she-cat-fem.sg.DC	fear-cause-imprf.ms.sg.	be-3sg.pres.

‘The tomcat frightens a/the she-cat (*habitually*).’

The subject of the transitive imperfective expression in 1-4 has the same morphology as the subject of the related intransitive expression in 1-5:

intransitive, imperfective

Example 1 5

billaa Dar-t-aa h-ai
 tomcat-ms.sg.DC fear-imprf.ms.sg. be-3sg.pres.
 ‘The tomcat is afraid (*habitually*).’

Note, however, that there are several other ‘non-nominative’ subjects in Hindi. The distribution of these subject types has no relation to the aspectual type of the participle. For example, the subject may appear with the particle *ko*:

Example 1 6

raamdaas ko juukaam aa-y-aa h-ai
 name-ms.OC End-Point cold-ms.sg.DC come-prf.ms.sg. be-3sg.pres.
 ‘To Ramdas a cold has come.’ (*i.e., Ramdas has caught a cold.*)

Post-positions with basically spatial meanings can also appear with subjects, as in 1 7:

Example 1 7

raamdaas k-e jaise aadmiyoN meN himmat ho-t-ii hai
 ‘men like Ramdas’-ms.pl.OC ‘in’ courage-fem.sg.DC become-imprf.fem.sg. be-3sg.pres.
 ‘In men like Ramdas is courage.’ (*i.e., Men like Ramdas have courage.*)

There are thus more than one ‘morphologically ergative’ pattern in Hindi. However, only the first of these patterns is aspectually conditioned (*i.e.*, when the participle is transitive and perfective, and the subject requires *n-e*) while the other patterns do not depend on the choice of participle (as when the subject appears with *ko* or one of the spatial post-positions).

Note that in clauses like 1-3 (*supra*) in which the subject appears with *n-e* and the object appears with *ko*, the clause has no argument in the direct case. This is only possible in clauses with *n-e*-subjects. All other clauses with non-nominative subjects must include an argument in the direct case with which the verb of existence and the participle agree. Furthermore, if a clause has just one argument, that argument must be in the direct case –or it must be a *n-e*-subject. Here too the clause with the *n-e*-subject stands apart (*infra*).

It is often claimed (*cf.*, Mohanan 1994) that the referent of the *n-e*-subject must have volition. Thus, in the examples above, the tomcat is understood to have deliberately acted in some way to frighten the she-cat. If the tom-cat actually did nothing deliberate, it could not appear as a subject with *n-e*, but only as a topicalised adjunct with the post-position *se* ‘with; of; from’:

Example 1 8

bille se billii Dar- ϕ -ii h-ai
 tomcat-ms.OC ‘with; from; of’ she-cat-fem.sg.DC fear-prf.fem.sg. be-3sg.pres.
 ‘The she-cat is frightened of the tomcat (*specific incident*).’

On the basis of data like these, it is generally assumed in the literature that aspectually conditioned morphological ergativity in Hindi (*i.e.*, the use of the *n-e*-subject) depends on *three* contextual factors: perfective aspect, syntactic transitivity, and volition of the referent of the subject. Various explanations have been set forth as to why *n-e* should appear in these contexts. It has been suggested, for example, that the transitivity requirement was originally entirely semantic in nature, but that it has evolved into a ‘blind rule of grammar’ (Montaut 2006), *i.e.*, that the distribution of *n-e* is now largely mechanical². The association of *n-e* with volition has long been claimed to reflect an etymological connection of this particle with an old instrumental suffix (MacGregor 1996). Attempts have also been made to relate the distribution of *n-e* to strong agentivity (*cf.*, the ‘transitivity prototype’ of Magier 1987), thereby dispensing for the need to refer to an overt object in the description of the distribution of *n-e*. However, all previous accounts have had to acknowledge counter-examples to each of these three assumed requirements.

The data that support these assumptions are reviewed below, along with some of the exceptional data that contradict them.

1.1 Transitivity and the *n-e*-subject

The traditional association of *n-e* with a volitional subject and an overt object responds to two types of evidence: 1) the highly agentive nature of subjects with *n-e*, and 2) the many examples of Hindi intransitives that can be ‘transitivized’ using *n-e*. The semantic and morphological patterns of these intransitive-transitive pairs have been discussed since Beames (1872) and Kellog (1893). While the subject of the intransitive expression is non-volitional, and requires the direct case, the subject of the related transitive is volitional, requiring a subject in the oblique case with *n-e*. The subject of the intransitive form is semantically similar to the object of the transitive form, as can be seen in the following examples, where the subject of *mar* ‘die’ and the object of *maar* ‘kill’ both end up dead:

Example 1 9

rukmini mar- ϕ -ii h-ai
 name-fem.DC die-prf.fem. be-3sg.pres.
 ‘Rukhmini has died.’

Example 1 10

raamdaas n-e rukhmini ko maar- ϕ -aa h-ai
 name-ms.DC Action-OC name-fem.OC End-Point kill-prf.ms.sg. be-3sg.pres.
 ‘Ramdas has killed Rukhmini.’

The following table displays a few common expressions that occur in similar pairs:

Table 1 Intransitive-transitive pairs

roots	meaning	DC subject	<i>n-e</i> -subject	volitional subject
<i>mar</i>	'wither; die'	♥		
<i>maar</i>	'beat; kill'		♥	♥
<i>daR</i>	'fear'	♥		
<i>daRaa</i>	'frighten'		♥	♥
<i>gir</i>	'fall'	♥		
<i>giraa</i>	'knock over'		♥	♥
<i>sikh</i>	'learn'	♥		
<i>siikh</i>	'teach'		♥	♥
<i>TuuT</i>	'break'	♥		
<i>toR</i>	'break'		♥	♥
<i>bhar</i>	'become full (<i>of something</i>)'	♥		
<i>bhar</i>	'fill (<i>something</i>)'		♥	♥
<i>jiit</i>	'be victorious'	♥		
<i>jiit</i>	'conquer'		♥	♥

The morphological signals of these correspondences are not fully predictable, and the semantics is even less so. The intransitive member of such pairs often has a short vowel, while the causative member has the corresponding long vowel. However, the variety of morphological signals and the various shades of 'causativisation' noted in the glosses suggest that these pairs are not related through a productive derivation.

A second group of intransitive-transitive pairs also alternates between subjects in the direct case and in the oblique case with *n-e*, respectively. The subject of the transitive member of each pair is at the origin of the event denoted by the expression, but a 'second subject' or 'causee' actually performs it:

Example 1 11

raamdaas (rukmini ke saath) naac- ϕ -aa h-ai
 name-ms.DC name-fem.OC 'with' dance-prf.ms.sg. be-3sg.pres.
 'Ramdas has danced (*with Rukhmini*).'

Example 1 12

rukmini n-e raamdaas ko nac-vaa-y-aa h-ai
 name-fem.OC Action-OC name-ms.OC End-Point dance-cause-prf.ms.sg. be-3sg.pres.
 'Rukhmini has made Ramdas dance (*has made her perform a dance*).'

The following table shows a few such pairs:

Table 2 Doing vs. having someone do

root pairs	meaning	subject in direct case	<i>n-e</i> -marked subject	volitional subject
<i>naac</i>	dance	♥		
<i>nacvaa</i> ³	make someone perform a dance		♥	♥
<i>paRh</i>	read	♥		
<i>paRhaa</i>	make someone read; teach		♥	♥
<i>dauR</i>	run	♥		
<i>dauRaa</i>	make someone run; chase		♥	♥

The morphological signal of the relationship between the subject and the causee is either the suffix *-aa* or *-v-aa* (Saksena 1982). The relationship between the intransitive and transitive forms is semantically and morphologically more regular than in the previous group, but not perfectly so. The choice of ‘causative’ suffix is generally related to whether or not there is a third party or intermediary between the ‘causer’ and the ‘causee’. In this area, there is some divergence among speakers in choice of suffix and interpretation. Like the first group discussed above, this kind of causitivation is not a very productive process.

The intransitive forms of both groups always appear with subjects in the direct case, in perfective and non-perfective clauses alike. Their transitive counterparts also require subjects in the direct case in non-perfective clauses. In perfective clauses, however, the transitives of both groups require subjects with *n-e*. Within these regular groups, there are restrictions on the semantic types of subjects and objects permitted in a clause with *n-e*: the subjects are volitional, and the objects are expressed by nouns. These restrictions appear to support the standard view that the distribution of *n-e* is tied to agentivity and transitivity.

Expressions requiring *n-e*-marked subjects generally appear with overt objects, even when these are little more than syntactic place-holders. For example, a person cannot simply ‘eat’ in Hindi: he is either ‘eating a meal’, ‘eating food’, or ‘eating some specific food’. The equivalent of English ‘I ate’ is disallowed in Hindi:

Example 1 13

raamdaas	n-e	*(khaanaa)	khaa-y-aa	h-ai	/	*(roTii)	khaa-y-ii	h-ai
name-	Action-OC	meal-	eat-	be-		bread-	eat-	be-
ms.OC		ms.sg.DC	prf.ms.sg.	3sg.pres.		fem.sg.DC	prf.fem.	3sg.pres.

‘Ramdas has eaten his meal / has eaten some roti.’

The expression *khaanaa khaa-* ‘(lit.) food/meal-eat’ thus appears to support the traditional perspective relating transitivity to the requirement for *n-e*. However, there is no intransitive-transitive pair.⁴

Another expression that fails to fit the intransitive-transitive pattern is *muskaraa-* ‘smile’. While *khaa-* ‘eat’ lacks an intransitive counterpart, *muskaraa-* ‘smile’ lacks a transitive counterpart. There is no lexical causative (neither ‘make a smile’, nor ‘make someone smile’), Even though *muskaraa-* has the form of a causative like *dauRaa-*. The expected intransitive form **muskar-* is missing. Nevertheless, thanks to the use of the cognate object, an intransitive-transitive pair does exist, with a variation in meaning and required subject. The intransitive form appears with a subject in the direct case; the transitive counterpart has a *n-e*-marked subject and a cognate object:

Example 1 14

laRkaa	muskaraa-y-aa
boy-ms.sg.DC	smile-prf.ms.sg.

‘The boy smiled.’

Example 1 15

laRke	n-e	vijay	k-ii	muskarahaT	muskaraa-y-ii
boy-ms.sg.OC	Action-OC	triumph	poss.-fem.	smile-fem.DC	smile-prf.fem.

‘The boy smiled a triumphant smile.’

Other idiosyncratic expressions of physiological events with intrinsically identifiable products include *khans-* ‘cough’, *muut-* ‘defecate’, and *thuuk-* ‘spit’. For some speakers, these alternate regularly between intransitive forms with subjects in the direct case and transitive forms with cognate objects and subjects in the oblique case and *n-e*.

However, for many speakers, some of these expressions always appear with subjects in the direct case, while others always appear with subjects with *n-e*, whether there is a cognate object or not. The contrast in the meanings of these forms is sometimes clear-cut, and sometimes claimed to be nil. Moreover, there are generally accepted expressions that do not follow the semantic patterns of these groups: non-volitional subjects are sometimes possible with *n-e*, and objects are sometimes impossible when the subject appears with *n-e*. Lastly, with gerundive participles of obligation, there is no transitivity requirement at all: it is enough for the obligation to originate in the subject referent for the particle *n-e* to appear.

1.1.1 Exceptions to the general distribution of *n-e*

The standard assumption is that if a perfective expression is transitive, it must have a *n-e*-subject, and that if it has a *n-e*-subject, it must be a transitive in the perfective. However, this strong generalization is inaccurate.

1.1.1.1 Subjects of transitives, appearing with or without *n-e*

Some expressions have no intransitive form, but have two transitives –one that requires a subject in the direct case, and another requiring a *n-e*-subject. For example, *bol* ‘utter, speak’ appears in the perfective with a subject in the direct case when speech is merely reported, or when the utterance is spontaneous:

Example 1 16

raamdaas bol- ϕ -aa, paaNv Thak ga-y-e h-ai-N
 name-ms.DC speak-prf.ms.sg. foot tired go-prf.m.pl. be-3pl.pres.
 ‘Ramdas said (*perhaps, muttered to self*), ‘My feet are tired.’’

When the utterance is an assertion (as opposed to aimless grumbling) the subject may appear with or without *n-e*:

Example 1 17

raamdaas (n-e) bol- ϕ -aa, bacce Thak ga-y-e h-ai-N
 name-ms. Action-OC 'speak-prf.ms.sg. child-ms.pl.D.C. tired go-prf.m.pl. be-3pl.pres.
 'Ramdaas said, 'The children are tired.'

However, when the addressee is included with the assertion, the particle *n-e* must be used:

Example 1 18

raamdaas *(n-e) patnii se bol- ϕ -aa, bacce Thak ga-y-e h-ai-N
 name-ms.DC Action- wife fem.DC 'with' speak- child- tired go- be-
 OC prf.ms.sg. ms.pl. DC prf.m.pl. 3pl.pres.
 'Ramdaas said to his wife, 'The children are tired.'

With *bol-* 'utter, speak', there is no 'object agreement', as there is no object in the direct case.

A similar example is *samajh-* 'understand'. When used to refer to understanding that comes of itself, *samajh-* requires a subject in the direct case:

Example 1 19

vah kahaanii samajh- ϕ -aa
 distal sg.DC parable-fem.DC understand-prf.ms.sg.
 'He understood the parable (*it came to him, perhaps suddenly*).'

However, with the *n-e*-subject, *samajh-* refers to understanding that comes after deliberation⁵:

Example 1 20

us n-e kahaanii samajh- ϕ -ii
 distal sg.OC Action-OC parable-fem.DC understand-prf.fem.
 'He understood the parable (*figured it out*).'

This particular example is sometimes given as support for the view that transitivity and volition are *both* necessary conditions for the use of *n-e* (MacGregor 1996). The subject of *samajh-* can only appear with the particle *n-e* when the referent is volitional, suggesting that transitivity is not a sufficient condition to require its use.

1.1.1.2 Subjects of intransitives, appearing with or without *n-e*

A second group of exceptional expressions are intransitives that can appear with subjects in the direct case, or in the oblique case with *n-e*. The variants have distinct meanings. When the subject is in the direct case, it undergoes the event; when it is in the oblique with *n-e*, it performs it:

Example 1 21

laRkii gam k-e maare roy-φ-ii
 girl-fem.sg.DC 'for grief' weep-prf.fem.sg.
 'The girl wept for grief.'

Example 1 22

laRkii n-e gussaa dikhaakar roy-φ-aa
 girl-fem.sg.OC Action-OC 'showing anger' weep-prf.ms.sg.
 'The girl wept in rage.'

These expressions also have derived causatives in which a second party undergoes the event, (an alternation in meaning that recalls alternations like *mar* 'die' > *maar* 'kill'):

Table 3 Undergoing vs. doing vs. getting someone to undergo

root	meaning	subject in direct case	<i>n-e</i> -marked subject	volitional subject
<i>ro</i>	weep (e.g., for grief)	♥		
<i>ro</i>	sob (e.g., to attract pity)		♥	♥
<i>rulaa</i> ⁶	make someone weep; tell a sob-story		♥	♥
<i>so</i>	sleep (e.g., fall asleep)	♥		
<i>so</i>	sleep (e.g., get a good sleep)		♥	♥
<i>sulaa</i>	put someone to sleep		♥	♥

Other intransitive expressions vary in this way, but have no derived causative form. When the subject is in the direct case, its referent is understood to have acted involuntarily. When the subject is in the oblique case followed by *n-e*, the referent has acted voluntarily:

Example 1 23

laRkaa cillaa-y-aa
 boy-ms.sg.DC shriek-prf.ms.sg.
 ‘The boy shrieked (*involuntarily*).’

Example 1 24

laRke n-e cillaa-y-aa
 boy-ms.sg.OC Action-OC shriek-prf.ms.sg.
 ‘The boy shrieked (*voluntarily*).’

The following list of such expressions is probably exhaustive:

Table 4 Intransitives with variable subject forms

Root	meaning	subject in direct case	<i>n-e</i> -marked subject	volitional subject
<i>bhaauNk</i>	‘bark (<i>e.g.</i> , at the moon)’	♥		
<i>bhaauNk</i>	‘bark (<i>e.g.</i> , in warning)’		♥	♥
<i>Cillaa</i>	‘shriek (<i>e.g.</i> , in pain)’	♥		
<i>Cillaa</i>	‘shriek (<i>e.g.</i> , in protest)’		♥	♥
<i>Ciik</i>	‘shriek (<i>e.g.</i> , in fright)’	♥		
<i>Ciik</i>	‘shriek (<i>e.g.</i> , imploringly)’		♥	♥

1.1.1.3 Subjects with *n-e* and non-sentient referents

Under the view that the distribution of *n-e* is related to agentivity, it is unexpected that non-sentient forces should appear as subjects with *n-e*, since these lack the volitional features observed in the subjects of the two kinds of causative transitives discussed above:

Example 1 25

kal raat k-ii andhii n-e mandir k-ii diivaar toR di-φ-i
 ‘yesterday’ night poss.- storm-fem. Action- temple poss.- wall-fem. tear- give-
 fem. OC fem. root prf.fem.
 ‘Last night’s storm tore down the temple wall.’

Nevertheless, such sentences are common (see also example 1 36). Thus, it is indeed possible for subjects with *n-e* to have inanimate, non-sentient referents.

1.1.1.4 Object semantics and the use of *n-e*

Some transitive expressions allow either the subject in the direct case, or in the oblique case with *n-e*, depending on the meaning. For example, *paRh* can mean ‘read’ or ‘study’. One ‘reads’ books (*n-e*-marked subject), but he ‘studies’ a study program (subject in direct case). It is notable that both of these may be voluntary Actions.

Example 1 26

raamdaas n-e phraaNc k-ii kitaab paRh-φ-ii h-ai
 name-ms.OC Action-OC French poss.fem. book-fem. read-prf.fem. be-3sg.pres.
 ‘Ramdas has read a French book.’

Example 1 27

raamdaas phraaNc paRh-φ-aa h-ai
 name-ms.DC French read-ms.sg. be-3sg.pres.
 ‘Ramdas has studied French.’

An expression may have different kinds of objects, and require a subject in the direct case when it has one kind of object, and a subject with *n-e* when the other kind is used. When the object of *paa-* ‘to obtain’ is expressed by a nominal, the subject requires *n-e*:

Example 1 28

us n-e acchii naukRii paa-y-ii h-ai
 distal sg.OC Action-OC good-fem. job-fem. obtain-prf.fem. be-3sg.pres.
 ‘He got himself a good job.’

However, when the object of *paa-* is a participial root, the meaning is ‘manage to do X’. The subject must appear in the direct case, never with *n-e*:

Example 1 29

vah acchii naukRii le paa-y-aa h-ai
 distal sg.DC good-fem. job-fem.sg.(D.C.) take-root obtain-prf.ms.sg. be-3sg.pres.
 ‘He managed to get a good job.’

The subject varies in form, even though both uses involve voluntary Actions.

1.1.1.5 Transitives with subjects and objects in the direct case

Exceptions to the transitivity requirement include a handful of transitive expressions in the perfective that always appear with a subject and an object in the direct case:

Example 1 30

vah paniir (ko) laa-y-aa
 3sg.DC cheese End-Point bring-prf.ms.sg.
 ‘He brought some (the) cheese.’

Example 1 31

vah caabbii (ko) bhuul- ϕ -aa h-ai
 3sg.DC key-fem.DC End-Point forget-prf.ms.sg. be-3sg.pres.
 ‘He forgot a / the key.’

These examples vary with respect to the possibility of using the definite object-marking particle *ko*, but whether or not the object can be made explicitly definite does not correlate with the use of *n-e*. ‘Bringing’ and ‘forgetting’, although transitive, cannot be done by a *n-e*-subject⁷. This is in spite of the fact that ‘bringing’ is typically a voluntary Action.

1.1.1.6 The subject with *n-e* of gerundive participles of obligation

Although this fact is generally ignored by purists, the particle *n-e* does not only appear with perfective participles, but is also possible with the subjects of both transitive and intransitive gerundive participles of obligation. In one formulation of this construction, however, the subject appears in the oblique case and is followed by the particle *ko*. The source of obligation is external:

Example 1 32

raamdaas ko jaldii jaa-n-aa h-ai
 name-ms.OC End-Point quickly go-N-ms.sg.DC be-3sg.pres.
 ‘Ramdas has to leave quickly (*involuntary*).’

However, when the source of obligation is internal, the subject appears in the oblique case with the particle *n-e*:

Example 1 33

raamdaas n-e jaldii jaa-n-aa h-ai
 name-ms.OC Action-OC quickly go-N-ms.sg.DC be-3sg.pres.
 ‘Ramdas has to leave quickly (*voluntary*).’

Transitive gerundives can be used in exactly the same way. When the subject is followed by the particle *ko*, he has been given *no choice* but to take the medicine:

Example 1 34

raamdaas ko davaa le-n-ii h-ai
 name-ms.DC End-Point medicine-fem.DC take-N-fem.DC be-3sg.pres.
 ‘Ramdas has to take medicine (*involuntary*).’

When the subject is followed by the particle *n-e*, he feels impelled to take the medicine:

Example 1 35

raamdaas n-e davaa le-n-ii h-ai
 name-ms.DC Action-OC medicine-fem.DC take-N-fem.DC be-3sg.pres.
 ‘Ramdas has to take medicine (*voluntary*).’

This use of *n-e* with gerundive participles of obligation thus goes against the alleged requirements for perfectivity and transitivity, but follows the requirement of volition.

1.1.1.7 Summary of cases of exceptional distribution of *n-e*

The *n-e*-subject is limited to the perfective and obligative gerundive aspects. It is always the subject of the clause. Transitivity and volition as such do not determine the distribution of *n-e*, although the distribution of *n-e* is strongly correlated with these notions. Strikingly, many clauses, transitive and intransitive, may appear with or without *n-e*, depending on the intended meaning, not necessarily involving volition. The nature of these exceptions suggests that the distribution of the particle *n-e* is governed by semantic structure, of which transitivity, perfectivity, the obligative mood, and volition of the subject are signs rather than causes. The presence of these features when *n-e* is used is epiphenomenal.

1.2.0 Previous accounts of the usage of *n-e*

The following sections examine the various accounts of aspectually-conditioned morphological ergativity in Hindi that have appeared to date in the literature.

1.2.1 Classical case systems and Hindi

The first European grammars of Hindi (*e.g.*, Beames 1872; Kellogg 1893) were modelled on descriptions of classical European languages. The post-positions of Hindi were assumed to parallel the case declensions of Sanskrit, Greek, and Latin, an approach that persists in the current literature (*e.g.*, Kachru 1980; McGregor 1995; T.Mohanam 1994). The nominative or direct case is opposed to the oblique case, which is required when the noun appears with a post-position. The noun in direct case ‘governs’ agreement relations in the clause, while the oblique case is understood to be a highly general locative that requires specification through the use of post-positions (Masica 1991). Thus, post-positions signal dative, accusative, instrumental, locative, and genitive case. However, the classical languages have no case corresponding to the Hindi particle *n-e*. The case inventory of Hindi was therefore enriched with an ‘agentive’ or ergative case. With this label, the particle *n-e* was expected to appear whenever an agent performs an Action. Exceptions to this, when acknowledged, were treated as idiomatic expressions. Clearly, the traditional grammars of classical languages are not suitable models for an account of Hindi grammar.

In classical case systems, nominative case and agreement are typically associated with the ‘grammatical function’ of subject. In Hindi, however, nouns in the direct case are not always subjects, even when they govern verbal agreement. As it has been noted above, Hindi has several non-nominative subjects, *i.e.*, nouns in the oblique case (with post-positions) that do not govern agreement. It is thus common to refer to nominative, ergative, and dative subjects in Hindi (*cf.*, McGregor 1995, Butt 2001). Current treatments also argue for instrumental, locative, and genitive subjects (T.Mohanam 1994; Narasimham 1997).

1.2.2 Magier (1987) and the Transitivity Prototype

The notion of transitivity has often been linked to the distribution of *n-e*, but some authors have argued that a broader notion than surface transitivity may allow for a more satisfactory generalization. Magier (1987), building on Hopper and Thompson (1980), tries to distinguish ‘notional’ transitivity from syntactic transitivity in Hindi. Notional transitivity is claimed to be determined by the number of participants in the ‘cognitive scene’ inherent to the meaning of the expression. Furthermore, certain semantic features of the elements in a clause are considered to vary in degree of ‘salience’, and these features are added up to yield ‘high’ vs. ‘low transitivity’ (*cf.*, Hopper and Thompson 1980). Certain feature clusters are said to place an argument closer to one end or the other of an Agent / Subject vs. Patient / Object continuum. Under Magier’s view, for example, ‘eat’ in all languages is bivalent (*i.e.*, transitive), whether the object is overt or not, as the object in the cognitive scene is part of the meaning of the verb ‘eat’, while ‘sleep’ is monovalent, (*i.e.*, intransitive, since this verbal meaning comprises no relationship with any other entity than the ‘sleeper’).

Notional transitivity is useful for describing the use of *n-e* with the subjects of certain intransitive expressions of physiological events with intrinsically identifiable products, *e.g.*, *khans-* ‘cough’, *muut-* ‘defecate’, and *thuuk-* ‘spit’, because that product figures in the cognitive scene. However, there are problematic cases. Why are overt, cognate objects required by expressions like *khaanaa khaa-* ‘eat’? Why are optional cognate objects accompanied by volitional meanings, *e.g.*, *khans khans-* ‘cough (*deliberately*)’? How is the obligatory participant in the cognitive scene expressed by intransitive *samajh-* ‘understand’ (a non-volitional subject in the direct case) notionally distinct from the ergative counterpart (volitional subject with *n-e*)? Notional transitivity also fails to explain the use of *n-e* when the subject has ‘low agentivity’, as in the following example:

Example 1 36

baraph	n-e	paanii	ko	ThanNDaa	kar	di-y-aa
snow-OC	Action-OC	water	End-Point	cold	make-root	give-prf.ms.sg.

‘The snow made the water cold.’

1.2.3 Ritter and Rosen (2000), Event Structure and Ergativity

Trask (1979) claims to identify two types of morphologically ergative language. In type A, the ergative pattern is only possible with subjects that are animate or highly specific. In type B, the ergative pattern can only occur with the past tense or the perfective aspect. Ritter and Rosen (2000) attempt to explain this typological observation by stipulating a parameter in the link between Aktionsarten and syntactic structure. They propose that States, Achievements, Activities, and Accomplishments are grouped differently in different languages. The aspectual classes in one group are ‘syntactically eventive’, *i.e.*, they are associated with a specific functional category projected in the syntax, while the aspectual classes in the other group are not eventive. Grammatical processes like morphological ergativity only occur with the aspectual classes that are found in the syntactically eventive group of the language in question.

The proposed functional category is either AgrS and AgrO, corresponding to ‘event initiation’ and ‘event delimitation’, respectively. A given language is said to have only one of these functional categories. The four verbal aspectual classes are claimed to be grouped differently in ‘Initiation’ or ‘beginning-point’ languages, *vs.* ‘Delimitation’ or ‘end-point’ languages. Depending on whether the language is an ‘Initiation’ language or a ‘Delimitation’ language, a functional category with eventive content is associated with either the beginning point or the end-point that is part of the intrinsic meaning of the event. States have neither intrinsic beginning nor intrinsic end-points, and thus are never syntactic events. Accomplishments have both intrinsic beginning and intrinsic end-points, and are thus syntactic events in both types of language. Activities have only intrinsic beginning points, while Achievements are said to have only intrinsic end-points. Thus, only Activities and Achievements change groupings, according to the event-orientation of the language.

The properties of the proposed language-types are summarised in the following table:

Table 5 **Initiation vs. delimitation languages**

EVENTUALITIES IN 'INITIATION'-LANGUAGES			
syntactically non-eventive		syntactically eventive, through AgrS	
States	Achievements	Activities	Accomplishments

vs.:

EVENTUALITIES IN 'DELIMITATION'-LANGUAGES			
syntactically non-eventive		syntactically eventive, through AgrO	
States	Activities	Achievements	Accomplishments

In a language with an AgrS - 'Initiation Phrase', Activities form a natural class with Accomplishments, in contrast with States and Achievements (which have no intrinsic beginning point). The grammar of an 'Initiation Language' is said to be sensitive to the semantics of the subject (*e.g.*, there may be non-nominative subjects). Morphological ergativity can occur in a language only when the subject has the functional projection associated with 'syntactic eventiveness'.

On the other hand, a language having an AgrO-Delimitation Phrase groups Achievements with Accomplishments. In contrast with States and Activities, these include an intrinsic end-point. Many grammatical processes are associated with the verb phrase, which is sensitive to the specificity and definiteness of the object. Should morphological ergativity exist in such a language, it occurs only in the past tense or in the perfective aspect, since the functional projection associated with 'syntactic eventiveness' dominates the VP.

Morphological ergativity is thus predicted to be tied to perfectivity, as in Hindi and other Type B languages. Hindi is therefore a 'Delimitation' language. Since the functional category making the morphologically ergative clause possible is linked to the terminal *point* of a predicate, *n-e* is expected to appear with the subjects of Achievements and Accomplishments. The perfective aspect is required, as it indicates that the event has reached the end-point defining these classes (in opposition to the arbitrary end-points of Activities).

More general support for the model comes from the observation that syntactically non-eventive Hindi expressions can be re-interpreted as syntactically eventive ones, thereby requiring subjects with *n-e*. For example, Activities with subjects in the direct case alternate with Achievements, which require subjects in the oblique case with *n-e*. The following is said to be an Activity, because the meaning does not include explicit reference to a transition between states:

Example 1 37

laRkii ro-y-ii
 girl-fem. DC cry-prf.fem.
 ‘The girl cried (*involuntarily*).’

The voluntary reading of 1 38, however, is said to include a punctual transition from ‘not crying’ to ‘crying’. 1 38 is therefore said to be an Achievement:

Example 1 38

laRkii n-e ro-y-aa
 girl-fem. OC Action-OC cry-prf.fem.
 ‘The girl cried (*voluntarily*).’

Similarly in transitive examples like 1 39 where the subject is in direct case, *jaan-* ‘know’ seems to be stative:

Example 1 39

raamdaas yah baat jaan-φ-aa
 name-ms.DC prox.sg.DC matter-fem.DC know-prf.ms.sg.
 ‘Ramdas knew of the matter (*perhaps accidentally*).’

When the subject has *n-e*, however, the clause has the reading of an Accomplishment:

Example 1 40

raamdaas n-e yah baat jaan-φ-ii
 name-ms.OC Action-OC prox.sg.DC matter-fem.DC know-prf.fem.
 ‘Ramdas found out about the matter (*through his own effort*).’

The model thus predicts that the distribution of *n-e* depends on the presence of an aspectually defined terminal point. In other words, when the subject is in the direct case, the clause

speaks of an Activity or a State; when it is with *n-e*, it expresses an Achievement or an Accomplishment. However, this generalization does not always hold (*infra*).

The authors do concede that Hindi does not match the ‘Delimitation’ type in every respect, as it also has various non-nominative subjects, a feature expected only in an ‘Initiation’ language. Moreover, in the Hindi pronominal system, the distribution of subject forms shows a split between first and second person pronouns (realized with direct case and *n-e*) and third person pronouns (realized with oblique case, with *n-e*). Morphological ergativity that is influenced by subject semantics is unexpected in a ‘Delimitation’ language.

The fact is, however, only a few Achievements can appear with a subject with *n-e*. Most Achievements require subjects in the direct case, or in the oblique case with a post-position :

Example 1 41

maiN aaj aa-y-aa huuN
 1sg.DC today come-prf.ms.sg. be-3sg.pres.
 ‘I came, have just come, today.’

Example 1 42

mujh ko coT lag-φ-ii
 1sg.OC End-Point injury-fem.DC cling-prf.fem.
 ‘I got hurt.’

In addition, *n-e* is not possible with all telic clauses. For example, the subject of an expression of movement to a destination requires a subject in the direct case:

Example 1 43

aakhir meN raamdaas dillii pahuNc-φ-aa
 ‘at last’ name-ms.DC Delhi-ms.OC reach-prf.ms.sg.
 ‘At last, Ramdas reached Delhi.’

If the direct object is the ‘grammaticalised’ end-point of an Accomplishment, why isn’t a destination also suited for this? The authors refer to the ‘eventive content’ of the functional category associated with the delimiter. It might then be argued that ‘Delhi’ is not involved in

the event of ‘going’ in the way ‘cake’ is affected by the event of eating. On the other hand, it appears that when one *leaves* ‘Delhi’, somehow there is the eventive content necessary for there to be the functional category required for the subject with *n-e* to occur:

Example 1 44

laRkoN n-e dillii coR-φ-aa
 boy-ms.pl.OC Action-OC Delhi-ms.DC leave-prf.ms.sg.
 ‘The boys left Delhi (*e.g., to settle in Kampur.*)’

This model is an attempt to explain morphological ergativity in terms of broad typological factors, and has nothing to say about exceptions. The account correctly limits *n-e* to Achievements and Accomplishments, but it fails to mention that most Achievements do not have *n-e*-subjects, and that not every Accomplishment has one either. It does not account for the distribution of *n-e* reliably in terms of aspectual classes, nor even in terms of language types. In reality, even the perfectivity constraint is too strong, as it would exclude the use of *n-e* with obligative gerundives.

The inadequacies of this model suggest that it cannot be the aspectual classes that determine the distribution of *n-e*, nor the beginning or end-points of the event. The natural end-point is neither necessary nor sufficient for the subject to appear with *n-e*. This point is made clearly by the following minimal pair. Whether or not the natural end-point is reached, the subject must appear with *n-e*:

Example 1 45

raamdaas n-e Dibbaa dillii bhej-φ-aa
 name-ms.OC Action-OC box-ms.sg.DC Delhi-OC send-prf.ms.sg.
 ‘Ramdas sent the box to Delhi (*focus on sending: the box may not have arrived.*)’

Example 1 46

raamdaas n-e Dibbaa dillii pahuuNc-v-aa-y-aa
 name-ms.OC Action-OC box-ms.sg.DC Delhi-OC make-arrive-prf.ms.sg.
 ‘Ramdas sent the box to Delhi (*focus on arriving: the box definitely arrived.*)’

The difficulty of referring to end-points, Achievements, and Accomplishments to predict morphological ergativity in Hindi⁸ is further underscored by instances of ‘semi-perfectivity’, (*cf.*, Koenig 2000) as in the following apparently self-contradictory sentence:

Example 1 47

raamdaas	n-e	kek	khaa-y-aa
name-ms.OC	Action-OC	cake-ms.DC	eat-prf.ms.sg.

##par	kek	nahiiN	khaa-y-aa	ga-y-aa
but	cake-ms.DC	neg.(+ ‘BE’)	eat- prf.ms.	go-prf.ms.sg.

‘Ramdas ate the cake, but the cake was not eaten (*it was not edible*).’

The perfective *khaa-y-aa* ‘eat-prf.ms.sg.’ does not in itself refer to any specific end-point. Nevertheless, the subject must appear with *n-e*. The Hindi perfective only indicates that an Action has reached some arbitrary end-point (M. Singh 1991). Even the expression *maara* ‘kill’ does not necessarily denote an Accomplishment. It can also mean ‘beat (*severely*)’. Contextual cues and grammatical devices like compounding are often used to place the emphasis on end-points of Actions. For example, when *khaa-y-aa* ‘eat-prf.ms.sg.’ is replaced by *khaa li-y-aa* ‘eat-take-prf.ms.sg.’, the clauses of the sentence contradict each other:

Example 1 48

raamdaas	n-e	kek	khaa	li-y-aa
name-ms.OC	Action-OC	cake-ms.DC	eat-root	take-prf.ms.sg.

(##par	kek	nahiiN	khaa-y-aa	ga-y-aa)
but	cake-ms.	neg.(+ ‘BE’)	eat- prf.ms.sg.	go-prf.ms.sg.

‘Ramdas ate the cake, (*##but the cake was not eaten*).’

In conclusion, Rosen and Ritter (2000) have shown that the semantic phenomenon underlying the distribution of *n-e* involves only certain aspectual types. However, it turns out that this account does not explain the phenomenon adequately.

1.2.3 Anand & Nevins (2006)

Anand & Nevins seek to determine whether the subject in the direct case and the subject in the oblique case with *n-e* both receive structural case. The ‘nominative’ and ‘ergative’ subjects do have similar subject properties, *viz.*, binding of anaphors, obviation of pronouns, and control into participial adjuncts (Mohanani 1994, Narasimham 1997, Kachru 1980). This, the authors claim, suggests in turn that the nominative and the ergative subject both receive structural case from the same functional head⁹.

The authors observe that the subject in the direct case shows two possible scope readings, while the ergative subject allows just one of these, the surface scope reading. On this basis, they seek to show that the Hindi subject in the direct case has structural case, and that the ergative or *n-e*-marked subject has inherent case. They observe that the subject in the direct case is in a formal AGR relation with TENSE, while the ergative subject is not. They claim that this AGR relation permits the Reconstruction necessary for the construal of the inverse-scope reading observed in clauses in the perfective aspect with nominative subjects. The ergative case blocks any AGR relation with TENSE, thereby, they claim, making unavailable the particular configuration of Reconstruction that would allow for the inverse-scope reading. However, it can be shown that the examples on which these arguments are based are not in fact minimally-paired, as the verb of existence or ‘copula’ is absent in their examples of clauses with frozen scope, and is present in those with both surface and inverse-scope readings (it has been found in the course of this study that scopal flexibility occurs whenever the ‘copula’ is present, and is lost when it is absent, irrespective of subject type and type of participle). While Anand & Nevins (2006) do uncover data that are valuable to the analysis of the Hindi clause, they do not explain the distribution of *n-e*. In fact, all subjects in Hindi show similar properties, in spite of the thematic diversity of subject types, because subjecthood in Hindi is a matter of syntactic position, and nothing more.

1.2.4 Davison (2003)

This is a detailed study of the distribution of Hindi subjects with *n-e*, subjects in the direct case, and subjects in the oblique case with the post-position *ko*. Davison (2003) draws on the ‘dependent structural case’ model of Marantz (1984), a formalization of the relationships of complementarity and dependency between cases.

Davison (2003) reviews the different case types of subjects and objects that can co-occur in Hindi transitive clauses, and puts them into classes. She proposes two kinds of case: lexical case, assigned within VP, and structural case, assigned in optional functional categories over VP. In her account, the two structural cases are the ergative case (*n-e*) and the dative case (*ko*). As the direct case is generated within the VP, it is considered a lexical case. Davison claims that there are two broad classes of transitive clause in Hindi:

...those with lexical case on either the subject or the object, and those which may have dependent structural case on the subject and object. (Davison 2003, p.2).

The VP may govern the dative lexical dative case on indirect objects marked by the post-position *ko*, or lexical locative case, marked by other post-positions, like *se*. Ergative *n-e* is only assigned to subjects. The structural dative *ko* marks direct objects. The generalization is that to have the *n-e*-subject, dative *ko* must be possible –with a few exceptions. However, dative *ko* being possible does not mean that it must occur, nor that it occurs when the *n-e*-subject occurs, nor that the *n-e*-subject must occur when *ko* occurs on the object.

Davison postulates that regular transitive expressions like *dekh* ‘see’ have three phrasal layers: a functional projection YP lexically specified for Ergative that is generated when certain properties of verbal aspect are present, a functional projection XP specified for Dative, and a VP. The XP hosting structural dative ‘*ko*’ must be optional, since the direct object can be expressed in the nominative, whether or not the subject appears with *n-e*.

The dependency between the YP and the XP is stipulated. The YP bears an ergative feature, and a categorial feature for X that ensures that it embeds an XP *if* there is a direct

object. XP optionally hosts a structural dative *ko*, since the direct object may appear in the direct case. This is how Davison derives the general pattern that clauses with ergative subjects must be transitive. A YP may have a lexical feature preventing it from appearing with an XP, as with the three or four intransitive expressions with *n-e*-subjects. However, it is odd that this aspect of the model is required to accommodate such a small group of exceptions, and puzzling that there are not more intransitives appearing with *n-e* subjects.

To the class of regularly-behaved transitive expressions, she opposes a tiny class of exceptional transitives, possibly exhausted by *laa* ‘bring’, *bhuul* ‘forget’, and *bol* ‘speak, utter’, that have nominative, not ergative subjects. These expressions are transitive, and have a Y projection, but they are lexically specified as lacking the Ergative feature. What motivates these lexical specifications, and why there are so few is unclear. Furthermore, these three examples do not constitute a homogeneous class: the object of *laa* ‘bring’ may appear with *ko*, the object of *bhuul* ‘forget’ may not, and it is considered rustic to use *ko* instead of *se* ‘with’ to mark the addressee of *bol* ‘speak, utter’ –and at any rate, when the addressee is mentioned, this expression requires a subject with *n-e*.

Similar syntactic feature-management devices are invoked to describe the behaviour of intransitives like ‘weep’, ‘bark’, and ‘shriek’, which may appear either with subjects in the direct case or ergative subjects. The meaning contrasts in these pairs are not discussed.

In order to provide semantic motivation for the apparently *ad hoc* distribution of *n-e* in these and related examples, Davison proposes that the +ERG feature occurs only when certain event structures are present. However, this approach has been shown to fail in other work (*cf.*, Rosen and Ritter 2000), as the aspectual classes can only be indirectly related to the distribution of *n-e*. In the case of Davison’s model, the conditional inclusion or exclusion of features like +ERG amounts to a restatement of the facts, with machinery that is at least as intricate as the data to be explained.

1.2.5 T. Mohanan (1994)

Drawing on LFG's multi-representational framework, Mohanan seeks to explain the distribution of the various possible case markers that appear with the Hindi subject. She claims that the distribution of *n-e* is semantically governed, and attempts to demonstrate the regularity of the other non-nominative subjects of Hindi in similar terms. As she observes,

In Hindi, as in most other South Asian languages, there is no one-to-one correspondence between grammatical function and case. *A nominative argument*, for instance, *may be the subject or the object of a clause. Conversely, the subject may be nominative, ergative, dative, instrumental, or locative; a primary object may be nominative or accusative.* On the other hand, there is often a systematic correspondence between meaning and case marking.

(T. Mohanan 1994, p.55; emphasis added)

The distribution of the ergative marker *n-e* is thus claimed to be determined by both grammatical function and meaning.

The levels of structure used in LFG to represent the links between verbal meaning and surface forms are summarized below:

Table 6 **Levels of structure in LFG**

Semantic Structure	elements of meaning that play systematic roles in morphology or syntax
Argument Structure	number of arguments of predicate (syntactic valency), their relative semantic prominence
Grammatical Function Structure	intra-clausal roles, Subject and Object, argument-case associations
Grammatical Category Structure	Noun and Verb Phrases
Word String	sequence of words that are uttered

While the factoring out of these levels of structure may appear redundant, the elements in each are not necessarily associated with each other in a one-to-one fashion. Elements may be multiply associated, unassociated, or ‘suppressed’¹⁰.

The arguments in Semantic Structure are ‘logical arguments’, *e.g.*, the originator and the receiver of an Action. The originator of the Action in Semantic Structure is linked by default to the highest position in Argument Structure, a hierarchy of thematic roles. This position in Argument structure is called the Logical Subject. In the default situation, the Logical subject is linked to the Grammatical Subject in Grammatical Function Structure.

The Logical Subject can be ‘suppressed’ in Argument Structure, yielding a passive-like meaning. Alternatively, the ‘subjectless’ construction can be produced in Hindi by suppressing instead the logical argument in Semantic Structure corresponding to the originator of the Action. In the ‘subjectless’ clause, the first argument appears with the accusative marker *ko*, since the most prominent argument is the object. This ‘subjectless’ / ‘accusative-*ko*’ clause is thus clearly distinguished from the well-known dative-*ko* or experiencer-subject clause. In the ‘accusative-*ko*’ clause, the relatively most prominent logical argument in Semantic Structure (the originator of the Action) does not match up with the relatively most prominent argument in Argument Structure (the argument with a human referent). This mismatch carries over to Grammatical Function Structure. The most prominent argument in Argument Structure is linked with the Subject position in Grammatical Function Structure, where case markers are associated with arguments. In the experiencer-subject construction, the subject is associated with *ko*¹¹.

There is thus no need in this framework to argue (*cf.*, Nevins, Davison) that the subject is an argument in a purely syntactic or discursive position, and is unrelated to thematic or semantic considerations. On the contrary, under Mohanan’s scheme, the thematic variety of post-positionally marked subjects can all be accounted for in semantic terms. The hierarchies of relative argument prominence in the Semantic Structure and the Argument Structure are set up under distinct sets of semantic principles. A ‘realignment’ of the

arguments of each level of structure can occur, such that the most prominent element in Argument Structure may have a meaning corresponding to any of the thematic roles. This argument is then linked to the Subject position in Grammatical Function Structure, and is associated there with a case marker identifying its Argument Structure semantics.

Mohanani's model thus provides an account of Hindi non-nominative subjects that occur with either the perfective or the non-perfective aspect. The distribution of *n-e* is another matter. Her model predicts that the default or 'Elsewhere' case associated in Grammatical Function Structure with the highest argument in Argument Structure is nominative. Various semantically-motivated 'realignments' of the arguments between the Semantic Structure level and the Argument Structure level may result in non-nominative arguments being associated with the Subject in Grammatical Function Structure. These are structurally 'special' cases that pre-empt the 'Elsewhere' case. When there are no such realignments, another 'special' case is possible: the highest argument in Argument Structure may bear a semantic feature, 'conscious choice'. Furthermore, Mohanani assumes that the inventory of case meanings is universal, but that the case meanings associated with certain case markers in particular languages may be extended or restricted. She claims that the Ergative case refers universally to a conscious entity acting on some other entity, whence the transitivity requirement for the Hindi ergative. However, this universal meaning of the ergative has been *restricted* in Hindi to the perfective aspect, and *extended* to intransitives. Thus the ergative is a special case, pre-empting the nominative or 'Elsewhere' case.

This account of the ergative marker *n-e* does not even achieve descriptive adequacy. Conscious choice is frequently not present in the Hindi ergative subject. *N-e* is also observed with the subject of gerundive participles of obligation. The intransitives in the perfective that may take ergative subjects total no more than four or five, which makes Mohanani's 'semantic extension' seem more like lexical marking. Lastly, it is unclear how this approach could be applied to the variation observed for some predicates that appear with ergative or nominative subjects, with systematic meaning variations. To some extent, these meaning variations are consistent with Mohanani's claim that ergative is associated with conscious choice, while the

nominative has no such specific association. However, the nominative / ergative variation is not possible with all transitive expressions. Further stipulation would be required to cover items that allow it. Mohanan fails to make the distribution of non-nominative subjects predictable on universal semantic and structural principles. Furthermore, the complex machinery of her framework has the potential to over-generate.

1.2.6 Mahajan (1997)

Mahajan (1997) relates the use of *n-e* to SOV word order, and to the fact that Hindi has no verb meaning 'to have', nor an auxiliary that can be related to such a verb. He claims that Hindi has a phonologically empty particle that is absorbed by the verb of existence to produce an auxiliary. This operation impedes the assignment of structural case to the subject, whence the need for *n-e*. In languages with different word orders, however, the particle is realized instead as an auxiliary verb 'have', and the subject receives structural case.

As the ergative marker and 'have' are claimed to arise from the same source, they are expected to be in complementary distribution across languages. Typologists have indeed observed that languages with morphological ergativity do not have 'have' (Trask 1979). Mahajan observes that in the main, only verb-peripheral languages can have morphological ergativity (with Basque an apparent exception), and only verb-medial languages can have 'have' (with languages like German as apparent exceptions).

The non-perfective forms of Hindi have neither *n-e* nor an auxiliary 'have', *i.e.*, there is no evidence of this complementary distribution within Hindi itself. This is related to the fact that the use of 'have' with the perfective in French is the counterpart of the perfectivity requirement on the distribution of *n-e* in Hindi. Mahajan claims that the perfective participles in both languages are caseless, motivating 'dependent case' (*cf.*, Marantz 1984). Hence the subjects of clauses based on non-perfective participles must have structural case for their subjects. This in fact appears to be so, insofar as agreement is equated with structural case, since non-perfective participles and their auxiliaries agree with their nominative subjects, and

n-e is impossible in those contexts. Thus, Mahajan's claim is that the French example in 1 49 and the Hindi example in 1 50 are underlyingly similar:

Example 1 49

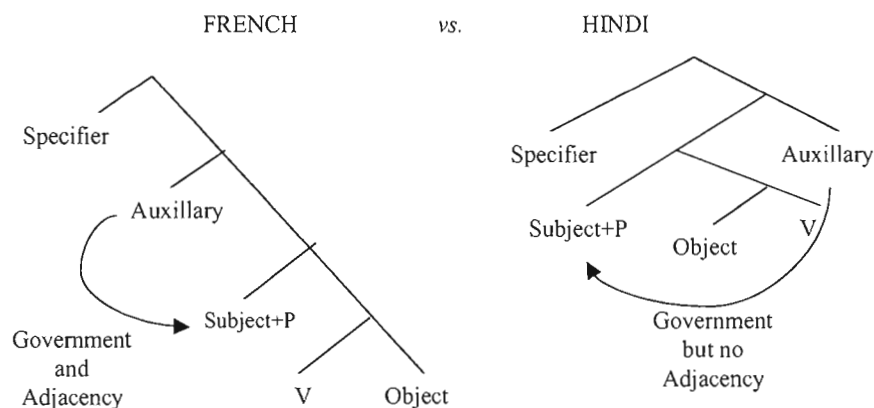
Jean a cuit les tomates.
'John cooked the tomatoes.'

Example 1 50

raamdaas n-e vah kitaabeN paRhii h-ai-N
name-ms.OC Action-OC dist.sg.DC book-fem.pl. read-prf.fem. be-3pl.pres.
'Ramdas read / has read the books.'

Assuming the 'subject in VP' hypothesis, 'have' is the oblique of 'be'¹². Word order and hierarchy determine whether incorporation of the underlying particle with 'be' is possible. In the verb-final configuration of Hindi, *n-e* cannot incorporate with the auxiliary, so *n-e* is realised as a particle, and the auxiliary as 'be'. When the auxiliary and P on the subject are adjacent in VP, as in French, government by the auxiliary obtains, and incorporation occurs, yielding 'have'. However, in the Hindi VP, the underlying P on the subject and the 'auxiliary' are not adjacent, such that government by the auxiliary cannot occur, and incorporation is blocked, yielding the surface form of the P, namely *n-e*:

Figure 1 'P' in the French vs. the Hindi clause



Mahajan says nothing about why the P-merges occur in non-perfectives, yielding the accusative pattern. Nor does he explain why P-merging can occur for certain perfective participles at some times but not others. In short, Mahajan disregards the exceptions, and does not consider meaning as a factor in his account of morphologically ergative ergativity.

1.2.7 Concluding remarks

Previous attempts to explain the distribution of *n-e* have concentrated on the features that are most consistently associated with it, *i.e.*, perfectivity, transitivity, and volition. Some authors have sought to derive the transitivity requirement from the fact that the interpretation of *n-e* is often agentive. This view allows for instances in which the agent is not necessarily acting on another physical entity (*cf.*, intransitives like 'shriek' and 'cry').

On the other hand, perfectivity and volition are often incorporated into the syntactic mechanism, so that *n-e* is not treated as a manifestation of semantic structure. In particular, no model has successfully gotten past an arbitrary association of *n-e* with the perfective aspect, nor explained the distribution of *n-e* in terms of the composition of the Hindi clause in general. Nor have the most commonly observed alternations, *e.g.*, imperfective-nominative subject *vs.* perfective-ergative subject, been shown to fall out naturally from the specific contrasts in meaning and form of non-perfective *vs.* perfective aspect clauses.

The role of *n-e* in Hindi grammar has not found a satisfactory explanation in these analyses. While the distribution of *n-e* is indeed related to the factors cited in this literature, the relationship is neither strict nor positive. Numerous exceptions to the generalizations about the role of transitivity, perfectivity, and volition must be 'listed' in the lexicon, *i.e.*, cases in which *n-e* fails to appear as predicted, and cases in which it appears unexpectedly.

The terms 'Perfective aspect' and 'transitivity' describe of the semantic structure underlying the distribution of *n-e* adequately. Perfectivity is not simply a 'feature' of the representation (*cf.*, Mohanan; Davison). Likewise, transitivity is not properly defined in terms of surface objects (*cf.*, MacGregor), nor in terms of notional objects in the cognitive scene

(*cf.*, Magier), nor an accumulation of features that shift the weight from the ‘intransitive’ to ‘transitive’ end of a semantic scale (*cf.*, Hopper & Thompson).

Furthermore, contrasts in meaning between clauses that differ minimally with respect to the presence or the absence of *n-e* have not been fully acknowledged in previous research. In particular, while *n-e*-marked subjects only appear in constructions with perfective participles, some perfective participles may also take direct case subjects depending on the intended meaning of the utterance. Lastly, the relationship between compounded participles and the distribution of *n-e* has never been satisfactorily explained. The various syntactic models of ‘morphological ergativity’ in the literature have all introduced powerful theoretical machinery without achieving more than an approximate account of the phenomenon.

Recent linguistic accounts of the use of *n-e* (*e.g.*, Mahajan 1997) and traditional descriptions (*e.g.*, McGregor 1995) have assumed that *n-e* is a post-position. These accounts refer to perfectivity and transitivity as necessary but not sufficient conditions for *n-e* to appear with the subject. They also refer to exceptions that must be memorized, *i.e.*, cases in which *n-e* fails to appear, or appears unexpectedly. Such accounts are approximations at best.

In summary, an account of the particle *n-e* in Hindi must answer certain questions:

Why is the *n-e*-subject limited to the perfective and obligative gerundive aspects? Why does it never appear with stative expressions or activities? Why is the *n-e* argument always the subject of the clause? Why must there be an argument in the direct case (an argument with which the participle and the verb of existence agree) in every clause -except in clauses with *n-e*-subjects? Why are overt transitivity and volition strongly, but not strictly correlated with the distribution of *n-e*? What is the nature of the exceptions to these latter patterns? The various accounts of *n-e* that have appeared in the literature address these questions in various ways with some credibility. However, none has managed to explain the phenomenon as a whole, nor to explain all these issues as instances of a single phenomenon.

Moreover, there are some pertinent questions that have never been posed in the literature. Why does *n-e* have the form that it has? How can this same form appear on the subjects of gerundive participles? If the verb agrees with the direct case argument, why is it that only the clause with a *n-e* subject can appear without an argument in the direct case?

1.3.0 Semantic representations

The following sections introduce semantic representations that will serve the analysis of Hindi presented in this thesis. The first section reviews a typology of Actions that has evolved in the recent literature (*cf.*, Perlmutter 1971, 1978; Burzio 1986; Levin and Rappaport-Hovav 1995; Hale and Keyser 1987, *etc.*). The following sections introduce two representations that will be crucial to the account of the clausal semantics of Hindi. The content of both of these representations is based on the observations of Leonard Talmy (2000). The formal aspects of the representations derive from the Conceptual Semantics framework of Ray Jackendoff (1990, 1993) and the reductionist framework of John Lumsden (1992, 1995, 2000).

1.3.1 The four kinds of intransitive expression

Intransitive clauses may be classed according to the thematic role of their single argument (necessarily, the subject of the clause) and according to whether or not there is a lexical alternation with a corresponding causative clause.

In the following English examples, the single argument *does* something and may thus be said to be an Actor (*cf.*, the test frame '*What NP did was...*' in Jackendoff 1990, p.126):

Example 1 51

- a. John walked toward the barn.
- b. Fritz sang all day.

Intransitive clauses with Actor subjects are said to be *unergative*. Unergative intransitives can usually be causitized by introducing an object argument, often a cognate form of the verb:

Example 1 52

- a. John walked his bicycle toward the barn.
- b. Fritz sang that song all day.

In the following examples, however, the single arguments don't really do anything. Rather, something happens to these subjects. They may thus be said to be Patient arguments (*cf.*, the test-frame '*What happened to NP was...*' *ibid*):

Example 1 53

- a. John fell through the guard rail.
- b. The boat sank in the storm.
- c. Great Scot! That official bribed easily!

These three examples of intransitive clauses with Patient subjects are not all the same with respect to causitivation. The example in 1 53 a. is an *unaccusative* clause, and it is difficult or impossible to turn an unaccusative into a causative.

Example 1 54

- a. *Bill fell John through the guard rail.
- b. *The train arrived Ed at the station.

The example in 1 53 b. is an *ergative* clause. Such clauses naturally alternate with causative counterparts in which a subject argument is introduced, relegating the intransitive subject to the direct object position. The ergative alternation may be universal in natural languages. In English, 'sink' and 'freeze' are used in typical ergative clause alternations:

Example 1 55

- a. The boat sank. / The destroyer sank the boat.
- b. The water froze. / The sudden drop in temperature froze the water.

The example in 1 53 c. is a *middle* clause. In fact, this construction is sometimes called *the English Middle* because intransitives like these are not found in every language. The difference between 1 53 a.&b. and 1 53 c. is that unaccusative and ergative intransitives do not necessarily imply that there is an Actor in the context of the event described by the clause. In the middle construction, however, this implicit actor is always felt to be present.

The middle construction is therefore easy to causativize. In fact, those languages that do not allow the middle construction often do have the causativized version of it.

Example 1 56

- a. Mr. Schneider bribed the official easily.
- b. Those pills swallow easily. / Jane swallowed those pills easily.

Researchers have noted regular syntactic reflexes in many languages that support the distinctions between these three types of verbal expressions and their subjects. Burzio (1986) argues that the subjects of intransitive ergative and unaccusative expressions in Italian are Patient arguments that stand in contrast with the Actor subjects of unergative expressions. He cites phenomena such as the use of the auxiliary *essere* 'to be' vs. the auxiliary *avere* 'to have'. The following examples illustrate the distribution of these auxiliary verbs:

Example 1 57

Giovanni ha telefonato.
 (name) has telephoned
 'Giovanni telephoned.' (*unergative*)

Example 1 58

Due navi sono affondate.
 two ships are sunk
 'Two ships sank.' (*intransitive ergative*)

Example 1 59

Giovanni è arrivato.
 (name) is arrived
 'Giovanni arrived.' (*unaccusative*)

Since passive constructions also take the auxiliary *essere*, and since the subjects of passives are said to be underlying Patient arguments, these examples support the claim that intransitive ergative and unaccusative subjects are underlying Patients. Verbs like *telefonare* ‘to telephone’, *caminare* ‘to walk’, and *russare* ‘to snore’ are typical unergatives, while *affondare* ‘to sink’, *scoppiare* ‘to burst’, *arrivare* ‘to arrive’ and *arrossire* ‘to blush’ are typical intransitive ergatives or unaccusatives, because only these latter verbs appear with *essere*.

Although it seems that all languages have unaccusative, ergative and unergative clauses, there is some cross-linguistic variation in the usages that belong to these clausal types. For example, it has been observed that certain expressions pattern syntactically with unaccusatives in some languages, and with unergatives in others (Rosen 1984), *e.g.*,

Table 7 Verbs that may be unaccusative or unergative in different languages

verb	unaccusative	unergative
bleed	Turkish	Italian
talk deliriously	Turkish	Italian
arrive	Italian	Albanian
stay	Italian	Albanian
sweat	Choctaw	Italian
die	Italian	Choctaw

Thus, ‘bleeding’ is something that happens to a Patient in Turkish, while it is something that is done by an Actor in Italian. ‘Arriving’ is described as something that happens to an Italian, but it is described as something that an Albanian does.

The next two sections present Talmy (2000) on force dynamic relations, and Jackendoff’s (1990) formalization of these notions in the verbal predicate AFFECT.

1.3.2 Force dynamics

Talmy (1985, 2000) argues that natural languages express relationships of force between two forceful entities, termed the Agonist and the Antagonist. The Agonist is the focus of the Force Dynamic relationship, such that the clause or other linguistic context that manifests it is 'about' the Agonist and what happens to it. Three basic parameters of variation determine the outcome of a Force Dynamic relationship:

- 1) The Agonist may be at rest, or it may be in action.
- 2) The Agonist may have a tendency toward rest, or a tendency toward action.
- 3) The Antagonist, which opposes the tendency of the Agonist, may be stronger or weaker than it.

The Agonist may undergo a change of state (*i.e.*, it passes from rest to action, or from action to rest), or it may maintain a steady state (*i.e.*, it continues to be at rest or in action). The scenes resulting in change of state may be summarized as follows:

Table 8 Possible outcomes of the Force-Dynamic relationship

Initial state >	Agonist at rest	Agonist in movement
Agonist has tendency toward rest	Antagonist stronger <i>change of state, movement</i> 'The wind blew the roof off'	Antagonist stronger <i>steady state, movement</i> 'The wind kept blowing the roof further away'
	Antagonist weaker <i>steady state, rest</i> 'The wind blew at the roof'	Antagonist weaker <i>change of state, rest</i> 'The dying wind let the roof fall back down'
Agonist has tendency toward movement	Antagonist stronger: <i>steady state, rest</i> 'The dyke held the river back'	Antagonist stronger: <i>change of state, rest</i> 'The dyke stopped the river from flooding the fields'
	Antagonist weaker: <i>Change of state, movement</i> 'The crumbling dyke began to let the river through'	Antagonist weaker: <i>steady state, movement</i> 'The tumbled-down dyke kept letting the river through'

Talmy's model of Antagonist-Agonist interactions makes it possible to generalise over many different linguistic expressions of causal relationships (*infra*).

In the representation of linguistic events developed in Jackendoff (1990), the Force Dynamic relations described in Talmy (2000) appear on an independent level of representation: the Action Tier. The ontological category AFFECT defines the thematic roles 'Actor' and 'Patient', corresponding to Talmy's Antagonist and Agonist, respectively. The various Actions that are described in particular verbs in the large inventories of verbal expressions found in the languages of the world are represented by the combination of AFFECT with *explicit* and *implicit arguments*. Explicit arguments are manifested in a phrasal position in the syntax. An argument is implicit when it appears in the semantic representation

without being manifested syntactically as a phrase¹³. The nature of the implicit argument is signalled in the name of the verb (*infra*).

Jackendoff's (1990) formal representation includes the following notations:

Example 1 60

- a. [AFFECT ([X], [Y])] X = Actor, Y = Patient
- b. [AFFECT ([], [Y])] implicit Actor, Y = Patient
- c. [AFFECT ([X], [])] X = Actor, implicit Patient

He also assumes that some Actions involve only an Actor:

Example 1 61

- a. Bill entered the room.
- b. [AFFECT ([X]), []] X = Actor

Some Actions are said to involve only a Patient:

Example 1 62

- a. Bill received a letter.
- b. [AFFECT [], ([Y])] Y = Patient

Jackendoff supplements these representations with semantic features such as [\pm volition] and [AFFECT⁺] versus [AFFECT] signaling positive versus negative effects, *etc.* He also continues to use an elaborate series of ontological categories on a second level of representation: the Thematic Tier. These include eventive predicates such as [GO ([THING], [PATH])], [STAY ([THING], [PLACE])] and [CAUSE ([THING/EVENT], [EVENT])], as well as stative predicates like [BE ([THING], [PLACE])], [ORIENT ([THING], [PATH])] and [EXTEND ([THING], [PATH])].

1.3.3 The Thematic Tier

Lumsden (1992, 1995, 2000) has argued that the proliferation of ontological categories on the Thematic Tier is unwarranted. Clearly, Jackendoff's formalism offers ample means to distinguish between unergative *vs.* unaccusative, ergative, and middle constructions. When the idiosyncratic portion of verbal meanings is captured by implicit arguments, all types of causality can be expressed on the Action Tier with one or two applications of the predicate concept AFFECT, and all the resulting situations can be described on the Thematic Tier with a particular stative predicate concept. The argument structure of this stative predicate is also derived from the observations of Talmy (1985, 2000).

According to Talmy (2000), the verb 'to be' has two obligatory arguments that are best understood as a Figure-Ground relationship. The notion of the Figure-Ground relationship was first developed in the Gestalt school of psychology of the last century, and the applications of this relationship to the analysis of visual perception are well known. In general, an entity can be perceived as an individual only because it is prominent in its setting.

Talmy argues that a similar pattern applies in the interpretation of the conceptual content of linguistic expressions. Under Talmy's analysis of Figure and Ground:

The Figure is a moving or conceptually movable entity whose path, site, or orientation is conceived as a variable, the particular value of which is the relevant issue. The Ground is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure's path, site, or orientation is characterized. (Talmy 2000, ch. 5, p.312)

The stative predicate permits the speaker to identify a Figure entity by naming it as the first argument of the predicate, while the second argument position of the predicate identifies the Ground entity that will serve best as a reference frame for the particular Figure in question. The Figure is therefore more salient than the Ground, typically smaller, more mobile, and more plausibly the focus of attention¹⁴. The Ground is typically a spatial framework, and is logically prior to the Figure. It is the field of reference in which the Ground is situated. Thus, in the following examples, the Figure argument 'the pen' is situated with respect to the

expressions 'on the table' and 'off the table'. These are Ground arguments, clearly marked with prepositions that relate 'the pen' to a spatial field of reference :

Example 1 63

- a. The pen lay on the table.
- b. The pen fell off the table.

It would be quite odd to situate 'the table' with respect to 'the pen', as in the following examples, as this would force a re-assignment of the Figure and Ground arguments in a way that is precisely the reverse of Talmy's typical characterization of these roles :

Example 1 64

- a. ?? The table lay under the pen.
- b. ?? The table fell / went out from under the pen.

For the table to be conceived as lying under the pen, the pen must be considered the Ground with respect to which the table is situated. While this is possible, it is implausible. An entity is more plausibly located in or situated with respect to an entity or spatial framework that can contain or include it. Thus, example b) below can only make sense in a special context, *e.g.*, where 'the house' is a doll-house, or perhaps a distant element in a picture of the bicycle:

Example 1 65

- a. The bike is near the house.
- b. The house is near the bike.

The elegance and generality of Talmy's account can be expressed quite simply in the following ontological category:

Example 1 66

BE [Y, Z], where Y = Figure, Z = Ground

Lumsden argues that this is the only ontological category that is needed in the Thematic Tier representation.

1.3.4 Simple Actions

In Lumsden's account¹⁵, concepts are *Gestalt* notions; collections of various information that have a unitary interpretation only through the application of a cognitive process that has been called *centering* (*cf.*, Wertheimer 1938). The centering process selects some predominant features of the Gestalt notion to serve as a central point of perspective from which the whole Gestalt can be seen as a unit. Moreover, some substantive concepts have more than one set of predominant features, so that the same Gestalt notion can be interpreted from one or another perspective in different derivations, thus undergoing a *Gestalt shift*. A simple example is found in the noun *bottle* in the following sentences.

Example 1 67

- a. Al broke a bottle of ginger beer.
- b. Al drank a bottle of ginger beer.

Clearly, *Al* did not drink what he broke. In the first example, *bottle* refers to an object made of glass, *etc.*, in the second, to a quantity of ginger beer normally contained in this object. Nonetheless, all this information is available in both usages of the term. The difference between the two interpretations is a matter of centering. Polysemous alternations like this are also found in the implicit arguments of verbs.

According to Lumsden, the Action Tier and the Thematic Tier are semantically related in that the (most-embedded) Patient argument of the Action Tier is co-referential with the Figure argument of the Thematic tier. This relation ensures that the two tiers speak of a single event. Thus, verbal expressions with simple actions appear in the following formats: (For convenience, Jackendoff's [AFFECT ([X], [Y])] is rendered as 'X AFFECT Y')

Example 1 68

unaccusative

'Fitch arrived.'

[ARRIVE_{FORCE}] AFFECT Fitch
$$\begin{array}{c} | \\ \text{BE [Fitch, [ARRIVE}_{\text{STATE}}]] \end{array}$$

This representation is be read as ‘The Force [ARRIVE] has affected (*i.e.*, ‘changed’) Fitch such that he has come to be situated in the State [ARRIVE]. The concept [ARRIVE] is polysemous. The Force [ARRIVE] is defined as the configuration of contiguity between ‘Fitch’ and the location of the arrival. This definition explains why the Action is understood to be punctual. The State [ARRIVE] is the conventional status that accrues from this contiguity (*i.e.*, having reached one's goal).

Unaccusatives are punctual Actions, but simple ergatives have duration. Nonetheless, the representations are formally similar. The difference is encoded in the implicit arguments of the two constructions.

Example 1 69

simple ergative

‘The frigate sank.’

[SINK_{FORCE}] AFFECT the frigate
 |
 BE [the frigate, [SINK_{STATE}]]

This representation is be read as ‘The Force [SINK] has affected (*i.e.*, ‘changed’) the frigate such that the frigate has come to be situated in the State [SINK].’ Here too, the concept is polysemous. The Force [SINK] is a dynamic configuration (moving toward the center of gravity) while the State [SINK] is a conventional result of this force (being below a specific level).

Both unaccusative and simple ergative Actions have implicit Actors centered as natural Forces. The unergative Action contrasts with unaccusative and ergative Actions in two ways. First, the Actor is explicit, and the implicit argument is in the Patient / affected Figure argument positions. Secondly, this implicit argument is centered as a manner Gesture that is performed by an Actor (*cf.*, Jackendoff's (1990) discussion of Action-Patterns):

Example 1 70

simple unergative 'Fitch danced.'

$$\begin{array}{c} \text{Fitch AFFECT [DANCE}_{\text{MANNER GESTURE}}] \\ | \\ \text{BE [[DANCE}_{\text{MANNER GESTURE}}, \text{Fitch}] \end{array}$$

This representation is read as, 'The Actor Fitch has affected (*i.e.*, 'created an instance of' or 'performed') the Manner-gesture [DANCE], such that this Manner-gesture has come to exist in the Actor (*i.e.*, in the physical body of the Actor).' According to Lumsden (1992), the identity of reference of the Actor and Ground arguments requires only a single syntactic manifestation of the noun (*cf.*, the account of the verbs meaning 'to buy').

According to Hale and Keyser (1987),

[the Middle construction] does not differ in any interesting linguistic sense from the ...[intransitive] member in an ergative construction. (pg.19)

Here again the difference lies in the interpretation of the implicit arguments. The middle construction is like the unergative in that the implicit argument is a manner-gesture, but it is like the ergative and the unaccusative constructions in that this manner-gesture is understood as a Force and appears in the Actor position:

Example 1 71

Middle 'The official bribes easily.'

$$\begin{array}{c} [\text{BRIBE}_{\text{ACTION PATTERN}}] \text{ AFFECT the official} \\ | \\ \text{BE [the official, [BRIBE}_{\text{STATE}}]] \end{array}$$

This reads: 'The gesture of bribing has affected the official such that the official is in the state 'bribed''.

Manner of motion verbs are of particular interest to this account because they can be realized either as unergative or as ergative expressions. For example, citing Zaenen (1993) and Rosen (1984), Levin and Rappaport-Hovav (1995) note that the Dutch verb *gelopen* and the Italian verb *correre*, both meaning ‘to run’, may be unergative or ergative / unaccusative, depending on whether they describe a specific change of location. The constructions that take the auxiliary *avere* or *hebben* ‘to have’ are unergative, referring to the Actions of the subject, but those with the auxiliary *essere* or *zijn* ‘to be’ are unaccusative expressions, referring to the subject’s change of state or location. This alternation is manifest in the choice of auxiliary verbs in the following examples:

Example 1 72

Hij heeft / *is gelopen.
 He has / *is run
 ‘He ran.’ (*subject = Actor*)

Example 1 73

Hij is/?heeft naar huis gelopen.
 he is/?has to home run
 ‘He ran home.’ (*subject = Patient*)

Example 1 74

Ugo *ha* corso meglio ieri.
 (name) *has* run better yesterday
 ‘Ugo ran better yesterday.’ (*subject = Actor*)

Example 1 75

Ugo *è* corso a casa.
 (name) *is* run to home
 ‘Ugo ran home.’ (*subject = Patient*)

In these examples, selection of the ‘be’ auxiliary reflects the fact that the subject is an affected Patient undergoing a specific change of location. Selection of the ‘have’ auxiliary reflects the fact that the subject is an Actor. Notice that merely directed motion is also an Action performed by an Actor, and does not entail a change the subject undergoes. As observed by Perlmutter (1978), the Italian verb *correre* with a ‘Goal’ argument is unergative:

Example 1 76

L'uomo *è/ha corso verso l'università
 the man *is/has run towards the university
 'The man ran towards the university.' (*subject = Actor*)

Thus, example 1 77 is a simple unergative:

Example 1 77

simple unergative 'Ugo ha corso.' 'Ugo ran'

Ugo AFFECT [CORSO_{MANNER GESTURE}]
 |
 BE [[CORSO_{MANNER GESTURE}], Ugo]

This means; 'Ugo has performed the manner gesture of running such that this manner gesture has come to be at Ugo.' However, the example in 1 78 is a simple ergative:

Example 1 78

simple ergative 'Ugo è corso a casa.'

[CORSO_{MANNER GESTURE}] AFFECT Ugo
 |
 BE [Ugo, a casa]

This means: 'The manner gesture of running has affected Ugo such that he is at home.'

Notice that in this representation, the definition of the Actor that performs the gesture of running is left open to factors of pragmatic and linguistic context. As it turns out, there appears to be just one contextual solution to such statements: the one who is displaced must also be the one who runs.

1.3.5 Complex Actions

In contrast with simple Actions, complex Actions involve two instances of the predicate AFFECT, with one instance embedded as an argument of the other. A complex ergative is illustrated in the following example, where the implicit argument [SINK] shows the same polysemic variation as in the corresponding simple unergative, *supra*:

Example 1 79

complex ergative Action

‘The company sank the frigate.’

The company AFFECT [[SINK_{MANNER GESTURE}] AFFECT the frigate]
 |
 BE [the frigate, [SINK_{STATE}]]

This means; ‘The company affected (*i.e.*, created) an Action where the manner gesture ‘sink’ affected the frigate such that the frigate came to be in the state ‘sunk’.’

Lumsden (1992) argues that further consideration of manner of movement verbs provides evidence that this is also the pattern of causitivation for ergative verbs. Consider the following examples:

Example 1 80

- a. Alison got on her horse and she walked it to the barn.
- b. Jennifer got off her bicycle and she walked it to the barn.

The subjects of the embedded clauses (*i.e.*, *Alison* and *Jennifer*, respectively) are clearly Actor arguments. These embedded clauses both speak of a change of location for the object (*i.e.*, the *horse* and the *bicycle*, respectively), so these should be Patient arguments. Moreover, it is clearly the manner-gesture of *walking* that is the force that propels them to the barn. Yet it is the *horse* that performs the manner-gesture of *walking* in the first example and *Jennifer* who performs it in the second example.

Following the ergative analysis of simple manner of motion Actions (*supra*), Lumsden proposes to represent both examples in the same format as ergative causatives:

Example 1 81

complex ergative Action ‘she walked it to the barn.’

She AFFECT [[WALK_{MANNER GESTURE}] AFFECT it]
|
BE [it, to the barn]

This means: ‘She created an Action where the gesture of walking affected it such that it came to the barn.’

The manner Gesture appears as an implicit Actor in the embedded Action. The question of who or what is the Actor that performs this manner Gesture is not defined in the representation. Rather, this question is left open for the pragmatic and linguistic context to decide. Since the bicycle has no legs, it must be Jennifer who walks to propel the bicycle to the barn. Since Alison is on the horse (and since it is hard to see how it could be accomplished without the cooperation of the horse), it is the horse that propels itself to the barn by walking.

Generalizing this result to the causative version of the middle construction seems to be a natural extension of this account. Thus the causative of 1 68 will be as follows:

Example 1 82

causative ‘Fitch bribed the official.’

Fitch AFFECT [[BRIBE_{MANNER GESTURE}] AFFECT the official]
|
BE [the official, [BRIBE_{STATE}]]

This means: ‘Fitch created an Action where the manner gesture of bribing affected that official such that the politician came to be in the state ‘bribed’.’

Similarly, the causatives of simple unergatives involving cognate objects can be represented in this format. Thus, the causative in 1 52 b. will be represented as follows:

Example 1 83

complex unergative 'Fritz sang that song.'

Fritz AFFECT [[SING_{MANNER GESTURE}] AFFECT that song]
 |
 BE [that song, [SING_{STATE}]]

This means; 'Fritz created an Action where the manner gesture of singing affected the song such that the song came to be in the state sung.'

The Action Tiers of the Action types available in language are summarized below:

Table 9 Possible Action Tier configurations

Action-type	simple	complex
unaccusative	$\Delta_{\text{INSTANTANEOUS FORCE}} \text{ AFF Y}$	-----
ergative	$\Delta_{\text{CENTERED AS FORCE WITH DURATION}} \text{ AFF Y}$	X AFF [$\Delta_{\text{CENTERED AS MANNER GESTURE}} \text{ AFF Y}$]
Middle/caus.	$\Delta_{\text{INTRINSIC MANNER GESTURE}} \text{ AFF Y}$	X AFF [$\Delta_{\text{INTRINSIC MANNER GESTURE}} \text{ AFF Y}$]
unergative	X AFF $\Delta_{\text{INTRINSIC MANNER GESTURE}}$	X AFF [$\Delta_{\text{INTRINSIC MANNER GESTURE}} \text{ AFF Y}$]

These formal distinctions, which are already motivated in the literature, will serve as the basis of the analysis of the Hindi clause that is presented in the chapters that follow.

1.3.6 Individual-level statives vs. Stage-level statives

Figure-Ground relationships obtain in both individual-level and stage-level stative clauses. The Figure is permanently or temporarily situated with respect to physical places or to states. Individual-level statives are generally claimed to be time-stable, and do not imply events of which they are the outcome, while Stage-level statives are generally claimed to be subject to variation over time, implying events of which they are the outcome. In English, the

distinction between individual-level statives and stage-level statives involving physical location is made through the use of the simple vs. the progressive tense:

Individual-level stative

Example 1 84

The statue of Peter Gzowski stands in the shadow of the the CBC Tower (*as it always has*).

Stage-level stative

Example 1 85

The statue of Peter Gzowski is standing in the shadow of the CBC Tower (*along with other debris left by the storm off Lake Huron*).

The distinction in event structure is similar for conditions, although both types of stative are expressed with the same tense:

Example 1 86

- a. This bike is titanium. (*individual level*)
- b. This bike is muddy. (*stage-level*)

The difference between individual-level statives and stage-level statives cannot be represented with reference to the Thematic Tier alone. Example a) refers to a defining property of the bike (being a titanium bike), while example b) refers to a temporary property, implying a previous stage when the bike was not muddy. This distinction can be made by including Force Dynamics in the representation of the Stage-Level 'stative', a term which can then be seen to be misleading, since the state is the result of a dynamic situation. On the other hand, the representations of the meanings of Individual-Level statives are similar to those of locative expressions like 'the pen is on the table; the bike is near the house', in that they include no Force Dynamic component. By contrast, the 'delocative' expression 'the pen fell off the table' and the Stage-Level 'stative' 'the bike is muddy' must include dynamic components in their descriptions. The predicative concept 'BE' introduces the concept of duration, but nothing more:

Example 1 87

BE [the bike, near the house]

‘The bike is near the house.’

Example 1 88

BE [the bike, all titanium]

These are ‘true’ statives, as they describe steady states involving no Action Tier. The implications in time for the bike being near the house or having an all-titanium frame must be inferred from context or from general knowledge, as they are not indicated by the semantic structure of these clauses.

In contrast, the Action Tier introduces the point in time at which ‘mud’ first gets all over ‘the bike’:

Example 1 89

[MUD] AFFECT the bike

|

BE [the bike, [MUDDY]]

The bike is in the *resulting* state of being muddy. The representation of the event structure must reflect the fact that this state of affairs was brought about by the Force relationship¹⁶.

1.3.7 Complex Event Nominals (Grimshaw 1990)

The account of Complex Event Nominals developed in Grimshaw (1990) proposes that there are three kinds of nouns referring to events. Concrete nouns like ‘bread’ and ‘letter’ may refer to the results of events that are merely implied. ‘Simple event’ nominal expressions like ‘race’ name events, but they have neither an obligatory argument structure nor an aspectual structure. ‘Complex event’ nominals like ‘loving’, ‘proof’, and ‘destruction’ (under the relevant readings) have both obligatory argument structures and aspectual readings, *i.e.*, they describe the internal structure of the events they name.

The English noun ‘destruction’ has generally been assumed to be able to appear optionally with a direct object complement, *e.g.*, ‘the destruction (of the city)’. However, Grimshaw contends that there are in fact two readings of such expressions, and two sets of semantic and syntactic behaviour. When the word is used with the ‘simple event’ reading, it does not appear with complements, and the word is incompatible with aspectual modifiers:

Example 1 90

The destruction (*in three hours / *for three hours) annoyed the mayor.

In this use, ‘destruction’ simply names the event or the result of the event. The expression does not speak of an event structure that can be modified. On the other hand, when the expression has an argument structure, it does describe an event, and can be tested for event-type with aspectual modifiers:

Example 1 91

The city’s destruction (in three hours / *for three hours) annoyed the mayor.

Example 1 92

The destruction of the city (in three hours / *for three hours) annoyed the mayor.

The Patient/Figure argument is the obligatory argument of a Complex Event nominal. The following example can only mean ‘The destruction of the barbarians by someone else’. It cannot mean, for example, ‘The destruction by the barbarians (of an understood Patient)’:

Example 1 93

The barbarians’ destruction annoyed the mayor.

Example 1 94

The destruction of the barbarians annoyed the mayor.

The morphological head of the noun is the affix *-tion*, which basically means ‘Action’ (*cf.*, Marchand 1968, p.309). The complement of this affix, *destruc-*, describes the particulars of the Action evoked by the head, *-tion*, possibly including the event structure of the event.

Grimshaw (1990) includes English progressive gerunds in the class of Complex Event Nominals. As Chomsky (1970) has noted, one formulation of the English gerund is a complex event nominal much like ‘destruction’, while there is another that shows clear verbal properties and has an obligatory complex event reading. The verbal gerund can be modified by an adverb, but not by an adjective. The Actor may be realised with either the genitive *-’s* or the accusative, and the Patient cannot appear with *of*. Compare the ordinary complex event nominal in 1 95 with the verbal one in 1 96:

Example 1 95

Bill’s vicious criticizing of the book for three hours annoyed Mary.

Example 1 96

Bill’s / Bill viciously criticizing the book for three hours annoyed Mary.

Both types of gerundive complex event nominal allow modification by modifiers of aspect and by event-counting adverbial phrases:

Example 1 97

Bill's viciously criticizing the book (ten times) / (for three hours) annoyed Mary.

Example 1 98

Bill's vicious criticizing of the book (for three hours) / (ten times) annoyed Mary.

In both examples, the affix *-ing* is the nominal realisation of Action. Arguably, however, in the verbal gerund, the result of the Action is expressed in a verbal expression that is the complement of the gerundive suffix *-ing*. The presence of this verb phrase in the structure of the gerund explains the combinations of nominal and verbal properties in the construction. Since the gerundive suffix represents the Action of the event, presumably this verb phrase is the expression of the result of this Action. In the framework described above, this implies the stative verbal predicate BE [Figure, Ground].

It is argued in the following chapter that the participles of Hindi have a similar structure.

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CHAPTER II

The Structures of Hindi

2.0 Introduction

This chapter provides a general account of the Hindi clause. The first section of the chapter provides a brief review of the notion of subject in Hindi, adopting the view of Mohanan (1994) and Narasimhan (1997) that Hindi subjects are best identified by their central role in the anaphoric relations of the clause. This role follows from the syntactic position of the Hindi subject, a position that c-commands the whole proposition. The reason why such a position exists is explained in terms of Van Voorst's (1988) account of the subject as the spatial location of the actualization of the event.

The first major empirical claim of this thesis is that *all verbs in Hindi are stative*, and since all clauses must be based on verbs, *all Hindi clauses are stative expressions*. Moreover, there is only one verb in Hindi that is explicitly marked for tense and for person agreement; namely, the verb *h-* 'be'. Therefore, this verb is the matrix verb of all clauses. Given the theoretical framework introduced in Chapter 1, this claim implies that every verb phrase has an argument structure that situates a Figure argument with respect to a Ground argument. The second section of this chapter will provide evidence that supports this perspective.

The second empirical claim of this thesis is that *Hindi participles are nouns that speak of Actions*, and that *Hindi participial expressions are Complex Event Nominals*. Furthermore, these participial Complex Event Nominals take a verb phrase complement (much like the verbal type of English *-ing* gerund described in the previous chapter). Thus, in Hindi, the dynamic facet of events is expressed nominally, and only the Thematic Tier is realized verbally. This claim is supported in the evidence and argumentation provided in the third section of this chapter.

The fourth section offers an account of participle compounds, a construction that plays a large role in Hindi sentence structure. It is argued that these compounds find a natural analysis under the assumption (stated above) that participial constructions are Complex Event Nominals with verb phrase complements. This account of compound structures will contribute to the account of the particle *n-e*, which is taken up in Chapter 3.

The fifth and last section contains the heart of the present thesis, as it relates the two empirical claims elaborated in the previous sections to the three clause patterns of Hindi: the accusative pattern, with a subject in the direct case, the aspectually-conditioned ergative pattern, with a subject in the oblique case and *n-e*, and the unconditioned ergative pattern, with a subject in the oblique case and a post-position. These are all Active clauses. Hindi also has a paraphrastic passive construction in which *jaa/ga* 'go' embeds a perfective participle. As the subject of the paraphrastic passive construction (not discussed here) is always in the direct case, it too could be grouped with the accusative clause pattern, as described *infra*.

These three clause-patterns reflect the position of the Complex Event Nominal in the clause, *i.e.*, whether it is in the Figure or the Ground argument position of the stative clause. Evidence for these underlying patterns is found in certain restrictions on person agreement. Furthermore, these patterns are claimed to correspond to event structure and Action-type.

2.1 The Hindi 'subject'

The various definitions of 'subject' in the literature refer to syntactic behaviour, to discourse functions, to semantic features, or to all of these (*cf.*, Comrie 1976, C.N. Li 1976). That is, depending on the language in question, a subject may be identified on the basis of verbal agreement with it, by its case, or by its role in various coreference patterns. It may also be identified by its thematic or its discursive roles, such as Agent or Topic. In general, only some of these characteristics are pertinent in a given language. Thus, the identification of a

'subject' is necessarily relative to individual languages, for there are no specific syntactic, thematic, or discursive properties that are invariably associated with subjecthood. However, if more than one of the properties just mentioned consistently converge on a particular element of the clause, that element may be referred to as a subject.

The Hindi subject is traditionally defined as the first noun phrase of a declarative clause in a discursively neutral word-order. Furthermore, Mohanan (1994) and Narasimhan (1997) have shown that it is this phrase that is the antecedent of reflexive anaphors, is disjoint in reference to pronouns, and controls the empty pronoun PRO in embedded clauses.

However, the subject of the Hindi clause cannot be defined by case or agreement, nor is it tied to specific thematic roles. Thus, the Hindi subject may appear in the direct case, or in the oblique case with a post-position, or in the oblique case with *n-e*. This variety of subjects was already illustrated in examples from Chapter 1, discussed further below.

In 2 1, the subject *bille* 'tomcat' is in the oblique case, followed by the particle *n-e*. The verb and the participle agree with the direct object *billii* 'she-cat' (the argument in the direct case).

Example 2 1

bille	n-e	billii	Dar-aa-y-ii	h-ai
tomcat-ms.sg.OC	Action-OC	she-cat-fem.sg.DC	fear-cause-prf.fem.sg.	be-3sg.pres.

'The tomcat frightened a / the she-cat.'

In 2 2, the subject is the highest argument in the direct case. The verb agrees with the subject:

Example 2 2

billaa	billii	Dar-aa-t-aa	h-ai
tomcat-ms.sg.DC	she-cat-fem.sg.DC	fear-cause-imprf.ms.sg.	be-3sg.pres.

'The tomcat frightens a / the she-cat (*habitually*).'

In 2 3, on the other hand, the subject appears with the particle *ko*. Agreement is with the highest argument in the direct case, which in this clause is the object *juukaam*, 'cold' :

Example 2 3

raamdaas ko juukaam aa-y-aa h-ai
 name-ms.OC End-Point cold-ms.sg.DC come-prf.ms.sg. be-3sg.pres.
 'To Ramdas a cold has come.' (*Ramdas has caught a cold.*)

Similarly, in 2 4 the subject appears with a post-position, and agreement is with the object in the direct case:

Example 2 4

raamdaas jaise aadmiyoN meN himmat ho-t-ii h-ai
 'men like Ramdas'-ms.pl.OC 'in' courage-fem.DC become-imprf.fem. be-3sg.pres.
 'In men like Ramdas is courage.' (*Men like Ramdas have courage.*)

Furthermore, Hindi subjects cannot be said to be topics. For one thing, non-subject arguments can be topicalized without changing the status of the subject argument. For example, the oblique case plural locative (deictic) pronoun *unheN* 'unto them' is the subject of 2 5 (a sentence with a neutral stress pattern).

Example 2 5

unheN mujhe paaNc rupaye de-n-e h-aiN
 dist.pl.obl.loc. 1sg.obl.loc. five rupee-ms.pl. give-N-ms.sg.obl. be-3pl.pres.
 'They owe me five rupees.' (*lit., 'upon them is an obligation to give five rupees to me'*)

The example in 2 6 is a topicalized variant of 2 5. The 1st person singular pronoun *mujhe* has been fronted. It is either pronounced with added emphasis, or it is followed by a pause to indicate its topic status. Nevertheless, the pronoun *unheN* is still the subject of the sentence.

Example 2 6

mujhe unheN paaNc rupaye de-n-e h-aiN
 1sg.obl.loc. dist.pl.obl.loc. five rupee-ms.pl. give-N-ms.sg.obl. be-3pl.pres.
 'To me, they owe five rupees.'
 (*lit., 'it is to me that there is an obligation upon them to give five rupees'*)

Indeed, subjects themselves can be topicalized, through emphatic stress, pauses, or extraposition or by means of a topic marker *to*, as in the following examples¹.

Example 2 7

rukhhinii to French siikh rah- ϕ -ii h-ai
 name-fem.DC TOP fem. learn-root stay-prf.fem. be-3sg.pres.
 ‘As for Rukhhinii, she is learning French.’

Example 2 8

rukhhinii ne to French siikh l- ϕ -ii h-ai
 name-fem.DC Action-OC TOP fem. learn-root take-prf.fem. be-3sg.pres.
 ‘As for Rukhhini, she learned French.’

Furthermore, subjects appear in relative clauses, a domain where topics are not allowed (presumably because the presence of a topic would interfere with the necessary link between the relativised element of the clause and the head noun of the construction).

Example 2 9

aurat jise laRke n-e haTaa-y-aa aa-n-e-vaal-ii h-ai
 woman-fem.DC comp OC boy OC Action-OC shove-prf.ms.sg. come-N-fem.sg.OC be-3sg.pres.
 ‘The woman that the boy shoved is on her way.’

Example 2 10

aurat jise laRkaa haTaa-y-aa kar-t-aa th- ϕ -aa
 woman-fem.DC comp-OC boy-ms.sg.DC shove-prf.ms.sg. do-imprf ms.sg. be-prf.ms.sg.

aa-n-e-vaal-ii h-ai
 come-N-VAAL-fem.OC be-3sg.pres.
 ‘The woman that the boy was shoving is on her way.’

If the Hindi subject position is not a topic position, nor a thematic position, nor a case or agreement position, then what is it, and why does it exist? Van Voorst (1988) argues that in languages like Dutch and English, the subject provides spatial coordinates that specify the referential identity of the clause. That is, clauses refer to events that are found at specific points in time and space. The temporal coordinates of the clause are manifested in tense and aspect markers, while the spatial coordinates of the clause are found in the reference of the subject. The argument in the Hindi subject position may thus be said to identify the spatial point of actualisation for the event of the clause.

2.2 The stative matrix verb of Hindi clauses

It is argued here that the interpretation of every clause of Hindi is based on a stative expression (with the structure: BE [Figure, Ground], as discussed in Chapter 1). In fact, in almost every clause of Hindi, the matrix verb is an explicit manifestation of the verb *h-* ‘be’ (the verb of existence). This is true of all simple stative expressions, and it is true of almost all the participial constructions of Hindi. For example, the imperfective participle requires an explicit manifestation of the verb *h-* ‘be’:

Example 2 11

billaa kutte se roz maaNs ciin-t-aa *(h-ai)
 tomcat-ms.sg.D.C. dog-sg.OC ‘from’ ‘every day meat snatch-imprf.ms.sg. be-3sg.pres.
 ‘Every day, the tomcat snatches meat away from the dog.’

The paraphrastic progressive construction has a similar requirement:

Example 2 12

vah seb khaa rah- ϕ -aa / rah- ϕ -ii *(h-ai)
 dist.sg.DC apple-ms.sg.DC eat-root stay-prf.ms.sg. / fem. (agr.= *vah*) be-3sg.pres.
 ‘He / she is eating an apple.’

The same is true of the gerundive construction:

Example 2 13

us ko karelaa khaa-n-aa *(h-ai)
 dist.sg.OC End-Point bitter gourd-ms.sg.DC eat-N-ms.sg.DC (agr.= *karelaa*) be-3sg.pres.
 ‘He / she should eat some bitter gourd.’

There are two exceptional constructions, however: first, the verb *h-* ‘be’ is never used in either clause of a counterfactual conditional; second, the verb *h-* ‘be’ does not appear in certain usages of the perfective aspect. These constructions will be discussed further below, where it will be argued that their exceptional status is merely apparent.

The fact that almost every clause of Hindi has an explicit manifestation of the stative verb *h-* ‘be’ is in itself strong support for the hypothesis that every clause of Hindi is a stative expression. Furthermore, since the verb of existence is the only form in the language that

inflects for tense and for person¹⁷, there is a clear reason for this state of affairs. Since clauses are referential elements, their referential identity must be assured, and since this is the only verb form that allows the speaker to establish the temporal identity of his expression, this verb form is almost always required. Clearly, it is incumbent on any account of the Hindi clause to explain this remarkable distribution of *h-* ‘be’.

The next section argues that the Hindi case system can be best understood as an explicit signal of the argument structure of a stative expression (*i.e.*, ‘Figure’ and ‘Ground’).

2.2.1 Figure, Ground, and case in Hindi

There are just two cases in Hindi: the direct or ‘unmarked’ case, and the oblique or ‘inflected’ case. The oblique case is always associated with a Ground argument. The direct case is almost always associated with a Figure argument, but there are some Ground arguments that also appear in the direct case -notably in equative constructions (*infra*). The distribution and meanings of these cases are reviewed below.

The locative case marker in the parent languages of Hindi was **-i*. It is assumed here that **-i* is still the underlying oblique case marker. Under classical sandhi rules¹⁸, *a* and *i* coalesce as *e*. The masculine singular form of the oblique case is therefore *-e*. The feminine marker is also *i*, such that the feminine singular oblique case form is a long vowel *-ii*:

Table 10 Singular direct case and oblique

‘boy/girl’	direct case	Oblique
masculine singular	laRkaa	[laRkaa + <i>*-i</i>]=laRke
feminine singular	laRkii	[laRkii + <i>*-i</i>]=laRkii

The locative meaning of the oblique case is very general. A noun in the oblique case usually appears with a post-position that brings a more specific meaning to the expression¹⁹. When the Figure argument of the clause is a noun and the Ground argument is a post-

positional phrase, a locative reading is produced, as in 2 14. The Figure is located in or situated with respect to the Ground. In this sentence, the Figure argument is also the subject:

Example 2 14

Figure	Ground		'BE'
laRk-aa	kamr-e	meN	h-ai
boy-ms.sg.DC	room-ms.sg.OC	'in'	be-3sg.pres., agr. = 'boy'
'The boy is in the room.'			

The nouns *laRk-aa* 'boy-masculine singular direct case' and *kamr-e* 'room-masculine singular oblique case' are regular masculine nouns, which inflect unambiguously for the direct and the oblique cases. Other nouns have lost the morphological reflex of their case, but since nouns in the oblique case nearly always appear with post-positions, intelligibility is not jeopardised by this erosion of the case mark. For example, the form *mez* 'table' may appear in direct case positions or in oblique case positions (in the singular). The following example is not ambiguous, however, because *mez* appears with the postposition *par* 'upon'.

Example 2 15

Figure	Ground		'BE'
billii	mez	par	h-ai
cat-fem.sg.DC	table-ms.sg.OC	'upon'	be-3sg.pres. agr. = 'cat'
'The cat is on the table.'			

In an equative construction, the Figure argument is a specific entity that is situated with respect to a *coextensive* Ground argument (*i.e.*, the Figure and the Ground have the same logical extension). Both arguments of the clause are noun phrases in the direct case, presumably because the Ground argument agrees with the Figure argument in case features. The word-order of this construction is rigid:

Example 2 16

Figure	Ground	'BE'
laRk-aa	jaaduu-gar	h-ai
boy-ms.sg.DC	magic-maker-ms.sg.DC	be-3sg.pres. agr. = 'boy'
'The boy is a magician.'		

The Ground argument may also be an adjective phrase. The Hindi adjective agrees in gender, number, and case with the argument that it modifies:

Example 2 17

Figure	Ground	'BE'
laRk-aa	acchaa	h-ai
boy-ms.sg.DC	good-ms.sg.DC	be-3sg.pres. <i>agr.</i> = 'boy'

'The boy is good.'

Perfective participles used as adjectives may also appear in the Ground position, and these adjectives agree with the Figure argument of the clause. Participles as nominal modifiers cannot appear alone, however. They require the presence of the participle *hu-* 'be, become', also in the perfective:

Example 2 18

Figure		Ground		'BE'
laRk-aa		khaR- ϕ -aa	hu- ϕ -aa	h-ai
boy-ms.sg.DC		stand-prf.ms.sg.DC	be(come)prf.ms.sg.DC	be-3sg.pres. <i>agr.</i> = 'boy'

'The boy is standing up.'

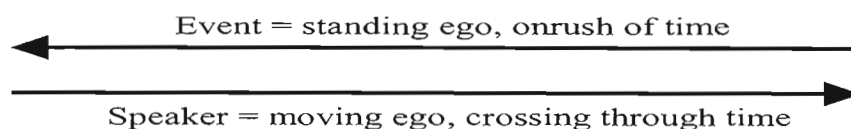
It will be argued in section 2.3 that some Hindi clauses with non-adjectival participles are also Figure-Ground constructions, similar to the clauses shown above.

The following section provides an account of the two participial constructions where the verb *h-* 'be' does not appear. In the analysis of the event structure of the clause, sentential aspect must be distinguished from verbal aspectual classes. Sentential aspect concerns relations of precedence and overlap between events. Verbal aspectual classes involve the internal composition of events. This standard view is refined by Gosselin (1996) in such a way as to make it possible to set apart the meaning effects of each type.

2.2.2 Hindi clauses without *h-* 'be'

Gosselin's (1996) model expands Reichenbach's (1947) model of the expression of time. Instead of using points to represent Event, Reference, and Speech-time, he represents these as bounded intervals. Rather than simply place these three on a single left-to-right time-line, he uses two parallel tracks representing opposite flows. On one of these, the Speech interval advances rightward, while on the other, the Event and Reference intervals recede leftward. This accommodates the jumble of 'moving ego' vs. 'moving time' metaphors that pervade discussions of temporality in language (Gosselin 1996, p.87; C. Smith 1997):

Figure 2 **The movement of speakers and events in time**



The following segments are the four basic elements needed to represent events in time (exchanging Reichenbach's single letters for paired letters identifying intervals):

Table 11 **The four time-segments for describing sentential aspect**

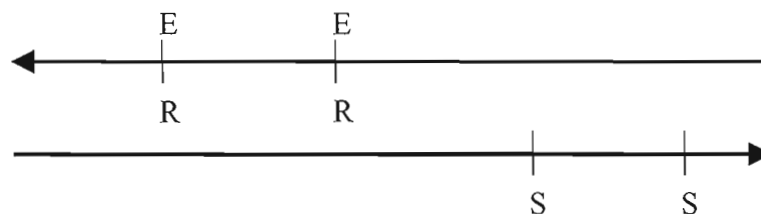
Time segment	Description
S-S	temporal period of speech
E-E	period of time during which process or state holds
R-R	period of time of reference
T-T	period of time of adverbial temporal expression

Gosselin's (1996) representation of time entails adjustments to the way E, R, and S relate to each other, and in particular to the definitions of the event and reference-period boundaries. Sentential aspect is defined as the relationship between segments on the time-line, allowing for the iconic description of four sentential aspects:

Table 12 The four sentential aspects

Sentential aspects and their specific configurations	
Sentence aspect	Event and Reference Relationship
oristic (perfective)	E...E = R...R
unaccomplished (imperfective)	E...R...R...E
accomplished (resultant)	E...E...R...R
prospective	R...R...E...E

The R-R boundaries on the ‘approaching event’ track are linked with the boundaries defining an S-S segment on the ‘advancing ego’ track. The S-S segment represents the perspective of the speaker, and it may be aligned with the segment on the ‘approaching event’ track in different ways to express temporal relations:

Figure 3 *Event, Reference, and Speech time-segments*

Gosselin’s model is useful in the interpretation of verb and participle constructions. In particular, this model offers an account of the two possible readings of the French present auxiliary + participle construction known as the *passé composé*. This construction is illustrated in the following examples. In the following example, the interpretation is coerced by the adverbial clause so that it must be simple past; the focus is on the dynamic event, which is understood to be oristic, inchoative, and punctual.

Example 2 19

Ayant fini le travail, nous avons mangé.
 having finished the work we have eaten
 ‘Having finished the work, we ate.’

In the next example, the interpretation is also coerced by the context, but the reading is present perfect. The Action of the event is over, but the resulting state is seen as something ongoing at the moment of speech:

Example 2 20

Merci quand même Madame, nous avons déjà mangé.
 thanks 'all the same' Ma'am we have already eaten
 'Thanks all the same, Ma'm, we have already eaten.'

According to Gosselin, the *passé composé* construction is ambiguous in this way because two sets of event-boundaries can be plotted out, with two distinct segments on the 'approaching time' track; one segment is the event described by the participle (*cf.*, Figure 4), and the other is the event described by the auxiliary (*cf.*, Figure 5). The interpretation depends on how these segments are linked with the single segment on the 'advancing ego' line, representing the perspective of the speaker.

Figure 4 $E^I = \text{«nous avons mangé»}$ (salient participial)

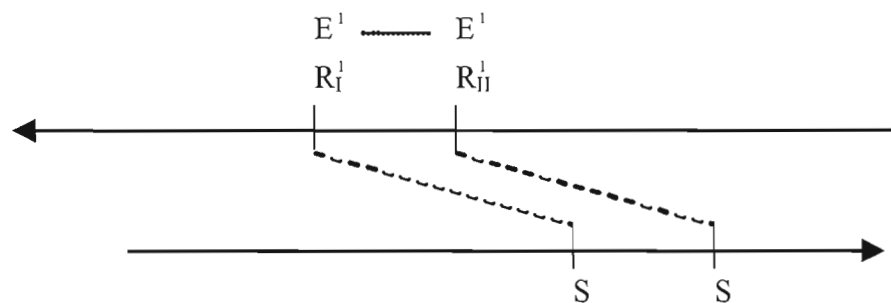
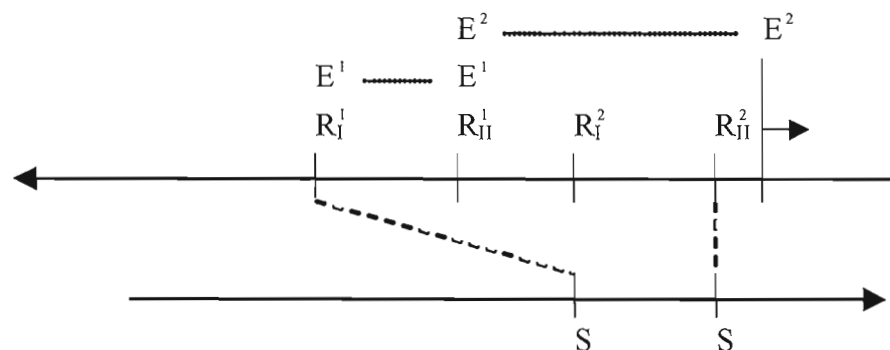


Figure 5 $E^2 = \text{«nous avons mangé»}$ (salient auxiliary)



The interpretation of the French *passé composé* depends on which of the two events is the more 'salient' in context. When the participle is the more salient, the reading of the *passé composé* is aoristic. In this use, the dynamic event (the Action) depicted by the participial expression is the focus of the interpretation, and the reading is close to that of the simple past tense. On the other hand, when the auxiliary is understood as more salient, the reading is past perfect: the construction is centered on the current situation, the state of affairs resulting from the Action described by the participial expression. Under this reading of the *passé composé*, the focus is on the resulting State of 'having eaten'.

The Hindi perfective participle construction can be similarly represented. Furthermore, the explicit use of the verb *h-* 'be' can be related to these distinct aspectual readings. When *h-* 'be' appears, the perfective is not ambiguous; it always describes the current situation resulting from the dynamic event portrayed in the participial expression. When *h-* 'be' does not appear, however, the perfective is ambiguous; it may describe the current situation, or it may have an aoristic interpretation, centered on the dynamic event that is described by the participial expression. Because the current situation can be uniquely described by manifesting *h-* 'be' explicitly, however, the first reading of the construction without *h-* 'be' is aoristic. Thus, the absence of an explicit verb form typically centers the perfective on the dynamic event, while the explicit manifestation of the verb *h-* 'be' always centers the perfective on the current situation resulting from this event.

The following Hindi examples have the same contextual coercion as the French examples of the *passé composé* in 2 19 and 2 20, above. In 2 21, the interpretation is centered on the dynamic event described by the participial expression. The use of *h-* ‘be’ is not acceptable.

Example 2 21

kaam kar-n-e ke baad ham n-e khaanaa khaa-y-aa (*hai)
 ‘after working’ 1pl. Action-OC meal-ms.sg.DC eat-prf.ms.sg. be-3sg.pres.
 ‘After working, we ate.’

Example 2 22

śukriyaa memsaaheb pehale bhii ham ne khaanaa khaa-y-aa ??(hai)
 Thank- Madam ‘just before’ 1pl. Action-OC meal- eat- be-
 you ms.sg.DC prf.ms.sg. 3sg.pres.
 ‘Thank-you Ma’am, we have already eaten.’

In 2 22, the interpretation is centered on the current situation resulting from the event described in the participial expression. In such examples, the use of *h-* ‘be’ is preferred.

Similarly, in the following example, the focus is on the dynamic event described in the participle *aa-y-aa* ‘came’, an Action that was completed before the moment of speech. The implication is that the speaker has come a second time:

Example 2 23

maiN kal aa-y-aa
 1sg.DC ‘yesterday’ come-prf.ms.sg.
 ‘I came yesterday.’ (...and here I am, back again!)

When there is an explicit instance of *h-* ‘be’, however, the focus shifts to the current situation that results from the Action described by the participle, implying that the person has remained at his destination until the present moment:

Example 2 24

maiN kal aa-y-aa h-uuN
 1sg.DC ‘yesterday’ come-prf.ms.sg. be-1sg.pres.
 ‘I came yesterday.’ (...and here I still am!)

The use of *h-* ‘be’ in the following example reflects the speaker’s center of interest in the event he describes. This statement would be natural, for instance, in the period before the lottery draw, because the focus is on the current situation that is the result of the dynamic event described in the participial expression (*i.e.*, having a lottery ticket):

Example 2 25

paaNc	din	puurv	hii				
five	day	before	exactly				
maiN	n-e	ek	laakh	k-aa	lottery ticket	li-y-aa	h-ai
1sg.DC	Action-OC	one	100,000	poss.- ms.sg.DC		take- prf.ms.sg.	be-3sg.pres.

‘Just five days ago, I took a hundred-thousand-dollar lottery ticket.’

In contrast, this sentence could be used without the verb of existence in the period after the drawing of the winning ticket, for the center of interest would be the act of buying the ticket.

Consider also the following sentence:

Example 2 26

raamdaas	n-e	kek	khaa-y-aa
name-ms.OC	Action-OC	cake-ms.DC	eat-prf.ms.

‘Ramdas ate cake.’

If the interpretation is centered on the dynamic event described by the participial expression, the meaning is more like ‘taste’ than ‘eat’, for the notions of post-prandial digestion and the like need not be present (*i.e.*, Ramdas performed the Action of ingestion, but he may not be in the state of ‘having eaten’). Indeed, this inchoative reading can be contextually coerced:

Example 2 27

raamdaas	n-e	kek	khaa-y-aa	
name-ms.OC	Action-OC	cake-ms.DC	eat-prf.ms.	
par	kek	nahiiN	khaa-y-aa	ga-y-aa
but	cake-ms.	neg.(+ ‘be’)	eat- prf.ms.	go-prf.ms.

‘Ram ate (= *tasted*) the cake, but the cake was not eaten.’

On the other hand, the next sentence is centered on the current situation resulting from the event described in the participial expression (*i.e.*, Ramdas has eaten). Under this reading, the second conjunct of the sentence is irreconcilable with the first. Notice that this second reading has been coerced by realizing the stative verb explicitly (*i.e.*, by using *h-* ‘be’):

Example 2 28

raamdaas	n-e	kek	khaa-y-aa	h-ai
name-ms.OC	Action-OC	cake-ms.DC	eat-prf.ms.sg.	be-3sg.pres.

##par	kek	nahiiN	khaa-y-aa	ga-y-aa
but	cake-ms.DC	neg.(+ ‘be’)	eat- prf.ms.sg.	go-prf.ms.sg.
‘Ramdas ate the cake, ##but the cake was not eaten.’				

It is thus argued that the Hindi perfective construction has the same kind of ambiguity as the French *passé composé* construction. The construction can be centered on the participial expression, describing a dynamic event that is understood to be already accomplished, or it can be centered on the verb, describing the current situation that results from the event described by the participial expression. It is remarkable, however, that *the Hindi perfective construction is ambiguous in this way only when there is no explicit verbal form*. Since the account of the ambiguity rests on the presence of both an ‘auxiliary’ verb and a participle, the fact that this ambiguity exists when there is no explicit manifestation of the verb form provides a strong argument supporting the hypothesis that the perfective participle is *always* embedded under a stative verb, even when there is no explicit verb form in the clause.

Note also that when the verb *h-* ‘be’ is explicitly manifested, the perfective construction is no longer ambiguous; the interpretation must be centered on the verb, describing the current situation that results from the event described by the participial expression. Apparently, the explicit verb form *h-* ‘be’ is more than just a reflex of the stative predicate; it contributes semantic content that obligatorily centers the interpretation of the construction on the temporal segment expressed by the stative predicate. Presumably, this content is carried by the tense marker of this verb form. That is, *h-* ‘be’ is the overt

expression of underlying predicative concept 'BE', but it also carries a tense marker with a deictic feature that centers the interpretation on the current situation.

This perspective offers an immediate account of the fact that the verb *h-* 'be' is never manifested with the imperfective participles that form the two clauses of the counterfactual conditional construction in Hindi. Clearly, the deictic temporal content of this form is in direct conflict with the counterfactual reading of this construction.

It is thus argued that every clause of Hindi is indeed based on a stative expression with the following semantic structure:

Figure 6 Semantic structure of the Hindi clause

BE (Figure, Ground)

2.3 The nominal status of Hindi participles

There is considerable evidence supporting the hypothesis that Hindi participial suffixes are in fact nouns that speak of Actions. When they are arguments of the matrix verb of a clause, their phrasal projections are 'Complex Event Nominals' in the sense of Grimshaw (1990), with obligatory arguments and internal aspectual structure. However, they can also have nominal uses describing the participants of Actions (*i.e.*, Patients or Actors) or the result of Actions, or particular Actions.

2.3.1 The Hindi participle as a simple noun or adjective

Whether they are perfective, imperfective, or gerundive, all Hindi participles inflect for gender, number, and case, as shown in Table 13, below. Since these grammatical properties are typical of nominal inflection across languages, this fact supports the claim that these participles are nominal expressions (*i.e.*, expressions headed by nouns or adjectives).

Table 13 **Inflected perfective, imperfective, and gerundive participles**

'die'		perfective		imperfective		gerundive	
		direct case	oblique	direct case	oblique	direct case	oblique
singular	mas.	mar- ϕ -aa	mar- ϕ -e	mar-t-aa	mar-t-e	mar-n-aa	mar-n-e
	fem.	mar- ϕ -ii	mar- ϕ -ii	mar-t-ii	mar-t-ii	mar-n-ii	mar-n-ii
plural	mas.	mar- ϕ -e	mar- ϕ -oN	mar-t-e	mar-t-oN	mar-n-e	mar-n-oN
	fem.	mar- ϕ -ii	mar- ϕ -ii	mar-t-ii	mar-t-ii	mar-n-ii	mar-n-ii

Furthermore, perfective, imperfective, and gerundive participles can appear as indirect objects or as sentential adjuncts of various kinds. In these positions, they inflect for oblique case, appearing with post-positions and particles, like other nominal expressions:

*Perfective participle***Example 2 29**

śakuntaalaa maroN meN se vaapas aa ga-y-ii
 name-fem.DC 'died'-ms.pl.OC 'among' 'from' 'back' come-root go-prf.fem.
 'Shakuntala came back from among the dead (*i.e.*, those who have died).'

*Imperfective participle***Example 2 30**

us n-e ro-t-oN ko caaval di-y-aa
 dist.sg.OC Action-OC weep-imprf.ms.pl.OC 'end-point' rice-ms.sg.DC give-prf.ms.sg.
 'She gave rice to the weeping (*i.e.*, those who were weeping).'

*Gerundive participle***Example 2 31**

mujhe paRh-n-e se chakkar aa-n-e lag- ϕ -aa
 1sg.OC loc. read-N-ms.sg.OC 'from' vertigo-fem. come-N-OC cling-prf.ms.sg.
 'I got dizzy from reading.'

These participles can also appear with direct case as the Figure argument (and subject) in a predicate adjective construction:

Example 2 32

mar-e hu- ϕ -e parlok meN h-aiN
 'died'-ms.pl.DC become-prf.ms.sg.OC heaven in be-3pl.pres.
 'Those who have died are in heaven.'

Example 2 33

ro-t-e	hu- ϕ -e	abhii	narak	meN	h-aiN
weep-imprf.ms.pl.DC	become-prf.ms.sg.OC	just now	hell	in	be-3pl.pres.

'Those who are weeping are still in hell.'

Example 2 34

paRh-n-aa	acchaa	hai
read-N.ms.sg.DC	good-ms.sg.	be-3sg.pres.

'Reading is good.'

As these examples show, the participles speak of Patient entities (*e.g.*, 'those who have died') of Actor entities (*e.g.*, 'those who were weeping') or of Actions (*e.g.*, 'reading'). In general, their interpretation is centered on concepts related to Actions.

In addition, perfective, imperfective, and even paraphrastic progressive participles may appear as pronominal modifiers, another clearly nominal function. The perfective participle of *hu-* 'become' is often added in these expressions:

Example 2 35

so-y-e	hu- ϕ -e	śer	ko
sleep-prf.ms.sg.OC	become-prf.ms.sg.OC	lion-ms.sg.OC	End-Point

'unto the sleeping lion'

Example 2 36

ro-t-aa	(hu- ϕ -aa)	/	ro-y-aa	(hu- ϕ -aa)	baccaa
weep-imprf.ms.sg.	become-	/	weep-prf.ms.sg.	become-	child-ms.sg.DC
	prf.ms.sg.			prf.ms.sg.	

'a weeping child / a has-been-weeping child'

Example 2 37

ro	rah- ϕ -aa	(hu- ϕ -aa)	baccaa
weep-root	stay-prf.ms.sg.	become-prf.ms.sg.	child-ms.sg.DC

'a persistently weeping child'

Both transitive and intransitive participles can be pronominal modifiers:

Example 2 38

mar- ϕ -aa	(hu- ϕ -aa)	bhaalu
die-prf.ms.sg.	(become-prf.ms.sg.)	bear-ms.sg.

'a dead bear' (*lit.* 'a having-died bear')

Example 2 39

maar- ϕ -aa (hu- ϕ -aa) bhaalu
 kill/beat-prf.ms.sg. (become-prf.ms.sg.) bear-ms.sg.
 'a slain bear'

All of these examples are distinct from relative clauses in form and meaning.

Thus, because they inflect for gender, number, and case, because they appear as arguments with nominal referents, and because they appear as pronominal adjectives, Hindi participles may be said to be nominal expressions.

2.3.2 Hindi participles as Complex Event Nominals

Even when they are used as pronominal adjectives or arguments with nominal referents, Hindi participles can be understood as events. The structure of the event can be seen, for example, in certain usages involving the Hindi possessive construction.

When a noun modified by a perfective participle is possessed, the relationship of the 'possessor' with the participle varies with the participle's event structure. When the participle expresses a simple ergative event (like *intransitive TuuT-* 'break', in 2 40), the possessor possesses the possession in the usual material sense:

Example 2 40

Pinky k-aa TuuT- ϕ -aa hu- ϕ -aa śiiśaa
 name-fem.OC poss.-ms.sg.DC break (intrans.)-prf.ms.sg. become-prf.ms.sg. mirror-ms.sg.DC
 'Pinky's broken mirror'

However, when the participle expresses an Action that implies the existence of an Actor, (like *transitive toR-* 'break', in 2 41), the possessor is obligatorily interpreted as this Actor:

Example 2 41

Pinky k-aa toR- ϕ -aa hu- ϕ -aa śiiśaa
 name-fem.OC poss.-ms.sg.DC break (trans.)-prf.ms.sg. become-prf.ms.sg. mirror-ms.sg.DC
 'the broken-by-Pinky mirror'

The gerundive is another participle that can be possessed. Furthermore, it can be centered on the Action of an event, or on the State resulting from this Action. When the gerundive is centered on the resulting State, possessor and possessum form a constituent which is the internal argument of the participle; the Actor in the event is not made explicit:

Example 2 42

raadhaa	k-e	kapaRe	phaaR-n-e	se
name-fem.OC	poss.-ms.pl.DC	clothes-ms.pl.DC	tear-N-ms.sg.OC	'from'

'from tearing Radha's clothes'

In this example, the noun phrase *raadhaa ke kapaRe* 'Radha's clothes' is the object of the participle *phaaR-n-e* 'tear' (*trans.*). However, when the gerundive participle is centered on the Action of the event, the possessor 'Radhaa' is interpreted as an Actor:

Example 2 43

raadhaa	k-e	kapaRe	phaaR-n-e	se
name-fem.OC	poss.-ms.pl.DC	clothes-ms.pl.DC	tear-N-ms.sg.OC	'from'

'from Radha's tearing (*possibly her own*) clothes'

The same construction can appear in the direct case as the Figure argument (and subject) of a simple stative clause, as in the following equative sentence.

Example 2 44

raadhaa	k-e	kapaRe	phaaR-n-aa	paap	h-ai
name-fem.OC	poss.-ms.pl.DC	clothes-ms.pl.DC	tear-N-ms.sg.DC	sin- ms.sg.DC	be- 3sg.pres.

'Radha's tearing her clothes is a sin.'

Furthermore, there is a related non-verbal Complex Event Nominal, as in the following sentence, where the Patient argument of the participle appears under possessive *k-*:

Example 2 45

raadhaa	k-e	kapaRe	k-aa	phaaR-n-aa	paap	h-ai
name- fem.OC	poss.- ms.pl.OC	clothes- ms.pl.OC	poss.- ms.sg.DC	tear-N-ms.sg.DC	sin-ms.sg.DC	be-3sg.pres.

'Radha's tearing of her clothes is a sin.'

Notice that the Patient argument is obligatory in this construction, while the Actor is optional. The single argument in the following examples must be understood as a Patient:

Example 2 46

raadhaa	k-aa	phaaR-n-aa	paap	h-ai
name-fem.OC	poss.-ms.pl.DC	tear-N-ms.sg.DC	sin-ms.sg.DC	be-3sg.pres.

‘The tearing of Radha is a sin (*i.e.*, *Radha is ‘torn’*).’
(*cf.*, *‘Radha’s tearing is a sin (*i.e.*, *tearing by Radha*)’)

Example 2 47

kapaRe	k-aa	phaaR-n-aa	paap	h-ai
clothes-ms.pl.DC	poss.-ms.pl.DC	tear-N-ms.sg.DC	sin-ms.sg.DC	be-3sg.pres.

‘The tearing of clothes is a sin’

Example 2 48

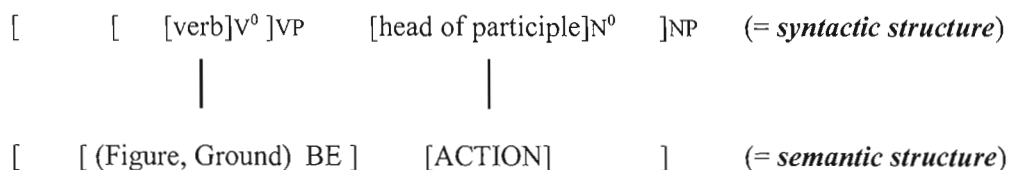
kapaRe	phaaR-n-aa	paap	h-ai
clothes-ms.pl.DC	tear-N-ms.sg.DC	sin-ms.sg.DC	be-3sg.pres.

‘Tearing clothes is a sin’

The parallels with the English progressive gerund are striking. These examples thus provide strong support for the claim that Hindi participles are complex event nominals.

2.3.3 The internal structure of Hindi participial constructions

Because every Hindi clause is a stative expression, dynamic events are always expressed in participial expressions in Hindi. These expressions have an internal structure that is similar to the ‘verbal’ type of progressive gerund in English discussed in Chomsky (1970) and reviewed above in Chapter 1. Hindi is left-branching, so the elements of these participial complex event nominals are ordered as follows:

Figure 7 The Hindi complex event nominal

The head of the noun phrase is the participial suffix. The interpretation of this noun is a specific aspectual manifestation of the concept ‘Action’ (*i.e.*, a perfective, imperfective or gerundive Action). The complement of this head is a verb phrase headed by a stative verb (*i.e.*, the predicative concept ‘BE’ with Figure and Ground arguments). The participial root is an implicit argument of this stative expression, so the phonological form of the participial root is realized in the head of this VP (*i.e.*, the form of the participial root is the name of the verb). Note, however, that this verb has no tense or agreement features.

The internal structure of the Hindi participial construction can be seen in the ambiguity of the interpretation of the adverb of frequency *dobaaraa* (*lit.*) ‘two-times’ according to its distribution in the gerundive participle. These variations in meaning correspond to modification of the Action, expressed by the head of the participle, *vs.* modification of the Thematic Tier, expressed by the stative VP embedded in the complement of the participle.

In the following, the bracketed portion is an entirely nominal construction in which the gerundive participle expresses an ergative Action with a ‘Middle’ interpretation. That is, the Action has an implicit Actor argument that is understood as a ‘manner-of-acting’ (*i.e.*, ‘beating’) that must be performed by some Actor. In this case, the Actor is understood to be the possessor (the ‘controller’) of this noun phrase; namely, *Ramdas*. When the adverb *dobaaraa* ‘two-time’ appears to the left of the participle phrase, it takes scope over the entire expression, including the negation. As it modifies the negated Action, modification of the resulting state is also implied. The interpretation is that on two occasions, the Action did *not* occur, and so the resulting State did *not* obtain:

Example 2 49

raamdaas k-aa dobaaraa [rukmini ko na maar-n-e]
 name-ms.OC poss-ms.sg.DC 'two-time' name-fem.OC End-Point neg. beat-N-ms.sg.OC

k-aa kaaran puuliis k-aa daR th-φ-aa
 poss-ms.sg.DC cause-ms. police-fem.OC poss-ms.sg.DC fear-ms.sg.DC be-prf.ms.sg.

'For fear of the police, Ramdas again did not strike Rukhmini, (*lit.*, 'The cause of Ramdas' again not striking Rukhmini was fear of the police').'

Under this analysis, it is assumed that the head of the gerundive participle, the morpheme *n*, is the nominal realisation of an Action, from which the structure of a Force relationship is inferred. The complement of *n* expresses the Thematic Tier or resulting State:

Example 2 50

ACTION (where the manner gesture [BEAT] affects 'Rukhmini')

|

BE ('Rukhmini', [BEATEN])

The position of the adverb of frequency *dobaaraa* 'two-time' is such that it takes scope over the negated Action nominal *n*, and thus over the entire event structure:

Example 2 51

(*dobaaraa* 'two-time') (negative) ACTION

|

BE 'Rukhmini', [BEATEN]

In other words, on two occasions, it was *not* the case that the Action-Gesture [BEAT] affected 'Rukhmini' such that 'Rukhmini' was located in the State [BEATEN], *i.e.*, 'For a second time, (*someone*) did *not* beat Rukhmini.'

However, when the adverb *dobaaraa* ‘two-time’ appears to the left of the negator, the negator takes scope over the adverb and the resulting State, but not the Action (*i.e.*, it only says that Rukhmini was not located in the Ground [BEATEN] a second time):

Example 2 52

raamdaas k-aa [rukmini ko dobaaraa na maar-n-e]
 name-ms.OC poss-ms.sg.DC name-fem.OC End-Point ‘two-time’ neg. beat-N-ms.sg.OC

k-aa kaaran puuliis k-aa Dar th-φ-aa
 poss-ms.sg.DC cause-ms. police-fem. poss-ms.sg.DC fear-ms.sg. be-prf.ms.sg.

‘Ramdas did not strike Rukhmini again, for fear of the police.’ (*lit.*, ‘The cause of Ramdas’s not striking Rukhmini a second time was fear of the police’)

The adverb *dobaaraa* ‘two-time’ takes scope over the resulting State only:

Example 2 53

ACTION

|

(negation) (*dobaaraa* ‘two-time’) BE (Rukhmini, [BEATEN])

In other words, while the Action-Gesture [BEAT] did affect Rukhmini once, she was *not* located in the State [BEATEN] that second time (*i.e.*, ‘Rukhmini was not beaten (*by someone*) a second time.’)

Similar variations in meaning are found in the negation of independent clauses based on perfective participles, but without any variation in the position of the negator:

Example 2 54

us n-e tasviir nahiiN banaa-y-ii
 dist.sg.OC Action-OC picture-fem. neg.(+BE) make-prf.fem.
 ‘He did not make the picture.’ (*did not even start*, or *did not finish*)

Either the Action of *banaa-y-ii* ‘make-prf.fem.’ is negated (Action not starting), or the resulting State is negated (Action not finishing).

The word *ekdam se* (*lit.*) ‘with one breath’ has two adverbial readings, depending on the portion of the clause it modifies. When it modifies the Action, it means ‘suddenly’:

Example 2 55

raamdaas	n-e	ekdam se	apnaa	cehraa	paanii	meN	Daal	di-y-aa
name-ms.OC	Action-OC	‘with one breath’	self’s	face- ms.sg.DC	water- ms.sg.DC	‘in’	pour-root	give-prf.ms.sg.

‘Ramdas *suddenly* submerged his face in water.’

In contrast, when positioned to modify the resulting State, *ekdam se* means ‘completely’:

Example 2 56

raamdaas	n-e	apnaa	cehraa	ekdam se	paanii	meN	Daal	di-y-aa
name- ms.OC	Action- OC	self’s	face-ms.sg.DC	‘with one breath’	water- ms.sg.DC	‘in’	pour-root	give- prf.ms.sg.

‘Ramdas *completely* submerged his face in the water.’

The expression *ekdam se* is centered so as to be compatible with the portion of the event structure that it modifies, whence the two possible readings. This is consistent with the hypothesis that the participles are Complex Event Nominals with two-part event structures.

Thus, it is argued that ambiguous adverbial expressions provide evidence that Hindi participles are Complex Event Nominals, with two-part event structures. Further evidence of this structure is presented below, in the account of compounded participles.

2.4 The Compounded Participle

Hindi participles may appear in two forms: simple or compounded. The following example has a simple participle:

Example 2 57

rukhhinii	mar-φ-ii
name-fem.DC	die-prf.fem.

‘Rukhmini died.’

Since the matrix stative verb is not manifested explicitly in this example, the preferred interpretation of the participle *mar-* ‘die’ is aoristic. This sentence is centered on the force dynamic relation that provokes the change of state from alive to dead (*i.e.*, the act of dying) and this Action is seen as something that was completed in the past.

The following example has a compounded participle. Here again the matrix stative verb is not manifested explicitly.

Example 2 58

rukmini mar ga-y-ii
 name-fem.DC die-root go-prf.fem.
 ‘Rukhmini has died.’

In this example, it is the inflected root *ga-* (*jaa-*) ‘go’ that describes a force dynamic relation that leads to the state of death. The compound *mar jaa-* thus means ‘become dead’ (*lit.* ‘go to the state ‘dead’’). This event is also understood to have been completed in the past, but here the aoristic interpretation is centered on the change of state from alive to dead. The force dynamic relation that leads to this change of state is peripheral to the focus of the expression.

The second element of the compound, the inflected form, is drawn from a closed list of about a dozen participle roots, all of which have independent uses as simple participles (*cf.*, Hook 1974). In compounded participles, these roots express a rather ‘generic’ force-dynamic relation, shifting the focus of attention to the change of state that is identified by the first element of the compound participial expression. The first element of the compound is always a bare root form, without inflection.

Compounding is often the preferred way of expressing the perfective event. For example, the sentence above based on the compound form *mar jaa-* ‘become dead’ can stand alone as a complete statement, but the use of the simple form *mar-* ‘die’ is usually found embedded in a larger expression. Thus, the simple form is appropriate in the condition clause of a promise, as in in the following example.²⁰

Example 2 59

agar rukhminii mar-φ-ii to us k-e bacce k-ii dekhbhaal kar-uuN-gaa
 if name-fem.DC die-prf.fem. then dist.sg.obl. poss. child poss. Care 'I will do'
 'If Rukhmini dies, I will take care of her child.'

The simple form is also used to provide background information to a clause that delivers the concluding point, as in the following example:

Example 2 60

ICU meN jaise hii rukhminii mar-φ-ii
 'in Intensive Care' 'seemingly' name-fem.DC die-prf.fem.

DaktaroN n-e upcaar kar ke use Zinda kar di-y-aa
 doctors Action-OC care 'having performed' distal-sg.OC 'living' make-root give-prf.ms.sg.
 'Rukhmini seemed to die in Intensive Care, but the doctors intervened and brought her to life.'

Furthermore, the simple form may indicate that there is something unresolved about the situation:

Example 2 61

pataa h-ai ki rukhminii mar-φ-ii par kaise?
 'known' be-3sg.pres. that name-fem.DC die-prf.fem. but How
 '(I) know that Rukhmini died... but how?'

In these examples, the simple participle appears when the focus is on 'dying', but not on 'death', *i.e.*, on the point at which death occurs, not on the ensuing state of death. At the point when Rukhmini dies, the speaker will take her child. On the other hand, when Rukhmini is on the point of dying, the doctors bring her back, *i.e.*, while the speaker does assert that Rukhmini has died, he dwells on the point at which death occurs, not the ensuing state.

In contrast, compounding underscores the completion and finality of an Action and its result. Thus, compound forms are generally unacceptable in negative expressions when uttered without robust contextual support:

Example 2 62

rukhminii nahiiN mar ga-y-ii
 name-fem.DC neg.(+ 'be') die-root go-prf.fem.
 'Rukhmini did not become dead.'

The negation of a compound can be appropriate, however, in a context in which the resulting state is pointedly denied, as in the following reproach uttered by a woman to relatives speculating on her life insurance:

Example 2 63

maiN koi mar to nahiiN ga-y-ii
 1sg.DC someone-DC die-root 'indeed' neg.(+ 'be') go-prf.fem.
 'I am not dead yet!'

The negated simple form, on the other hand, is quite acceptable as a complete statement, as in the following example:

Example 2 64

rukminii nahiiN mar- ϕ -ii
 name-fem.DC neg.(+ 'be')²¹ die-prf.fem.
 'Rukhmini did not die.'

This clause asserts that the subject did not pass the moment of dying.

The tables below list the participial roots that are most frequently used as the second element of a compound participle. The intransitive participles are based on concepts commonly found in the simple ergative constructions of other languages, while the concepts of the transitive participles are common in complex ('causativized') ergative constructions. There are no unergative second elements in compound participles. In contrast with ergative participles, unergative participles in the perfective always appear in independent clauses.

The simple ergative forms describe a Patient argument that is affected by a natural Force. The causativized ergative forms describe a Patient that is affected by a Manner of Action implying the intervention of an Actor. The subjects of simple ergatives are expressed

in the direct case, and subjects of causativised or complex ergatives in the oblique case with *n-e*:

Table 14 **Related intransitive and transitive compounders**

intransitive (direct case subject of clause with perfective participle)	transitive (<i>n-e</i>-marked subject of clause with perfective participle)
--	--

Centered on Force

lag 'cling, adhere' (*start*)

nikal 'emerge' (*turn out as*)

mar (*end up; peter out*)

Centered on Manner, Actor implied

lagaa 'attach to something' (*associate*)

nikaal 'expel' (*bring out, figuratively*)

maar 'beat, kill' (*pull off, e.g., prowess; finish off*)

Duub 'dive'

Duub mar 'drown (*intrans.*)'

Duub 'dive'

Duub maar 'drown somebody'

jal 'burn (*intrans.*)'

jal mar 'to burn right up'

Intransitive compounders like *mar* 'wither, die' describe a Patient argument that is affected by a Natural Force:

Example 2 65

[WITHER-TO-DEATH] AFFECT Patient

Transitive compounders like *maar* 'beat, kill' describe a Patient that is affected by a Manner of Action that implies the intervention of an Actor:

Example 2 66

[BEAT-TO-DEATH] AFFECT Patient

This contrast in the centering of an implicit argument is overtly signalled in many simple/causative ergative pairs in the Hindi lexicon. Three such pairs are used as the second element in compound participles (*i.e.*, *mar/maar* 'wither, die'/'beat, kill', *nikal/nikaal* 'emerge'/'expel' and *lag/lagaa* 'cling, adhere'/'attach to something'). Two others have the same alternation without an overt morphological signal, while the remaining forms on the list

do not alternate. Nevertheless, the intransitives of the list below are centered on natural Forces, while the transitives are centered on Manner Gestures implying an Actor:

Table 15 **Centering of intransitive vs. transitive compounders**

Centered on Force

jaa / ga 'go' (*complete; become*)
aa 'come' (*complete*)
baiTh 'sit' (*fall into event; 'end up X-ing'*)

uTh 'rise' (*start impulsively*)

hu/hu 'be' (*become*)
paR 'fall, strike the earth like rain' (*befall; accrue as obligation*)

Centered on Gesture, Actor implied

kar 'make, do'
de 'give' (*production, outward-oriented*)
le 'take' (*self-interested or inward-oriented action*)
Daal 'strike, thrust, slap down. pour' (*dash off; perform with casual violence*)
rakh 'put' (*set up, settle; make stable*)
khaa 'eat' (*experience*)

The meaning of the second element in a compound is less literal than the meaning of that form in its independent use, *e.g.*, 'kill' means 'finish off an Action' in a compound, 'fall like rain' means 'afflict'. Similarly, compounding with *de* 'give' adds outward-orientation, as in *paRh de* 'read + give, *i.e.*, read out, read out loud for others to hear', while *le* 'take' imparts self-direction, as in *paRh le* 'read + take, *i.e.*, read to oneself, for oneself'. The semantics of the two roots in a compound participle must be compatible. It is thus possible to have *khaa le* 'eat + take, *i.e.*, have something for oneself to eat (*not* 'take something in order to eat it')'. However, there is no such compound as **khaa de* 'eat + give', *i.e.*, give something in order to eat it, eat for someone else's sake'.

Whether a compound participle construction takes a subject in the direct case or a subject in the oblique case with *n-e* is determined by the second element of the compound participle, and this form also determines the event type and the argument structure of the compound. The second elements in compounds contribute shades of meaning which are related to their meanings in independent usages. These are not optional auxiliaries, as has been commonly assumed in the literature.

For example, the manner gesture of an unergative root like *naac* ‘dance’ must be performed by an Actor. The Actor performs the Action Pattern of dancing, such that an instance of the dance comes to be situated at the Actor:

Intransitive Unergative participle

Example 2 67

raamdaas jaan-buujhkar / *acaanak naac-φ-aa
 name-ms.sg.DC deliberately suddenly dance-prf.ms.sg.
 ‘Ramdas deliberately / *suddenly danced (e.g., took his wife and went onto the dance floor).’

This is a standard unergative Action. The possibilities for modifiers are consistent with the voluntary nature of dancing.

However, when *naac* ‘dance’ is compounded with *uTh* ‘rise (start impulsively)’, the dancing is something that happens to the dancer; he does not initiate it. The following is appropriate in a context where Ramdas was taken up by the mood into the dancing:

Intransitive Unergative root + Intransitive Ergative compounder

Example 2 68

raamdaas acaanak / *jaan-buujhkar naac uTh-φ-aa
 name-ms.sg.DC suddenly deliberately dance-root rise-prf.ms.sg.
 ‘Ramdas suddenly / *deliberately leapt up dancing (e.g., was swept up in the frenzy).’

Compounding with an intransitive ergative yields an intransitive ergative, and compounding with a transitive unergative yields a transitive unergative. The subject in the following example must appear in the oblique case with *n-e* because the inflected root form *li-y-aa* requires a *n-e* subject:

Intransitive Unergative root + Causative Ergative compounder

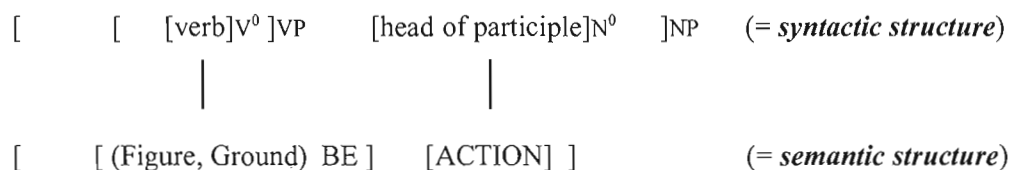
Example 2 69

raamdaas ne naac li-y-aa
 name-ms.sg.OC Action-OC dance-root take-prf.ms.sg.
 ‘Ramdas danced (e.g., pulled off a complex move).’

Likewise, if the perfective compounder in its independent use requires a subject in the direct case, so does the compound.

This account of compound participles brings further evidence to support the account of simple participles that was presented above. Recall the schematic representation of the simple participle structure (repeated here):

Figure 8 The Hindi complex event nominal



The head of the noun phrase is a participial suffix that is understood as a perfective, imperfective or gerundive Action. The complement of this head is a verb phrase headed by a stative verb (*i.e.*, the predicative concept ‘BE’ with Figure and Ground arguments). The participial root is an implicit argument of this stative expression, and the phonological form of the participial root is realized in the head of this VP (*i.e.*, the form of the participial root is the name of the verb).

The compounded participle structure is arguably parallel to this structure. The only further assumption needed is that the second element of the compounded expression (*i.e.*, the inflected form) is *lexically* compounded with the participial suffix, adding further definition to the Action concept of the participle. The participial suffix therefore enters the syntactic derivation with a root form already attached, so the root form that appears in the head of the verb phrase remains unattached.

As might be expected, compound participles are commonly used with the participle types that lend themselves to an interpretation focused on the resulting state. Imperfective and progressive constructions thus rarely involve compounds.

Table 16 Types of participles that appear in the compound form

	<i>freely</i>	<i>idiomatic or highly marked</i>	<i>banned</i>
perfectives	all	many, intransitive and transitive	
gerundives	all		
conjunctive ('having done X')	all		
imperfectives		a few, intransitive and transitive	
paraphrastic progressives based on perfective <i>rah</i> -‘stay’		a few, transitive	intransitive

Since conjunctive participles never have explicit subject arguments, it is worth remarking that the domain where compound participles appear is the same as the domain where the *n-e* subject appears (*i.e.*, in perfective and gerundive constructions). This parallel offers a hint as to why the distribution of *n-e* is aspectually conditioned, as discussed in the next chapter.

2.5 The expression of events in Hindi clauses

Hindi participial expressions appear in the stative structure of the clause either as Figure arguments or as Ground arguments. When the participial expression is the Ground argument of the clause, the Figure argument is a noun phrase in the direct case. When this Figure argument is the subject of the clause, this is the ‘Accusative’ clausal pattern. When a post-position with noun phrase in the oblique case appears in subject position, this is the ‘unconditioned’ ergative pattern²². When the participial expression is the Figure of the clause, this is the ‘aspectually-conditioned ergative’ clausal pattern, a pattern that only occurs with the perfective participle, or with the gerundive participle of obligation. In this construction, the Ground is a *n-e* argument, which is necessarily the subject of the clause. These three clause-patterns are summarily described below with reference to the forms of the subject, and the patterns of verbal agreement.

The accusative clause minimally comprises a Figure argument in the direct case and the verb of existence. The verb agrees in number and person with this argument:

Example 2 70

maiN h-uuN
 1sg.DC be-1sg.pres.
 'I am.' (*i.e., I exist.*)

The same agreement pattern obtains in Locative clauses:

Example 2 71

maiN kamr-e meN h-uuN
 1sg.DC room-ms.sg.OC 'in' be-1sg.pres.
 'I am in the room.'

A clause in the accusative pattern can relate two noun phrases, both of which bear direct case. Again, verbal agreement is with the Figure argument:

Example 2 72

maiN jaadu-gar h-uuN
 1sg.DC magic-maker-ms.sg.DC be-1sg.pres.
 'I am a magician.'

A clause in the accusative pattern can relate a noun phrase with a predicative adjective. The adjective agrees in gender, number, and case with the Figure argument. As in the previous examples, the verb of existence agrees in person and number with this argument:

Example 2 73

maiN acchaa h-uuN
 1sg.DC good-ms.sg.DC be-1sg.pres.
 'I am good.'

Lastly, the clause in the accusative pattern can relate a noun phrase to a participial expression. The participle agrees in number and gender and case with the Figure argument. Thus, the participle appears in the direct case, even though it is in the Ground position of the clause. The construction is thus similar to equative and predicate adjective constructions in simple stative clauses. The verb agrees with the Figure argument in person and number:

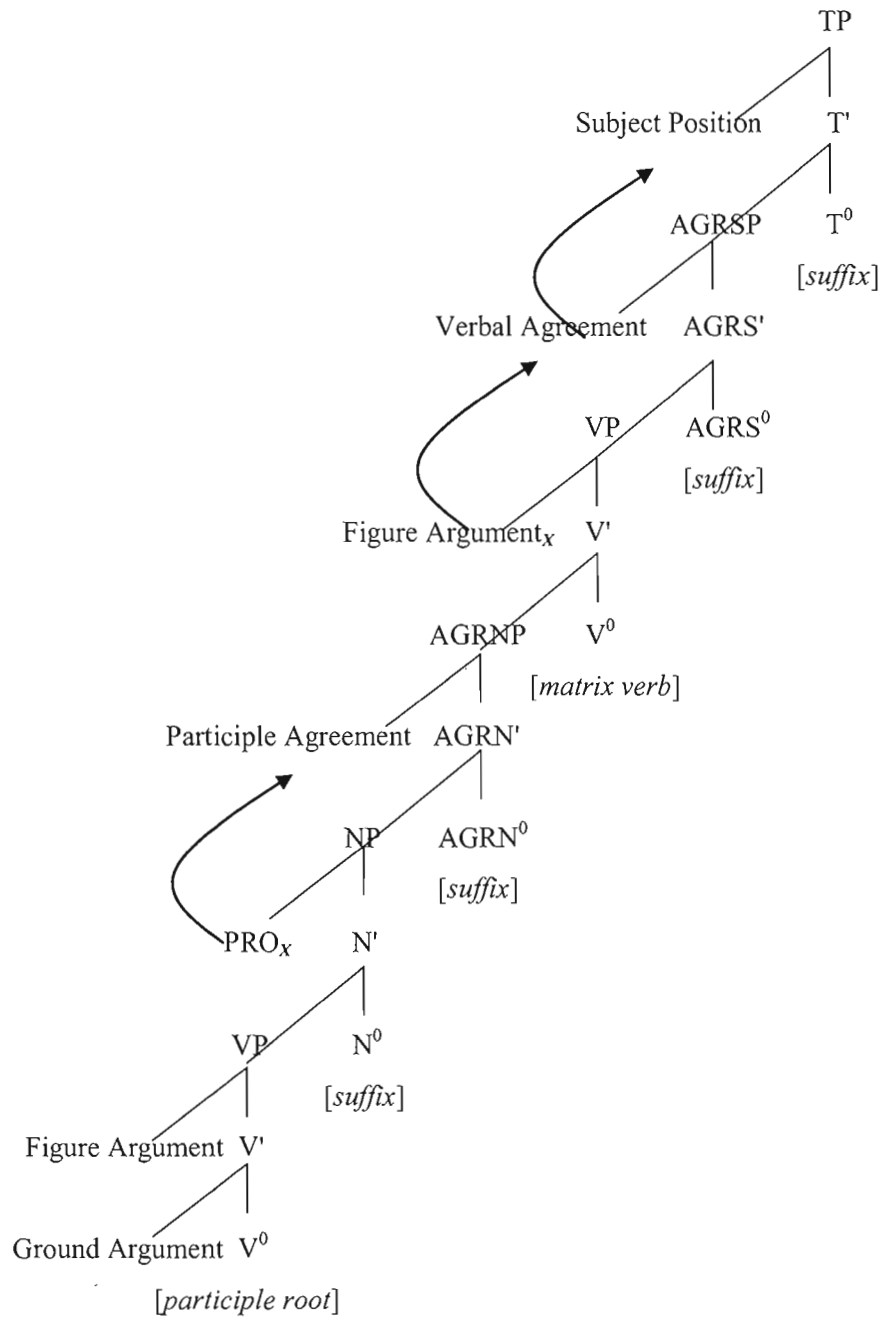
Example 2 74

maiN bille ko Dar-aa-t-aa h-uuN
 1sg.DC tomcat-fem.sg.OC End-Point scare-do-imprf.ms.sg. be-1sg.pres.
 'I scare the tomcat.' (*lit., 'I do scare to the tomcat.'*) (*habitually, with or without success*)

With the accusative pattern, the Figure argument of the clause moves through the specifier of the verbal agreement phrase to the subject position (assumed to be in the specifier of the Tense phrase). When the Ground argument of the clause is a participial expression, the Figure argument controls the argument that is not taken up by the root concept of the participle (*i.e.*, the Actor position in unergative Actions and the Patient position in ergative or unaccusative Actions). This argument is represented as an empty pronoun (PRO) that moves from the specifier position of the participle noun phrase to the specifier position of the participle agreement phrase. Since the Patient argument is the Figure of the Thematic tier of the verb phrase embedded under the participle, it follows that in an ergative or unaccusative expression, the matrix Figure argument controls the Figure argument of the embedded verb phrase.

The pertinent syntactic structure is illustrated below.

Figure 9 The Accusative clause-pattern



In this structure, the Figure Argument_x controls the PRO_x argument.

Like the accusative pattern, the unconditioned ergative pattern can occur with any kind of participle, or with none at all. The difference between the two constructions is the fact that the unconditioned ergative pattern involves psychological or physiological properties which are situated at or experienced by a locative subject. There are only a few post-positions that are used with these subjects, as illustrated in the following examples:

Example 2 75

laRke meN himmat h-ai
 boy-ms.sg.OC 'in' courage-ms.sg.DC be-3sg.pres.
 'The boy has courage.' (*as a character trait*) (*lit., 'In the boy is courage.'*)

Example 2 76

laRke ko zuukaam h-ai
 boy-ms.sg.OC End-Point cold-ms.sg.DC be-3sg.pres.
 'The boy has a cold.' (*lit., 'Unto the boy is a cold'*)

Example 2 77

mere paas ek nayaa dukaan h-ai
 l.sg.poss.OC 'proximity' one new-ms.sg.DC store-ms.sg.DC be-3sg.pres.
 'I own a new store.' (*lit., 'In my possession is a new store.'*)

Example 2 78

laRke ko zuukaam aa-t-aa h-ai
 boy-ms.sg.OC End-Point cold-ms.sg.DC come-imprf.ms.sg. be-3sg.pres.
 'The boy catches colds.' (*habitually*) (*lit., 'Unto the boy comes a cold.'*)

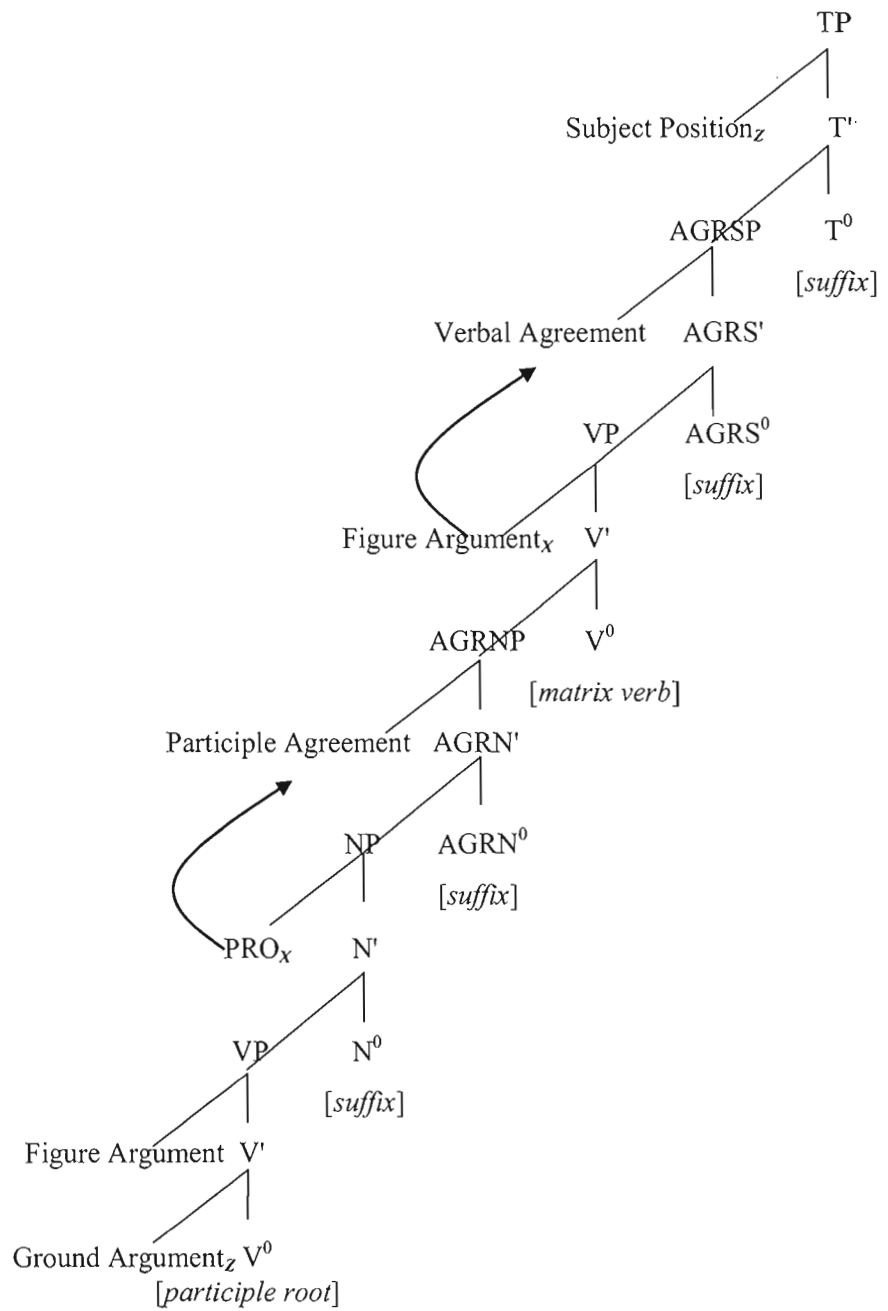
Example 2 79

laRke ko maiN dikh-ø-aa h-uuN
 boy-ms.sg.OC End-Point 1sg.DC appear-prf.ms.sg. be-1sg.pres.
 'The boy caught sight of me.' (*lit., 'I appeared unto the boy.'*)

In this pattern, as in the accusative pattern, the verb and the participle agree with the matrix Figure argument, and this Figure argument controls a position in the Action described by the participle. The only difference between the two patterns is that the subject in the unconditioned ergative pattern is a post-position with a noun phrase complement in the oblique case and this post-position phrase controls the Ground position in the verb phrase that is embedded under the participle.

The pertinent syntactic structure is illustrated below.

Figure 10 The Unconditioned Ergative Pattern



In this structure, the Figure Argument_x controls the PRO_x argument. The argument in the Subject Position_z controls the Ground Argument_z of the verb phrase embedded under the participle.

The aspectually-conditioned ergative pattern involves the particle *n-e*, of course, and it can only occur when the clause is based on a perfective participle or the obligational gerundive participle. Consider the following examples involving perfective participles:

Example 2 80

bille n-e billiyyaN Dar-aa-y-ii h-aiN
 tomcat-ms.sg. OC Action-OC she-cat-fem.pl.DC fear-cause-prf.fem.pl. be-3pl.pres.
 ‘The tomcat frightened she-cats.’

Example 2 81

bille n-e billiyoN ko Dar-aa-y-aa h-ai
 tomcat-ms.sg. OC Action-OC she-cat-fem.pl.OC End-Point fear-cause-prf.ms.sg. be-3sg.pres.
 ‘The tomcat frightened the she-cats.’

In the first of these examples, the object appears in the direct case. In the second example, however, the object is in the oblique case followed by a post-position. In this latter example, therefore, *the clause has no argument in the direct case*, a situation that is only possible in the aspectually-conditioned ergative pattern. The reason why this situation is remarkable is that both *traditional and current accounts of Hindi grammar claim that the participle and the matrix verb agree with an argument in the direct case*. Since this example does not have such an argument, this position seems hard to maintain.

Further enquiry reveals an odd grammatical conspiracy concerning verbal agreement in Hindi. Recall that in the accusative pattern, the participle agrees in gender and number with the argument in the direct case, and the verb of existence agrees with that same argument in number and person, as in the following example:

Example 2 82

tum billii Daraa-t-e h-o
 2pl.DC she-cat-fem.sg.DC fear-cause-imprf.ms.pl. be-2pl.pres.
 ‘You (*plural of intermediate courtesy*) frighten the cat.’

As noted above, arguments in the direct case do appear in the *n-e* clause, but there is an important gap in these data. In fact, *the only arguments that appear in the direct case in the n-e clause are third person arguments*. First and second person forms are necessarily

pronominal, of course, and it turns out that first and second person pronouns can never appear in the direct case in the *n-e* clause. They can only appear in the oblique case, as in the following examples:

Example 2 83

raamdaas	n-e	mujhe	haaTaa-y-aa	h-ai
Raam-OC	Action-OC	1sg-OC	shove-prf.ms.sg	be-3sg.pres.

'Raamdas shoved me.'

Example 2 84

raamdaas	n-e	hameN	haaTaa-y-aa	h-ai
Raam-OC	Action-OC	1pl-OC	shove-prf.ms.sg	be-3sg.pres.

'Raamdas shoved us.'

Here again, there appears to be no argument in the direct case with which the participle and the verb of existence may agree.

On the other hand, third person pronominal arguments can appear in the direct case in this position in the *n-e* clause. The participle agrees with these forms, and the matrix verb appears to as well²³:

Example 2 85

raamdaas	n-e	veh	haaTaa-y-e	h-aiN
name-ms.OC	Action-OC	3.pl.DC	shove-prf.ms.pl.	be-3pl.pres.

'Ramdas shoved them.'

Furthermore, although first and second person direct case pronouns are never found in a *n-e* clause, they do appear in unconditioned ergative clauses. Compare the following examples.

Example 2 86

raamdaas	n-e	*maiN	haaTaa-y-aa	*h-uuN
name-ms.OC	Action-OC	*1sg.DC	shove-prf.ms.sg.	*be-1sg.pres

(*intended meaning*) 'Ramdas shoved me.'

Example 2 87

raamdaas	ko	maiN	dikh-aa	h-uuN
name-ms.-OC	End-Point	1sg.DC	appear-prf.ms.sg.	be-1sg.pres

'Ramdas caught sight of me.' (*lit.*, 'I appeared unto Raam.')

Apparently, the argument position following the subject in the unconditioned ergative pattern is different from the argument position following the subject of the aspect-conditioned ergative pattern. Clauses without direct case arguments have been traditionally termed ‘impersonal’ because of the apparent absence of agreement. More recent treatments refer to ‘default case’. However, none of these accounts has explained *why* this pattern should exist here and not elsewhere.

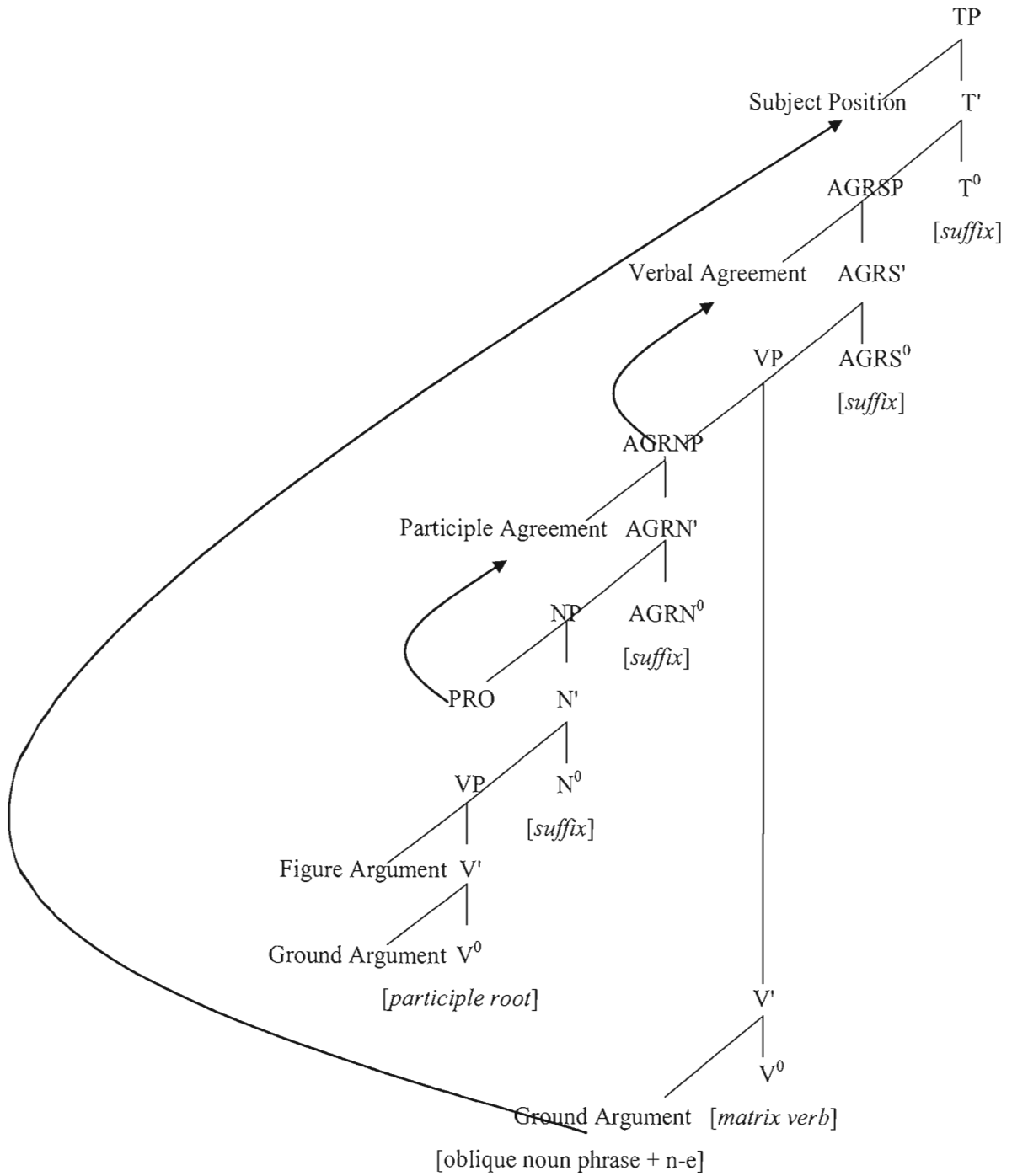
It is proposed that in the aspect-conditioned ergative pattern clause, the participial phrase is the Figure argument of the matrix verb. Thus, although the participle agrees with its complement in the direct case (in gender and number), the matrix verb actually agrees with the participle phrase itself (in person and number). In other words, the matrix verb in a clause with a *n-e* subject only agrees *indirectly* with the number of the argument of the participle in the direct case. It always agrees directly with the participle, and therefore always shows third person agreement. Since the participle phrase is the Figure argument of the clause, the Ground argument of the clause must be the *n-e* argument, which eventually moves to the subject position.

This explains why only a clause in the aspectually-conditioned ergative pattern may appear without a direct case argument, for it is only in this construction that the matrix verb agrees with the participle. Presumably, the grammatical conspiracy (*i.e.*, the fact that Hindi has no first or second person object pronouns in the direct case) is an historical relic of the early development of the aspectually-conditioned ergative pattern.

Furthermore, in the aspectually-conditioned ergative pattern, an empty pronoun (PRO) in the specifier position of the participle noun phrase is used to represent the ‘empty’ argument position in the Action described by the participle (*i.e.*, whichever argument is not taken up by the root concept of the participle itself: in an unergative Action, the Actor position is empty, and in an ergative or unaccusative Action, the Patient position is empty). This empty pronoun moves to the specifier of the participial agreement phrase.

The pertinent syntactic structure is illustrated below.

Figure 11 The Aspectually-conditioned Ergative Pattern



Similarly, in clauses expressing obligation, the gerundive participle is the matrix Figure argument, while the argument that appears in subject position has been displaced from the matrix Ground position. In fact, this is true when these clauses have a *n-e* subject, as well as when they have a subject in the oblique case followed by the locative particle *ko* ‘end-point’. This can be seen in the patterns of verbal Agreement.

Whether the subject is realized with *n-e* or with *ko*, the matrix verb agrees with a third person object in number, as in the following examples:

Example 2 88

maasTar n-e laRkiyaaN ghumaa-n-ii h-aiN
 teacher-OC Action-OC girl-fem.pl.DC walk-around-N-fem.DC be-3pl.pres.
 ‘The teacher feels he must take the girls around.’

Example 2 89

maasTar n-e veh ghumaa-n-ii h-aiN
 Teacher-OC Action-OC distal pl.DC walk-around-N-fem.DC be-3pl.pres.
 ‘The teacher feels he must take them around.’²⁴

Example 2 90

maasTar ko laRkiyaaN ghumaa-n-ii h-aiN
 teacher OC End-Point girl-fem.pl.DC walk-around-N-fem.DC be-3pl.pres.
 ‘The teacher must take the girls around.’

Example 2 91

maasTar ko veh ghumaa-n-ii h-aiN
 teacher OC End-Point distal pl.DC walk-around-N-fem.DC be-3pl.pres.
 ‘The teacher must take them around.’

However, when the object is in first or second person, it must appear in the oblique case, and the matrix verb does not agree with it for either person or number:

Example 2 92

maasTar n-e tumheN ghumaa-n-aa h-ai
 teacher Action-OC 2pl. OC walk-around-N-ms.sg.DC be-3sg.pres.
 ‘The teacher feels that he must take you around.’

Example 2 93

*maasTar ko tum ghumaa-n-aa h-o
 teacher-OC End-Point 2pl. DC walk-around-N-ms.sg.DC be-2pl.pres.

Example 2 94

maasTar ko tumheN ghumaa-n-aa h-ai
 teacher-OC End-Point **2pl. OC** walk-around-N-ms.sg.DC be-3sg.pres.
 'The teacher must take you around.'

Example 2 95

*maasTar ko tum ghumaa-n-aa h-o
 teacher-OC End-Point **2pl. DC** walk-around-N-ms.sg.DC be-2pl.pres.

Thus, it would seem that in expressions of obligation, the gerundive participle is always manifested in the Figure position of the matrix verb. The verb agrees with this participle directly for person and number, and it reflects the number of an object in direct case only, since the participle agrees with this object in number and gender. In these constructions, therefore, the subject of the clause is always derived from the Ground position of the matrix verb, whether it is realized with *n-e* or with the locative particle *ko*.

CHAPTER III

The uses of *n-e* in Hindi

3.0 Introduction

The first part of this chapter examines the composition and the meaning of *n-e*. It is argued that *n-e* is composed of two elements: a noun *n* meaning ‘Action’, and an oblique case mark *-e*, a signal of the general locative case.

The oblique case mark *-e* is found in numerous Hindi constructions. Many of these have already been cited in previous chapters, for *-e* is the most common case mark of Ground arguments in Hindi. It will be demonstrated in this chapter that the same case mark appears on adverbial clauses, on conjunctive participles and on subjects that express inalienable possession.

The noun *n-* meaning ‘Action’ is found in another prominent Hindi construction; *n-* is the head of the gerundive participle. In certain uses, the gerundive participle is also marked with the oblique case marker *-e*. Here too, *n-e* represents an Action that is understood as an abstract location.

The second part of this chapter provides an explicit description of the distribution of *n-e*, explaining why *n-e* is used in Hindi, and why it is restricted to the domain of perfective and gerundive participles. It also explains why *n-e* is always the subject of its clause.

The third section of this chapter provides an explicit analysis of the transitive and volitional examples that are considered standard under previous analyses of the phenomenon,

and an equally explicit account of the exceptional cases that have been problematic in these analyses.

The conclusion of the chapter provides a more general perspective on the main points of this account of Hindi grammar.

3.1 The Composition and the Meaning of *n-e*

The Hindi form *n-e* is composed of a noun *n-* meaning ‘Action’ and an oblique case mark *-e*, a signal of the general locative case. A wealth of historical²⁵ and comparative data supports this segmentation of the particle *n-e*²⁶, but the most compelling facts are found in Hindi itself. The noun phrase in the oblique case that precedes *n-e* (as in *laRk-e n-e* ‘in the Action of the boy’) is a complement of the noun *n-* and it is interpreted as the Actor who performs the Action *n*. Since the *n-e* phrase is the Ground argument of the matrix verb phrase of the Hindi clause (*supra*), it is interpreted as an abstract location. The Action described in the participial expression that appears in the Figure position of the matrix verb phrase is situated in the Action of the *n-e* phrase. Of course, the only way an argument can be situated in an Action is to be either an Actor or a Patient of that Action. Since the complement of the *n-e* phrase is the Actor, the Action of the participial phrase can only be interpreted as the Patient argument of the *n-e* Action. That is, *the Actor identified in the complement of the n-e phrase affects (i.e., causes or creates) the Action described by the participial expression.*

The oblique case marker *-e* appears in many constructions, and many of these are similar in use to that of the *e* in *n-e*. Consider, for example, the possessive marker *k-* in the following possessive construction:

Example 3 1

guNDe	k-aa	beTaa
hoodlum-ms.sg.OC	poss.-ms.sg.DC	child-ms.sg.DC
‘The hoodlum’s son’		

Notice that the mark *k-aa*²⁷ after the possessor agrees in gender, number, and case with the ‘possessed’ item, in this case *beTaa* ‘the son’, here presented in the direct case.

The same possessive marker can also appear as the Ground argument in a matrix clause in the unconditioned ergative pattern. Note that the possessive marker *k-e* is invariable. As mentioned above, oblique case arguments do not enter into agreement relations:

Example 3 2

[sitaa k-e] [do bahaneN] h-aiN
 Sita poss.OC two sisters be-3pl.pres.
 ‘Sita has exactly two sisters.’ (*lit.* ‘In the (inalienable) possession of Sita are two sisters.’)

This construction expresses inalienable possession. The Figure argument ‘two sisters’ is situated in the Ground argument, ‘in the possession of Sita’, and this Ground argument is also the subject of the clause, so it precedes the Figure argument. The reading is that Sita has exactly two sisters.

The locative marker *-e* is used to form a clausal adverbial expression based on perfective and imperfective participles. On the discourse level, these adjuncts can be understood as providing a contextual Ground with respect to which the main clause is situated. In the following example, the imperfective participle appears with the oblique case marker *-e*, and this form is reiterated to convey a sense of duration:

Example 3 3

[paRh-t-e paRh-t-e] [laRkaa thak ga-y-aa]
 read-imprf.loc. boy-ms.sg.DC ‘tired’ go-prf.ms.sg.
 ‘The boy grew tired from reading.’

The boy’s growing tired is situated in a context of constant reading. The pragmatics of the situation suggest a causal relation: the boy has become tired because of too much reading.

The conjunctive marker *k-e* 'upon doing x...' is used to mark one event as immediately prior to another. In this function *k-e* may be added to the participle of a 'background' clause immediately preceding the main clause:

Example 3 4

ham	khaanaa	khaa-k-e	furaan	paanii	pii-t-e	h-aiN
1pl.DC	food-ms.	eat-KE	immediately	water-ms.	drink-imprf.ms.pl.	be-3pl.pres.

'Upon eating, we drink some water.'

As the following example shows, *k-e* is incompatible with reference to an intervening period:

Example 3 5

ham	khaanaa	khaa-k-e	(*pandrah minaT ke baad)	paanii	pii-t-e	h-aiN
1pl.DC	food-ms.	eat-KE	fifteen minutes later	water- ms.	drink- imprf.ms.pl.	be- 3pl.pres.

'(*Fifteen minutes) after eating, we drink some water.'

The conjunctive *k-e* thus marks an event as the 'locus' of a second event, much as the *k-e* of inalienable possession marks the possessor as the locus of the possession. Since the notion of proximity and the notion of possession are closely related in Hindi, and since there is some evidence that the possession marker *k-e* and the conjunctive marker *k-e* are etymologically related, it might be argued that these are two instances of one and the same form. This issue would lead the discussion too far afield, however.

The hypothesis that the second segment of the form *n-e* is indeed the oblique case marker *-e* seems quite natural in the light of these examples and the numerous examples in previous chapters that demonstrate the widespread use of the oblique case form *-e* in marking Ground arguments. The fact that the first segment of *n-e* (*i.e.*, the noun *n-* meaning 'Action') is also found in another context provides further support for this analysis.

The *n* suffix of the gerundive participle and the *n* segment of the form *n-e* are two instances of the same morpheme. The difference between them is that the interpretation of the Action of *n-e* is centered on the Actor (as manifested in the oblique case noun phrase that appears as its complement), while the interpretation of the Action of the gerundive participle

is centered on the Patient (as manifested in the Figure argument of its verb phrase complement). Thus the subject form *raamdaas n-e* must be read as ‘located in the Action of Ramdas’, and the locative gerundive form *khaa-n-e* as ‘located in the Action of eating’.

In the following example the gerundive participle appearing in the direct case is the Figure argument of a noun-complement clause.

Example 3 6

[us k-aa kah-*n*-aa] Thiik h-ai
 dist.sg.OC poss.-ms.sg.DC tell-N-ms.sg.DC ‘right’ be-3sg.pres.
 ‘What he is saying is right.’

The gerundive participle of purpose, however, appears in the oblique case with the marker *-e*. Note that when the gerundive participle appears in the oblique case, the ending is identical with the particle *n-e*. The gerundive participle in the oblique case refers to the Action denoted by *n* and its complement, the root, as a location, as in *maa^Njh-n-e me^N* ‘in the Action of scrubbing’, *maa^Njh-n-e se* ‘from the Action of scrubbing’.

Consider further the use of the gerundive participle with the suffix *-vaal*. This derivational suffix ascribes a property X to an antecedent, *e.g.*, ‘the one which is X, is an X, has quality X, is X-ing, is about to X, *etc.*’. For example, the suffix can be added to an adjective. The whole form then takes the regular inflections for gender, number, and case that match those features of the item that the adjective is understood to modify:

Example 3 7

mujhe vah safiid-vaal-aa de-n-aa
 1sg.OC distal-DC white-VAAL-ms.sg.DC give-N-ms.sg.DC
 ‘Give me that white one.’ (*to merchant, etc.*)

The suffix *-vaal* can also be added to the gerundive participle in the oblique form. When it appears in the Ground argument position of an equative expression, this complex form may suggest current or imminent Actions:

Example 3 8

rukhhinii aa-n-e-vaal-ii hai
 name-fem.DC come-N-OC-VAAL-fem.DC be-3sg.pres.
 'Rukhmini is coming.' (*lit.* 'Rukhmini is one in the Action of coming.')

Thus it is argued that the Hindi form *n-e* is composed of two elements, the first being a noun *n-* meaning 'Action', and the second being an oblique case marker *-e*, generally a signal of Ground arguments in Hindi. This analysis is strongly supported by the fact that it provides a coherent interpretation of the form *n-e* as the subject of aspectually-conditioned ergative clauses *and* as the oblique case form of the gerundive participle. Furthermore, the analysis is supported by the fact that both elements of the form are found in independent uses that conform to the interpretations proposed for their combined usage.

3.2 Three questions on the distribution of *n-e*

This section responds to three fundamental questions concerning the use of the *n-e* form in Hindi. Firstly, why does Hindi require some subjects in the direct case, and others in the oblique case with *n-e*? Why doesn't Hindi use direct case subjects everywhere, as English and many other languages do?

The answer begins with the claim that Hindi has only stative verbs, and therefore must express all Force dynamic relations through Complex Event Nominals. It has thus been argued that all Hindi participles are nominal expressions describing an Action, and that the differences between the meanings of the different participles lies in their aspectual modification of this basic notion.

Consider again the Action types discussed in Chapter 1 (repeated below):

Table 17 (=Table 9) Possible Action Tier configurations

Action-type	simple	complex
unaccusative	$\Delta_{\text{INSTANTANEOUS FORCE AFF Y}}$	-----
ergative	$\Delta_{\text{FORCE WITH DURATION AFF Y}}$	X AFF [$\Delta_{\text{FORCE WITH DURATION AFF Y}}$]
Middle	$\Delta_{\text{INTRINSIC MANNER GESTURE AFF Y}}$	X AFF [$\Delta_{\text{INTRINSIC MANNER GESTURE AFF Y}}$]
unergative	X AFF $\Delta_{\text{INTRINSIC MANNER GESTURE}}$	X AFF [$\Delta_{\text{INTRINSIC MANNER GESTURE AFF Y}}$]

It is claimed here that Hindi participial expressions can only express simple Actions; that is, Actions that involve only one Actor and one Patient argument. Thus, the clause in the accusative pattern and the clause in the unconditioned ergative pattern in Hindi express unaccusative Actions, simple ergative Actions, and simple unergative Actions, as in the following examples:

*Unaccusative***Example 3 9**

maiN aa-y-aa h-uuN
 1sg.DC come-prf.ms.sg. be-1sg.pres.
 'I have come (*and here I am*).'

*Ergative***Example 3 10**

ghaghRii paanii se bhar- ϕ -aa
 jug-ms.sg.DC water-OC with fill-prf.ms.sg.
 'The jug filled with water.'

*Unergative***Example 3 11**

rukhminii naac- ϕ -ii
 name-fem.DC dance-prf.ms.sg.
 'Rukhmini danced (*socially*).'

As mentioned in Chapter 1, the English middle construction is not found in every language. Because of the one-Action-per-participle constraint, however, Hindi does have participial expressions that represent the Action type of the middle construction. Nonetheless,

Hindi, like many other languages, does not allow middle Actions in simple clauses; the external Actor performing the intrinsic manner gesture of the middle Action must be made explicit in a *n-e* phrase. Similarly, the causative ergative Action and the causative unergative Action both require a *n-e* phrase. These complex Actions can be illustrated as follows:

Causative Middle

Example 3 12

rukmini n-e bahan sataa-y-ii
 name-fem.OC Action-OC sister-fem.sg.DC torment-prf.fem.sg.
 'Rukhmini tormented the sister (*i.e.*, *someone's female sibling*).'

Causative Ergative

Example 3 13

maalii n-e ghaghRii paanii se bhar-φ-aa
 gardener.ms.sg.OC Action-OC jug-ms.sg.DC water with fill-prf.ms.sg.
 'The gardener filled the jug with water.'

Causative Unergative

Example 3 14

rukmini n-e naac naac-φ-aa
 name-fem.OC Action-OC dance-ms.sg.DC dance-prf.ms.sg.
 'Rukhmini danced a dance.'

Thus, *Hindi has n-e subjects because Actions in Hindi are expressed in participial phrases, and these phrases can only describe simple Actions*. The *n-e* subject brings a causative Action to the participial construction, allowing the expression of complex Actions. The fact that the use of the *n-e* form thereby augments the valency of the participial expression explains why it is generally associated with transitivity, as observed in previous literature. Exceptions to this generalization are discussed in the next section of this chapter.

This analysis of the *n-e* phrase garners further support from examples involving the obviative marker *-v-*. Because Hindi puts complex Actions together by locating one simple Action in another simple Action, using the Figure/Ground argument structure of a stative verb, it is possible to create double-causative constructions, as in the following examples:

Example 3 15

raamdaas n-e apne bhaai ke dwaaraa
 name-ms.OC Action-OC self's-ms.sg.OC brother-ms.sg.OC poss.ms.sg.OC 'door'

kutte ko mar-v-aa-yaa
 dog-ms.OC End-Point make-obviative-beat/kill-prf.ms.sg.

'Ramdas had his brother beat the dog.' (*lit.* 'Ramdas, by the door of his brother, beat the dog.')

Example 3 16

raamdaas n-e gopaal se kek ko gir-v-aa-y-aa
 name-ms.OC Action-OC name-ms.OC 'through' cake-ms.sg.OC End- have-s.o.-make-
 Point s.o.-fall-prf.ms.sg.

'Ramdas made the cake fall down through (*the intervention of*) Gopaal.'

The obviative morpheme *-v-* forces a special interpretation of the relationship between the Action named by the participle and the Actions nominally realized by *n-*, such that it is understood that there is a causal chain of responsibility between the former and the latter. As a result, the clause is compatible with an adjunct naming the proximate cause of the event.

Secondly, why is the use of *n-e* restricted to perfective and gerundive participle constructions? Why does it never appear in clauses based on participles in the imperfective, progressive, or frequentative aspects, or in the passive construction?

The answer begins with the observation made in Chapter 2 concerning the distribution of compound participles, which has a similar restriction. Compound participles are only freely available in perfective and gerundive constructions. Since the use of a compound participle focuses the interpretation of the event on the resulting state, rather than on the Action of the event, it was suggested that compounds are most commonly used with the types of participle that lend themselves to this interpretation. Participles in the imperfective, progressive, or frequentative aspects do not lend themselves to an interpretation that focuses on the state resulting from the Action of the event they describe.

Furthermore, it must be recalled that when the participial expression is in construction with *n-e*, it appears as the Figure argument of the matrix verb of its clause. Participial expressions in the imperfective, progressive, or frequentative aspects, or in the

passive construction, are always manifested in the accusative pattern, so they never appear as Figure arguments. According to Talmy, the Figure argument must be understood as an entity. In particular, it is ‘...a moving or conceptually movable entity’ (2000, p.312). Presumably, for an event to be understood as an entity, it must be telic (*i.e.*, its description must include a clear terminal point). In particular, since the event described in the participial expression must be situated as an affected Patient in the Action named by *n-e*, it should be telic in the sense that the participial expression lends itself to an interpretation focused on the state resulting from the Action of the event that it describes.

In fact, the only gerundive participle that requires an explicit subject, the gerundive of obligation, *always* appears as the Figure argument of the matrix verb, even when it has a subject argument marked with the post-position *ko* ‘end-point’. It is notable that the gerundive participle is the most ‘noun-like’ of the participles. For example, while nominal uses of the perfective and the imperfective participles require the support of the perfect participle *hu- ϕ -e* ‘became’ to be interpreted as nouns, the gerundive participle does not. This is illustrated in the following examples (repeated from Chapter 2).

Example 2 32

mar-e hu- ϕ -e parlok meN h-aiN
 ‘died’-prf.ms.pl.DC be(come)-prf.ms.sg.OC heaven in be-3pl.pres.
 ‘Those who have died are in heaven.’

Example 2 33

ro-t-e hu- ϕ -e abhii narak meN h-aiN
 weep-imprf.ms.pl.DC be(come)-prf.ms.sg.OC just now hell in be-3pl.pres.
 ‘Those who are weeping are still in hell.’

Example 2 34

paRh-n-aa acchaa h-ai
 read-N-ms.sg.DC good-ms.sg. be-3sg.pres.
 ‘Reading is good.’

Moreover, the perfective and imperfective participles are often used as prenominal modifiers (*i.e.*, adjectives) but the gerundive is hardly acceptable in such constructions. The ‘noun-like’

properties that distinguish the gerundive participle presumably include an inherent telicity. This is why this participle is especially felicitous as the Figure argument of the matrix verb.

Thus, it is argued that the aspectual conditioning of the *n-e* subject follows from the fact that the use of *n-e* requires a participial expression to appear as the Figure argument of the matrix verb of the clause. This in turn requires a participial construction that describes an event with an explicitly telic reading. The perfective participle and the gerundive participle are therefore both suitable in clauses with *n-e*.

Thirdly, why is *n-e* always the subject of its clause? The answer begins in Van Voorst's (1988) account of the grammatical function 'subject', which is based on the notion that the identification of a clausal event requires that it be anchored in both time and space. The temporal anchors of the event are provided in the temporal and aspectual markers of the clause. The role of the subject is to anchor the event in space by naming the place where it is actualized.

As discussed above, the clause with a *n-e* subject necessarily expresses a complex Action, with the participle phrase expressing one simple Action and the *n-e* phrase expressing another. These two Actions are understood to be part of the same event because the participial expression is the Figure argument of the matrix verb, and the *n-e* expression is the Ground argument. The simple Action of the participle phrase is therefore situated (embedded) as a Patient argument in the simple Action of the *n-e* phrase. In this way, the Action described in the *n-e* phrase is understood to be the cause of the Action described in the participle phrase.

Of course, the matrix verb of the clause is stative and the stative event expressed by this verb is the one that needs to be anchored in time and space. Therefore, one of the arguments of this verb must be the subject of the clause. Since the causal Action is logically prior to the caused Action, the causative Action expressed by the *n-e* phrase must be the one

that names the place where the event is actualized. The point of actualization of the event is expressed by the complement of the *n-e* phrase, naming the Actor (or instrument) that has affected (caused or created) the Action of the participial expression.

Thus, given the account of the aspect-conditioned ergative pattern described above, the fact that the Hindi *n-e* phrase is always a subject follows under the definition of 'subject' provided by Van Voorst (1988).

3.3 Analyses of some simple clauses

This section presents some explicit analyses of selected Hindi sentences that illustrate the analyses proposed in the discussions above.

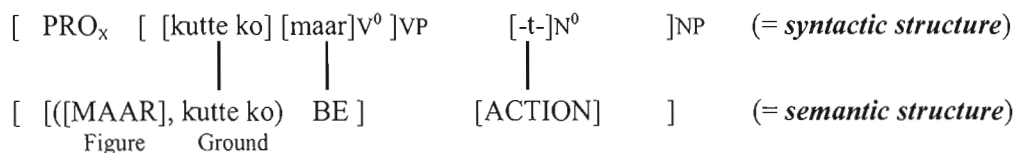
Consider the contrasts in the following imperfective and perfective usages of the root *maar* 'beat/kill'. The following example involves the imperfective participle.

Imperfective, accusative clause-pattern

Example 3 17

raamdaas apne kutte ko maar-t-aa hai
 name-ms.DC self'ms.sg.OC dog-ms.OC End-Point beat/kill-imprf.ms.sg. be-3sg.pres.
 'Ramdas beats his dog.'

The imperfective construction is an accusative pattern clause that is understood as an unergative activity. The matrix Figure argument is the noun phrase [*raamdaas*] and the matrix Ground argument is the imperfective participial expression with its agreement phrase [*apne kutte ko maar-t-aa*]. The participial expression is made explicit in the following representation:

*Imperfective, accusative clause-pattern***Example 3 18**

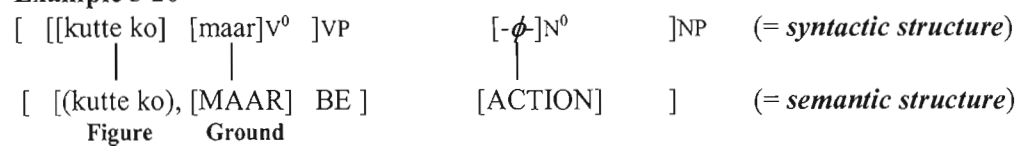
Because it is coindexed with the empty pronominal PRO_x in the specifier position of the participle phrase, the matrix Figure argument controls the Actor position in the Action described in the participle *-t-*. The Patient of this Action is the Action-gesture described by the root *maar*. Because the Patient and the Figure argument of the event must be the same argument, this concept is also the implicit Figure argument of verb phrase inside the participle phrase. The phonological form of this implicit argument is manifested in the head position of this verb phrase. The Ground position of the embedded verb phrase is the dative post-positional phrase *apne kutte ko*. The example says that *Ramdas* has performed the gesture [BEAT] and that this gesture is situated *at his dog*.

In contrast, the following related example involves the perfective participle:

*Perfective, aspectually-conditioned ergative clause-pattern***Example 3 19**

raamdaas n-e apne kutte ko maar- ϕ -aa
 name-ms.OC Action-OC self's-ms.sg.OC dog-ms.OC End-Point beat/kill- prf.ms.sg.
 'Ramdas beat his dog to death.'

The perfective construction is a clause in the aspectually-conditioned ergative pattern that is understood as a causative unergative. The participial expression itself describes a middle construction, as is made explicit in the following representation:

*Perfective, aspectually-conditioned ergative clause-pattern***Example 3 20**

The Action-gesture described by the root *maar* is understood as a Force that takes up the Actor position of the Action described by the participial morpheme *-φ*. At the same time, this Action-gesture is such that it implies the presence of an Actor that performs it. The Action-gesture/force affects the dog (the Patient/Figure argument) such that the dog is situated in the state *maar* (*i.e.*, here understood as *dead* rather than merely *beaten* because of the presence of the optional dative marker *ko*). In this usage, the concept *maar* appears as an implicit argument in the Ground position of the embedded verb and again, the phonological form of the root appears in the head of the verb phrase.

Because the Action gesture implies an Actor, this participial expression must appear with a *n-e* phrase. The example says that the event of beating *his dog* such that *his dog* comes to be situated in the state [*dead*], is situated in (caused by) the Action of *Ramdas*.

Now consider the following examples in the perfective aspect, repeated from Chapter 1. Both of these usages of the root *bol* ‘speak’ are transitive, but only one requires *n-e*. When an utterance has no specific addressee, the subject appears instead in the direct case:

Example 1 16

raamdaas bol-φ-aa, paaNv thak ga-y-e h-ai-N
 name-ms.DC speak-prf.ms.sg. foot ‘tired’ go-prf.ms.pl. be-3pl.pres.
 ‘Ramdas said (*perhaps, muttered to self*), ‘My feet are tired.’’

This clause is in the accusative pattern, and is understood as an unergative activity. The matrix Figure argument is the noun phrase [*raamdaas*], and the matrix Ground argument is the perfective participial expression with its agreement phrase [*bol-φ-aa paaNv Thak ga-y-e*]. The participial expression itself is made explicit in the following representation:

Perfective, accusative clause-pattern

Example 3 21

[PRO _x [[paaNv thak ga-y-e] [bol]v ⁰]VP	[-φ]N ⁰]NP (= syntactic structure)
[[([BOL], paaNv thak ga-y-e) BE]		[ACTION]] (= semantic structure)
Figure	Ground	

Because it is coindexed with the empty pronominal PRO_x in the specifier position of the participle phrase, the matrix Figure argument controls the Actor position in the Action represented by the participial morpheme $-\phi$. The Patient of this Action is the Action-gesture described by the root *bol*. Because the Patient and the Figure argument of the event must be the same argument, this concept is also the implicit Figure argument of the verb phrase embedded in the participle. The phonological form of the implicit argument is manifested in the head position of this verb phrase. The Ground position of the embedded verb phrase is the utterance *paaNv thak ga-y-e* ‘feet are tired’. The example says that *Ramdas* has performed the Action-gesture [*say*] and that this gesture is situated in the utterance [*my feet are tired*]. The embedded verb phrase contains an equative construction. The Action-gesture [*say*] and the utterance [*feet are tired*] are therefore coextensive (*i.e.*, they have the same reference).

However, when a specific addressee is intended, the particle *n-e* must be used:

Example 1 18

raamdaas	*(n-e)	patnii	se	bol- ϕ -aa,	bacce	Thak	ga-y-e	h-aiN
name-ms.DC	Action-OC	wife fem.DC	‘with’	speak- prf.ms.sg.	child- ms.pl. DC	‘tired’	go- prf.m.pl.	be- 3pl.pres.

‘Ramdaas said to his wife, ‘The children are tired.’

This perfective construction in an aspectually-conditioned ergative pattern clause is understood as a causative unergative. The participial expression itself describes a middle construction, as is made explicit in the following representation:

Perfective, aspectually-conditioned ergative clause-pattern

Example 3 22

[[bacce thak ga-y-e] [patnii se] V ⁰] VP	[bol + ϕ -] N ⁰] NP	(= <i>syntactic structure</i>)
[[bacce thak ga-y-e], [patnii se] BE]	[ACTION]]	(= <i>semantic structure</i>)
Figure	Ground	

The Action-gesture described by the root *bol* is understood as a Force that takes up the Actor position of the Action described by the participle ϕ . Furthermore, this Action-gesture implies the presence of an Actor that performs it, and affects the utterance (the Patient/Figure argument) such that the utterance is situated in the location [[*patnii se*]] ‘said to his wife’. In this usage, the embedded Figure and Ground positions are occupied by explicit arguments. The implicit argument *bol* must thus appear elsewhere. Since *bol* is the Actor of the Action signified by the perfective marker ϕ , *bol* is arguably compounded in the lexicon with the ϕ .

Because the Action gesture implies an Actor, this participial expression must appear with a *n-e* phrase. The example says that the event of saying ‘*the children are tired*’ such that the utterance ‘*the children are tired*’ comes to be situated in the state [*said to his wife*] is situated in (and in fact, caused by) the Action of *Ramdas*.

The crucial distinction between these examples is that when an utterance is made, the gesture of saying and the utterance are one and the same thing, but when an utterance is said *to someone*, the gesture is directed and can no longer be considered identical to the utterance, for it includes a specification of the destination. The Action-gesture must be adjusted accordingly. Speaking to one’s wife is not the same gesture as simply speaking.

The following pair of sentences (from Chapter 1) is quite similar, although this is not immediately evident. They both have a perfective participle, yet neither is transitive. Nonetheless, the sentence with a *n-e* phrase has a voluntary reading:

Example 1 23

laRkaa cillaa-y-aa
 boy-ms.sg.DC shriek-prf.ms.sg.
 ‘The boy shrieked (*involuntarily*).’

Example 1 24

laRke n-e cillaa-y-aa
 boy-ms.sg.OC Action-OC shriek-prf.ms.sg.
 ‘The boy shrieked (*voluntarily*).’

The first example (with an involuntary reading) is a simple ergative in an accusative pattern clause. The matrix Figure *laRkaa* ‘the boy’ controls the Patient position in the Action described by the participial expression. The physiological force [CILLAA] ‘shriek’ is an Actor that affects ‘the boy’, and ‘the boy’ is situated in the physical state of [CILLAA] ‘shriek’.

The second example is a complex unergative in a clause of the aspectually-conditioned morphologically ergative pattern. The Action-gesture [CILLAA] (which must be performed by an Actor) produces the physical state of [CILLAA] ‘shriek’ *which is oriented toward another person*. This orientation can be seen in the following probably exhaustive list of such constructions (from Chapter 1):

Table 18 (=Table 4) **Intransitives with variable subject forms**

root	meaning	subject in direct case	<i>n-e</i> -marked subject	volitional subject
<i>bhaauNk</i>	‘bark (e.g., at the moon)’	♥		
<i>bhaauNk</i>	‘bark (e.g., in warning)’		♥	♥
<i>cillaa</i>	‘shriek (e.g., in pain)’	♥		
<i>cillaa</i>	‘shriek (e.g., in protest)’		♥	♥
<i>ciik</i>	‘shriek (e.g., in fright)’	♥		
<i>ciik</i>	‘shriek (e.g., imploringly)’		♥	♥

Each of the volitional readings has an orientation toward a listener. These may now be analyzed as complex unergative expressions.

Consider the following example (from Chapter 1). This is a transitive sentence, but there is no *n-e* phrase:

Example 1 31

vah caabbii (ko) bhuul-φ-aa h-ai
 3sg.DC key-fem.DC End-Point forget-prf.ms.sg. be-3sg.pres.
 ‘He forgot a/the key.’

This is a simple ergative expression in an accusative-pattern clause. The physiological force [BHUUL] ‘forget’ affects the Patient (*vah* ‘he’), who is then situated in the state [[caabbii ko] BHUUL] ‘having forgotten the key’.

Consider now the following examples involving the gerund of obligation (from Chapter 1). One has a *ko* subject and the other a *n-e* subject. Both of these are realized in an aspectually-conditioned ergative clause, but they have a difference of meaning. The obligation in the example with *ko* is imposed externally; the subject has no choice:

Example 1 32

raamdaas ko jaldii jaa-n-aa h-ai
 name-ms.OC End-Point quickly go-N-ms.sg.DC be-3sg.pres.
 ‘Ramdas has to leave quickly (*involuntary*).’

This participial expression is a simple ergative event. The force of [CONVENTION] is the Actor in the Action described by this participle and this force affects (creates) an [OBLIGATION] that is situated at the Action-gesture [JAA] ‘go’ (a gesture that must be performed by an Actor). This event is situated at the dative postposition phrase *raamdaas ko*. Thus, Ramdas has the obligation to perform the Action-gesture.

When the subject appears in the oblique case with the particle *n-e*, the source of obligation is internal:

Example 1 33

raamdaas n-e jaldii jaa-n-aa h-ai
 name-ms.OC Action-OC quickly go-N-ms.sg.DC be-3sg.pres.
 ‘Ramdas has to leave quickly (*voluntary*).’

Here, the physiological Action-gesture [DECIDE] is the Actor in the Action described by the participle. This force affects (creates) an [OBLIGATION] that is situated at the physical Action-gesture [JAA] ‘go’, and both gestures must be performed by an Actor. This event is situated at the phrase *raamdaas n-e*. Thus, the Action-gesture of decision that creates the obligation to perform the Action-gesture of going is located in the Action of Ramdas.

Lastly, consider the following examples (from Chapter 1) involving inanimate complements in *n-e* phrases. These examples are inconsistent with the idea (common in the literature) that Actors introduced in *n-e* phrases must be ‘agentive’:

Example 1 25

kal	raat	k-ii	andhii	n-e	mandir	k-ii	diiivaar	toR	di-φ-i
‘yesterday’	night	poss.- fem.	storm-fem.	Action- OC	temple	poss.- fem.	wall-fem.	tear- root	give- prf.fem.

‘Last night’s storm tore down the temple wall.’

Example 1 36

baraph	n-e	paanii	ko	ThanNDaa	kar	di-y-aa
snow	Action-OC	water	End-Point	cold	make-root	give-prf.ms.sg.

‘The snow made the water cold.’

Such examples must be constructed carefully, as they have unexpected implications in their interpretation. For instance, the first example must involve a specific episode (*e.g.*, last night’s storm, not just the weather in general). In the second example, the *baraph* ‘snow’ has been introduced into the *paanii* ‘water’ by some agency not mentioned in the sentence.

It is thus argued that the general account of the composition, the meaning, and the distribution of the Hindi particle *n-e* provides for the analysis of well-known examples that can be described in terms of transitivity or volition, as well as exceptional examples that are inconsistent with these generalizations.

CONCLUSION

It has been argued that every Hindi clause is a stative expression, and that Actions in Hindi must be expressed in the head positions of Complex Event Nominals (*i.e.*, participial expressions). In Hindi, these expressions include a verb phrase complement (also a stative expression) expressing the result of the Action named by the participle.

The events expressed in these participial constructions are limited to simple Actions. Because of this, a complex Action must be expressed as the composition of two simple Actions: the ‘causative Action’, and the ‘caused Action’. The *n-e* phrase provides the causative Action. The various participle suffixes *n-*, *-y-*, and *-ϕ-*, provide the caused Actions.

The simple Action is adequate for the expression of imperfective participles, paraphrastic progressive expressions based on the perfective participle for ‘stay’, and many perfective and gerundive participles that express simple Actions. These all have subjects in the direct case, or in the oblique case with post-positions. The derivation of these subjects is straightforward. The participle phrase that expresses a simple Action appears in the Ground argument position of the matrix. Depending on the Action type expressed by the participle, the reference of one of the argument positions in the participial Action remains open. For example, if the Action is unergative, the Actor position must be filled explicitly in the syntax. If it is unaccusative or ergative, it is the Patient position that must be filled in the syntax.

The noun in the matrix Figure position may then move to the subject position commanding the clause, thereby acquiring the syntactic properties of a subject. In certain cases, the noun in the Figure argument position of the matrix clause does not move to the subject position. Instead, a post-positional phrase appears as subject and controls the Ground position of the verb phrase embedded in the participial expression. In general, this occurs with psychological or physiological predicates. Thus, the choice of subject in the accusative-

pattern clause is semantically motivated. When this choice is described in Van Voorst's terms, the Hindi subject position can be understood in the same way as subjects in English and other languages, in that it identifies the spatial coordinates (*i.e.*, the point of origin or actualisation) of the event of its clause (*cf.*, Van Voorst 1988). The noun that moves up to the subject position is the one that has these characteristics.

In construction with *n-e*, the perfective or gerundive participle appears in the Figure position of the matrix clause. The subject with *n-e* is generated in the Ground position. The essential link between these two Actions is established through this Figure/Ground relation. Complex actions are thus expressed in Hindi by situating one simple Action in another simple Action.

This analysis provides naturally for exceptions that must be listed in previous accounts. Although the subject marked with *n-e* is frequently an Agent, as expected under traditional analyses, the notion that provides the proper generalization is Actor. While the typical Agent is an individual with volition, the Actor is the source of a Force relationship. Agents are therefore Actors, but Actors can be many other things. In certain contexts, even inanimate objects and abstract phenomena, including states of mind, may appear as subjects with *n-e*.

The participles that have two possible realizations, one with a subject in the direct case, and the other with a subject in the oblique case with *n-e*, are those that have implicit arguments that undergo polysemic alternation. The implicit argument named by the participle may be centered as a natural Force that affects a Patient argument, producing a 'true' simple Action and taking a subject in the direct case. It may also be centered as a gesture performed by an Actor, producing a simple Action that intrinsically implies a prior Action. This prior Action is realised by the *n* of the particle *n-e* appearing with the subject.

Under these hypotheses, it falls out naturally that *n-e* never appears with the subjects of imperfectives and progressives, as these cannot be centered on the resulting State.

There is a striking congruency between these findings and the data on participle compounding, which support the analysis of events in terms of Action and resulting State. Compounded participles must be perfective or gerundive. It is no coincidence that the semantics of either the perfective or the gerundive are also necessary for the subject with *n-e* to appear. What the meanings of the perfective and the gerundive have in common is reference to the Action and the resulting State; imperfective and progressive participles cannot refer to the resulting State. They therefore rarely appear compounded, and never appear with the subject with *n-e*.

Compounding is possible with simple unergative Actions expressed with perfective participles because the basic meaning of perfectivity is completeness of the Action. The Force and the resulting State can be distinguished, and both can be named by the implicit arguments. This analysis is supported by the fact that no compound can be interpreted as a simple unergative, because the implicit argument of a simple unergative refers to the Patient/Figure, not to the Force and the resulting State. All compounders are ergative, whether transitive or intransitive, and they impose their own argument structure on any participle root they compound with. An unergative root must therefore compound with an ergative compounder, yielding an ergative compound.

Similarly, compounding of gerundive participles is possible when these refer to the end-point or completion of an Action, *e.g.*, through the obligational meaning. The Force and the resulting State can be distinguished by naming the Force and the resulting State.

The subject with *n-e* is limited to perfective and gerundive participles for distinct but related reasons. If the meanings of these participles did not refer to resulting State, *i.e.*, if the Actions they denote were not complete, they would not be compatible with the pairing of a 'causative Action' with a 'caused Action' that is required in the expression of a complex Action.

Recall that the Hindi subject position identifies the spatial coordinates of the event of its clause. Since the *n-e* phrase is the Ground argument where the Action named by the perfective participle is to be found, and since these two are the only arguments of the matrix semantic expression of the clause, the *n-e* expression is inevitably the subject. The particle *n-e* is thus distinct from the post-positions, even though they too can but do not necessarily appear with subjects. Post-positions simply situate the items with which they appear; they do not signal a 'causative' Action, *i.e.*, the Action of which the post-positional noun is the subject is not a 'caused' Action. Unlike the particle *n-e*, the post-position that appears with some subjects cannot refer to the context of a causative Action, and therefore cannot pragmatically ensure the reference of the Actor implied by the Complex Event Nominal.

The *n-e* phrase or Ground argument typically precedes the participle phrase or Figure argument, while in clauses with subjects in the direct case, the Figure argument typically precedes the Ground argument. This follows from the fact that the *n-e* phrase is necessarily the subject of its clause, and that the subject position of the Hindi clause precedes and c-commands all the thematic positions.

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NOTES

¹ The meaning of this gloss is developed in the course of the thesis.

² The view is widely held that the perfectivity requirement (and possibly the particle *ne* itself) is inherited from the ancient languages from which Hindi has evolved, and that the historical link between the perfective and *ne* is an ancient areal trait persevering in the grammars of Hindi and related languages (*cf.*, Butt 2001).

³ The shortening of the root vowel is due to a general restriction in Hindi on sequences of long vowels within the word, thus **naac-v-aa*.

⁴ The idea of transitive and intransitive pairs is the basis of most paedagogical descriptions of the problem of choosing a subject in the direct case *vs.* the oblique case with *n-e*.

⁵ This expression also offers an example of the irregular meaning relationships that exist between basic and causitvized forms. While one might expect the following relationship to hold,

samajh ‘understand; figure out’ > *samjh-aa* ‘to make someone understand’

in fact the causative form means ‘to explain’; ‘understanding’ is just an optional outcome:

maiN n-e use saarii baat samjhaa-y-ii,
1sg. Action-obl. ‘to him’ all matter explain-cause-prf.fem.

phir bhii vah naalaayak kucch nahiiN samjhaa
‘even so’ ‘that’ ‘worthless one’ anything not understand-prf.ms.sg.
‘I explained the whole matter to him, but that worthless fellow still does not understand.’

The use of the compound *samjhaa de* ‘make understand+give’ can focus on the end-point or result of ‘explaining’, thereby implying the causative ‘make understand’. The following is thus self-contradictory:

maiN n-e use saarii baat samjhaa dii
1sg. Action-obl. ‘to him’ all matter explain-root give-prf.fem.

phir bhii vah naalaayak kucch nahiiN samjhaa
‘even so’ ‘that’ ‘worthless one’ anything not understand-prf.ms.sg.
##‘I got him to understand the whole matter, but he still does not understand.’

This is consistent with the view that the relationship between base and causative forms is lexical in both of the groups cited above.

⁶ As noted above, the root vowel shortens with causative derivation.

⁷ *Cf.*, the compound *bhuul kar* ‘forget+make/do’, meaning ‘to go astray, commit an error’, which must appear with the *ne*-subject. In this context, the word *bhuul* is translated as ‘error’, and is treated as a feminine noun:

us ne baRii bhuul kii hai
3sg.oblique case Action-obl. big-fem. error-fem make/do-prf.fem. be-pres.3.sg.
‘He has committed a grievous error.’

⁸ As these examples show, the direct object of an Accomplishment can be interpreted partitively, ambiguously suggesting either an Activity that has merely stopped, or an Accomplishment (Initiation-language behaviour). In recent work, the authors have conceded that it may be too strong to claim that languages develop only one functional head, either an Initiation Phrase or a Delimitation Phrase.

⁹ Conversely, the agreement patterns of the Hindi clause could falsely lead one to identify the controller of agreement with the subject, insofar as agreement is identified with structural case, and structural case is tied to the subject position. In fact, agreement is with the highest syntactic argument in direct case in the clause. This argument may or may not have the subject properties. Agreement and structural case are therefore not indicators of subjecthood.

¹⁰ The division of labour between Semantic Structure and Argument Structure makes it possible to give the intuitive notions ‘logical subject’ and ‘grammatical subject’ formal definitions. This allows for a simple account of the ambiguous referential possibilities of the Hindi reflexive anaphor *apn-* ‘self’s’, commonly used to diagnose subjecthood. As is well known, the reflexive anaphor also identifies the ‘logical subject’, e.g., it is coreferential with the grammatical subject of a passive clause, and can also be coreferential with the ‘agent phrase’. This puzzle is simply ignored in most work.

¹¹ Recall that Davison (2003) represents the dative-subject structure by simply omitting the functional projection above it (which assigns *ne*). Like Mohanan, Davison distinguishes accusative and dative *ko*, but her model offers no obvious way of distinguishing these in first-argument position. In both models, accusative *ko* can only appear on direct objects, but Davison omits mention of the ‘subjectless’ clause, in which the first argument is marked with accusative *ko*.

¹² Cf., Beneveniste 1967, Kayne 1993, for the proposal that ‘be’ + empty preposition = ‘have’.

¹³ This notion is to be distinguished from Roeper’s (1987) well-known ‘implicit argument’.

¹⁴ The Rubin’s Vase and similar novelties involve contrived or fortuitous configurations in which the viewer may have to choose between equally plausible candidates for the Figure. Significantly, the viewer may only pursue one choice at a time. This is consistent with the claim that perception depends on establishing the Figure-Ground relationship.

¹⁵ The following review of the pertinent literature draws in particular on work by J. Lumsden (ms., Université du Québec à Montréal).

¹⁶ This analysis of the well-known SLP/ILP contrast turns out to be especially apposite in the discussion of the Hindi perfective, which describes a *resulting* state, thus crucially involving an Action.

¹⁷ It will be argued below that Hindi does have other stative verb forms; namely the first element in a compound participial expression. But since these forms are the complements of complex event nominals, they express only the verb root, with no inflection.

¹⁸ Similarly for the plural forms: sandhi rules predict $a(a) + u = o$. Sanskrit masculine plural locatives ended in *-u*. Thus : *laRkaa+u+N = laRkoN*, masculine plural oblique (nasalization marks plurality).

Noun forms, direct case vs. oblique + post-position

<i>laRkaa</i> ‘boy’, <i>laRkii</i> ‘girl’	direct case	oblique + <i>ne, ko, se, etc.</i>
masculine singular	laRk aa	laRk e
masculine plural	laRk e	laRk oN
feminine singular	laRk ii	laRk ii
feminine plural	laRk ii	laRki-y-aaN

¹⁹ Both direct case and oblique case inflections have been partially or totally eroded from many Hindi nouns. The basic opposition between nouns expressing the Figure and those expressing the Ground thus often turns out to be a contrast between nouns without post-positions or particles, and those with them.

²⁰ The overt verb of existence is not always felicitous in the examples discussed here. The compound participle, the overt verb of existence, and the post-position *ko* have over-lapping effects on the interpretation of the event for completeness. These issues do not affect the points made here about the meaning and distribution of compounding, and the insights to be garnered from them concerning the meaning and distribution of *ne*.

²¹ The form of the negation is related to indicative vs. irrealis mode. The negator *na* appears in irrealis contexts, while *nahiiN*, traditionally claimed to be an amalgam of *na* and *hai* 'be-3sg.pres.', is limited to indicative contexts. As the imperative is ambiguous between these modes, a minimal pair can be created to highlight the modal affinities of each negator:

yah kaam (1) na / (2) nahiiN karo
 dist.sg.DC work-ms.sg.(DC) neg. / neg. (+'BE') make/do-imperat.
 '(lit.) Do not do this deed.'
 (1) = general prohibition
 (2) = specific episode

²² See Verma (1990) on the 'experiencer subject', which is common in both northern and Dravidian languages.

²³ While this sentence with the third person in the direct case is admittedly very strained, it is intelligible, while the use of a first or second person pronoun in the direct case would be gibberish (see next example).

²⁴ The deictic sense of the third person pronoun implies a contrastive context: 'the teacher feels he must walk THEM around (and not these others)'.

²⁵ The the *n* of Hindi *ne* is related to a *n* segment that occurred in the participles of Sanskrit. Macdonell (1927) observes that some Sanskrit passive past participles in *-it-* are ambiguous between 'active transitive' and passive readings :

...both a passive and a transitive active sense; e.g., *praapt* 'obtained' and 'having reached'; *praviṣṭ* 'entered (by)' and 'having entered'; *piit* 'imbibed' and 'having drunk'; *vismṛt* 'forgotten' and 'having forgotten'; *vibhakt* 'divided' and 'having divided'; *prasuut* 'begotten' and 'having borne' (f.); *aaruuDh* 'ridden', etc., and 'riding', etc.

These all refer to entities affected by an Actor. This foreshadows the flexibility of the Hindi perfective participle, used in transitive and intransitive *ne*-clauses of 'active' voice as well as in passive-like clauses embedded under the verb for 'go' (i.e., 'become'), and the ambiguity of the perfective participle when used as a pronominal modifier ('the eaten boy', i.e., 'the boy who has eaten' or 'the boy who has been eaten').

The Sanskrit participles with *t* sometimes contrast, and sometimes coincide in meaning and distribution, with similar participles formed with a *n* segment. Macdonell observes (p.202) that

...past participles in *n* never seem to occur with a transitive active meaning.

These *n*-participles also are never used with the verb of existence (Whitney 1889, p.343). The *t* and *n* participles can both describe the end-point of a Force relationship, or Patient. The initiator of this relationship, the Actor, may be an entity, expressed in Sanskrit with an instrumental. In Perry's words (1936, p.110) :

When this participle [*t* and *n*-type] is made from transitive verbs, it qualifies something as having endured the action expressed by the verb; thus *datta* 'given', *ukta* 'spoken'.

The Actor may also be a natural Force, and thus implicit:

When made from an intransitive or neuter verb, the same participle has no passive, but only an indefinite past sense; thus, *gata* 'gone', *bhuuta* 'been', *patita* 'fallen'.

(Examples of participles with *n*, below.) Gifts, words, departures, existence itself, and falls do not involve 'endurance' in a uniform sense, although they all refer to Actor-Patient relationships. Most *n*-participles are adjectives with unaccusative meanings:

arṇ 'tardy', *piin* 'swollen up fat', *mīaan* 'withered', *śuun* 'swollen', *ruḡṇ* 'sick'

Others correspond to the inchoative pole of an ergative alternation, *i.e.*, they illustrate the 'sank' in 'The boat sank' vs. 'They sank the boat':

The following is a list of both types of *n*-participle (Macdonell 1927, p.210ff, Perry 1936, p.111; Whitney 1889, p.343-4):

reference to Actor (instrumental case)	
yes	no
<i>utta</i> 'moistened, wetted'	<i>unna</i> 'moist, wet'
<i>vitta</i> 'found, acquired, seized'	<i>vinna</i> 'existent, real'
<i>satta</i> 'seated'	<i>sanna</i> 'seated'
<i>tvarit</i> 'hastened'	<i>tuurṇ</i> 'hastened'
<i>patita</i> 'fallen'	<i>panna</i> 'fallen'
<i>dita</i> 'cut, divided'	<i>dina</i> 'cut, mowed'
<i>nutta</i> 'driven away'	<i>nunna</i> 'driven away'

Contrast *tuurṇ* '(he) hastened' with its 'active' counterpart, *tvarit* '(he) was hastened along (by s.o.)'. The difference between these two participles is that the one with the nasal has an implicit Actor 'hasten', while the one with *-it-*, the well-attested ancestor of the perfective morphology in Hindi and sister languages, is compatible with reference to an explicit Actor. The nasal is the lexical realization of an implicit Actor.

This is not far removed from the function of the gerundive or *-n*-participle in Hindi, the lexical realization of an Action Tier. When a Hindi participle shows *-n-* with person, number, and direct case features, it may be cast as a Figure.

²⁶ The modern particle *ne* is related to an ancient morpheme **-n-* or **-na* and a general locative marker **-i* (**-na+*-i = ne* under sandhi rules).

²⁷ The possessive particle is segmented as *k-aa*, *k-ii*, and *k-e* on the basis of historical evidence, assumed here, according to which the base of the possessive particle is related to a participle of **kar* 'make, do' in a parent language. *Cf.*, the equivalent particle in Punjabi, *d-aa*, *etc.*, originating with a participle meaning 'give'.