LONG-DISTANCE AGREEMENT, SECONDARY PREDICATES, AND COMPLEX PREDICATION: THE EVIDENCE FROM HINDI

Long-Distance Agreement (LDA) in Hindi-Urdu has been the subject of intense research in minimalist analyses (Boeckx 2004, Bhatt 2005, a.). Starting from canonical examples which follow the pattern in (1), the most important questions have been revolving around: a) the nature of the projection initiating the LDA; b) the specific formal motivation behind a projection entering into an agreement relation with an argument which is not (at least initially) merged in its domain; c) establishing formal properties of those instances in which LDA is possible/blocked (Mahajan 1989); d) whether this is an intrinsic property of the ergative-absolutive pattern; e) the root of the characteristic ‘specificity’ readings:

(1) Vivek-ne [kitaab, parh-nii, chaah-i]  
‘Vivek wanted to read the book.’

However, one LDA instance that has received less attention in the literature is the one seen with secondary predicates, as illustrated in (2) with the intensional predicate sooch-i (‘think’):

(2) Vivek-ne bili choot-i sooch-i.  
Vivek.M.-ERG. cat.F. small-F. think-PFV.F.  
‘Vivek considered the cat/a specific cat small.’

# ‘Vivek considered some cat or other small.’

Sentences like (2) appear to be constrained by the same type of restrictions when it comes to the implementation of multiple agreement: a) parasitic agreement on the secondary predicate is obligatory (3a, b); b) the obligatoriness of specificity readings: the intuition of native speakers as well as the indication of grammars is that the shared argument in (2) can only be interpreted as referring to a specific cat, salient in the discourse, or identifiable contextually.

(3) a) *Vivek-ne bili choot-i sooch-aa.  
Vivek.M.-ERG. cat.F. small-F. think-PFV.M.SG./D.SG  
INTENDED: ‘Vivek considered the cat small.’

b) * Vivek-ne bili choot-aa sooch-ii.  
Vivek.M.-ERG. cat.F. small-M. think-PFV.F.SG.  
INTENDED: ‘Vivek considered the cat small.’

Moreover, LDA secondary predicates also pass canonical tests, which are generally taken to indicate the restructuring character of LDA configurations. For example, a polarity sensitive item (PSI) in the subject position of the matrix predicate in (4) can be bound by the negative marker nahĩ placed in the domain of the secondary predicate:

(4) ek-bhii larke-ne bili nahĩ choot-ii sooch-ii.  
one-PSI. boy-ERG. cat.F. NEG. small-F. think-PFV.F.SG.  
‘Not even a single boy considered the cat small.’

Given these observations, the further questions are: a) what do LDA instances with secondary predicates tell us about the process of long-distance agreement with non-finite embeddings; b) what are the interactions between restructuring, secondary predicates, and LDA; c) what do data like (2) indicate about the structure of secondary predicates, more specifically about the debate between a small-clause structure (GB literature following Chomsky 1981, Stowell 1981, 1983, etc.) and a complex predicate configuration (Chomsky 1957, Chomsky 1986, etc.).

This paper proposes an analysis whose main ingredients are the following: i) the process of long distance agreement with secondary predicates is initiated by v flagging complex predicate configurations; ii) the shared argument is introduced above the matrix predicate by a functional projection with specificity/evidential semantics which is necessary for the construction of intensional predicates like consider/seem/appear. This straightforwardly explains the ‘wide-scope’/‘specificity’ readings (Williams 1983); iii) secondary predicates do not project small-clause configurations, but rather form complex predicates with the matrix predicate (Chomsky 1957, Williams 1983, a.o.). The current account follows
an enriched implementation of Multiple Agree (Hiraiwa 2005), by assuming that secondary predicates are integrated into the domain of the matrix predicate by a process of complex predicate formation (5a):

(5) PRINCIPLE OF COMPLEX PREDICATE FORMATION

a) [uPredicate] features of more than one predicate in the same phase are checked derivationally simultaneously by a probe who has preliminary established an AGREE relation with a goal containing the relevant interpretable [ϕ] features.

b) $\begin{array}{c}
P > G_1 > \ldots \ldots > \text{Pred}_1 > \ldots \ldots \text{Pred}_n \\
\end{array}$

One salient question obviously pertains to the nature of $P$. The two main hypotheses proposed in the appear to be problematic when applied to secondary predicates under LDA in Hindi. On the one hand, one source of the Multiple Agree process has been assumed to reside in a clitic projection generated above the matrix and the secondary predicate (as in 6, Boeckx 2004 who builds on insights provided by the clitic – doubling contexts in Romance). But this implementation lacks the empirical motivation in Hindi – specificity readings with secondary predicates under LDA do not permit/require clitic-doubling.

(6) $\begin{array}{c}
\text{ClP} \quad \text{Cl} \quad \ldots \ldots \quad \text{VP} \quad \text{Part. Obj.} \\
\end{array}$ LDA (Boeckx 2004)

On the other hand, assuming that the matrix $T$ is the probe would run into problems when it comes to examples like (7), in which the matrix + secondary predicate complex modify a shared argument in a non-finite context. Note that in such configurations, default agreement on the secondary predicate results in unacceptability:

(7) choot-i sooch-i bili.
    small-F.SG. think-PFV.F. cat. F.
    ‘cat considered small.’

(8) *choot-a sooch-i bili./ *choot-i sooch-a bili.
    small-DEF.SG. think-PFV.F. cat. F. small-F.SG. think-PFV.DEF. cat. F.
    ‘cat considered small.’

The proposal in this paper addresses the nature of the functional projection initiating the Multiple Agree process from a different perspective. The source of LDA is assumed to be a $v$ that flags complex predicate configurations. For the secondary predicates, the analysis builds on many recent observations according to which shared arguments with secondary predicates are normally felicitous if found under the scope of direct evidence (9) (Matushansky 2002, Asudeh And Toivonen 2008, etc.). The precise assumption is that the so-called intensional predicates are obtained by merging a verbal root with a functional projection indicating the nature of the (direct/indirect) evidence (just like a predicate like see has as its lexical property the specification of visual evidence). This functional projection introduces the shared argument, which being found structurally above the matrix predicate, will receive an (direct/indirect) evidential, wide-scope reading (10). As the argument must be introduced by the evidential functional projection above the matrix predicate, the embedded predicate will not have a clausal structure, hence its agreement will end up being dependent on the matrix predicate (Rothstein 1983, 2005, etc.).

(9) I walked into the squire’s room when he wasn’t there. I saw medicine bottles, Kleenexes, and smelled a foul, sickly stench.
    a. The squire seemed to be sick.
    b. # The squire seemed sick.

(10) $\ldots \ldots$ $v$ [shared argument $[v_{\text{evidence}} + \text{intensional predicate}]$ [secondary predicate]]

The LDA is initiated by the $v$ merged above the evidential projection which introduces the shared argument. After this head establishes an agreement relation with the shared argument, it will simultaneously value the uninterpretable $\phi$ features of the two predicate. This account will not only explain the Hindi LDA data with secondary predicates, in which the shared argument can only be interpreted as strong (as opposed to other LDA environments where narrow-scope readings might be found, see Bhatt 2005), but will also put the configuration into a unitary cross-linguistic picture, together with the languages in which the evidential marking is overt in such instances (Japanese, Turkish).