

Absolute and Relative Scalar Particles in Spanish and Hindi

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Proceedings of the Twenty-Sixth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on Aspect (2000), pp. 225-233

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The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](http://eLanguage.org), the Linguistic Society of America's digital publishing platform.

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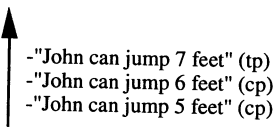
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1. Introduction

Kay's (1990) study of the scalar particle *even* is groundbreaking for its analysis of the particle's sensitivity to features of the discourse context:

- (1) A: Can John jump 6 feet?
B: Yes, he can **even** jump 7 feet.

In (1), *even* "marks the proposition expressed by the clause or fragment in which it occurs as MORE INFORMATIVE than some other [contextual] proposition" in the same scalar model (Kay 1990:69; emphasis added). The more informative, *even*-marked, "text proposition" (tp) pragmatically entails the less informative "context proposition" (cp) within a scalar model like the one schematized in (2) below. Kay's analysis therefore relativizes the vague Gricean notion of "informativeness" to scalar models.

- (2)
- 
- An
- "John can jump 7 feet" (tp)
- "John can jump 6 feet" (cp)
- "John can jump 5 feet" (cp)

important consequence of Kay's analysis is that *even* cannot be linked invariably to "end-of-scale" propositions (contra prior analyses, e.g. Fauconnier 1975). However, despite Kay's analysis, the view that *even* invariably marks a scalar endpoint continues to be widespread, and is assumed even by scholars who explicitly accept Kay's analysis, as the following quotes illustrate:

[W]hat all of the accounts [of *even*] share is the claim that *even* introduces a scale of unlikelyhood, or negative expectation, the **highest position** on which is occupied by the referent of the expression in the scope of *even*. (Dancygier 1998:161-2)

Even is associated with the **lowest** member of the scale for which the proposition is asserted. (Lee and Horn 1995:15)

- (13) a. Even Peewee lifted the rock.

What *even* ... contribute[s] to the context are presuppositions that *S* [=speaker] treats as noncontroversial: ... that others (in the context set) lifted the rock and that Peewee was the **least likely** member of this set to have done so ... (Horn 1996:306)

Exactly WHY these analyses have persisted in associating *even* with scalar endpoints is a question that we are not able to answer fully. However, the following proposed explanation is probably on the right track:

Probably folks continue to refer to EVEN as end-of-scale all these years after Kay 1990 because it's easier and for most purposes the distinction [between end-of-scale and non-end-of-scale] doesn't matter. (Larry Horn, email message, 1/22/00)

In the rest of this paper, we demonstrate that this distinction DOES matter for a comprehensive semantic/pragmatic account of pairs of scalar particles in Spanish and Hindi. These languages provide clear evidence for distinguishing between what Schwenter (1999, 2000) has termed "absolute" (endpoint-marking) and "relative" (non-endpoint-marking) particles.

2. "Even" in Spanish and Hindi

Our analysis concentrates on two pairs of scalar additive particles in Spanish (*incluso/hasta*) (Schwenter 1999, 2000) and Hindi affixes (*-bhii/-tak*) (Vasishth 1998). These particles are in some respects "interchangeable" in their respective languages, and all can be considered translation equivalents of English *even*.

- (3) **Incluso/Hasta** Pablo vino a clase.
'Even Pablo came to class.'
- (4) **Riinaa-bhii/-tak** klaas-mē aayii.
Reena-BHII/-TAK class-in came
'Even Reena came to class.'

The specific dialects we are analyzing here are Peninsular (European) dialects of Spanish (consultants from Alicante, Madrid, Valencia, Zaragoza). Our data for Hindi come from the Delhi variety of Northern Hindi.

The meaning of the particles are similar in two respects. First, both pairs of particles are SCALAR: they can be understood as situating Pablo in (3) and Reena in (4) at an "extreme" point on a scale that ranks students according to their (un)likelihood of coming to class, similarly to *even* in (1) above. Second, both particles in each language are ADDITIVE: they entail that other students more likely (or less unlikely) to come to class than Pablo/Reena also came to class today. This component of meaning is further evidenced by (5) and (6), where the additive interpretation cannot be cancelled felicitously (# = pragmatic infelicity):

- (5) **Incluso/Hasta** Sara vino hoy a clase, #pero no vino nadie más.
'Even Sara came to class today, but nobody else did.'
- (6) **Siimaa-bhii/-tak** aaj klaas-mē aayii, #lekin aur-koi nahī aayaa.
Seema-BHII/-TAK today class-in came but other not came
'Even Seema came to class today, but nobody else did.'

Without the presence of the particle(s), any implicature that other students besides Sara/Seema also came to class can be cancelled felicitously, as shown by (7) and (8). This is evidence that the particles themselves contribute the additive meaning to the sentence.

- (7) Sara vino hoy a clase, pero no vino nadie más.
'Sara came to class today, but nobody else did.'

- (8) Siimaa aaj klaas-mẽ aayii thii, lekin aur-koi nahĩ aayaa.
 Seema today class-in came was but other not came
 'Seema came to class today, but nobody else did.'

Despite the parallelism between the particles in the preceding examples, it is noteworthy that native speakers assess the versions with *hasta/-tak* to be "stronger" or "more emphatic" than the versions with *incluso/-bhii*. To our knowledge, no previous explanation of this intuition has been offered. In the next two sections we provide a precise account of where the semantic/pragmatic differences between the two particles in each language are to be found; the analysis explicates the intuition that *hasta/-tak* are "stronger" than *incluso/-bhii*.

3. Contextual Dependence

There are clear differences between *hasta/-tak* and *incluso/-bhii* with respect to their degree of dependence on the information structure of the prior discourse context. Specifically, *incluso/-bhii* require that the proposition they mark be more informative than ANOTHER proposition on the same pragmatic scale which is already accessible in the context (as does *even*). In contrast, *hasta/-tak* do not exhibit this requirement. Compare first the differences found in responses to WH-questions, where *hasta/-tak* are fully felicitous, but *incluso/-bhii* are odd:

- (9) A: ¿Quién ha comido oreja de cerdo?
 'Who ate pig's ear?'
 B: **Hasta/#Incluso** mi abuela la ha comido.
 'HASTA my grandma ate it.'
Hasta/#Incluso mi abuela.
 'HASTA my grandma.'
- (10) A: kis-ne bakri-kii aankhe khaayĩ?
 who goat's eyes ate
 'Who ate goat's eyes?'
 B: Meri daadii-**tak**-ne/#-ne-**bhii** khaayĩ.
 My grandma-TAK-erg ate
 'My grandma-TAK ate it.'

Crucially, however, once a (less informative) scalar proposition is made accessible (i.e. at least "inferred" in Prince's [1992] terms) in the discourse context, *incluso/-bhii* become felicitous in the response (note that *hasta/-tak* would also be felicitous in [11] and [12], as would *even* in English):

- (11) A: ¿Quién ha comido oreja de cerdo?
 'Who ate pig's ear?'
 B: Pues yo (la he comido) e **incluso** mi abuela (la ha comido).
 'Well I (ate it) and INCLUSO my grandma (ate it).'
- (12) A: kis-ne bakri-kii aankhe khaayĩ?
 who goat's eyes ate
 'Who ate goat's eyes?'
 B: mai-ne khaayĩ aur meri daadii-ne-**bhii** khaayĩ.
 I ate and my grandma-erg-BHII ate
 'I ate it and my grandma-BHII ate it.'

Further evidence for the accessible context proposition (cp) requirement comes from yes/no question contexts. As (13) shows, both particles are felicitous in the response to this kind of question:

- (13) A: ¿Has comido oreja de cerdo?
 'Did you (sg.) eat pig's ear?'
 B: (Sí.) **Hasta/Incluso** mi abuela la ha comido.
 '(Yes.) HASTA/INCLUSO my grandma ate it.'

In (13), a cp of the form "B ha comido oreja de cerdo" ('B ate pig's ear') is accessible from the content of the yes/no question, thereby permitting the *incluso*-prefaced response. The same result is found for *-bhii* in Hindi, as shown by (14):

- (14) A: kyaa tum-ne bakri-kii aankhe khaayī?
 Q you-erg goat's eyes ate
 'Did you (sg.) eat goat's eyes?'
 B: (Hāā.) Meri daadii-**tak**-ne/-ne-**bhii** khaayī.
 (Yes) My grandma-TAK-erg/-erg-BHII ate
 '(Yes.) My grandma-BHII-TAK ate it.'

In sum, the examples presented above show that *incluso*/-*bhii* but not *hasta*/-*tak* REQUIRE that a proposition on the same pragmatic scale be accessible in the prior discourse context, or infelicity will result. Another (naturally-occurring) example corroborates this requirement:

- (15) [Mother watching her son playing with a new toy. NOTHING ELSE has been said about the toy]
 Ese juguete es **hasta** (#**incluso**) peligroso.
 'That toy is HASTA dangerous.'
 [A.C.A., 7/31/98]

In (15) the mother's *hasta*-marked utterance situates the toy in question on a scale of attributes. The attribute *peligroso* 'dangerous' is presented as maximally distant from the scalar "norm" for toy attributes. The alternate version with *incluso* is infelicitous because no other mention of toy attributes has been made in the discourse context. Once such mention has been made, an *incluso*-marked utterance becomes felicitous (16):

- (16) A: Ese juguete es feo.
 'That toy is ugly.'
 B: E **incluso** peligroso.
 'And INCLUSO dangerous.'

Identical restrictions hold for an "out of the blue" utterance in Hindi (17); however, like *incluso* in (16), *-bhii* can recover its felicity given the appropriate prior discourse context, as (18) illustrates:

- (17) [Same context as in (15)]
 Ye khilonaa-to bacce-kii jaan-**tak**/#-**bhii** le saktaa hai.
 this toy-top child's life-TAK take can is

- (18) A: 'This toy can kill-TAK a child.'
 Ye khilonaa-to bahut badsuurat hai.
 this toy-top very ugly is
 'This toy is really ugly.'
 B: Ye-to bacce-kii jaan-**bhii** le saktaa hai.
 this-top child's life-BHII take can is
 'And it can kill-BHII a child.'

4. Scalar "Strength"

The particles' differing degrees of dependence on context, illustrated in the previous section, is linked to the differing degrees of scalar "strength" they express, and specifically to whether or not the particle invariably marks scalar endpoints. To illustrate this more clearly, assume the pragmatic scale in (19). On this scale, propositions satisfying the schema " α came to the party" are ordered with respect to the unlikelihood that α actually came to the party (i.e. propositions higher on the scale are less likely to be true):

- (19)
- 

-"Z came to the party"
 -"Y came to the party"
 -"X came to the party"

The felicity of B's responses in (20) and (21) demonstrate that *incluso/-bhii* do not signal a fixed point—and therefore do not signal an endpoint—on a pragmatic scale. Indeed, each particle is compatible with BOTH non-endpoint and endpoint interpretations.

- (20) A: ¿Vino X a tu fiesta?
 'Did X come to your party?'
 B: No sólo X, **incluso** vino Y e **incluso** Z.
 'Not only X, INCLUSO Y came and INCLUSO Z came.'
- (21) A: kyaa X tumharii paartii-mē aayii?
 Q X your party-in came
 'Did X come to your party?'
 B: X-hii nahī, Y-**bhii** aur Z-**bhii** aayii.
 X-only not, Y-BHII and Z-BHII came
 'Not only X, but Y-BHII and Z-BHII came.'

In (20) and (21), speaker B can use *incluso/-bhii* to "climb the scale" of persons ranked by their unlikelihood of attending the party. There is no contradiction in repeating *incluso/-bhii* (or *even*, as Kay [1990] has argued).

In stark contrast to *incluso/-bhii*, the particles *hasta/-tak* are infelicitous when repeated, since they result in a contradiction between the two focused elements:

- (22) A: ¿Vino X a tu fiesta?
 'Did X come to your party?'
 B: #No sólo X, **hasta** vino Y y **hasta** Z.
 'Not only X, HASTA Y came and HASTA Z came.'

- (23) A: kyaa X tumharii paartii-mē aayii?
 Q X your party-in came
 'Did X come to your party?'
 B: #X-hii nahī, Y-tak aur Z-tak aayii.
 X-only not, Y-TAK and Z-TAK came
 'Not only X, but Y-TAK and Z-TAK came.'

The contradiction in (22-23) derives from the scalar endpoint-marking value of *hasta/-tak*, as opposed to the non-endpoint-marking value of *incluso/-bhii*, seen in (20-21) above. By marking Y with *hasta/-tak*, speakers commit themselves to an interpretation in which Y is considered the most extreme value on the pragmatic scale in question. Thus it is not possible to also mark Z with *hasta/-tak*.

The contradiction which arises in (22-23) is the same one found in durative (prepositional) uses of *hasta*. Compare (24a) and (24b):

- (24a) Viajaron **hasta** Holanda.
 'They traveled as far as Holland.'
 (24b) *Viajaron **hasta** Holanda y **hasta** Rusia.
 'They traveled as far as Holland and as far as Russia.'

Once it is made clear that the trip in question consisted of two (or more) temporally separate legs, then the sentence is fine:

- (24c) Viajaron **hasta** Holanda y *luego* **hasta** Rusia.
 'They traveled as far as Holland and *then* as far as Russia.'

Exactly the same restrictions hold for Hindi *-tak* in its durative use, as illustrated by the examples in (25):

- (25a) Riinaa pichle saal amriikaa-tak ho-kar aayii.
 Reena last year America-TAK go came
 'Last year Reena traveled as far as America.'
 (25b) *Vo pichle saal amriikaa-tak aur austreliaa-tak ho-kar aayii.
 She last year America-TAK and Australia-TAK go came
 'Last year she traveled as far as America and as far as Australia.'
 (25c) Vo pichle saal amriikaa-tak aur *uske-baad* austreliaa-tak ho-kar aayii.
 She last year America-TAK and that-after Australia-TAK go came
 'Last year she traveled as far as America and *then* as far as Australia.'

5. Interactions with Other Constructions

5.1. Concessive Conditionals

It is typical to analyze concessive conditionals expressing the meaning of "even if p, q" as asserting that q holds "no matter what" (König 1986; Iatridou 1994; Montolio 1999). However, the "no matter what" reading appears to be conversationally implicated, as illustrated by the contrast between (26a) and (26b). In (26a), there is a potential implicature that class will be held no matter what, but (26b) shows that this implicature can be cancelled by the addition of a more extreme condition under which q will no longer hold:

- (26a) Even if it snows, we're going to have class.
 (26b) Even if it snows, we're going to have class, but if we get hit by a blizzard, class will be cancelled.

What (26b) shows, then, is that concessive conditionals assert "extreme" but not "endpoint" conditions: they simply effect a comparison between some condition which pragmatically entails that *q* will occur under "less extreme" conditions (e.g., when weather is "normal").

Given this fact about concessive conditionals, and the differences seen above between the two sets of particles with respect to endpoint-marking, we predict that *incluso/-bhii*, but not *hasta/-tak* will be compatible with concessive conditional constructions. This is indeed what we find in (27) and (28):

- (27) **Incluso/#Hasta** si llueve, van a jugar el partido.
 'Even if it rains, they're going to play the game.'
 (28) **Agar baarish-bhii/#-tak** ho ham jaaenge.
 if rain-BHII happens we will-go
 'Even if it rains, we'll go.'

The asymmetry between the Spanish particles in concessive conditionals is further supported by spoken and written corpus data. In the Real Academia Española's online CREA corpus (~150 million words), over 200 examples of *incluso si* concessive conditionals are found, as opposed to a mere five examples introduced by *hasta si*. Crucially, every example of an *hasta si* concessive conditional is clearly construable as marking an endpoint condition, thereby implying that the main clause proposition *q* does indeed hold "no matter what".

5.2. Comparative Sentences

Given the inherently relative nature of comparative sentences, especially comparatives of "inequality", we predict that *incluso/-bhii* will be the preferred choices in these contexts as well. This prediction is again borne out by the data:

- (29a) Javier es **incluso/#hasta** más inteligente que Marta.
 'Javier is even more intelligent than Marta.'
 (29b) Javier es **incluso/#hasta** menos inteligente que Marta.
 'Javier is even less intelligent than Marta.'
 (30a) Riiṭaa-to Ravi-se-**bhii/#-tak**-se zyaadaa akalmand hai.
 Rita-top Ravi-than-BHII more intelligent is
 'Rita is even more intelligent than Ravi.'
 (30b) Riiṭaa-to Ravi-se-**bhii/#-tak**-se kam akalmand hai.
 Rita-top Ravi-than-BHII less intelligent is
 'Rita is even less intelligent than Ravi.'

However, if what one wishes to express is not only a relative comparison between two entities, but also the endpoint status of one entity, then either particle is felicitous as the endpoint marker (recall that *incluso/-bhii*, though not inherently endpoint-marking, are nonetheless compatible with endpoints):

- (31) Javier es **incluso** más inteligente que Marta. De hecho, es **incluso/hasta** el más inteligente de toda la clase.
'Javier is even more intelligent than Marta. In fact, he's even the most intelligent in the whole class.'
- (32) Riitaa-to Ravi-se-**bhii** zyaadaa akalmand hai.
Rita-top Ravi-than-BHII more intelligent is.
Asal-mē, vo saarii klaas-se-**bhii/-tak**-se zyaada akalmand hai.
in-fact, she whole class-than-BHII/-TAK-than more intelligent is
'Rita is even more intelligent than Ravi. In fact, she is smarter than the entire class.'

6. Conclusion

In this paper, we have demonstrated that the distinction between absolute (inherently endpoint-marking) and relative (not inherently endpoint-marking) scalar particles, first proposed by Schwenter (1999) for Spanish, has cross-linguistic validity, as shown by the parallel Hindi distinction between *-tak* and *-bhii*. In addition, we have shown that the contextual dependence and "scalar strength" of scalar additive particles are properties which are not independent of each other. Rather, a particle's scalar strength is derivable as a consequence of its contextual requirements.

In broader cross-linguistic perspective, a prediction that can be made based on the foregoing analysis is the following: if a language has only one scalar additive particle, it will be relative, not absolute, in nature, since the former type is compatible with both non-endpoint and endpoint interpretations. This prediction is already supported by English, whose only scalar additive particle (*even*) is of the relative type. Put a bit differently, our claim is that the inherently comparative meaning of relative scalar particles is more basic with respect to communicative function. Absolute scalar particles, which by definition require no anchoring to a contextually-accessible proposition, must necessarily signal the endpoint of a pragmatic scale. As a result, they have a domain of application which is considerably more restricted than that of relative scalar particles.

References

- Dancygier, Barbara. 1998. *Conditionals and prediction*. Cambridge: Cambridge University Press.
- Fauconnier, Gilles. 1975. Pragmatic scales and logical structure. *Linguistic Inquiry* 6: 353-375.
- Horn, Laurence R. 1996. Presupposition and implicature. In S. Lappin (ed.) *Handbook of contemporary semantic theory*, 299-319. Oxford: Blackwell.
- Iatridou, Sabine. 1994. On the contribution of conditional *then*. *Natural Language Semantics* 2: 171-199.
- Kay, Paul. 1990. Even. *Linguistics and Philosophy* 8: 59-111.
- König, Ekkehard. 1986. Conditionals, concessive conditionals and concessives: Areas of contrast, overlap and neutralization. In E. C. Traugott, A. ter Meulen, J. Snitzer Reilly & C. A. Ferguson (eds.) *On conditionals*, 229-246. Cambridge: Cambridge University Press.
- König, Ekkehard. 1991. *The meaning of focus particles*. London: Routledge.
- Lee, Young-Suk & Laurence R. Horn. 1995. *Any as indefinite plus even*. Ms., Yale University.

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- Montolío, Estrella. 1999. Las oraciones condicionales. In I. Bosque & V. Demonte (eds.) *Gramática descriptiva de la lengua española*, 3642-3737. Madrid: Espasa-Calpe.
- Prince, Ellen F. 1992. The ZPG letter: Subjects, definiteness, and information-status. In S. Thompson & W. Mann (eds.) *Discourse description: diverse analyses of a fundraising text*, 295-325. Amsterdam: Benjamins.
- Schwenter, Scott A. 1999. Two types of scalar particles: Evidence from Spanish. In J. Gutiérrez-Rexach & F. Martínez-Gil (eds.) *Advances in Hispanic linguistics*, 546-561. Somerville, MA: Cascadilla Press.
- Schwenter, Scott A. 2000. Lo relativo y lo absoluto de las partículas escalares *incluso y hasta*. *Oralia* 3. Forthcoming.
- Vasishth, Shravan. 1998. Focus particles and negative polarity in Hindi. First Annual North-West Centre for Linguistics Conference on Negation (Syntax, Semantics, Pragmatics), Salford, UK.

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