Agents. What Motion Predicates in ASL reveal about the structural properties of Agentadding devices.

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Much work on the issue of transitive/intransitive alternations discusses whether syntax or the lexicon are responsible for each of the members of the tr/intr pair and whether or how the two are derivationally related. In this paper, we analyze data from ASL motion predicates that support a syntactic approach, with one particular distinct head introducing, specifically, an Agent argument (not a causer). We also show that not all Agents are the same and that a particular difference (whether the Agent stands in [±continuous] contact with the theme/undergoer; Hale-Keyser2001) has structural consequences. Further, we claim that the multiple structural patterns we observe for the [±cont] contact options are the combined result of the particular Numeration selected and the subsequent syntactic operations in the derivation. The data obtained for this study has yielded structures using classifier (CLS) predicates. We take the position that CLS-predicates are morphologically complex (verbal) units composed of a handshape (the classifier itself, coreferential with an argument of the predicate) and a movement denoting the event's motion. In (1), we show the notation used here: 3+ represents the CLS, of type whole entity (w/e) coreferential with CAR (sharing the subindex-a), while +GO_UP encodes the simultaneously co-articulated movement:

(1) CAR_a 3_a+GO_UP car CLS_{w/e}+move_upwards 'A car is moving up (the road)'

Data. A 175 videoclip app was used as a qualitative, not experimental, elicitation tool. The app, designed for crosslinguistic crosscultural elicitation, includes 87 items related to transitivization: 50 for initial [-cont] contact (*kick the ball into the hole*-type), 37 items for [+cont] contact (*take the ball to the basket*-type), each with a corresponding minimally contrastive intransitive pair (*the ball moves into the hole*). Telic and atelic versions of the motion event are included. Data from 3 native ASL signers were collected using 2 cameras (at a frontal and 45° angle).

Assumptions. We assume Agents (but not causers) are introduced by a dedicated functional head, *little v* (Kratzer 1996, Chomsky 1995) in ASL. We further assume a *v*-split (Borer1994, 2005; Benedicto-Brentari2004; Ramchand2008; Harvey2013), with an agentive v_2 structurally separate and above a thematic v (v_1) that introduces the theme/undergoer; we follow Benedicto-Brentari 2004 analysis that positions *handling* (HDL) and *body-part* (BP) classifiers bundled in the upper v_2 head and *whole entity* (W/E) classifiers in the lower v_1 head. Finally, we assume the syntactic decomposition of subeventive structure, as in Benedicto-Branchini-Mantovan2015, represented in (2-4): a larsonian recursive embedding of a PATH π -substructure and a telic REACH τ -substructure in Motion Predicates, yielding Serial Verb Constructions. The subeventive PATH- π , as well as REACH- τ , are, in these languages, a verbal element (+V), akin to 'move' but more complex in structure.

Results. The most notable result is that [+cont] contact Agents are, we claim, the result of syntactic movement of the PATH π -head to (v_1 and subsequently to) v_2 head, with the intended interpretational effect that the Agent is involved (together with the theme) in the motion. We take it that the [±continuous] contact distinction can be derived from the path-related structure ending up in syntactic contact with the Agent-related head, via syntactic movement. Along these same lines, thus, [-cont] contact Agents will result from lack of head-movement of π to the agentive v_2 .

Let's consider the possible derivations here. Let's first consider a Numeration that contains 2 classifiers, say, one BP-CLS and one W/E-CLS, and the necessary clausal subeventive functional heads; the BP-CLS will bundle with the v_2 head and the W/E-CLS with v_I (per Benedicto-Brentari2004). We see the derivation in (2) next: the π -head, a bound morpheme, will raise to v_I + W/E-CLS and no further head movement will occur (the complex head can be spelled out

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(2) DP_{Ag} ν_2^o [+AG] uDBP-class DP_{th} νι^ο[+ΤΗ] uDw/e-class π XPLoc [REACH] ... (MAN).a (CHILD).b V-bnt_{WE}.b+BE_AT MAN BP-CL >> π ... (SLIDE).c

as is).

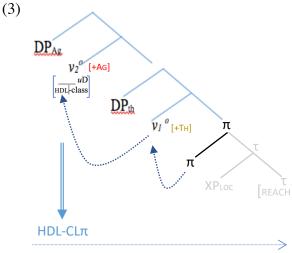
This will result in the two heads, v_2 +BP-CLS and v_l + W/E-CLS+ π , being spelled out separately, resulting in an SVC sequence with the concurrent interpretation that the Agent does not participate in π 's motion path (since π didn't raise to v_2).

In the example in (2), B_{BP} .a+PUSH spells out v₂, while V-bnt_{we}.b+SLIDE-DOWN spells out v_I , in a prototypical SVC.

 $B_{BP}a+PUSH.b$ BOY.b V-bnt_{WE}.b SLIDE-DOWN. π B.c+BE_AT _ _B_{BP}.a+PUSH.b B.c+BE_AT.π

the man pushed the boy (to go) down the slide

This derivation yields the [-cont] contact Agent type, with no sharing of the path of motion. Let's now consider an alternative Numeration: one that provides only one classifer morpheme, of the HDL-class type, to be bundled with the higher v_2 , and no REACH head.



In (3) π , as a bound morpheme, again moves to v_1 but it cannot find a suitable host there (there being no CLS), and so continues to v_2 ,+HDL-CLS where it can be spelled out. In this case, as a result of the particular Numeration and the operations that take place in the course of the derivation, a single predicate form appears (Cdwn_{HDL}+GRAB) with only one HDL-CL, Cdwn+, that is co-articulated on the motion's PATH (carried by π).

[0905-ASLem] H1. GIRL ... TRAIN Cdwn_{HDL}+GRAB. $\pi_{.b}$ 5dwn_{WE}+BE_AT.b T-U-N-N-E-L TRAIN 5)dwn_{WE}+BE_AT.b

'the girl pushes a train toy towards the tunnel

Alternatively, if a a head REACH is provided by the Numeration, together with a HDL-CLS and a W/E-CSL, then again, an SVC may arise. In this case, the W/E-CLS bundles with the telic head

(4) DP_{Ag} v_2^o [+AG] HDL-class DP_{th} ν₁ ° [+ΤΗ] π XPLoc [REACH] uDw/E-class $HDL-CL_{\pi}$ W/E

REACH, which can thus be spelled out; the bound head π raises to v_1 where it cannot find a suitable host (there being no CLS), and so continues on to v_2 ,+HDL-CLS where it can finally be spelled out. Two predicate forms, thus, are produced, again, as an SVC:

C-C_{HDL}+HOLD, the output of $\langle v_2, +HDL-$ CLS+ v_I + π >, and Vbnt_{we}+REACH, the output of <REACH+ W/E-CLS>.

Thus, again, the HDL-CLS is co-articulated with π , yielding the interpretation of [+cont] Agent, sharing the path of motion.

... (FATHER) (CHILD) C-C_{HDL}+HOLD.π V-bnt_{WE}+SLIDE-DOWN. π $C-C_{HDL}+HOLD.\pi$

'the father takes the child (all the way) down the slide'

As predicted, thus, derivations with π -to- ν_2 movement (3-4), yield the [+cont] agentive type.