Fresh takes on VP ellipsis

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1 Degradation / agradation under mismatch

VP ellipsis is subject to a **parallelism** constraint: the unpronounced **target** must reproduce the **source**, syntactically or semantically – up to a point.

(1) But early on, IBM offered its basic design to anybody wanting to copy it. Dozens of small companies **did**, swiftly establishing...¹

Depending on where that point is placed, a **voice mismatch** where the source is passive but the target is active is in principle either **in** or **out**.²

By and large, it is out if ellipsis is subjected to a syntactic identity condition (as do, i.a., Hankamer & Sag (1976), Hestvik (1995), and Kennedy (2003)), and it's in if ellipsis is subjected to a semantic identity condition (as do, i.a., Klein (1986), Dalrymple, Shieber & Pereira (1991), and Hardt (1993)).³

So mismatch cases that are in fact in challenge theories that exclude them, and mismatch cases that are in fact out challenge theories that include them. As a matter of fact, some mismatch cases are in and some are out –

- (2) In March, four fireworks manufacturers asked that the decision be reversed, and on Monday the ICC did.⁴
- (3) #The incident was reported by the driver, and the pedestrian did too.⁵

From the viewpoint of theories that disallow mismatches, something about cases like (2) mitigates their ungrammaticality, while from the other angle, there is something about cases like (3) that degrades them.

Kehler (2000) occupies a mid position: ellipsis resolution can be syntactic or semantic, and mismatches are allowed if it is semantic. Whether it is one or the other depends on the **discourse relation**: coordinating relations require syntactic identity while subordinating ones only require semantic identity.

It is possible to ask how operational and how explanatory this theory is.⁶

1.1 The view from information structure

Kertz (2013)⁷ moves the emphasis from discourse to information structure: A voice mismatch is not acceptable if the topic of the target clause forms a contrast with some constituent in the source clause but not with its topic. This is the case in (3) but not in (4).

(4) The incident was reported by the driver, although he didn't really need to.

Independent evidence: a topic contrasting with something in the preceding sentence but not with its topic is penalized even in the absence of ellipsis:

(5) The incident was reported by the driver, and the pedestrian reported it too.

Kim and Runner (2017) note that Kertz's own experimental data show that mismatch systematically degrades acceptability regardless of topic structure: a sentence like (4) is still degraded in comparison to one like (6).

(6) The driver reported the incident, although he didn't really need to.

Their own experiments confirm a residual mismatch effect above and beyond effects of discourse relations or information structure.

They conclude that there is a structural constraint requiring that the elided VP and its antecedent have structurally matching representations – but that instances that violate this constraint can still receive an interpretation.

 $^{^{1}\,\}mathrm{From}$ the Bos and Spenader (2011) ellipsis corpus.

 $^{^2}$ But note that Kehler (2000) and Sailor (2014) predict that **some** mismatches are out.

 $^{^3\,\}mathrm{But}$ note that Merchant (2013) and Fiengo & May (1994) predict it to be in.

 $^{^4\,\}mathrm{Associated}$ Press Newswire, cited by Dalrymple (1991).

⁵ Cited by Kertz 2013.

 $^{^6\,\}mathrm{As}$ do Frazier and Clifton (2006) and Kertz (2013: 396f.).

⁷ building on Hendriks (2004)

1.2 The view from language processing

This is in line with Frazier (2013), who assumes that the LF of an antecedent must match the LF of the elided constituent but that mismatch ellipsis may be repaired by the language processing mechanism.

Some cases are more easily repaired than others:

it is the simplest, most unadorned cases...that sound the worst. An account where mismatch ellipsis... are grammatical does not lead us to expect the simple cases to be unacceptable. (495)

At the other end of the scale, most attested mismatch cases contain modals or other words implying that the state of affairs described is non-actual.

Non-actuality implicatures...introduce alternatives. A contrast between the state of affairs described in a clause and the actual world may introduce a question under discussion...(494)

By choosing an antecedent introducing a question under discussion (QUD), the ellipsis clause is guaranteed to comment on the QUD; form mismatches may in general be more tolerable when "the content of the message is clear and expected, as it is when the ellipsis clause comments on the" QUD.

This seems to fit well with (the admittedly non-attested cases) (7)–(9).

- (7) The letters were to be removed upon graduation, but most people didn't, so many vintage jackets ...
- (8) Firearms and ammunition must be stored separately, but many gun owners don't.
- (9) The regulation bra bikini could be made in a more imaginative fabric than spots or tropical flowers, but hardly anybody does.

1.3 Ellipsis high and low

Cued from Merchant (2013), Sailor (2014) develops another middle position: Extra-syntactic factors do not **unburden** syntax, they **influence** syntax; in fact, the key bridging factor is the ellipsis clause's site of attachment.

The elided constituent must match its antecedent structurally, but it can be (simplifying slightly) either VoiceP (**high** ellipsis) or VP (**low** ellipsis).

Simplifying a bit, \underline{I} did too can be either \underline{H} or \underline{L} :

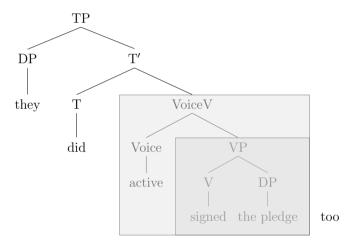
 $\mathbf{H} \quad \left[_{\mathrm{TP}} \ \mathrm{I} \left[_{\mathrm{T'}} \ \mathrm{did} \left[_{\mathrm{VoiceP}} \bigcirc\right]\right]\right] \qquad \qquad \text{(high ellipsis)}$

 $\mathbf{L} \quad [_{\mathrm{TP}} \text{ I } [_{\mathrm{T'}} \text{ did } [_{\mathrm{VoiceP}} \text{ active } [_{\mathrm{VP}} \bigcirc]]]] \qquad \qquad \text{(low ellipsis)}$

High ellipsis disallows a voice mismatch because $[V_{\text{oiceP}}]$ must be active if the auxiliary is do and passive if the auxiliary is do. Low ellipsis allows a voice mismatch because $[V_{\text{P}}]$ is neutral – neither active nor passive.

To illustrate:

(10) I signed the pledge and they did, too. (D. Trump)



So when are ellipses high and when are they low? The size differences are triggered by differences in ellipsis clause / antecedent clause configurations: if the ellipsis clause is subordinated to the antecedent clause, ellipsis is low, if it is coordinated with the antecedent clause, ellipsis is high.

Now while it is clear why ellipsis must be low if the E clause is subordinated (or else the ellipsis would be contained in its antecedent), it does not follow that ellipsis must be high if the E clause is coordinated; rather,

we must assume that high ellipsis is the preferred representation by default. (Sailor 2014: 74)

This is then the reason that a case like (11) is out.

(11) #The pledge was signed by the others but I didn't.

Since the ellipsis clause is coordinated and thus attached above VoiceP, there is no special reason to opt for low ellipsis.

So this theory predicts that a voice mismatch is possible if the E clause is attached to the A clause by subordination but impossible (or bad anyway) if it is attached to it by coordination. (12), say, is predicted to be good.

(12) The pledge was signed by everybody else before I did.

The subordination/coordination distinction tracks the voice mismatch data well, Sailor writes (2014: 19). As to whether all ellipsis clauses are related to their antecedents by coordination or subordination, he remarks that it is

plausible that all ellipsis clauses are either coordinated with or subordinated under their antecedents at the level of discourse if not in the syntax explicitly, and that possibly, even discourse-level coordination and subordination have syntactic reflexes. (Sailor 2014: 63)

Such syntactic reflexes could more specifically take the form of silent superordinate antecedent clauses (Sailor 2014: 74).

Another concern is that many mismatch cases that are deemed good, like (2) and (7)–(9), are on the surface **coordination** cases. As is also the attested

(13) It took a long time for me to be diagnosed and he was the one who finally did.

What would need to be said about such cases is that somehow they display subordination at a deeper, or higher, level of discourse relations.

2 Do it in Norwegian: deep or surface

What does it take for something to count as VP ellipsis in a language? Building on the diagnostics developed by Goldberg (2005), Vander Klok (2016) concludes that VP ellipsis is attested in (Western Malayo-Polynesian) **Javanese**. It seems less clear whether it exists in Mainland Scandinavian.

3.1 Norwegian has or lacks VPE

Sailor (2017) counters the generalization proposed by Lipták & Saab (2014), rendered in (14), by noting that MSc does have VP ellipsis and V movement out of VP (aka V2) but lacks V stranding VP ellipsis.

(14) A language that has XP ellipsis and X movement out of XP also has X stranding XP ellipsis.

It is clear that MSc lacks V stranding VP ellipsis:

(15) Alle elsker den kaka, men jeg elsker *(den) ikke. all love that cake but I love it not

But whether VP ellipsis exists in MSc is much less clear. Let us first consider whether auxiliary stranding VPE exists. According to Platzack (2012: 281), it does, not only in Danish, but also in Swedish.

And to be sure, modal auxiliaries can often stand alone. On the other hand, Thoms (2010) bases a claim that Norwegian lacks VPE on evidence like (17).

- (16) Jeg tar 45 studiepoeng dette semesteret. Ikke fordi jeg vil. I take 45 studypoints this semester not because I will Ikke fordi jeg er en streber. Men fordi jeg må. not because I am a careerist but because I must
- (17) *Mary vil gi mange penger til Susan og Paul vil, også Mary will give much money to Susan and Paul will, too 'Mary will give much money to Susan, and Paul will, too' (Terje Lohndal, personal communication to Gary Thoms)

Clearly, there is variation among Norwegian speakers. But here is a case where most or all will reject a version without the pronoun det:

(18) Hoene vil normalt ikkje utvikle støttenner, sjølv om det finst females will normally not develop tusks even if there are døme på at dei òg kan??((gjere) det). examples on that they also can do it

As for the perfect tense auxiliary ha, again, there is considerable variability, both in regard to judgments and in regard to contexts, although this latter parameter is as yet not well understood.

(19) Vi har dessverre ikke telt hvor mange fjær ei kråke we have unfortunately not counted how many feathers a crow har, og jeg veit ikke om noen har ??((gjort) det) heller. has and I know not if anyone has done it either

(20) Jeg har både drukket hjemmebrent og sloss. Jeg kjenner til I have both drunk moonshine and fought I know og med homofile vegarbeidere som har ??((gjort) det). even homosexual roadworkers that have done it

According to Bentzen, Merchant and Svenonius (2013), Norwegian allows VPE consistently only with modals, not with 'have' or passive 'become'.

Now let us turn to dummy verb stranding VP ellipsis, the dummy verb for the finite main verb being *qøre* (Danish), *qjere* (Norwegian), *qöra* (Swedish).

According to Platzack (2012: 281), Danish and Norwegian have this but Swedish needs to add the pronoun *det*, resulting in **VP Pronominalization** in the terminology of Houser, Mikkelsen and Toosarvandani (2008).

The Norwegian data are contested. Here are two sentences that need det:

- (21) Nesten alle i gata abonnerer på Klassekampen, det er bare oss almost all in street subscribe on Class-struggle it is only us som ikke gjør *(det).

 that not do it
- (22) Mange av oss sender tweets fra sykkel- eller skiturene våre i many of us send tweets from bicycle- or skihikes ours in Nordmarka. Jeg gjør *(det), i alle fall.

 Nordmarka I do it in all cases

3.2 'Do it': almost VPE?

Even if Norwegian, like Swedish but possibly unlike Danish, lacks VPE in the strict sense of a stranded dummy verb 'do', *gjere det* 'do it' has been argued to **behave like** VP ellipsis (Bentzen, Merchant and Svenonius 2013). In particular, the argument goes, *gjere det* can be a case of *surface anaphora*.

On the one hand, $gj \sigma re \ det$ shows signs of being **deep anaphoric**:

- the antecedent can be non-linguistic ('exophoric use'), cf. (23),
- Ā extraction is excluded, cf. (24).
- (23) Ta det med ro, hun kommer ikke til å gjøre det. take it with calm she comes not to to do it 'Calm down, she's not gonna do it.'

(24) Det interessante er ikke så mye hvem han sparker som hvem han the interesting is not so much who he fires as who he ikke gjør det *(med).

not does it with

But crucially, *qjøre det* also shows signs of being **surface anaphoric**:

- Missing Antecedent Anaphora is licensed, cf. (25),
- Inverse Quantifier scope readings are preserved, cf. (26).
- (25) Tar ikke de depositum? De gjorde det sist jeg leide, men jeg
 Take not they deposit they did it last I rented but I
 fikk det igjen etter noen dager bare.
 got it back after some days just
- (26) Og nå skal en av dere banke på hver eneste dør her? Ja, and now shall one of you knock on every single door here yes eller en av de frivillige valgkampmedarbeiderne skal gjøre det. or one of the volunteer campaigners shall do it

To account for this paradoxical behavior, Bentzen, Merchant and Svenonius (2013) distinguish two det in $gj \sigma re$ det: one, det_s , an extraordinary pronoun involving ellipsis ($gj \sigma re$ is a light verb), and one, det_d , an ordinary pronoun not involving ellipsis ($gj \sigma re$ is a main verb). They go on to note that

- det_d correlates positively with Object Shift,
- \bullet $det_{\rm s}$ correlates negatively with Object Shift.
- (27) illustrates that Object Shift is obligatory for exophoric resolution:
- (27) Slapp av, han gjør {det} ikke {*det}. relax off he does it not it

However, exophoric resolution does seem possible without Object Shift:

(28) Du gjør ikke det en gang til, altså. you do not it one time to thatis 'You're not doing that again, I'm telling you.'8

 $^{^8 {\}rm Or:}\ {\it Du}\ {\it gjorde}\ ikke\ det\ med\ vilje,\ håper\ jeg?}$ 'You didn't do that on purpose, did you?'

The reason seems to be that a pronoun can refer to a discourse topic without functioning as a deaccented "continuing topic". BMS appear to concentrate on "prosodically light" det.

Incompatibility of Missing Antecedent Anaphora licensing with Object Shift is illustrated with (30) versus (29).

- (29) Guro skriver aldri med penn. Jens gjør alltid det. Den er rød. Guro writes never with pen Jens does always it it is red
- (30) Guro skriver aldri med penn. Jens gjør det alltid. #Den er rød. Guro writes never with pen Jens does it always it is red

This contrast may seem elusive; my judgment is that both are problematic. Now in (31), both the version with and the one without OS seem good:

(31) Dater hun noen nå? Hun gjorde {det} ihvertfall {det} sist jeg dates she anyone now she did it inanycase it last I så henne, og han var dødskjekk.

saw her and he was supercool

Incompatibility of inverse scope readings with Object Shift is illustrated with (32-b) ($\exists > \forall, *\forall > \exists$) versus (32-a) ($\exists > \forall, \forall > \exists$).

- (32) En av studentene i gruppe A svarte feil på hvert spørsmål, ... 'A student in group A answered every question wrong, ...'
 - a. . . . og en av studentene i gruppe B gjorde også $\det_{\mathbf{s}}.$
 - ... and one of students.the in group B did also it
 - b. ... og en av studentene i gruppe B gjorde det_d også.
 ... and one of students.the in group B did it also

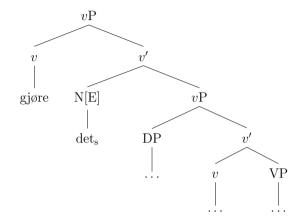
Again, this contrast may seem elusive; in my judgment, the $\forall > \exists$ reading is difficult to get in both cases. Now in (33), this reading might be available – on both versions:

(33) Er det slik at en psykolog vurderer hvert enkelt tilfelle? Ja, is it so that a psychologist assesses every single case yes og en pedagog gjør {det} også {det}.

and a pedagogue does it too it

Thus the correlations between \det_d/\det_s and \pm Object Shift seem shaky.

This weakens the case for a surface anaphoric $gj \sigma re$ det as a MSc VP ellipsis counterpart, because BMS analyze det_s not as a pronoun but as a noun, a noun hosting an E-feature triggering ellipsis of its sister vP predicate:



As an N, det_s does not qualify as a potential target for Object Shift.

So maybe $gj \sigma re \ det$ is not ambiguous but just flexible.

Something that still speaks in favor of an ambiguity analysis is the fact that while *gjøre det* can host PP orphans (cf. Mikkelsen, Hardt and Ørsnes 2012),

- (34) Små vatn behandles med rotenon, men det gjøres ikke med store. tiny lakes treat.s with rotenon but it do.s not with big
- and can take stative predicates as antecedents, combinations are impossible:
- (35) *Jeg elsker han, men han gjør ikke det med meg.

 I love him but he does not it with me

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