"Hindi particles and the Ergative Case"
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Introduction

Purpose of Study

The impetus for this thesis was a 2011 field methods paper that focused on the -/ne/ particle in Hindi, and the evidence for labeling Hindi an ergative-absolutive language. Preliminary study of the Hindi dataset yielded the conclusion that -/ne/ is a case marker that serves to identify Ergative case on subject arguments in transitive sentences, and that that ergativity is split in Hindi along tense/aspectual lines, with the expression of -/ne/ occurring at the intersection of past tense and perfective aspect. While there is some basic truth to that assertion, it is sorely lacking in scope and depth. Simply asserting that Hindi overt argument marking alignment is “ergative”, as expressed through a subject marker -/ne/, not only completely ignores the presence of object marker -/ko/ as a serious challenge to ergative conceptualization of Hindi argument marking, but it also undermines our ability to begin to understand the true nature and beautiful complexities of those two particles.

Traditional analyses of ergativity would assert that -/ne/ and -/ko/ should not be able to coexist, and yet they do. This thesis seeks to solve the “problem” of this coexistence by proposing a unifying and all-encompassing solution which reconciles -/ne/ and ko. In the process, I present a more detailed understanding of the nature of both particles, the ultimate effect of which being a new way of conceptualizing Hindi argument marking.

Structure of Thesis

**********
Methodology

Data collection

The data for this study was collected from September 2011 to December 2011 from three consultants for whom Hindi is their native language. All three consultants speak English and were Swarthmore students. The data collected from the consultants can be sorted into three groups. The first group is data elicited in class. The second is data elicited outside of class by groups of four students each, and the third group of data is that data elicited by myself alone. The elicitation sessions were audio recorded and transcribed, with most involving the elicitation of data from one speaker at a time. In-class sessions had the opportunity to occasionally elicit data with two speakers present. Data analysis was undertaken concurrently with data collection, and continued afterwards.

Self-Limitation of study

Due to the fact that the idea for this thesis came out of a paper written for a hands-on Linguistic field methods class studying Hindi, I was prohibited from accessing literature on Hindi. My knowledge of specific linguistic phenomena related to the topic of this thesis comes from previous exposure and targeted research on linguistic principles. So while the knowledge and frameworks I use to analyze the data are drawn from general linguistic literature as well as classroom experience, the analyses, interpretation, and conclusions are all mine. I’m not aware of the current, definitive, final word on case in Hindi. This thesis is valuable in that it has provided an opportunity to really test the skills I have learned over the years. The real test will be however in familiarizing myself with the literature and seeing how my results and conclusions about the case system in Hindi square with the extant literature on the language.
**Part II**

**Conflict and Resolution**

**Ergativity**

Whole books can be and have been written about ergativity, and this section is intended as only the briefest and most introductory of overviews. In the broadest and most traditional sense, Ergativity is conceived of as a linguistic phenomenon which sees the subject of a transitive sentence treated in a particular way, to the exclusion of the object of the transitive sentence and the subject of an intransitive sentence, which are treated alike. The treatment of the transitive subject is generally termed *ergative* and the treatment of the object and of the intransitive subject *absolutive*. This is in contrast to *nominative-accusative* situations which offer a somewhat reversed argument treatment in which the two subjects (nominative) are patterned the same as each other, to the exclusion of the object of the transitive (accusative) sentence, which is patterned differently.

*(Figure 1)*

Languages have various ways of treating verb arguments, and therefore there are various ways ergative and accusative alignments can manifest themselves to mark their arguments. Broadly we can speak of marking based on syntactic and morphological systems.
It is important to note that “treated/patterned the same or differently” is not automatically the same thing as marked vs. zero marking. “Nominative” or “absolutive” is not always the absence of marking (Although it should also be noted that if a language does have a zero marking option in a particular area of the grammar, then that zero marking will most likely be nominative or accusative.

While it is common to see languages described as being ergative/ergative-absolutive or accusative/nominative-accusative, this incorrectly implies that Ergativity or accusativity applies uniformly through all applicable aspects of the language. I also reject the idea of an ergative case, which implies some certain ergative property that must be identified through case. So-called ergative markers are performing a specific function, and this function happens to have an ergative distribution. As shown above, ergativity or accusativity is a function of specific systems in a language, which occur together. So-called ergative-absolutive and nominative-accusative languages, while perhaps displaying either of these patterns prominently in some aspect of their grammar, are rarely if at all 100% erg active or absolutive. Most often what one finds is a language in which a certain grammatical system (for instance argument case) or systems may follow an ergative patterning while others (like word order) may not.

Theoretically this ability to combine different types of systems would seem to be able to yield any number of outcomes, however in actuality there do seem to be restrictions on

<table>
<thead>
<tr>
<th>Syntactic:</th>
<th>Morphological:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word order</td>
<td>Case marking</td>
</tr>
<tr>
<td>Relative clauses</td>
<td>Verb agreement</td>
</tr>
<tr>
<td>Subordination</td>
<td></td>
</tr>
<tr>
<td>Pivots</td>
<td>Etc.</td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
</tr>
</tbody>
</table>
what combinations may occur. While there are many known cases where languages possess accusative syntax and ergative morphology (broadly speaking), there seems to be no known language that possesses ergative syntax but accusative morphology. These restrictions may provide more information on the nature, conditions, and reasoning of ergative alignment.

What we mean when we talk about Ergativity is therefore the observation of a certain alignment of the grammatical marking of verb arguments in related morphological or syntactic functions.

**Split Ergativity**

Going simply off of the term split ergativity (in addition to split ergative language), it might be reasoned that split ergativity occurs when both ergativity and accusativity are present in a language. However, it has already been explained how such a mix is quite normal and expected in languages which display ergativity. The term split ergativity is used more specifically to refer to the alternation between ergative alignment and non-ergative alignment (most often accusative) within a particular grammatical system (such as case marking, agreement, word order, etc.). So for example, a language in whichergativity was expressed through verb agreement could be said to display split ergativity if the expression of ergativity occurred only part of the time.

Given the tendency of languages towards efficiency, we would expect some governing principle to be behind such splits in alignment. While theoretically any number of principles might govern a split, very often we see ergative splits conditioned by tense and
aspect, in which, within a particular argument marking system, Ergativity is confined to past tense and perfective aspect.

While it is important to consider possible semantic motivations for associating ergativity with past tense and perfective aspect, I will wait to discuss these until the discussion on the ergative marker in Hindi (section blah blah)

**Ergativity in Hindi**

The question of Ergativity in Hindi had its inception in beginning attempts to gather information about Hindi pronouns. Single word translations for pronouns in the elicitation sessions yielded one form of the pronouns (“mә”, “tum”, “ap,” etc.), however once we started eliciting sentences variants of these words began to appear (“mәә”, “tumne” “apne” etc.).

(1) /mә keń l= kaa= h=a/  
    I banana eat-CONT be-PRES.I SING  
    “I eat a banana.”

(2) /mәә kele kai= h=a/  
    I bananas eat-PFTV be-PRES  
    “I ate bananas.”

These sentences are interesting in that there appear to be two different words for the first person singular pronoun. The two words did not appear to be performing any different functions in the sentence, so the alternation did not appear to be a reflection of case in the usual sense. As elicitation sessions expanded their focus, -/nә/ continued to appear, demonstrating that its appearance was not limited to pronouns, but seemingly could appear on any type of NP in subject position. The particular alternation noticed first in pronouns persisted, however.
-/ne/ - establishing the split

Listing all the instances of subject NPs with -/ne/ and those without, gave prominence to a very interesting pattern. The data seemed to sort themselves into the zero-marked group or the -/ne/ marked group based on tense, aspect, whether the sentence was transitive or intransitive, and a special interaction between these factors. The group of sentences that used -/ne/ with their subject were overwhelmingly in the past tense, and the group of sentences which did not use ne with their subject were overwhelmingly in non-past tenses, and always with non-perfective aspects. The -/ne/ group of sentences contained every occurrence of the perfect aspect. *(note about hindi tenses/aspects in appendix or footnote) The -/ne/ group contained only transitive sentences, whereas the -Ø group contained both transitive sentences and intransitive sentences.

Table 1

<table>
<thead>
<tr>
<th>-Ø</th>
<th>-ne/ - simple, progressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Tenses</td>
<td>Subject, Intransitive</td>
</tr>
<tr>
<td>Non - Past</td>
<td>Subject Object, Transitive</td>
</tr>
</tbody>
</table>

Table 2

| -ne/ - perfective |
| Past | Subject Object, Transitive |

Hierarchy

Additionally, these different criteria seem to be organized hierarchically, each associated with one expression or the other of the first person singular subject, with the “choice” of -Ø vs -ne being determined by the number of criteria fulfilled, and the association of the highest ranked criterion.
Using these insights into the data, it became possible to make hypotheses about the “choice” of either /-O/ or /-ne/ in a sentence, and to then test the hypothesis. For example, a transitive sentence can either use /-O/ or /-ne/. If we assign that transitive sentence past tense, then the assumption is that it will use /-ne/. Indeed this is supported by the existence of real sentences like (2) above.

Another example might see us form another transitive sentence using a non-past tense and progressive aspect. Based on the association of the past tense with /-ne/ and the progressive aspect with /O/, it might be expected that the sentence thus constructed would utilize /-ne/. However, the ranking that describes the data asserts that the higher ranked criterion must take precedence. In this case, the sentence contains the progressive aspect, which is ranked higher than non-past tense. This conclusion is supported in the data with sentences like blah:

(3) /me kitab p"r r"hi hogi/
   I book read-PROG be-FUT
   “I will be reading a book.”

**Tense and Aspect**

It is clear that /-ne/, as ergative argument marker, is conditioned to appear based on the intersection of tense and aspect within the transitive sentence. In order to be able to understand and support this claim in the data it is important to understand how tense and aspect work in Hindi. While a comprehensive exploration of this subject is outside of the
range of this thesis, even a rudimentary overview will prove a useful reference throughout the rest of the analysis or in looking through the data, especially in possible situations where the appearance of -/ne/ seems at odds with the tense/aspect of the sentence.

It is extremely important to remember that all of the data for this study were elicited from one language into another, mostly from English into Hindi. As is to be expected, not everything always translates exactly, and this includes tense and aspect. There are instances in the data where some aspect of a Hindi sentence seems at odds with the given English translation, however the issues are resolved upon closer examination of the structure of the Hindi sentence. For this reason I have roughly sketched out some basics of Hindi verb tense and aspect.

<table>
<thead>
<tr>
<th>/kana/: ka + na</th>
<th>verb: stem + infinitive ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ka_ h@/: ka + [aspect] (hona)</td>
<td>Verb + [aspect] (conjugated “to be”)</td>
</tr>
<tr>
<td>tV – continuous aspect</td>
<td>hV – present tense</td>
</tr>
<tr>
<td>rahV – progressive aspect</td>
<td>thV – past tense**</td>
</tr>
<tr>
<td>V/yV – perfective aspect*</td>
<td>hongV – future tense</td>
</tr>
<tr>
<td>aspect vowel inflected for gender</td>
<td>verb vowel inflected for person and number</td>
</tr>
<tr>
<td>a – male, i - female</td>
<td>(pattern not fully established)</td>
</tr>
</tbody>
</table>

Note: perfect tense/aspect is logically a combination of perfective aspect and present tense
*in Hindi: telic, represents punctual and non-punctual perfective aspect
**thV vowel only inflected for gender

After becoming acquainted with these basics, one can better understand sentences like blah:

(4) /tin b`dzh3 t`k m3n3 ek k`nt3 kelie kele kaja tha/
    “By 3 o’clock I will have been eating a banana for an hour”
If we attempt to look at this sentence armed only with the hierarchy of tense and aspect, and focusing on the English translation instead of the Hindi, without considering the chart of verb basics, we might be confused to see -/ne/ occurring with non-past tense and progressive aspect. However, with only a slightly better understanding of Hindi verb structure we can see that this sentence is indeed predicted by the tense/aspect hierarchy proposed above.

(5) /tin b\dzh3 t\k m3n3 ek k\nt3 kelie kele kaja tha/
   (3 o’clock by) I-ne (one hour for) bananas eat-PFTV be-PAST
   “By 3 o’clock I will have been eating a banana for an hour”

The input being perfective aspect and past tense, the proposed hierarchy correctly predicts a sentence using -/ne/.

-NE/ as split ergative marker

It is important for the purposes of the explanations in this paper, to reiterate that in this analyses of Hindi data, -/ne/ has never been known separately from its ergative "split-ness"- in fact, the split nature of the distribution of -/ne/ as subject marker was noticed and explored before any concept of its "Ergativity." The first thing that was noticed about -/ne/ was that it appeared on some transitive subjects and not on others, while intransitive subjects never seemed to take -/ne/. Only through examining -/ne/ in the context in which it actually appeared - the intersection of past tense and perfective aspect- and noting aspects of the particular argument marking alignment of transitive and intransitive sentences in this context, was the presence of Ergativity in Hindi, as expressed by -/ne/-marked subjects, determined, as in this context there seemed to be a clear A -S/O marking distinction. Factoring in those non-past/non-perfective transitive
sentences in which -/ne/ was not present led to the determination that the -/ne/-linked Ergativity was confined to past tense and perspective aspect, and therefore "split" in the language along those lines.

/-ne/ as added subject marker

It was decided that this alternation was between some base form of the subject and the base form plus -/ne/, based on the lack of appearing with singularly elicited nouns. In the original study, -/ne/ was simply assumed to be somehow attached to the subject. However whether or not some sort of morphological or semantic attachment is present cannot be assumed without further targeted analysis, which is beyond the scope of this paper. While the exact relation of -/ne/ to the NPs with which it occurs is not presently known, certain placements of pauses by the consultants in uttering sentences in which -/ne/ appeared, appear to support at the very least a close phonological relation of -/ne/ and the presumed base noun form in those occurrences where -/ne/ was present.

(6) /apne... mudzhe mara/
   You me hit-PFTV.MASC
   “You... hit me.”

While this does not prove that -/ne/ is not some verbal component which then happens to associate with the subject through movement or some other quality of the verb structure in Hindi, the phonological evidence would seem to indicate that -/ne/ and the base noun are grouped together. This is similar (but clearly not entirely the same as) to the ways in

(7) I’m ... going to the store vs. I ... am going to the store vs. *I ... ’m going to the store.

which the naturalness of pauses in English sentences with contractions (and their uncontracted counterparts) depends on where those pauses are placed, which depends on
how the contractions are grouped in speech, which might reasonably be expected to be a
reflection of some aspect of association between the argument and the contracted
element.

I provide these examples fully aware that there are differences between them, and my
intention is not to make any final pronouncements on the status of -/ne/ as a cliticized
element, nor to open up the question of clitics in Hindi, etc. I only argue that, whatever
the relationship between -/ne/ and either the subject NP and/or the verb, it seems
reasonable to continue to consider it as at least superficially grouping with and marking
the subject.

*What is -/ne/?*

In the brief beginning of this exploration of -/ne/, it hasn't really been established what-
/ /ne/ actually is. The immediate response might well be to label -/ne/ a case. However I
hesitate to do this. -/ne/ is clearly associated with A arguments. It groups with these
arguments phonologically. But the question of case is tricky, and like so many things, too
vast to be fully considered in this study. Even so, some things stand out which prevent
conclusive labeling of -/ne/, at least in the present analysis, beyond a particle or marking
of some sort. First of all, it hasn't been determined exactly how -/ne/ marks subjects.

There is no other marked form for nouns that would suggest a larger paradigm for -/ne/ to
be a part of. While -/ne/ clearly associates with arguments, it is not immediately clear
whether or not this is through typical case inflection, as a cliticized element, or perhaps
through some projection of the verb that has become phonologically associated with A
arguments through surface proximity. Of course -/ne/ could be all of these things
combined, but to determine that would require much more detailed study and extensive knowledge on my part.

Complicating this determination, and contributing to the lack of clarity, is the fact that -/nɛ/ exists at the intersection of many different criteria for determining the nature of similar particles. From the perspective of case, -/nɛ/ would not be fully structural nor would it be fully semantic, but either some meeting of the two, or something specifically different. -/nɛ/ definitely marks subjects, but only in the context of a specific type of verbal action. If -/nɛ/ were purely a syntactic case, we might expect it to appear with subjects regardless of tense or aspect. If -/nɛ/ was purely semantic then again we might expect it to appear with agents regardless of tense or aspect. Through analysis of the environments in which -/nɛ/ can appear, it seems quite clear that in spite of some of its seemingly case-like characteristics, -/nɛ/ gains relation to its NPs first and foremost through how it relates to and represents the verb. The presence of -/nɛ/ is driven by Perfective, completed verbal action, which would most likely be carried out by agentive subjects, however it seems to be neither the agency of the subjects nor the subject ness of the agents which compel -/nɛ/ to appear. In my limited exposure I am uncertain as to how situations of this sort would fit into case theories if at all - a case for which the nature of its argument is secondary to the nature of the verbal action. From the perspective of clitics, -/nɛ/ would seem to be slightly untraditional as well, possessing some aspects of clitics but not others. It does appear to demonstrate phonological dependence on another word, to be necessarily unstressed, and in terms of syntax does engage at the phrase level, but does not seem to be "word-like", does not seem to have
another free counterpart, and its presence or absence does not seem to fully affect that syntax of the sentence.

Sentences without -/ne/ were deemed ungrammatical by some of the consultants but not all. This difference could very well be the result of dialect differences. However for those speakers for whom removing -/ne/ is acceptable*, again, taking away -/ne/ does not seem to really take away the "subject-ness" of the subject. The ungrammatical-ness of the sentences with -/ne/ removed seems to arise from a removal of semantic description. Then again, the fact that this semantic description (completed action) cannot be gleaned entirely from the verb (which remains unchanged), might suggest more than just a phonological association between -/ne/ and its argument, however secondary to the verbal action. Yet this still leaves us questioning: what is -/ne/? Currently we can only consider it some sort of postpositional (but not necessarily a postposition!) verbal argument marking particle - seemingly a combination of all the ways a particle can be a particle.

- /ne/ - Function

I have up to this point focused on describing -/ne/ in terms of its distribution, and have labeled it a split ergative marker. Yet this does not tell anything about its function. What is the purpose of -/ne/?

We get a clue from -/ne/’s distribution pattern. As mentioned above, the appearance of -/ne/ is governed by past tense and perfective aspect. The intersection of these temporal-aspectual systems is heavily associated with completion and specifically active action. In fact one of the consultants expressed as much during an elicitation session, comparing the non-ergative 3rd person singular pronoun form /vo/ to the ergative /usne/ form.
According to the consultant, usne is the action of doing something, whereas vo is more static. In the context of multiple sentences making up a larger discourse, usne has already been introduced and identified, and therefore is able to do things. Vo introduces and establishes, and needs context to support it. Usne plus a verb is better able to stand on its own. If there is one person doing one thing, like reading (a progressive action), it is in these situations one would be more likely to use vo. Vo seems to set up the background, whereas usne embosses agents into the foreground.

According to the consultant this distinction does not work as well even with first person pronouns (which importantly are higher in prominence). Much more so than the third person pronoun, the first person pronoun must be marked with -/ne/ in perfective past tense transitive sentences. The distinction between the two forms is based on the completion of the action. The consultant allowed that me could be used if the action was something that the person wanted to do, but hadn’t done yet, or completed. However the preference is clearly towards using the ergative “forms” for completed action, and more a more active feel.

It is also important to note that, as important as the implications of perfective aspect and past tense are for providing information as to how and why -/ne/ is used, ultimately transitivity is as important if not more so. Past tense perfective sentences do not have to be transitive, but it is the transitive sentences which contain -/ne/.* In addition to imparting information about subjects that actively complete actions, -/ne/ also apparently imparts the information that those actions were completed against something. That something is clearly an integral part in the relationship between the subject and the verb, and therefore between -/ne/ and the subject. Perhaps more important than the
characteristics of the subject itself (which would technically exist without the object), is the transfer of the verbal action through the subject’s characteristics, to the object. This of course makes a great deal of sense given that we have already observed that \(-/ne/\) appears to have an overwhelming connection to the verb, even though it (phonologically at least) “connects” with the subject. Instead of thinking of \(-/ne/\) as simply a marker of ergative case (!!) or as a subject marker, etc. and doing a disservice to the language, we must understand the function of \(-/ne/\) as one of transfer (indeed of transitivity).* The function of \(-/ne/\) is not “ergativity,” but rather it has a different function, which happens to see it active with an ergative distribution. I believe that understanding this aspect of Hindi grammar may help illuminate and draw together other aspects of the language into a more comprehensive and comprehensible whole.

**Problem**

Up until this point, the complexities of \(-/ne/\) and my limited knowledge notwithstanding, I have painted a simplistic picture of how ergativity works in Hindi. The initial conclusions above about the ergative distribution of \(-/ne/\) were drawn from Hindi sentences that seemed to display fairly typical ergative alignment. These sentences, however, represent only a very small portion of all sentences in the data set that have \(-/ne/\) marked subjects. Interestingly, the majority of sentences in the data with \(-/ne/\) marked subjects also display marked direct objects.

The presence of marked direct objects clearly presents a major problem for description of \(-/ne/\) as an ergative marker, and of Hindi as displaying this sort of ergative alignment, for obvious reasons. If ergative alignment is defined by the transitive subject being treated differently from the intransitive subject and transitive object, which are treated the same
as each other, then how can we say that Hindi displays ergative alignment with -/ne/ as
the ergative argument marker? Later on I propose a possible solution, however first it is
necessary to come to a better understanding about the nature of -/ko/.

-/ko/

-/ko/ as Direct Object Marker

One of the first things we notice about -/ko/ is that it marks direct objects. Sentences blah
and blah give some examples of this.

(8) /larkine larkago dekha/
girl-ne boy-ko saw
“The girl saw the boy”

(9) /meneko argako mara/
I-ne rabbit-ko hit
“I hit the rabbit”

However almost as quickly we notice that direct objects are not always marked by -
/ko/. We see this in some of the example sentences provided for -/ne/ above, as well as in
sentences blah blah:

/mene kitab p’rha/
I-ne book read-PFTV.MASC
“I read a book.”

/uesne ava soni/
He-ne noise hear.
“He heard a noise.”

We might think this alternation is dependent on animacy, with animate nouns being
marked with -/ko/ and inanimate nouns not marked. However further examination of the
data reveals sentences like those in blah:

/mene kursi ko mara/
I-ne chair-ko hit-PFTV.MASC
“I hit the chair.”

Mene katl ko tora
I-ne glass-ko break-PFTV.MASC
I broke the glass.

In these sentence the object is inanimate, and yet still receives marking by -/ko/.

Noticeably, however, these inanimate objects are definite, whereas the previous
inanimate objects were indefinite. Of the previous three groups of example sentences,
both the definite animate and the definite inanimate objects are marked with -/ko/.

Looking for sentences with indefinite animate objects we see the following:

As expected, though indefinite, these sentences show animacy again as an indicator of -/ko/ marking.

What we learn from this, then, is that -/ko/ marking on direct objects seems to be generally governed both by animacy and definiteness, with animate NPs marked with -/ko/, and definite NPs marked with -/ko/. Indefinite inanimate nouns appear to go without direct object case marking.

It is worth noting that in some cases definite inanimate objects do not receive -/ko/. Many of the sentences in which definite inanimate direct objects are not marked with -/ko/ also interestingly all seem to contain “expected” or typical scenarios.

It is quite ordinary to eat bananas, throw balls, and to open doors, and these are actions that are done with great frequency. There is a logical connection between the verb and the particular object. It is to be expected that one might open a door, eat a banana, throw a ball, read a book etc. And in fact, in listing definite inanimate objects which receive -/ko/ and those which do not, along with the verbs they appear with, the notion that frequency of occurrence in daily life or expected connection between the verb and the object plays a factor in whether or not -/ko/ appears with direct objects appears to be generally upheld.
-ko/ unrestricted by tense/aspect

-ko/ appears to be unrestricted by tense or aspect.

/m3 usko dekhraha tha/
I he-ko watch-PROG.MASC be-PAST.MASC
“I was watching him.”

The implications of this will be considered in more detail later on.

-ko/ in Ditransitive Sentences

Up until now I have described -ko/ as a direct object marker, but importantly, I have only presented monotransitive sentences. What exactly -ko/ might be becomes more complicated as we open up the analysis to sentences in which there is more than one object. In sentences blah and blah we see some examples of ditransitive sentences.

/mene usko kitab dija/  /Larkene larkiko ful dija/
I-ne he-ko book give-PFTV.MASC  Boy-ne girl-ko flower give-PFTV.MASC
“I gave the book to him”  The boy gave the flower to the girl

Quite interestingly, in these sentences it is the indirect object which receives the -ko/ marking. And the direct object receives no marking. This is a pattern which holds up across the data set. No ditransitive sentence contains a direct object marked with -ko/. While it is possible for an indirect object not to receive -ko/, it should be noted that in these cases the indirect object is a first or second person pronoun which appears in a distinct form its “normal” nominative, uninflected or unmarked form, and that this different form is the same form encountered in first and second person pronoun direct objects in monotransitive sentences.

element

The fact that -ko/, which sometimes marks direct objects in monotransitive sentences, never marks direct objects in ditransitive sentences and only marks indirect objects in
ditransitive sentences would seem to support the notion that -\ko/ is not inherently a
direct object marker, with direct object marking not being its primary function. If -\ko/
were primarily associated with direct objects, we would expect to see either an exclusive
association with direct objects in ditransitive sentences, with possible different indirect
object markers marking the indirect objects. Instead -\ko/ seems to “prefer” to mark the
indirect object. The fact that -\ko/ does not appear on both direct and indirect objects in
the same sentence would seem to support -\ko/ as being something other than a general
object marker. Determining what kind of marker -\ko/ inherently is, along with the
reasons it seems to switch objects, depends on determining the similarities between
indirect objects and monotransitive direct objects, the differences between monotransitive
and ditransitive direct objects, as well as the motivation for using one marker to mark
both arguments.

-\ko/ as Dative

The cross-linguistic association with indirect objects and dative case is enough to provide
compelling reasons to consider -\ko/ related to the dative, and the fact that if given a
“preference” in ditransitive environments -\ko/ “chooses” to mark the indirect object is
even more compelling. More explicitly, however, -\ko/ appears in almost classically
dative environments.

\ko gusa bohut ata h3/
he-DAT anger much come-PRES.MASC be-
PRES.3SING
“He gets angry a lot.”

\ko ko obama me vilva[ he/
America-DAT Obama-in confidence be-PRES.3SING
America believes in Obama.

Clearly there is some close relation between -\ko/ and the dative, which is intriguing,
considering -\ko/’s appearance marking direct objects.
What is -/ko/?

Before exploring possible explanations for the distribution of -/ko/, some discussion of what kind of particle it is is worth engaging in. Similarly to my thoughts on -/ne/, I am somewhat hesitant (due to lack of data and experience) to make a strict determination about what kind of marker it actually is. Like -/ne/, -/ko/ is postpositional (like Hindi postpositions, however this does not necessarily mean it is a postposition in the same sense of the word). Like -/ne/-/ko/ appears to mark its objects at the phrase level. Like -/ne/-/ko/ appears to have some aspects of clitics, however not enough for me to be confident in labeling it as a clitic. In comparison to -/ne/-/ko/ does seem to lean more towards being some sort of case marker. Rather than being predicated on the specific nature of the verbal action, -/ko/ seems to be more directly related to the nature of the object itself, appearing in all tenses and aspects. When -/ko/ is marking the direct object, it appears to do so in accordance with prominence hierarchies of animacy and definiteness. When -/ko/ is marking the indirect object, reasonable comparisons may be drawn, as is above, to some sort of dative case. As mentioned above, with first and second person pronoun indirect objects, -/ko/ appears to alternate with the same form of the pronoun we see when the pronoun is a direct object, as well as when the pronoun may be said to resemble having dative case. But simply behaving like case or appearing in places where case also does or might be expected to appear does not mean that -/ko/ is definitely a case. While there are ways in which -/ko/ does not seem to behave like traditional cases would, it would seem to be more case-like than -/ne/. Ultimately though, the question of case or not, or of clitic or not, as with -/ne/, is not the focus of this paper, nor does it seem imperative to the analysis presented here to establish definitively -/ko/ or -/ne/’s “type.” For now I am satisfied thinking of -/ko/ as some sort of object marker.
Possible Explanations

DOM

Direct Object Marking*(DOM) is an increasingly well-studied phenomenon in which a language marks some direct objects overtly, and not others. Which objects are marked depends on their prominence, which is derived from the conjunction of animacy and definiteness scales (Aissen 2002). More prominent objects will tend to be marked and less prominent objects will tend to be unmarked, due to the supposed natural tendency of subjects to be more prominent and objects to be less prominent. DOM is therefore conceived of as a way to identify as an object an object which might otherwise be assumed (or preferred) to be a subject. As Aissen states, DOM arises “to facilitate the distinguishing of subject and object. The properties which increase the likelihood of overt case marking for objects are exactly those most frequently associated with subjects.” (Aissen 2002, 7) The scales by which prominence is determined are represented in blah blah

Figure 3

Animacy Scale

Human >>> Animate >>> Inanimate

Definiteness Scale

Pronoun >>> Proper >>> Definite >>> Indefinite >>> Non-Specific

Noun

While the structure of these scales remains constant, languages differ in how they use them to determine which objects are marked and which are unmarked. Where on each scale the line falls above which objects are marked, or even whether or not both scales are relevant to object marking, depends on the language.
With regards to the distribution of \(-/ko/\), DOM is an attractive possible explanation. It has already been established that \(-/ko/\) appears to mark definite and indefinite animate objects, as well as definite inanimate objects (allowing for in some cases the familiarity generated by frequency), along with human and animate proper nouns and pronouns. We can assume that inanimate pronouns and proper nouns will also take \(-/ko/\) based on the tendency of objects higher up on the prominence scale than a certain point which takes marking, to also take marking. The fact that some definite objects do not take any overt marking can possibly be explained as the influence of frequency or expectedness of a particular verb pairing with a particular object. Whether or not such leaving off of \(-/ko/\) is optional or not has yet to be determined, however it seems sensible to allow for the intersection of such considerations with DOM.

*Figure 4 - Prominence in Hindi*

![Figure 4 - Prominence in Hindi](image)

While DOM appears to fit for the most part, it still does not address the curious switching of \(-/ko/\) from marking direct objects in monotransitive sentences to marking indirect objects (and only indirect objects) in ditransitive sentences. Indeed, in ditransitive sentences where indirect objects are marked with \(-/ko/\), DOM appears to be absent. For these reasons DOM cannot be sufficient in and of itself to explain \(-/ko/\).
**Ditransitive Alignment**

Hasplemath (2005) addresses how major types of ditransitive alignment sentences mark their arguments, building on literature that demonstrates the ability of these ditransitive alignment markings to be considered in the same way as argument marking in monotransitive alignment types.

From this investigation we have the following diagrams:

**Figure 5**
1. The major monotransitive alignment types
   - a. nominative alignment
   - b. neutral alignment
   - c. absolutive alignment

**Figure 6**
2. The major ditransitive alignment types
   - a. directive alignment
   - b. neutral alignment
   - c. primative alignment

We can see immediately similarities between the distribution pattern of -/ko/ and Hasplemath’s so-called secundative alignment. As in secundative alignment, DOM’d direct objects in monotransitive sentences and indirect objects in ditransitive sentences pattern alike with -/ko/. However fairly quickly we see that these alignment types may not be much more useful than as showing a similarity in description, at least as treated by Hasplemath in this particular instance. According to Hasplemath secundative alignment tends towards only overtly marking the T argument because, as Hasplemath states in agreement with Comrie 1978, “the two equally treated roles will always be more frequent and hence should be zero coded.” (Hasplemath 2005, 11). However in Hindi, using these ditransitive alignments as a descriptive comparison, we find secundative alignment
characterized by overtly marked equally treated roles. Such patterning did appear in Hasplemath’s sample of languages, and the rarity of such patterning (according to Hasplemath) obviously does not prohibit Hindi from patterning similarly. However his assertion that frequency of arguments in this case should have a bearing on markedness, and his assumption that the secundative T argument would be the marked specially treated role, is enough to cause doubts as to how well his treatment of ditransitive argument types really matches up with the situation present in Hindi. Contributing to this uncertainty is the fact that there isn’t any really sufficient reasoning given as to what function or purpose such ditransitive alignments might serve, or the rationale behind them. Hasplemath seems more concerned with the fact that, for instance, secundative flagging (as we see in Hindi) occurs than the reasons why it occurs, or the reason why a language might display secundative alignment where the T is zero-coded and the P and R roles are overtly flagged.

-ko/ as Dative marker
That -ko/ exhibits a preference for marking the indirect object, as well as -ko/’s overall strong association with what is traditionally considered dative case, would seem to support -ko/ as inherently some sort of dative marker. -ko/ as dative marker would certainly explain the switch from marking direct object to marking indirect object. Of course the question then becomes: why would -ko/ mark direct objects at all? I believe the answer to this question lies in the DOM distribution explored earlier. It is important to notice where the dividing line for ko-marked differentially marked direct objects falls on the prominence graph above. Setting aside those objects not marked due to (supposed) frequency, the criteria for being marked with ko are: be at least animate and
specific, or if inanimate be at least definite. And it is important to remember what these prominence criteria really mean, and what the function of DOM is. The more prominent an object is, the less prototypically object-like it is, and the more subject-like it is. The less object-like and the more subject-like, the more it gains the ability to engage and to receive. And the traditional recipient arguments? Indirect objects, which in Hindi, are marked by ko. From this perspective, it makes complete sense, if you are a language looking for an economical way to differentially mark your direct objects that possess key features of recipient-type entities (namely: animacy and definiteness), to use your pre-existing dative/indirect object marker, as long as it is not being used. And once it is needed, it will clearly outrank the direct object, as actual recipients are necessarily more recipient-like than recipient-like objects.

We can even turn back to Hasplemath’s study of ditransitive alignment types, even though I still disagree with many of his generalizations about specific aspects of the alignments he presents. Specifically, at least in Hindi, which at the very least happens to group its object arguments in the specified way, I would contend that markedness is not only conveyed by isolation, but perhaps sometimes by association as well (R associating with P in monotransitive contexts marks that P, leaving T unmarked yet isolated). Hasplemath’s study of ditransitive alignment types is therefore a good jumping-off point for further varied analyses, and some of my previous questions about why a language might display these sorts of patterns, etc. have been answered in this analysis of ne and ko.

Identifying ko as marking recipient-like objects also fits very nicely with the analysis of ne as transferor of a defined verbal action. Transference necessarily requires some
endpoint to which to transfer to, which is also capable of being transferred to. Kο-marked direct objects then are ideal candidates to receive ne’s action.

What we find, then, is that not only is the alternation between -/ko/ as direct object marker and -/ko/ as indirect object marker due to choosing an economical way of marking the two objects, but also that, through this DOM, Hindi is sensitive to the dative-like qualities of prominent objects. With one object marker Hindi can ensure object disambiguation in any context. -/ko/ satisfies DOM in monotransitive sentences by distinguishing the object from the subject, and in ditransitive sentences -/ko/ functions as the sole object marker still serves to distinguish the indirect from the direct object. Of course, these suggestions still beg the question of why would not some marker still be necessary for DOM in ditransitive sentences. The existence of this question, however, does not seem to exist in conflict with the above analysis. I therefore believe the argument for -/ko/ as a differential/dative marker is compelling.

**Solution- Reconciling -/ne/ and -/ko/**

When I began this study I was coming from a frame of mind in which ne was clearly ergative, participating therefore in unquestioned ergative-absolutive alignment. The emergence of ko with a DOM system was at odds with the analysis I had grown comfortable in, and was seen as a problem that needed to be solved. Ko was clearly a separate system that needed to be accounted for and evaluated in relation to the ergative argument marking system already in place.

My previous solution kept the analysis of ne and an ergative alignment intact, proposing, however, the existence of overlapping systems, similar to graded lens filters on a camera, which if positioned just right, might simulate the appearance of one system, while being
in actuality, two separate systems superimposed on one another. That ko does not seem to have the same tense/aspect restrictions as ne only proved their separateness.

However, the more I engaged with the data and attempted to understand what was in front of me, the more my attempts to jam Hindi into a predesigned mold seemed obviously forced and unable to truly account for the complexity of argument marking.

My solution to the “problem” that ko presents to the notion of ergativity in Hindi is simple: There is no problem. Because of course the only challenge is to theoretical explanations that may or may not be equipped to encompass the reality of the language itself. In line with my general wariness about ergativity, I would argue that ne should not be considered an ergative particle, or as some identifier of so-called “ergativity. It is rather a component of some other system that happens to have a distribution similar to other components of other different systems, whose similarities in distribution we call “ergative.” I would then contend that ne and ko are part of the same system, which governs and marks the transfer of specific types of action as conceptualized by Hindi.

I have no idea what the current word on ne and ko and argument marking in Hindi is. I have no idea how close or far away I am to that word, and I am well aware of my general lack of long and established theoretical experience. However I believe the arguments I have put forth are sensible and plausible. Just as writing systems are often taken to be the actual languages they represent, I believe it is possible to forget that theory is simply the attempt to describe what is real. Every now and then it’s good to step back and see if the rules are describing reality, or attempting to create it.
Part III

Discussion/Reflections

This has been a long process – at times engaging and exhilarating, and at other times remarkably overwhelming. However I am very pleased with what I have presented in this paper and look forward to continuing to cultivate these preliminary analyses. I am quite aware that this thesis is a quite coarse introduction to the topic at hand, and that there is much that was not included. There are many things that I wish to have been able to include (and will in further revisions!) and many gaps either in background information or detailed analysis upon which I intend to improve. In this section I would like to reflect a bit on the process, specifically from the perspective of fieldwork. I would also like to present some lingering questions that I did not fully address above, and I would like to present some ideas for further study.

Fieldwork

This study was my first major foray into the “field,” as it were – being responsible for a large portion of my own data collection, the organization and transcription of that data, and of course – thorough analysis of that data. I learned a great deal about the fieldwork process, and about myself as well, and of course accumulated a number of lessons from which to gain future growth.

I learned the importance of good data collection. Good means a number of things. I learned the importance of targeted and intentional elicitation. Preparation is key, which means sitting down and planning for different directions that you may not even be aware of wanting to go in, but that you will wish you had two days later when you examine
your data and can’t find what you need. And I learned what good preparation is.

Preparation means going in with intentional angles and a focus, but not getting stuck in that focus to where you miss opportunities for valuable information along the way. Preparation means understanding why you want to elicit what you want to elicit.

Good also has to do with how the data is collected, and specifically I am thinking of the interpersonal dynamic between the elicitor and the consultant. I tend to be rather quiet in situations in which I am not comfortable, and especially if another person or a group is involved my impulse tends to be to defer and not rock the boat. However as I would discover later on, when your work or your project depends on that data collection, it is necessary to strike an appropriate balance between consideration and your own need to collect as much useful data as possible. It is important not to succumb to the pressure of the group, within reason, or to harm your own data collection by hurrying or skipping through what you want to cover because other people are not receptive. When I look at my transcribed data and notes there are a number of sentences that I had planned to elicit but did not, which would have provided valuable information. In some situations, questions I have from this analysis would have been taken care of if I had gathered all of the data that I had set out to gather.

Regarding the dynamic between the elicitor and the consultant, I learned that sometimes data collection suffers because of the lack of interest of the consultant. I learned the importance of being confident enough to be able to deal with any situation you may encounter, in a way which acknowledges the consultant but which also does not detract from your own goals. Again, my notes are full of unelicited information that is detailed and different from what I did elicit, because at the time I was eliciting, I was not fully
able to deal with a bored consultant or a disinterested consultant, or a rushed consultant, etc. in a way which benefitted both of us.

I learned that there is no substitute for picking up the language, because often what is requested (in English) does not quite match up with what is actually provided. Understanding the language you are eliciting is absolutely key – the elicitation language should not be depended on.

I learned the importance of keeping the data organized and in keeping notes on the data (and notes on those notes), all with the goal of working towards whatever it is you are trying to say about what you have collected.

One of the most important things I learned throughout the process of analyzing the data was, as I mentioned earlier, that it’s easy to get lost in the data. I went into this expanded study with a particular idea in mind, and a specific way of viewing the data that I collected in the hope of corroborating what I thought that I already knew. This approach shows in the types of sentences I gathered. Because I originally went in expecting to either prove or disprove particular assumptions about ne, the type of sentences I collected are very similar to each other which, halfway through writing my first draft of this thesis when I suddenly decided to shift my entire argument, proved rather stifling.

Being able to produce something from start to finish which was done completely or mostly on my own, from my own ideas, was truly amazing. While I am proud of the finished product, I am equally proud of the experiences I have gained in relation to the work and the creative process.
**Lingering Questions and Further Study**

Obviously I would like to continue to explore the nature of this verbal action transferring system of which ne and ko are a part. There are many other things I would like to pursue further, however a few select ones are as follows: I would also like to take some of the ideas presented in this thesis and see if they can be applied in other languages with which I am familiar. I would like to establish what kind of particles ne and ko are. I would like to expand on the type of sentences I elicited, and in general get great deal more and varied data. I would like to gain a better understanding of the Hindi verb and how it works. I would like to explore ditransitive alignments in more depth, as well as come up with some reasoning for such alignments if possible.

**Part IV**

**References**

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