Highest-Argument Orientation in Adverbials and the structure of Events

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While Minimalism (Chomsky 1995 inter alia) lacks a coherent theoretical notion "subject", there are still constructions which seem to be oriented specifically to arguments which conform to traditional notions of subjecthood. These include certain varieties of Adjunct Control, such as the South Asian Conjunctive Participle construction, a non-finite adverbial clause, marked in Hindi-Urdu with the suffix -*kar* (hereafter -*kar*-clauses or KCs).

(1) Siddhārth-ne₁ Karīnā-ko₂ [PRO₁ nāch-kar] mār-ā Siddharth-ERG Karina-DOM dance-KAR hit-PERF 'Dancing, Siddharth hit Karina' (Siddharth is dancing)

Most sentence types allow for exactly one possible controller for a KC: The agent of a transitive or ditransitive construction (as in 1), a dative-marked experiencer, or the single argument of an intransitive verb. There are small number of exceptions to this, however, which involve valency-changing operations: morphological indirect causatives and passives. Here, by examining the interpretation of KCs with the assumption that they are interpreted based on their relationship to event-denoting predicates (V and v), I show how the interpretation of these adverbials makes clear what the syntax of these valency-changing operations must be.

Hindi-Urdu causatives may be either direct or indirect. For the stem form of a verb (2a) or the direct causative form (b), there is only one possible controller for a KC. An indirect causative introduces a second possible controller (c).

- (2) a *Sākshi*₁ [*PRO*₁ *chillā-kar*] *jāg-ī*Sakshi shout-KAR wake.up-PERF
 'Shouting, Sakshi woke up' (Sakshi is shouting)
 - b *Karīnā-ne*₁ *Sākshi-ko*₂ *[PRO*₁ *chillā-kar] jag-ā-yā*Karina-ERG Sakshi-DOM shout-KAR wake.up-DIR.CAUS-PERF
 'Shouting, Karina woke Sakshi up' (Karina is shouting)
 - c *Siddhārth-ne*₁ *Karīnā-se*₂ *Sākshi-ko*₃ *[PRO*_{1,2} *chillā-kar] jag-vāyā* Siddharth-ERG Karina-ABL Sakshi-DOM shout-KAR wake.up-IND.CAUS 'Shouting, Siddharth had Karina wake Sakshi up' (Siddharth or Karina is shouting)

In passives, a controller may only be an oblique agent; KCs have no possible controller in passives without an overt agent and thus cannot be included in such a sentence.

(3) * $(Siddh\bar{a}rth-dv\bar{a}r\bar{a}_1)$ Kar $\bar{i}n\bar{a}-ko_2$ [PRO_{1,*2} $n\bar{a}ch-kar$] $m\bar{a}r-\bar{a}$ gay \bar{a} Siddharth-INST Karina-DOM dance-KAR hit-PERF go-PERF 'Dancing, Karina was hit by Siddharth' (Siddharth is dancing)

This follows from the following generalization about the structural position of KCs:

(4) The controller of a KC is the highest argument associated with a given event.

This works given two fairly simple assumptions about argument structure in Hindi-Urdu: that indirect causatives consist of two v predicates denoting separate events (as Harley 1995, 2008 suggests for Japanese) and passives introduce an agent argument in exactly the same way as equivalent active sentences (suggested by Mahajan 1994). Control of KCs then falls out naturally from the interpretation of vPs, assuming structures like those in (5).

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(5) a Transitive or Passive
[$\mu_P \text{ Agent}_1 \ [\mathbb{K}_C ... \text{PRO}_1 ...] \ [\mu_P \text{ Patient}_2 \ V \] [$\mu]$]
b Causative, Causee control
[$\mu_P \text{ Causer}_1 \ [\mu_P \text{ Agent}_2 \ [\mu_C ... \text{PRO}_2 ...] \ [\mu_P \text{ Patient}_3 \ V \] [$\mu]$] [$\mu_{caus} \]]]
c Causative, Causer control
[$\mu_P \text{ Causer}_1 \ [\mu_C ... \text{PRO}_1 ...] \ [\mu_P \text{ Agent}_2 \ [\mu_P \text{ Patient}_3 \ V \] [$\mu]$] [$\mu_{caus} \]]]
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The interpretation of KCs also allows for greater understanding of the "ingestive" class of verbs (Bhatt and Embick 2003, Ramchand 2008). Ingestive verbs are transitive verbs where under causativization the external argument is dative marked *and not a possible controller for a KC*; under direct causativization there is one possible controller and under indirect causativization there are two possible controllers, patterning with unaccusatives.

a Siddhārth-ne₁ kahānī [PRO₁ baiṭh-kar] sun-ī
Siddharth-ERG story sit-KAR hear-PERF
 'Sitting, Siddharth heard the story'
 b Karīnā-ne₁ Siddhārth-ko₂ kahānī [PRO_{1,*2} baiṭh-kar] sun-ā-yī
Karina-ERG Siddharth-DAT story sit-KAR hear-DIR.CAUS-PERF

'Sitting, Karina told Siddharth the story' (Karina was sitting)

c Karīnā-ne₁ Sākshi-se₂ Siddhārth-ko₃ kahānī [PRO_{1,2,*3} baiṭh-kar]
Karina-ERG Sakshi-ABL Siddharth-DAT story sit-KAR
sun-vā-yī
hear-DIR.CAUS-PERF
'Karina had Sakshi tell Siddharth the story' (Karina or Sakshi was sitting; *Siddharth was sitting)

To account for this, I propose that underived ingestives take an external argument which is both goal and agent, but which under causativization is only goal, similar to a proposal by Ramchand (2008) that the agent-like role these arguments take is usurped by the new external argument introduced by the causative. Thus the sentences in (6) have structures like (7), with possible controllers of a KC bold-faced.

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    (7) a Underived
        [vP Agent1 [VP (e1)( [Patient2 V]] [v]]
    b Direct Causative
        [vP Agent1 [VP Goal2 [Patient3 V]] [v]]
    c Indirect Causative
        [vP Causer1 [vP Agent2 [VP Goal3 [Patient4 V]] [v]] [vcaus])
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Given these structures, since the underived and direct causative forms both have only one v, describe only one event and have only one possible controller and the indirect causative has two v predicates denoting two events, the interpretation of KCs for ingestives in all forms follows straightforwardly from the above analysis.

Finally, I discuss how this account of the interpretation of KCs might be applied to other languages and adverbial constructions which allow for different sets of possible controllers, and what sort of cross-linguistic data could determine the parameterization (or similar formalization of variation) needed for the attachment and interpretation of adverbials.