# Pragmatic Explanations for Expressing Obligations of the Agent referred to in Hindi

Ghanshyam Sharma

**Pragmatic Explanations for Expressing Obligations of the Agent referred to in Hindi**

■ Ghanshyam Sharma ■

_____

Hindi possesses three constructions of similar syntactic nature – with an agent referred to, an infinitival verb form and one of three modal markers – to express three kinds of deontic modality. These overtly similar constructions are, however, employed by the speaker to achieve different pragmatic goals. Their individual meanings derive from the various pragmatic strategies involved and from the type of mutual knowledge and beliefs shared by speaker and addressee. This paper is an attempt to describe these strategies in a formal way.

_____

■ 1. INTRODUCTION

To express obligations on the agent referred to (hereafter *Agref*), a Hindi speaker makes use of, among others, the following three syntactic constructions employing three different 'modals' (or verbal markers expressing modality), namely,

1. a. Agref - ko + Infinitive + *caahie*
   b. Agref - ko + Infinitive + *paRnaa*
   c. Agref - ko + Infinitive + *honaa*


Most Hindi grammars try to explain these modal constructions in terms of their corresponding constructions in English. Such studies, though based on very subjective approaches, are a useful tool for interpreting these constructions for language-teaching purposes, but they fail to point out the different pragmatic strategies the speaker employs in selecting one instead of another. They tend to classify the three constructions according to the degree of 'strength' they are supposed to carry in a conversational setting. But, as shall be shown later, that is not the subjective parameter which a speaker employs in order to weigh them before using them. Rather, they are used by the speaker to achieve certain pragmatic goals.

At surface-structure level the three constructions under discussion are syntactically parallel, inasmuch as all three demand an agent[1] NP in a dative construction signaled by the postposition *ko* and a VP which includes a verb in the infinitive plus one of the three verbal markers. Differences can be found among them with respect to the verbal agreement they show with the object of the verb. The form *caahie* shows no agreement with the verbal (i.e. infinitival) object.[2] The other forms, *paRnaa* and *honaa*, always agree (with that infinitival object) in number and gender, however. Another important difference between *caahie*, on the one hand, and *paRnaa* and *honaa*, on the other, can be noticed in their uses in different tenses and aspects. The modal *caahie* does not inflect according to tense and aspect, while *paRnaa* and *honaa* can be found in different tenses and aspects. The latter differ one from the other with respect to their ability to express deontic modality in directive illocutions. The modal *paRnaa* is used exclusively in the future tense for this purpose, as its use in the present or any other tense does not express deontic modality. *Honaa*, on the other hand, can be used in the present as well as the future tense.

As similar as these forms are, however, their respective uses in differing contexts of discourse depend upon the pragmatic goals of the speaker as well as the illocutions selected to achieve them. The present paper is an attempt to discover and formalize precisely the situations in which the use of these constructions is possible.

## ■ 2. THE THREE MODALS AND THEIR VERBAL AGREEMENT

As far as their syntactic structures are concerned, the modals show little variation as a group in that they all have the same word order and restrict Agref (the logical subject) to the dative. The infinitive of the verb, which expresses the action to be carried out by Agref, may in some cases show agreement with its object and in other cases it may not. Let us look at the three modals now separately.

### 2.1. *caahie*

*Caahie* is an aspect-less and tense-less verbal marker except in the past tense where it takes the auxiliary *thaa*, as in:

2. John ko      vahaaN jaanaa  caahie  thaa
   John-Dat     there   go       should  was
   'John should have gone there.'

Otherwise, to repeat, it is not inflected. The meaning of the constructions employing this modal verbal marker can be understood in general in the following way: "(Because I feel it is in Agref's interest to do so,) Agref should/ought to VP."

3. Agref + ko (i.e. 'dative nominal')[3] + Infinitive + *caahie*
   a. tumheN     peruujaanaa  caahie      [without a verbal object]
      you-Dat    Peru go      is advisable
      'You ought to go to Peru.'
   b. tumheN   tiin kele        khaane    caahie  [with an object-m-pl]
      you-Dat   three bananas-m-pl eat-m-pl   is advisable
      'You ought to eat three bananas.'
   c. tumheN   tiin rotiyaaN   khaanii caahie  [with an object-f-pl]
      you-Dat   three bread-f-pl  eat-f-pl is advisable
      'You ought to eat three (pieces of) bread.'

As these examples show, when there is no verbal object the infinitive has the impersonal form singular masculine (3a). Except with verbs of movement as in (3a), when there is a verbal object, the infinitive shows agreement with it in gender and number (3b/c). Some styles of spoken Hindi, however, tend to neutralize the gender and number agreement when the situational context is informal and select the uninflected infinitival form:

3. b'.   tumheN   tiin kele        khaanaa   caahie  [with an object-m-pl]
      you-Dat   three bananas-m-pl eat-Ø      is advisable
      'You ought to eat three bananas.'
   c'.  tumheN   tiin rotiyaaN   khaanaa  caahie  [with an object-f-pl]
      you-Dat   three bread-f-pl  eat-Ø      is advisable

'You ought to eat three (pieces of) bread.'

## 2.2. *paRnaa*

*PaRnaa* can be used in any tense and aspect, but to express deontic modality (directive illocution) only the future tense is employed (4a). In other tenses and aspects it is used in declarative utterances (assertive illocution), for example in (4b), and therefore these uses will not be discussed in the present paper:

4. a. John  ko        peruujaanaa   paRegaa    [directive illocution]
      John-Dat       Peru go        must-fut-m-sg
      'John will have to go to Peru.'
   b. John  ko        peruujaanaa   paRtaa hai  [assertive illocution]
      John-Dat       Peru go        must-pres-m-sg
      'John has to go to Peru (habitually).'

This modal carries information about both aspects and tenses. Its meaning can in general be summarized in the following way: "[Even though it would be unpleasant/harmful/distasteful/annoying/... for you,] you will have to VP." Let us look at a few examples.

5. Agref + ko (i.e. dative nominal or experiencer subject) + Infinitive + *paRnaa*
   a. tumheN      peruujaanaa   paRegaa
      you-Dat     Peru  go       be obligatory-fut
      'You will have to go to Peru.'
   b. tumheN     tiin  kele           khaane       paReNge
      you-Dat    three bananas-m-pl  eat-m-pl     be obligatory-m-pl-fut
      'You will have to eat three bananas.'
   c. tumheN     tiin  rotiyaaN     khaanii  paReNgii
      you-Dat    three bread-f-pl   eat-f-pl be obligatory-f-pl-fut
      'You will have to eat three (pieces of) bread.'

In this case, the agreement between the infinitive and its object is required, most likely because the modal itself here shows the agreement, which it does not do in the case of *caahie*.

## 2.3. *honaa*

The constructions containing this auxiliary can be found in any tense or aspect of the verb, although the most common to express the deontic modality in Hindi are the present and future tenses. With respect to this particular modality, the future tense of the auxiliary indicates actions to be carried out by Agref at a time after the time of speaking, and in the same way the present tense may also indicate a future action. Constructions with *honaa* are semantically and pragmatically intermediate between those of *caahie* and *paRnaa* in the sense that they may sometimes express the speaker's advice and sometimes the speaker's judgment about obstacles Agref might encounter while carrying out the action. As we shall see later, the variation in meaning in these constructions depends very much on the mutual knowledge and beliefs of speaker and addressee. The speaker's intended meaning in this construction is usually as follows.

6. Speaker's intended meaning using *honaa*
   a. "[On the basis of the information I have, I feel I should remind you that] you have to VP."
   b. "[On the basis of my authority, I emphasize that] you have to VP."

The different uses of this structure will now be illustrated.

7. Agref + ko (i.e. Dative Nominal) + Infinitive + *honaa*
    a. tumheN    peruu jaanaa  hai/hogaa
       you-Dat    Peru  go       be supposed to-pres/fut
       'You are (supposed) to go to Peru.'
    b. tumheN    tiin   kele          khaane       haiN/hoNge
       you-Dat    three banana-m-pl  eat-m-pl     be supposed to-pl-pres/m-pl-fut
       'You are (supposed) to eat three bananas.'
    c. tumheN    tiin   rotiyaaN    khaanii haiN/hoNgii
       you-Dat    three bread-f-pl  eat-f-pl  be supposed to-pl-pres/f-pl-fut
       'You are (supposed) to eat three (pieces of) bread.'

It should be noted here that in (7b) and (7c) only the future tense forms of the auxiliary show gender agreement between the auxiliary and the verbal object.


■ **3. THE ILLOCUTIONARY POINT OF DEONTIC MODALITY**

In almost all directive illocutions with which a speaker expresses her desire or wish for Agref to do *l*, deontic modality is employed. The person(s) by whom such a desired action is to be carried out can be any of the following: second person(s), third person(s), or, in monologues, even first person(s). The deontic modality can also be used in the case of a natural phenomenon to express the desires and wishes of the speaker(s), in which case no action by the agent is envisaged: only a 'so-be-it' fact is hoped for. The following taxonomy will show the relationships between the presence or absence of an Agref in a conversational setting, Agref's reference, and the strength of the deontic modality involved in the various cases:

8. Conversational settings

| | Speaker[4] | Addressee(s) | Agref | Strength of deontic modality |
|---|---|---|---|---|
| Situation 1: | I (we) | you [sg./pl.] | you [sg./pl.] | (strongest) |
| Situation 2: | I (we) | you [sg./pl.] | he/she/they | ↑ |
| Situation 3: | I (we) | you [sg./pl.] | I/we | &#124; |
| Situation 4: | I (we) | I | I/we | &#124; |
| Situation 5: | I (we) | I | he/she/they | &#124; |
| Situation 6: | I (we) | you [sg./pl.] | [None] | ↓ |
| Situation 7: | I (we) | I | [None] | (weakest) |

In situation 1 the speaker wants her addressee(s) to do *l* because the addressee in this case is also the intended agent of *l*. In situation 2 it is the third person(s) who is/are supposed to carry out the action, while in situations 3 and 4 the first person(s) is/are supposed to carry it out. Situations 4, 5 and 7 are monologues (in which the speaker is also the addressee) while their respective Agrefs differ in having in 4 a self-reference (possibly including others), in 5 a third-person Agref and in 7 no Agref at all. Situation 6 has an addressee other than the speaker, but also has no Agref. For example, I may utter (to myself or to someone else) a sentence like 'It must rain tomorrow' or 'It should be a hot day tomorrow', without there being an Agref to carry out any action. Keeping in

mind the above taxonomy, a full list of possible Agrefs in Hindi can therefore be presented in the following way:

9.  Situation 1

    a.  tujhe[5]    peruu jaanaa caahie/  paRegaa/   hogaa/hai
        you-sg-Dat   Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'You [sg.] ought to/(will) have to/are supposed to go to Peru.'
    b.  tumheM    peruu jaanaa caahie/  paRegaa/   hogaa/hai
        you-pl-Dat   Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'You [pl.] ought to/(will) have to/are supposed to go to Peru.'
    c.  aap ko     peruu jaanaa caahie/  paRegaa/   hogaa/hai
        you-pl-hon-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'You [sg. polite] ought to/(will) have to/are supposed to go to Peru.'
    d.  tum logoN ko  peruu jaanaa caahie/  paRegaa/   hogaa/hai
        you-pl-Dat   Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'You [pl.] ought to/(will) have to/are supposed to go to Peru.'
    e.  aap logoN ko  peruu jaanaa caahie/  paRegaa/   hogaa/hai
        you-pl-hon-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'You [pl. polite] ought to/(will) have to/are supposed to go to Peru.'

10. Situations 2 and 5

    a.  use    peruu jaanaa caahie/   paRegaa/   hogaa/hai
        he/she-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'He/she ought to/will have to/is supposed to go to Peru.'
    b.  unheN  peruu jaanaa caahie/   paRegaa/   hogaa/hai
        they-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'They ought to/will have to/are supposed to go to Peru.'
    c.  un logoN ko peruu jaanaa caahie/   paRegaa/   hogaa/hai
        they all-Dat  Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'They all ought to/will have to/are supposed to go to Peru.'

11. Situations 3 and 4

    a.  mujhe peruu jaanaa caahie/   paRegaa/   hogaa/hai
        I-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'I ought to/will have to/are supposed to go to Peru.'
    b.  hameN  peruu jaanaa caahie/   paRegaa/   hogaa/hai
        we-Dat Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'We ought to/will have to/are supposed to go to Peru.'
    c.  ham logoN ko peruu jaanaa caahie/   paRegaa/   hogaa/hai
        we all-Dat  Peru go   is advisable/ be obligatory-fut/ be supposed to-fut/pres
        'We all ought to/will have to/are supposed to go to Peru.'

12. Situations 6 and 7

    a.  us peR ko  ab  gir jaanaa  caahie  [with an anti-transitive verb]
        that tree-Dat now fall-antitrans is expected
        'That tree ought to/will have to/should fall now.'

5

  b. kal   tak kaam puuraa ho jaanaa caahie/hai  [with the verb 'become']
    tomorrow by  work complete become  is advisable/is supposed to
    'The work ought to/has to be complete by tomorrow.'
  c. kal   baarish honii   caahie/hai  [with the verbs 'take place'/'be']
    tomorrow rain  take place is expected
    'It ought to rain tomorrow.'

As can be seen from the examples above, the strength of the deontic modality conveyed by the speaker decreases from situation 1 through situation 7. An important aspect of this phenomenon can also be noted in the use of the kind of verb the modal construction can take. For example, *caahie* can very well be employed in expressing wishes where there is no Agref. Situations 6 and 7, in fact, do not have any Agref: only the speaker's desire is conveyed. In this case, though, only an anti-transitive or a 'become'/ 'be' type of verb is normally found. *PaRnaa*, on the other hand, can never be used in situations 6 and 7; this means that it is not normally used with an anti-transitive verb. The case of *honaa*, however, seems to fall in both of the areas of modal constructions which contain *caahie* and *paRnaa*. Causative verbs do not normally occur in situation 6 and 7.

## ■ 4. THE THREE HINDI CONSTRUCTIONS EXPRESSING DEONTIC MODALITY

The three Hindi expressions which appear to occur in the same syntactic construction differ greatly in meaning. This difference in meaning can be accounted for with reference to the pragmatic settings in which they occur.

### 4.1. *caahie*

13. a. S desires $p$ ($p$ = a proposition anchored in a conceived world $w_i$, different from $w_0$,
    in which Agref does $l$ at time $t_i \geq t_0$).
  b. To fulfill her desire mentioned in (13a), i.e. $p$, S utters a sentence containing
    1. [V (active verb) + *caahie*] in situations mentioned in (9)-(11), or
    2. [V ('to be' or an anti-transitive verb) + *caahie*] in situations mentioned in (12).

14. S does so under any of the following conditions:
  a. The speaker believes that because of all she knows Agref 's doing $l$ would be
    useful/helpful/beneficial/gainful/advantageous or even necessary for Agref or would be
    in the interest of either addressee, speaker or an absent third party.
  b. On the basis of all she knows, she believes that Agref 's carrying out $l$ would be a right
    action according to moral obligations on Agref.

The pragmatic constraints discussed in (14a) and (14b), respectively, can be illustrated with the following examples (15) and (16):

15. a. aapko    roj   duudh piinaa caahie
    you-hon-Dat  every day milk  drink  is advisable
    'You ought to/should drink milk every day.'
  a'. ?? aapko   roj   duudh piinaa caahie.   haalaaNki yah
    you-hon-Dat every day milk  drink  is advisable. However  this
    laabhdaayak  nahiiN
    beneficial    not (is)
    ?? 'You ought to/should drink milk every day. However, it is not beneficial for you.'

b. aapko        turant      aspataal jaanaa   caahie
you-hon-Dat  immediately  hospital go    is advisable
'You ought to/should immediately go to the hospital.'

b'. ?? aapko       turant      aspataal jaanaa  caahie.        lekin yah
you-hon-Dat  immediately  hospital go    is advisable.  But   this
upyogii/zaruurii  nahiiN
useful/necessary  not (is)
??'You ought to/should go to the hospital immediately. But this is not useful/necessary for you.'

c. tumheN     hindi     siikhnii  caahie.
you-Dat    Hindi   learn    is advisable.
'You ought to/should learn Hindi.'

c'. ?? tumheN hindi    siikhnii caahie.    lekin yah  upyogii nahiiN
you-Dat   Hindi   learn     advisable. But  this  useful   not (is)
??'You ought to/should learn Hindi. But it is not useful.'

16.   a. tumheN gariiboN     kii sahaayataa karnii caahie
you-Dat the poor    of help       do      should
'You should help the poor.'

a'. ?? tumheN gariiboN    kii sahaayataa karnii  caahie.    lekin    dharm-granth aisaa
you-Dat   the poor    of help     do      is needed. But      religious books  this
nahiiN   kahte
not       say
??'You should help the poor. But no religious books say so.'

b. aapko        apne maaN-baap   kii sevaa karnii   caahie
you-Dat   your parents       of service do     is morally required
'You should/ought to look after your parents.'

b'. ?? aapko    apne maaN-baap kii sevaa karnii    caahie.         haalaaNki
you-Dat   your parents    of service do    is (morally) required.   However
   yah tumhaaraa kartavy     nahiiN
this   your        duty        not (is)
??'You should/ought to look after your parents. However, it is not your duty to do so.'

In example (16) the obligation imposed by *caahie* upon Agref is usually based on moral judgments made by the speaker, though sometimes, as in (15), it may be the expression of an assessment of a different kind. To prove the pragmatic constraints mentioned above, it would be sufficient to see the examples in (15) and (16). The acceptability of (15a'), (15b'), (15c'), (16a') and (16b') is pragmatically invalid in that if information is added to them with certain conjunctions (15a, 15b, 15c, 16a, 16b), utterances arise which are grammatically correct but pragmatically infelicitous.

The use of the construction *caahie* in the (past) imperfect tense requires the past form of the auxiliary *honaa*, i.e. *thaa,* and refers to unfulfilled actions such as in: 'You should have done that.'

17.   a. aapko         roj        duudh   piinaa caahie       thaa. lekin aapne
you-Dat   every day  milk    drink    advisable   was. But  you-hon-Erg
aisaa            nahiiN  kiyaa
such a thing   not     did
'You were supposed to drink/should have drunk milk every day. But you didn't do so.'

b. aapko   apne maaN-baap kii    sevaa karnii   caahie            thii. lekin

7

> you-Dat your parents of service do morally required was. But
>
> aapne yah nahiiN kiyaa
>
> you-hon-Erg that not did
>
> 'You should have looked after your parents. But you didn't do that.'

This use of *caahie* in the imperfect tense, however, given the proper shared knowledge and beliefs between speaker and addressee, may refer to an action still to be carried out by Agref, such as "[you haven't yet done so, but] you are still advised to VP." In such cases, though, the utterance does not contain explicit information that the action was not fulfilled.

### 4.2. *paRnaa*

The speaker, on certain grounds, considers it necessary for Agref to do *l* and also thinks that carrying out the action *l* would be a bit annoying for Agref, and knows further that Agref at least would not, if not obliged to do so, want to do *l*.

18. Speaker's strategy:
    a. S desires *p* (*p* = a proposition anchored in a conceived world $w_i$ different from $w_0$, in which Agref does *l* at time $t_i \geq t_0$ ).
    b. To achieve *p*, S utters a sentence involving *paRnaa*. There may or may not be an addressee, and the reference to Agref may be either the addressee, a third party, or the speaker herself.

19. S performs (18b) under one of the following conditions:
    a. She believes that Agref will not, under normal conditions, carry out *l*.
    b. She believes that Agref will not willingly carry out *l*.
    c. She believes that Agref will have difficulties in or will feel uneasy about carrying out *l*.

(19) is a statement about the speaker's beliefs concerning the likelihood of Agref's carrying out an action, while (20) explains the speaker's reasons for wanting Agref to carry out the action:

20. S performs (18b) because:
    a. She believes that Agref 's doing *l* would be useful either to S, to Agref or to a third party.
    b. She believes that not carrying out *l* would be harmful either to S, to Agref, to a third party.

21. Examples:
    a. tumheN duudh acchaa nahiiM lagtaa. lekin tumheN duudh piinaa
       you-Dat milk pleasing not is. But you-Dat milk drink
       paRegaa
       be obligatory-fut
       'You do not like milk. But you will have to drink it.'
    a'. ?? tumheN duudh acchaa lagtaa hai. lekin tumheN duudh piinaa paRegaa.
       you-Dat milk pleasing is. But you-Dat milk drink be oblig.-fut
       ??'You like milk. But you will have to drink it.'
    b. tumheN peruu jaane ke lie vah mazbuur kar rahaa hai. islie tumheN
       you-Dat Peru go for he compel-prog is. Therefore you-Dat
       vahaaN jaanaa paRegaa.
       there go be obligatory-fut
       'He is compelling you to go to Peru. Therefore, you will have to go there.'

8

b'. ?? tumheN peruu jaane ke lie koi nahiiN mazbuur kar rahaa. islie
you-Dat   Peru  go   for nobody   compel-prog (is).   Therefore
tumheN vahaaN jaanaa   paRegaa.
you-Dat there   go   be obligatory-fut
??'Nobody is compelling you to go Peru. Therefore, you will have to go there.'

c. tumheN peruu jaane meN bahut pareshaaniyaaN hoNgii. phir bhii   tumheN
   you-Dat Peru going in   many difficulties   be-fut. Nonetheless you-Dat

vahaaN jaanaa   paRegaa
there   go   be obligatory-fut
'You will face many difficulties in going to Peru. Nonetheless, you will have to go there.'

c'. ?? tumheN peruu jaane meN bahut pareshaanii hogii.   islie   tumheN
   you-Dat   Peru going in   many difficulties be-fut. Therefore you-Dat
vahaaN jaanaa   paRgaa.
there   go   be obligatory-fut
??'You will have many difficulties in going to Peru. Therefore, you will have to go there.'

The utterances (21a), (21b) and (21c) become infelicitous if further information is added to them with one of the conjunctions given in (21a'), (21b') and (21c'). To express unfulfilled actions under this kind of obligation, no past tense form can be employed. Instead, the past tense of *honaa* is used to indicate such an obligation. Other constructions can also be used to do so:

22.   a. tumheN   har roz   duudh   piine kii   zaruurat   thii
      You-Dat every day milk   drink of   necessity   was
      'You had to/used to have to drink milk every day.'

4.3. *honaa*

The speaker wants to remind Agref about a previous intention (or a normal obligation he has) to carry out a certain action:

23.   a. S desires $p$ ($p$ = a proposition anchored in a conceived world $w_i$, different from $w_0$, in which Agref does $l$ at time $t_i \geq t_0$ ).
   b. To fulfill her desire mentioned in (23a), i.e. $p$, S utters a sentence containing
      1. [V (active verb) + *honaa*] in the situations (9), (10) and (11)
      2. [V (to become or an anti-transitive verb) + *honaa*] in (12).

24. S does so under any of the following conditions:
   a. The speaker is not quite sure whether Agref still remembers his duty to carry out the action $l$ or she is under the impression that Agref may possibly have forgotten an action already planned by himself or required by some authority, internal or external.
   b. On the basis of all she knows, she believes that Agref 's carrying out $l$ would be a right action resulting from moral or other kind of obligations on Agref.

In (25) the different situations mentioned in (24) are exemplified based on the mutual knowledge of the speaker and the addressee:

25. Agref + ko (i.e. Dative Nominal) + Infinitive + honaa

a. tumheN     peruu jaanaa  hai.              tumhaare   vahaaN  jaane ke vicaar   haiN
   you-Dat    Peru go       is supposed to.   of yours   there   go  of plans      are
   'You are (supposed) to go to Peru. You have plans to go there.'

a'. ?? tumhaaraa  peruu jaane ke vicaar   nahiiN   haiN. islie       tumheN     vahaaN

    of yours       Peru go    of plans    not      are.  Therefore  you-Dat    there
    jaanaa   hai
    go       is supposed to
    ??'You have no plans to go to Peru. Therefore, you are (supposed) to go to there.'

a". ?? tumheN     peruu jaanaa  hai.              lekin yah  zaruurii    nahiiN
    you-Dat       Peru go       is supposed to.   But   this  obligatory  not (is)
    ??'You have to go to Peru. But there is no obligation to do so.'

b. tumheN     peruu jaanaa  hogaa.            yah  tay        hai
   you-Dat    Peru go       be supposed to-fut  This  decided  is
   'You will have to go to Peru. It is  decided.'

b'. ?? tumheN     peruu jaanaa  hogaa.            agar  na   jaao       to    koi
    you-Dat       Peru go       be supposed to-fut. If    not  go-subj   then  some
    baat      nahiiN
    problem not (is)
    ??'You will have to go to Peru. If you don't go, there will be no problem.'

b". ?? tumheN     peruu jaanaa  hogaa.            lekin yah  zaruurii    nahiiN
    you-Dat       Peru go       be supposed to-fut. But   this  necessary  not (is)
    ??'You will have to go to Peru. But this is not necessary.'

As can be seen from the examples above, the construction *honaa* expresses Agref's plan to carry out an action (in this case the speaker simply wants to inform the addressee of his duty to do so) or else, in the case of the use of the modal marker in the future tense, an obligation imposed by the speaker. While (25a) is an acceptable utterance, (25a') and (25a") are infelicitous. The same can be said of (25b) and its variants.

■ 5. COMMUNICATIVE LEVELING IN MUTUAL BELIEFS OF SPEAKER AND ADDRESSEE AND THE THREE HINDI CONSTRUCTIONS EXPRESSING DEONTIC MODALITY

As far as the use of the modal operator expressing necessity     and possibility ◊ is concerned, we find that each of the three modals expressing obligation imposed by the speaker is on a par with the other two. The only difference is that of the strength of the deontic modality they are to carry in a normal context and the different kinds of deontic modality they are intended to communicate in a given situation derived from the level of mutual knowledge between speaker and addressee. But their negative counterparts yield different formalisms.  For example, using the modal operator for necessity (the only possibility in this case), (9b) will have the reading given under (26):

26.   tumheM           peruu jaanaa  caahie/       paRegaa/          hogaa/hai
      you-Dat          Peru go       is advisable/  be obligatory-fut/  be supposed to-fut/pres
      'You ought to/(will) have to/are supposed to go to Peru.'

      =    p (i.e. 'It is necessary that p.')

The negative counterparts of these modals, however, indicate that they are not similar as far as their capacity to express deontic modality is concerned:

27. a. tumheM   peruu nahiiN  jaanaa  caahie
     you-Dat   Peru not       go       is advisable
     'You ought not (to)/should not go to Peru.'

   b. tumheM           peruu nahiiN  jaanaa  paRegaa
     you-Dat          Peru not      go      be obligatory-fut
     'You will not have to go to Peru.'
   c. tumheM           peruu nahiiN  jaanaa  hai
     you-Dat          Peru not      go      be supposed to-pres
     'You are not supposed to go to Peru.'
     (i.e., 'No one expects you to go to Peru.')
   d. tumheM           peruu nahiiN  jaanaa  hogaa
     you-Dat          Peru not      go      be supposed to-fut
     'You are not supposed to go to Peru.'
     (i.e., 'No one will expect you to go to Peru.')

Both (27a) and (27c) yield $\Box\neg p$, i.e., it is necessary that not p, while (27b) and (27d) do not give that kind of formalism, since the latter are not cases of directive, but rather of assertive illocution by means of which the speaker informs Agref about an exemption from obligation. (27c), however, being ambiguous, may yield another reading, since, as has been noted before, the present tense form of *honaa* may mean either the same as *caahie* or as *paRnaa*. Keeping in mind the dual functionality of *honaa*, (27) can be formally represented in the following way:

28. a.   $\Box\neg$p (i.e. 'It is necessary that not p.')
   b. $\neg$  $\Box$ p (i.e. 'It is not necessary that p.')
   c.   $\Box\neg$p (i.e. 'It is necessary that not p.')
   c'. $\neg$  $\Box$ p (i.e. 'It is not necessary that p.')
   d. $\neg$  $\Box$ p (i.e. 'It is not necessary that p.')

Therefore, one reading of (27c), namely (27c'), cannot be considered a case of deontic modality in which Agref is obliged to carry out an action: it is simply a case of informing Agref of the situation.
Most studies of mutual knowledge time and again stress the infinite nature of the tables of mutual knowledge between speaker and addressee as well as the difficulties the tables present in formally judging the nature of utterance meaning.

29.   LEVEL I[6]
    $B_s$ . $\Box$ p, and either
       {$B_s$ .¬$K_h$. $\Box$ p /
       ¬$B_s$ .$K_h$. $\Box$ p (= ◊.$K_h$ . $\Box$ p; ◊ .¬$K_h$. $\Box$ p)}

In other words, the speaker believes that $\Box$p ($\Box$p = 'It is necessary for the addressee to go to Peru.'), and, in addition, either she believes that the addressee does not know that $\Box$p or she does not know whether the addressee knows that $\Box$p (i.e., it is possible in this case that the addressee knows or does not know that $\Box$p).

30.   LEVEL II

$B_s$ .$K_h$ . p, and either
$\{B_s$ .$\neg K_h$ .$B_s$ . p /
$\neg B_s$ .$K_h$ .$B_s$ . p (= $\Diamond$ .$K_h$ . $B_s$ . p; $\Diamond$ .$\neg K_h$ .$B_s$ . p)$\}$

Thus, the speaker believes that the addressee knows that p, and, in addition, either she that the addressee does not know that p or she does not believe that the addressee knows that she believes that p. So it is possible that the addressee knows or does not know that she believes that p. This reflexive process of speaker/addressee knowledge/beliefs is considered by many researchers of cognition and communication to be infinite. At a certain point in the process, however, the information shared by the two communicating parties becomes redundant and therefore is of no particular interest as far as the use of the three modal particles discussed in this paper is concerned. The exact point at which the redundancy becomes evident will no doubt vary from situation to situation and will require further investigation in order to be understood properly. It will therefore not be discussed at this time.[7]

## ■ 6. CONCLUSION

As we have seen above, it is the pragmatic meaning intended by the speaker with these three Hindi modal constructions that makes them differ from one another. The constructions are not in a contrastive situation because one can be used in place of another given the right conversational settings. Their intended meanings, however, differ greatly and can be accounted for only through pragmatic explanations that require an in-depth understanding of the speaker's beliefs of the addressee's beliefs or knowledge. It is difficult to assign them all the possible meanings which they may have in different situations. It is possible, though, to arrange and list the contexts on the basis of which their intended meanings can be demonstrated. *Caahie*, in general, is used to communicate the speaker's wishes, whereas *paRnaa*, to put it simply, communicates her awareness of the obstacles Agref might encounter in carrying out the action desired by the speaker or imposed on Agref by outside forces. *Honaa*, on the other hand, in the appropriate communicative settings can play a dual role, i.e., it expresses an obligation or informs Agref of plans already made but not yet carried out.

## ■ REFERENCES

**Chierchia, Gennaro**, and **Sally McConnell-Ginet.** 1993. *Meaning and grammar*. Cambridge, MA: MIT Press.
**Geiger, Richard A.** (ed.) 1995. *Reference in multidisciplinary perspective*. Hildesheim/New York: Georg Olms Verlag.
**Grice, Paul.** 1989. *Studies in the way of words*. Cambridge, MA: Harvard University Press.
**Hoe, Leo.** 1997. *Adverbs and modality in English*. London: Longman.
**Hook, Peter E.** 1979. *Hindi structures: intermediate level*. (Michigan Papers on South and Southeast Asia, 16) Ann Arbor, MI: Center for South and Southeast Asian Studies, University of Michigan.
**Kachru, Yamuna.** 1980. *Aspects of Hindi Grammar*. New Delhi: Manohar Publications.
**Kratzer, Angelika.** 1981. The notional category of modality. *Words, worlds, and contexts: new approaches in word semantics*, ed. by H. Eikmeyer and Hannes Rieser. Berlin: Walter de Gruyter.

**Levinson, Stephen C.** 1983. *Pragmatics*. Cambridge: Cambridge University Press.

**Lyons, John.** 1977. *Semantics*. Vol. 2. Cambridge: Cambridge University Press.

**McGregor, R. S.** 1972. *Outline of Hindi Grammar*. Oxford: Clarendon Press.

**Mascica, Colin P.** 1991. *The Indo-Aryan languages*. (Cambridge Language Surveys) Cambridge: Cambridge University Press.

**Palmer, Ralph.** 1986. *Mood and modality*. Cambridge: Cambridge University Press.

**Perkins, Michael R.** 1983. *Modal expressions in English.* Norwood, NJ: Ablex Publishing Corporation.

**Schiffer S. R.** 1987. *Remnants of meaning*. Cambridge, MA: MIT Press.

**Searle, John R.** and **Daniel Vanderveken.** 1985. *Foundations of illocutionary logic*. Cambridge: Cambridge University Press.

**Shapiro, Michael C.** 1989. *A primer of Modern Standard Hindi*. Delhi: Motilal Banarsidass Publishers.

**Smith, N. V.** (ed.) 1982. *Mutual knowledge*. London/New York: Academic Press.

**Verma, Manindra K.** and **K. P. Mohanan.** (eds.) 1990. *Experiencer subjects in South Asian languages.* Stanford: CSLI.

---

[1] The NP being referred to here as 'agent' occurs of course normally with an action verb and, as far as I can see at this point, this represents the default case in such constructions. Other verb types are however possible and correspondingly sometimes demand non-agent NPs in the dative. Within the framework of this paper I will restrict myself to a discussion of the default case and defer discussions of the other cases to a later time.

[2] According to some Hindi grammars (Shapiro 1989: 132f.), the *caahie* form should agree with the gender and number of the object, but this type of agreement is not found in standard written Hindi, though it is possible to find it in some areas where, because of dialectal influence, certain forms showing this phenomenon can be found in informal Hindi.

[3] For a general discussion of this term see the Introduction to Verma & Mohanan (1990), pp. 2ff.

[4] In normal communicative situations it is only the singular 'I' that utters any sentence, but the singular speaker may speak also on behalf of a number of persons. For example, a representative of a political party can speak on behalf of all the members of the party.

[5] The pronominal system of address in Hindi has for a singular reference three forms, *tu, tum, aap*, and for a plural reference again three forms, *tum, tum log, aap log*. Of these only *tu* requires a verb in the second person singular; only *tum* requires a verb in the second person plural; the other three pronouns all require a verb in the third person plural. *Aap* and *aap log* are honorific forms used in situations where respect and politeness are being expressed by the speaker. *Tu* (always singular in reference) and *tum* (when it has a plural reference) are intimate forms used in situations of great informality.

[6] The explanation of the symbols used here are as follows:

$B_s$ = speaker believes
$B_h$ = addressee believes
$K_s$ = speaker knows
$K_h$ = addressee knows
. = that
? = whether
/ = or
$\lozenge$ = it is possible
$\neg$ = negation
{} = alternation bracket

[7] However, a formalization of the different levels of mutual knowledge and beliefs can be sketched (without explanatory discussion) in the following way:

<u>KNOWLEDGE:</u>
LEVEL I
$K_s$.P, and either
$\quad$ {$K_s$.$\neg K_h$ .P/
$\quad$ $\neg K_s$ ?$K_h$ .P (= $\lozenge$.$K_h$ .P; $\lozenge$ .$\neg K_h$ . P)}

13

LEVEL II
$K_s$ . $K_h$ .P, and either
    {$K_s$ .¬$K_h$ . $K_s$ . P/
    ¬$K_s$ ?$K_h$ .$K_s$ .P (= ◊ .$K_h$ . $K_s$ P; ◊ .¬$K_h$ $K_s$ .P)}

LEVEL III
$K_s$ .$K_h$ .$K_s$ .P,  and either
    {$K_s$ .¬$K_h$ .$K_s$ .$K_h$ .P/
    ¬$K_s$ . ?$K_h$ .$K_s$ .$K_h$ .P (= ◊ .$K_h$ .$K_s$ .$K_h$  .P; ◊ .¬$K_h$ .$K_s$ .$K_h$ .P)}

LEVEL IV
$K_s$ .$K_h$ .$K_s$ .$K_h$ .P, and either
    {$K_s$ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .P/
    ¬$K_s$ . ?$K_h$ .$K_s$ .$K_h$ .$K_s$ .P (=◊ .$K_h$ .$K_s$ .$K_h$ .$K_s$ .P;◊ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .P)}

LEVEL V
$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$ .P, and either
    {$K_s$ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .P/
    ¬$K_s$ . ?$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ P (= ◊ .$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .P; ◊ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .P)}

LEVEL VI
$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .P, and either
    {$K_s$ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$ P/
    ¬$K_s$ . ?$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$ P (= ◊ .$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$; ◊ .¬$K_h$ .$K_s$ .$K_h$ .$K_s$ .$K_h$ .$K_s$ P)}

**BELIEFS**:
LEVEL I
$B_s$ .P, and either
    {$B_s$ .¬$B_h$ .P/
    ¬$B_s$ ?$B_h$ .P (= ◊.$B_h$ .P; ◊ .¬$B_h$ . P)}

LEVEL II
$B_s$ . $B_h$ .P, and either
    {$B_s$ .¬$B_h$ . $B_s$ . P/
    ¬$B_s$ ?$B_h$ .$B_s$ .P (= ◊ .$B_h$ . $B_s$ P; ◊ .¬$B_h$ $B_s$ .P)}

LEVEL III
$B_s$ .$B_h$ .$B_s$ .P,  and either
    {$B_s$ .¬$B_h$ .$B_s$ .$B_h$ .P/
    ¬$B_s$ . ?$B_h$ .$B_s$ .$B_h$ .P (= ◊ .$B_h$ .$B_s$ .$B_h$  .P; ◊ .¬$B_h$ .$B_s$ .$B_h$ .P)}

LEVEL IV
$B_s$ .$B_h$ .$B_s$ .$B_h$ .P, and either
    {$B_s$ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .P/
    ¬$B_s$ . ?$B_h$ .$B_s$ .$B_h$ .$B_s$ .P (=◊ .$B_h$ .$B_s$ .$B_h$ .$B_s$ .P; ◊ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .P)}

LEVEL V
$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$ .P, and either
    {$B_s$ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .P/
    ¬$B_s$ . ?$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ P (= ◊ .$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .P; ◊ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .P)}

LEVEL VI
$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .P, and either
    {$B_s$ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$ P/
    ¬$B_s$ . ?$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$ P (= ◊ .$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$; ◊ .¬$B_h$ .$B_s$ .$B_h$ .$B_s$ .$B_h$ .$B_s$ P)}