1. Introduction

This paper explores the semantic contribution of the Hindi emphatic particle hii. Hindi speakers often employ hii in conjunction with focus. As an example, take a simple sentence like in (1), where Aatish is focused. It is common to place hii after the focused constituent, as in (2).

(1) Aatish₁ ne Upasana ko kiss kiya.
    Aatish   ERG Upasana ACC kiss do-PAST
    'Aatish kissed Upasana.'

(2) Aatish₁ ne hii Upasana ko kiss kiya
    Aatish   ERG hii Upasana ACC kiss do-PAST
    'Aatish kissed Upasana.'

Interestingly, the use of hii in (2) results in different readings, which become salient in different contexts. One common salient reading is ‘Only Aatish (and nobody else) kissed Upasana.’ However, a context can allow for a scalar reading like ‘Just Aatish (and nobody better) kissed Upasana.’ Many speakers also get an intensifying reflexive interpretation like ‘Aatish himself kissed Upasana’ or a cleft reading like ‘It was Aatish that kissed Upasana.’

The goal of this paper is to determine what hii contributes to a sentence like (2), where a proper name is associated with hii. I will present evidence that hii’s meaning contribution is pragmatic rather than truth-conditional. Specifically, hii will be shown to carry two particular presuppositions – an ‘only’ presupposition, and an ‘even’-like presupposition.

Section 2 will discuss the motivating empirical data, and Section 3 will then present a classical analysis for English only and even. Section 4 will detail my own analysis for hii. Then the following two sections will describe how my analysis explains two particular puzzles about hii; Section 5 will explain sirf (Hindi only) and hii associating with the same focused constituent, while Section 6 will discuss hii with sentential negation. Section 7 will then conclude and summarize the paper.

2. Motivating Data

A very common observation is that hii is like only. Bhatt (1994) observed that in a basic sentence like (2), hii readily translates to English quantificational only. This can be seen by evaluating the sentence in two common situations, like in (3). Suppose men named Aatish, Deepak, and Vijay are all possible people to have kissed a woman named Upasana.

(3) a. Situation 1: Aatish kissed Upasana, Deepak didn’t kiss Upasana, and Vijay didn’t kiss Upasana.
    b. Situation 2: Aatish kissed Upasana, Deepak kissed Upasana, but Vijay didn’t kiss Upasana.

In Situation 1, (2) evaluates as true, but in Situation 2, where somebody other than Aatish has kissed Upasana, (2) evaluates to false. This is the same patterning of truth conditions for English only in the sentence 'Only Aatish kissed Upasana.'

It is unsurprising then that the descriptive and theoretical literature has generally stated that *hii* is restrictive or exclusive in nature. Nevertheless, *hii*'s nuanced meanings are hinted at as well. Sharma (1999) says there is a complex functional range for *hii*. McGregor (1972) and Imai (1981) refer to an emphatic type of role of *hii*. Also Bhatt (1994) has described *hii* as a marker of discourse-grounded status. Beyond this, there has not been an attempt to define a semantic/pragmatic role of *hii*.

*sirf*, the Hindi word for *only*, can grammatically mark the same constituent that *hii* does. Bhatt remarks that (4) gives the same truth conditions as using *hii* alone, or *sirf* alone, for the situations in (3).

(4) *Sirf* Aatish\(_F\) ne hii Upasana ko kiss kiya
only Aatish ERG hii Upasana ACC kiss do-PAST

'Only Aatish kissed Upasana.'

If *hii* is semantically equivalent to *sirf*, then it needs to be explained how there can be a single 'only' reading when both are combined. To explain this, Verma (1971) suggested that sentences like (2) actually always have a covert *sirf* (or *bas* or *keval*, also words for 'only' in Hindi). Under this analysis, the covert *sirf* is what actually contributes the truth condition of *only*, while *hii* serves only to overtly delimit the right edge of the focused constituent.

Thus, according to Verma, *hii* is merely a spellout of the focus marking. Unfortunately, this does not explain some other behavior of *hii*, illustrated by the paradigm in (5). The data shows that two constituents marked with *hii* within a single clause leads to ungrammaticality.

(5) a. *Aatish\(_F\) ne hii Upasana\(_F\) ko hii kiss kiya.
Aatish ERG hii Upasana ACC hii kiss do-PAST

b. *Aatish\(_F\) ne Upasana\(_F\) ko kiss kiya.
Aatish ERG Upasana ACC kiss do-PAST

'Aatish kissed Upasana.'

c. *Sirf* Aatish\(_F\) ne *sirf* Upasana\(_F\) ko kiss kiya.
only Aatish ERG only Upasana ACC kiss do-PAST

'Only Aatish kissed only Upasana.'

It is rather curious that two instances of *sirf* are grammatical in (5c), and similarly the case with multiple occurrences of contrastive focus alone, without the use of a particle, as in (5b). Thus, it cannot be that *hii* is just a spellout of focus, nor that *hii* is just *only*. There must be something about *hii* that sets it apart from *only* and *sirf*, and from the use of contrastive focus alone.

Furthermore, if *hii* is in a negated environment, like in (6), some speakers are able to obtain an even-like reading for it from the use of *hii*. This is brought out in (6b). The most salient reading is the *only-not* reading in (6a), but in (6b), the *even* reading of the same sentence is brought out by adjusting the followup context.

(6) a. *Aatish\(_F\) ne hii Upasana ko kiss nahiiN kiya.
Aatish ERG hii Upasana ACC kiss NEG do-PAST Rest all people ERG do-PAST

'Only Aatish didn’t kiss Upasana. Everyone else did.'

b. *Aatish\(_F\) ne hii Upasana ko kiss nahiiN kiya.
Aatish ERG hii Upasana ACC kiss NEG do-PAST So more who kiss do-FUT

'Even Aatish didn’t kiss Upasana. So else will?'

This set of data brings out an 'even' meaning component of *hii* that needs to be accounted for. Simply giving *hii* equivalence with *sirf* and *only* therefore cannot satisfy this.

To summarize, then, the issue to be addressed in this paper is how it is that a single particle *hii* can contribute an exclusive sense of *only* and a scalar sense akin to *even*. The goal is to define *hii* in a flexible enough way that can accommodate both of these different senses.
3. Regarding only and even

Because of the similarity of hii with only and even, it is helpful to start with an analysis of these two words in English. Rooth (1992) and Rooth (1996) analyze only as in (7) and even as in (8).

(7) only (p)
Presupposes: p
Asserts: ∀p′ [(p′ ∈ C & ∨p′) → p′ = p]

(8) even (p)
Presupposes:
  a. ∃p′ [p′ ∈ C & ¬(p = p′) & ∨p′]
  b. ∀p′ [[p′ ∈ C & ¬(p = p′)] → p′ ≻likely p]
Asserts: p

According to this analysis, a statement with only is true if the asserted proposition is the only true one amongst the contextually-given set of alternatives in C. Rooth, like Horn (1969), assumes that the prejacent is presupposed to be true. even is truth-conditionally vacuous, but has one presupposition of existence, and another scalar presupposition, stating that the prejacent should be the least likely of the alternatives.

4. An Analysis for hii

I propose the analysis given in (9), whereby hii encodes two presuppositions. (9) posits that hii is truth-conditionally vacuous, but has an exclusive and a scalar presupposition.

(9) hii (p)
Presupposes:
  a. ∀p′ [(p′ ∈ C & ∨p′) → p′ = p]
  b. ∀p′ [[p′ ∈ C & ¬(p = p′)] → p ≻likely p′]
Asserts: p

The exclusive presupposition in (9a) lends the only sense, while the scalar presupposition in (9b) provides a meaning similar to even, but selecting for the most likely rather than least likely proposition.

The evidence for the exclusivity of hii derives from the fact that we cannot follow up Aatish ne hii Upasana ko kiss kiya with adding that somebody else had kissed Upasana as well, as shown in (10). The same holds for sirf and only. In both cases, the exclusive requirement cannot be canceled.

(10) a. Aatish ne hii Upasana ko kiss kiya, #aur Vijay ne bhii kiya.
    Aatish ERG hii Upasana ACC kiss do-PAST and Vijay ERG also do-PAST
    ‘Aatish kissed Upasana, #and Vijay did too.’

 b. Sirf Aatish ne Upasana ko kiss kiya, #aur Vijay ne bhii kiya.
    ‘Only Aatish ERG Upasana ACC kiss do-PAST and Vijay ERG also do-PAST
    ‘Only Aatish kissed Upasana, #and Vijay did too.’

A scalar requirement needs to be specified on hii for the asserted proposition to be the most likely proposition amongst the alternatives, as evidenced by an overt wh-question. If asking Who kissed Upasana? in (11), there is a difference between answering with sirf, and answering with hii.

(11) Kis ne Upasana ko kiss kiya?
who ERG Upasana ACC kiss do-PAST
    ‘Who kissed Upasana?’

 a. Sirf Aatish/Vijay/Deepak ne Upasana ko kiss kiya.
     only Aatish/Vijay/Deepak ERG Upasana ACC kiss do-PAST
     ‘Only Aatish/Vijay/Deepak kissed Upasana.’
Thus, there is a felicity condition dealing with likelihood when using the most likely individual to have kissed Upasana. Only Aatish fulfills this requirement in this context. Only Aatish/#Vijay/#Deepak kissed Upasana."

(11) can be answered with Sirf Aatish ne Upasana ko kiss kiya, Sirf Vijay ne Upasana ko kiss kiya, or Sirf Deepak ne Upasana ko kiss kiya with no further restrictions on the context. However, with Aatish ne hii Upasana ko kiss kiya, there is a contextual requirement that must hold. Assume we have a background assumption that Aatish and Upasana are a couple. Now take the situation where Deepak kissed Upasana, Aatish did not kiss Upasana, and Vijay did not kiss Upasana. Here it is perfectly acceptable to answer ‘Who kissed Upasana?’ with Sirf Deepak ne Upasana ko kiss kiya. However, it is not felicitous to describe this situation with Deepak ne hii Upasana ko kiss kiya. It is only acceptable to assert X ne hii Upasana ko kiss kiya when X is the sole kisser of Upasana, and furthermore when X is assumed to be the most likely individual to have kissed Upasana. Only Aatish fulfills this requirement in this context. Thus, there is a felicity condition dealing with likelihood when using hii.

This is going beyond Bhatt’s observation that hii must associate with an NP that is discourse-grounded in some way. I propose here with (9) that it is not only the case that the name associated with hii should be already in the discourse, but it must to be related to the other propositional alternatives in such a way that it is the most likely or the most expected in the context to have the property in question.

5. sirf with hii

Recall that a constituent can be acceptably double-marked with sirf and hii, and moreover still yield a single exclusive meaning, as in (4). This puzzle now has an explanation, with the analysis for hii defined in the previous section. First we need to determine whether hii takes narrow scope or wide scope with respect to sirf, and also determine which scopal relationship gets the proper felicity conditions for the reading. We can determine which scopal relationship satisfies the felicity conditions by calculating the denotation of both LF’s. (12) shows the calculation for sirf taking narrow scope with respect to hii; (13) shows the calculation for sirf taking wide scope with respect to hii.

(12) a. \([Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya] \circ = \text{kissed(a, u)}\)
   b. \([\text{sirf}(Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya)] \circ = \forall p' [(p' \in C \& \nabla p') \Rightarrow p' = \text{kissed(a, u)}]\)
   c. \([\text{hii}(\text{sirf}(Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya))] \circ = \forall p' [(p' \in C \& \nabla p') \Rightarrow p' = \text{kissed(a, u)}]\)

(13) a. \([Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya] \circ = \text{kissed(a, u)}\)
   b. \([\text{hii}(Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya)] \circ = \text{kissed(a, u)}\)
   c. \([\text{sirf}(\text{hii}(Aatish_F \ ne \ Upasana \ ko \ kiss \ kiya))] \circ = \forall p' [(p' \in C \& \nabla p') \Rightarrow p' = \text{kissed(a, u)}]\)

Truth-conditionally, (12) and (13) are equivalent. However, due to the differing placement of hii, the scalar presupposition trigger, the likelihood requirements differ between the two. If hii takes wide scope with respect to sirf, as in (12c), sirf combines with the proposition first, and the alternatives fed into hii are of the form Only X kissed Upasana. By the scalar presupposition, this requires that Only Aatish kissed Upasana is more likely than Only Vijay kissed Upasana and Only Deepak kissed Upasana. If instead hii takes narrow scope with respect to sirf, as in (13c), the alternatives for the likelihood ranking are simply of the form X kissed Upasana. This is exactly what the sentence requires of the context – that Aatish kissed Upasana be more likely than Deepak kissed Upasana and Vijay kissed Upasana. Thus (9) accounts for both the right truth conditions and the proper presuppositional requirements for Sirf Aatish ne hii Upasana ko kiss kiya with the LF in (13c).

6. hii with sentential negation

Lastly, I will present the puzzle posed by a sentence in which sentential negation used along with hii gives rise to two potential readings. Bhatt noticed that one reading is an only-not reading, and another is a not-even reading, as described in the Introduction and brought out in (6).
Not all speakers are able to get both of these readings, but ideally an account for *hii* should be able to account for the two situations in (14).

(14)  
a. **Background Context:** Aatish and Upasana are known to be a couple.  
**Situation:** Aatish didn’t kiss Upasana, Deepak didn’t kiss Upasana, Vijay didn’t kiss Upasana.

b. **Background Context:** N/A  
**Situation:** Aatish didn’t kiss Upasana, Deepak kissed Upasana, Vijay kissed Upasana.

As with the case of *sirf* and *hii*, there are two possible scopal relationships in the negated environment. If we look at the LF with *hii* taking narrow scope with respect to negation, we get the requirements we need to elicit the (14a) reading, which is a *not-even* reading. Aatish kissing Upasana should be the most likely, which is if the context has it that they are a couple. The exclusive presupposition requires that if anybody kissed Upasana, it should have been Aatish; nobody did, so this is vacuously satisfied.

If *hii* takes wide scope over negation, then we get the right exclusive requirement for (14b), in that Aatish should be the only one to have not kissed Upasana. However, the scalar presupposition needs to be taken into consideration as well, and unfortunately this is where the problem is. It seems that it does not matter who was the most likely to kiss Upasana; the only requirement is that Aatish is the only one who did not in the situation. Somehow, the scalar presupposition needs to be eliminated in this case, though according to the analysis, it needs to hold whenever *hii* is employed.

I leave for further research the question of whether the scalar inference can be canceled to accommodate this reading, and if so, how this can be done in a principled way.

7. Conclusion

In this paper, I have shown that *hii* has an exclusive meaning component like *only*, as is often thought, but it also has a meaning component that forces an ordering amongst the propositions it is being compared against. This scalar presupposition is where *hii* bears some similarity with the classical analysis of English *even*. Putting aside the fact that *even* has an extra presupposition that requires existence, *hii* is the "opposite" of *even*, in picking out the most likely proposition, rather than the least likely.

Defining exclusive and scalar felicity conditions on the use of *hii* provides us with an explanation for why a focused constituent can be double-marked with both *sirf* (Hindi *only*) and *hii*, and also sheds light on how we might ultimately explain why *hii* in negated sentences yields both an *only-not* and *not-even* reading.

References


