

Orphans hosted by VP anaphora*

Dan Hardt (Copenhagen Business School)
Bjarne Ørsnes (Freie Universität Berlin)
Line Mikkelsen (UC Berkeley)

WCCFL 29, University of Arizona, April 23, 2011

1 Orphans

Overt VP anaphors (*do so/it/the same*) allow preposition-marked orphans with antecedent-internal correlates:

- (1) You have jilted two previous fiances and I expect you would do the same **to me**.

ANAPHOR	<i>do the same</i>
ORPHAN	<i>to me</i>
ANTECEDENT	<i>jilted two previous fiances</i>
CORRELATE	<i>two previous fiances</i>

Correlate is inside antecedent VP \Rightarrow orphan and antecedent must interact to produce interpretation:

...I expect you would jilt me

Orphans are superficially similar to remnants of ellipsis:

- (2) I wouldn't say that to my mother, but I would **to you**. [pseudo-gapping]
...I would say that to you
- (3) I know he gave the dresser away, but I don't know **to who**. [sluicing]
...I don't know who he gave the dresser to
- (4) Q: Who did he give the dresser to?
A: **To me**. [fragment answer]
...He gave the dresser to me

Remnants argued to escape ellipsis by extraction (e.g. Jayaseelan 1990, Merchant 2001, 2004) — orphans too?

Claims

1. PP orphans are different from PP remnants of ellipsis; orphan is not extractee, but base-generated adjunct
2. VP ellipsis and overt VP anaphora require different analyses (contra e.g. Elbourne 2008, Baltin and van Craenenbroeck 2008, Culicover and Jackendoff 2005)
3. *do the same to X* is not a construction (contra Culicover and Jackendoff 2005:289ff): it has regular syntax and regular semantics, but the orphan comes with a pragmatic requirement

*This work was made possible by a grant from the Danish Agency for Science, Technology, and Innovation. We are also grateful to John Beavers, Peter Culicover, Michael Houser, Andy Kehler, Russell Lee-Goldman, Beth Levin Ivan Sag, Maziar Toosarvandani and audiences at Stanford (CUSP 3) and the Copenhagen Business School (Syntax Semantics Workshop) for feedback, data, ideas, and help with the literature. Corpus data come from the BNC, Europarl, and Gigaword.

2 Orphans vs. remnants of ellipsis

Syntactic category No inherent category restriction on remnants of ellipsis:

- (5) I wouldn't say that to my mother, but I would **to you**. [PP]
 (6) You might not believe me, but you will **Bob**. [DP]
 (7) I know she's pretty tall, but I don't know **how tall**. [DegP]
 (8) Q: Is he tired or just lazy?
 A: **Tired**. [AP]
 (9) Q: What did he say?
 A: **That we should go ahead without him**. [CP]

Orphans must be PPs:

- (10) You have jilted two previous fiances and I expect you would do the same **to me**. [PP]
 (11) *You have jilted two previous fiances and I expect you would do the same **me**. [DP]
 (12) *He built a small box to keep his CDs in and I did the same **large**. [AP]
 (13) *The guide came over and told me that I had to stay behind the red line and then the guard did the same **that I had to stop taking photos**. [CP]

Identity of P For remnants, P is determined by antecedent:

- (14) I wouldn't rely **on** Harvey, but I would **on/*to/*with** Frank.
 (15) She's looking **at** something, but I don't know **at/*to/*for** what.
 (16) Q: What are you looking **at**?
 A: **At/*To/*For** this little ant crawling over my cell phone.

For orphans, P is not determined by antecedent, but loosely restricted by thematic relation:

- *for* is typically used for benefactives:

- (17) Why should we not give Ukraine the prospect of membership when we would do the same **for** Turkey.
 (18) Opening up the telecoms market to competition has contributed a great impetus to growth and innovation **in** the UK and will do the same **for** Europe as a whole from next year. [*in* → *for*]

- *to* is typically used for patients (Huddleston and Pullum 2002:1533, Culicover and Jackendoff 2005:285)

- (19) Which of us on finding our car aerial snapped off by a vandal have not momentarily wanted to do the same **to** his neck?
 (20) Commissioner, you have now suddenly decided to look again **at** the old alliances, and to do the same **to** the new ones, in order to establish how far they comply with competition rules. [*at* → *to*]

- *with* is used for themes (Culicover and Jackendoff 2005:285) and elsewhere

- (21) The fact that President Mugabe wants to stifle inward investment by nationalising the farms, and threatening to do the same **with** the mines, will do nothing to resolve the economic situation in Zimbabwe.
 (22) By penalising the pirating of Canal+ decoders, we effectively created a monopoly **on** reception. And some people would like to do the same **with** the Internet ... [*on* → *with*]

2.1 Remnants

Remnants as extractees:

(23) You might not believe me, but you will [VP [VP ~~believe t_i~~] Bob_i] (Jayaseelan 1990:65)

(24) I know she's pretty tall, but I don't know [CP how tall_i [TP ~~she is t_i~~]] (Merchant 2004:665)

(25) Q: Is he tired or just lazy?

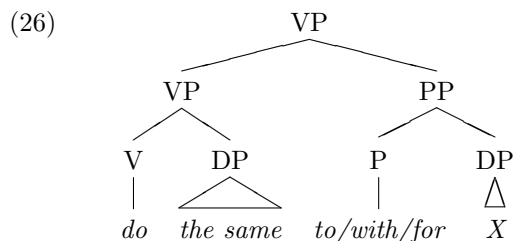
A: [FP tired_i [TP ~~he is t_i~~]] (Merchant 2004:675)

→ no inherent category restriction on remnant; restrictions reduce to subcategorization and restrictions on movement

→ identity of P in PP remnant is determined by deleted head; no P-shift

2.2 Orphans

Orphans are base-generated adjuncts to VP:



→ orphan is a PP, as opposed to DP, because PP is the syntactic category of adjuncts to VP in English¹

→ P-shift is possible, because orphan doesn't inherit P from antecedent.

Adjunct analysis further explains why:

- orphan is optional:

(27) He folded up his jacket and sat on it. I did the same (with mine).

- P is semantically contentful and not the case-marker *of*.
- orphans allow the same range of Ps wherever they occur:
 - pseudoclefts (Jackendoff 1990:125ff): What he did **to/with/for** X was VP.
 - predicate questions: What did you do **to/with/for** X?
 - *as*-clauses (Lee-Goldman 2011)

(28) She's not above ribbing someone, as she did **to** me in calling, "Nice face plant Larry. You might work on avoiding that next time."

(29) Or perhaps she got the name of the Chinese American Citizen's Alliance close, but not quite right, as she had **with** the Arizona Historical Society's library?

(30) Yes, just as Bruno claimed **for** an infinite universe, this finite model has "no center nor edge".

¹English does allow a fairly restricted set of DP adjuncts with temporal (*I saw him this morning.*) and manner (*Don't talk that way!*) interpretations.

2.3 *do the same* vs. ellipsis

Extractee analysis of remnants of ellipsis is attractive because it combines independently motivated processes:

- Pseudo-gapping: Heavy NP-shift + VP ellipsis
- Sluicing: Wh-movement + clausal ellipsis
- Fragments: Focus fronting + clausal ellipsis

Orphans hosted by *do the same* cannot be analyzed this way.

Question Are we forced to posit a *do the same to X* construction, similar to Culicover & Jackendoff’s rule for orphans with *do so*?

(31) Syntax: [VP [V do][_? so] ⟨YP_i^{ORPH}⟩] CS:[Action $\mathcal{F}(\dots)$; ... ⟨Y_i⟩...]

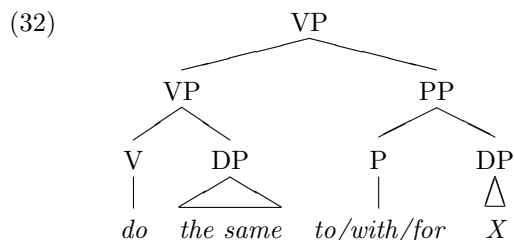
“The VP is connected by indirect licensing to an antecedent, the orphan is connected to a target [i.e. correlate; DH, BØ & LM] within the antecedent. ... Within the CS [i.e. the Conceptual Structure; DH, BØ & LM], there is the familiar open function \mathcal{F} whose content is filled in from the antecedent by indirect licensing and the optional semantic constituent Y corresponding to the orphan falls within the domain of \mathcal{F} .” (Culicover and Jackendoff 2005:289)

Our answer A non-constructional analysis is possible and preferable.

3 A non-constructional analysis

3.1 Syntax

The orphan is an adjunct to VP



3.2 Semantics

The presence of the orphan adjunct forces abstraction over the correlate in the antecedent, creating a “slot” for the orphan in the meaning reconstructed for the anaphor.

An example

(33) The governments of the great nations would like to deny a number of smaller countries access to weapons. They would like to do the same to certain organisations described by them as terrorist.

CORRELATE	<i>a number of smaller countries</i>
ORPHAN	<i>certain organisations described by them as terrorist</i>
ANTECEDENT	<i>deny a number of smaller countries access to weapons</i>
ANAPHOR	<i>do the same</i> (as) E

Simplifying assumption: the anaphor hosts an ellipsis, E.

Interpretation in three steps:

1. Lambda abstraction: correlate is replaced by a variable in antecedent

$\lambda x.$ x deny a number of smaller countries access to weapons \Rightarrow
 $\lambda y.\lambda x.x$ deny y access to weapons

2. Semantic reconstruction:² antecedent is copied to ellipsis position E, “do the same (as) E”

do the same (as) [$\lambda y.\lambda x.x$ deny y access to weapons]

3. Application: the reconstructed material is of type $\langle \alpha, \beta \rangle$, the orphan is of type α . Apply reconstructed material to orphan.

[$\lambda y.\lambda x.x$ deny y access to weapons] (certain organisations described by them as terrorist) \Rightarrow
 $\lambda x.x$ deny certain organisations described by x as terrorist access to weapons

An alternative analysis Abstraction is done by movement

1. Correlate movement: correlate is moved out of antecedent VP at LF
2. Semantic Reconstruction: antecedent is copied to ellipsis position E
3. Application: apply reconstructed material to orphan.

Abstraction by movement is problematic, because correlate can be inside islands:

(34) You have written off all [**our** supplementary questions] as statements and you did the same to Mr
Marinos. [Left Branch]

(35) I convened [a seminar at the beginning of June to which **all the management authorities throughout the European Union in charge of objective 1 appropriations** were invited]. 500 administrators attended, from all the management authorities, from the whole of Europe. And I shall do likewise, in the autumn, with the objective 2 management authorities. [Complex NP]

If Abstraction is done by movement, why does it not obey constraints on movement?

1. Because ellipsis repairs the island violation (Lasnik 2001, Merchant 2001, 2004, Merchant 2008)
 - But the island violating movement occurs in the antecedent clause, not in the ellipsis clause.
2. Because movement of correlate is covert and covert movement does not obey islands
 - But what about the large body of work that argues that covert movement does obey islands (e.g. Breuning and Tran 2006 and references cited there)

²In the sense of e.g. Dalrymple et al. 1991, Jacobson 1992, and Hardt 1993.

3.3 Pragmatics

Not all correlates make for good orphans:

- locative:

(36) ??I took my mother to **the beach** and Frank did the same for/with/to the fair.

- temporal:

(37) ??Abby said she was going to stop smoking by **Christmas** and Beth did the same for/with/to New Year.

- complement of governed PP

(38) ??One of the duelists decided on **a traditional pistol**, though the other did the same for/with/too a rifle.

Not a categorical ban:

- (39) is better than (36):

(39) He put salt in **the rice** and afterwards he did the same with the ratatouille.

- (40) is better than (37):

(40) ?Abby always says that she's going to stop smoking by **Christmas** and Beth does the same with New Year.

- (41) is better than (38):

(41) Commissioner, you have now suddenly decided to look again at **the old alliances**, and to do the same to the new ones, ...

⇒ pragmatic restriction on orphan (see Reinhart 1981 on aboutness):

(42) An orphan is felicitous only if it can be interpreted as what the clause is about.

4 Conclusions

- Orphans are not extractees, but base-generated adjuncts to VP.
- Overt VP anaphora is derived differently from ellipsis.
- A compositional, non-constructural analysis of orphans is possible.
- The striking differences between remnants and orphans

1. argue against recent attempts to unify VP ellipsis and overt VP anaphora;
2. reaffirm Hankamer and Sag's (1976) distinction between Deep and Surface Anaphora,³

³Once *do so* is recognized as a Deep Anaphor (Houser 2010).

References

- Baltin, M. and J. van Craenenbroeck (2008, November). On becoming a pronoun. Towards a unified theory of ellipsis. Paper presented at the 10th CUNY/SUNY/NYU/YU-miniconference.
- Breuning, B. and T. Tran (2006). Wh-questions in Vietnamese. Journal of East Asian Linguistics 15, 319–341.
- Culicover, P. W. and R. Jackendoff (2005). Simpler Syntax. Oxford: Oxford University Press.
- Dalrymple, M., S. M. Sheiber, and F. C. N. Pereira (1991). Ellipsis and higher-order unification. Linguistics and Philosophy 14(4), 399–452.
- Elbourne, P. (2008). Ellipsis sites as definite descriptions. Linguistic Inquiry 39(2), 191–220.
- Hankamer, J. and I. A. Sag (1976). Deep and surface anaphora. Linguistic Inquiry 7(3), 391–428.
- Hardt, D. (1993). Verb phrase ellipsis: Form, meaning, and processing. Ph. D. thesis, University of Pennsylvania. Distributed as IRCS Report 93-23.
- Houser, M. (2010). The Syntax and Semantics of Do So Anaphora. Ph. D. thesis, UC Berkeley.
- Huddleston, R. and G. K. Pullum (2002). The Cambridge Grammar of the English Language. Cambridge: Cambridge University Press.
- Jackendoff, R. (1990). Semantic Structures. Cambridge, MA: MIT Press.
- Jacobson, P. (1992). Antecedent contained deletion in a variable-free semantics. In Proceedings of the Second Conference on Semantics and Linguistic Theory, Columbus, Ohio, pp. 193–213.
- Jayaseelan, K. A. (1990). Incomplete VP deletion and gapping. Linguistics Analysis 20(1?), 64–81.
- Lasnik, H. (2001). When can you save a structure by destroying it? In M. Kim and U. Strauss (Eds.), Proceedings of NELS 31, pp. 301–320. Amherst, MA: Graduate Linguistics Student Association.
- Lee-Goldman, R. (2011). Supplemental relative clauses: Internal and external syntax. To appear in Journal of Linguistics.
- Merchant, J. (2001). The Syntax of Silence. Sluicing, Islands, and the Theory of Ellipsis. Oxford: Oxford University Press.
- Merchant, J. (2004). Fragments and ellipsis. Linguistics and Philosophy 27(6), 661–738.
- Merchant, J. (2008). Variable island repair under ellipsis. In K. Johnson (Ed.), Topics in Ellipsis, pp. 132–153. Cambridge: Cambridge University Press.
- Reinhart, T. (1981). Pragmatics and linguistics: An analysis of sentence topics. Pragmatics 27, 53–93.