Stay in shape!

Bill Haddican   **Anders Holmberg**   **Nanna Haug Hilton**
(Queens College-CUNY)   (Newcastle/Cambridge)   (Groningen)

1. Introduction. In recent generative literature, cross-linguistic variation in passive symmetry—the (non-)availability of theme passivisation out of double object constructions (DOCs)—has typically been explained in terms of locality (Anagnostopoulou 2003, McGinnis 1998, Ura 1996). According to this model, in languages without theme passivisation, theme-raising to T is blocked by the intervening goal. Languages *with* theme passivisation differ minimally in the availability of short theme movement to an outer spec of the same projection hosting the goal, enabling the theme to subsequently raise to T without crossing the goal, as in (1).

(1) [$_{TP}$ theme T... [$_{XP}$ ~~theme~~ goal X ... [$_{YP}$ Y ~~theme~~]]]   (the locality approach)

In support of this approach, Anagnostopoulou (2003) notes a cross-linguistic correlation within Mainland Scandinavian between the availability of theme-goal orders in passive contexts and theme-goal orders in object shift (OS), as in (2) and (3), respectively, from Norwegian. In Norwegian/Swedish, which allow theme-passives, *some* speakers accept theme-goal orders in OS. In Danish, theme-goal orders are disallowed in both contexts. Anagnostopoulou takes this correlation as evidence that short theme movement feeds theme passivisation.

(2) ***Passive***   (3) ***Active OS***   (4) ***Active non-OS***
a. Per ble gitt boken.   a. Jeg ga   ham den ikke. a. Jeg har ikke gitt   ham den.
   P. was given book.the   I   gave him it   not   I   have not given him it
   'P. was given book.the.'   'I didn't give him it.'   'I haven't given him it.'
b. Bok-en ble gitt Per.   b%Jeg ga den ham ikke.   b%Jeg har ikke gitt den ham.

2. An experiment. Anagnostopoulou's approach makes a strong prediction about cross-speaker variation: speakers should accept (2b) iff they accept (3b). We test this with an acceptability judgment experiment with 505 native speakers of Norwegian. The experiment crossed object order (*theme-goal/goal-theme*) with context (2)-(4). Subjects judged four lexicalisations of these six conditions via a web-based application. Results revealed a much stronger correlation between the two active (OS and non-OS) conditions than between either of the active conditions and the passive condition, where the effect was negligible. Assuming a structure for DOCs with the goal merged above the theme, these results suggest that theme movement above the goal in active non-OS contexts feeds theme-goal orders in OS, i.e. speakers accept the latter iff they accept the former. Importantly, theme-goal orders in active OS and non-OS contexts appear *not* to feed theme-goal orders in passives.

An initially appealing approach is that some movement permutes the objects low in the structure and a constituent containing these objects in the order theme-goal raises them in OS contexts. The fact, however, that shifted objects can be separated by an extra-VP adverb, as in (5), suggests they do not raise as a constituent.

(5) Jeg ga   ham sjølsagt   den ikke.   We propose that these facts are best ex-
    I   gave him obviously it   not   pressed not in terms of locality but in terms of
    'Obviously I didn't give it to him.'   shape conservation, i.e. derivational constraints
on linearization of syntactic objects following Fox & Pesetsky's (2005) Cyclic Linearization proposal (see also Aanagnostopoulou 2005). Fox & Pesetsky propose that precedence relations among syntactic objects are established phase-by-phase, as in (6). Extra-phasal movement cannot permute the linear order of two syntactic objects, since this would entail conflicting ordering relations for the phonology.

(6) a. [$_{\text{Phase2P}}$ X Y [$_{\text{Phase1P}}$ X̶ Y̶]]   b. *[$_{\text{Phase2P}}$ Y X [$_{\text{Phase1P}}$ X̶ Y̶]]

We propose that theme-goal orders in active contexts reflect optional movement of the theme to an outer spec of Appl, as in (7). We further assume that, in active but not passive contexts, little-v is a phase head Chomsky 2000, and that transitive-v therefore freezes the order of arguments in its c-command domain. In OS, which targets an extra-phasal position, the order of objects must therefore match the order established vP-internally.

(7) [$_{\text{TP}}$ T [$_{\text{vP}}$ v [$_{\text{VP}}$ V [$_{\text{ApplP}}$ theme goal Appl t̶h̶e̶m̶e̶]]]]]

Theme-passivisation is not fed by this short theme movement. Rather, theme vs. goal-passivisation reflects variation in whether the "extra" probe in applicative structures is located on Appl or a linker head above ApplP, where it probes the goal (Baker & Collins, 2006). In passives, where v is not a probe, the T will probe and attract the theme across the previously probed goal, as in (8). This entails that the goal does not defectively intervene for theme movement to T (Broekhuis 2007, Bruening 2012). These assumptions now correctly express the facts that (i) theme-goal orders in OS are possible only for speakers who allow theme-goal orders vP-internally; and (ii) theme-goal orders in passives are independent of this movement.

(8) [$_{\text{TP}}$ theme T [$_{\text{vP}}$ v-passive [$_{\text{VP}}$ V [$_{\text{LkP}}$ Lk [$_{\text{ApplP}}$ goal Appl t̶h̶e̶m̶e̶]]]]]

3. British English. A challenge for this analysis is to explain the divergence of these data from Haddican & Holmberg's (2012) results from British English (BrE) showing a cross-speaker correlation in acceptance of theme-goal orders in active and passives. That is, acceptance of (9) correlates with acceptance of (10).

(9) She gave it me.   (10) The ball was given the girl.

Theme-goal active DOC sentences like (9) are only possible with weak themes, and are best for many speakers with *it* as the theme rather than *them*. Importantly, object *it* in English can *only* be weak, while its counterparts in Norwegian need not be:

(11) a. *I saw IT.   b. *Peter came with it and a bottle of wine.

(12) a. Jeg så   DEN.   b. Per kom med den og   en flaske vin.
     I   saw it   P.   came with it   and a bottle wine
     'I saw IT.'   'P. came with it and a bottle of wine.'

We take this difference between BrE and Norwegian to relate to shape conservation effects in these languages. In both languages, theme vs. goal passivisation is determined by the presence of a linker head, as in (8). However, in BrE, theme-goal active DOCs do not involve raising of the theme to spec, Appl, as in Norwegian, but rather (i) the presence of a linker head above Appl, and (ii) incorporation of weak pronouns into their probes following Roberts (2010). BrE *it* is a ϕP, consisting exclusively of ϕ-features. Following Agree, its features are a subset of the features of the ϕ-probe v, and are spelled out in the position of v by ordinary chain reduction/copy deletion (the analysis of object clitics in Roberts 2010). The corresponding Norwegian pronoun, even in its weak form, is a DP, and therefore not incorporable. Theme-goal orders like (9) reflect incorporation of the theme into v across the previously probed goal as in (13). The cross-speaker correlation in acceptance of (9) and (10) therefore reflects the variable presence of the linker morpheme.

(13) [$_{\text{TP}}$ T [$_{\text{vP}}$ v-*it* [$_{\text{VP}}$ V [$_{\text{LkP}}$ Lk [$_{\text{ApplP}}$ goal Appl i̶t̶]]]]]]

4. Summary. Our data support an object symmetry effect not described previously, namely a correlation in object order preferences in active OS and non-OS contexts. Object order preferences in active OS and non-OS contexts correlate more closely across speakers than in passive and OS contexts, a result mispredicted by Anagnostopoulou (2003) but readily explained by Cyclic Linearization.