Parasitic participles in VP-focus pseudoclefts

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1. Introduction

This article discusses pseudocleft constructions of the type in (1)-(2), found in Dutch and German, where the verb in the focused verb phrase (in square brackets) can be either an infinitive or a past participle.

(1) *Dutch*

Wat	ik	heb	ge-daan	is	[	keihard	werk-en /	ge-werk-t]
what	I	AUX:1SG	GE-do:PTCP	be:3SG		real.hard	work-INF	GE-work-PTCP

'What I did is work real hard.'

(2) *German*

Was	ich	ge-mach-t	habe	ist	[	einfach	weitere	Apps
what	I	GE-do-PTCP	AUX:1SG	be:3SG		just	more	apps

installier-en /	installier-t]
install-INF	install-PTCP

'What I did is simply to install more apps.'

Past participles in Dutch and German normally occur with a temporal (*have*/*be*) or passive auxiliary, which is absent from the focus VP in (1)-(2). In the pseudocleft constructions in (1)-(2), the participle in the focus VP is parasitic on the past participle in the antecedent VP:

(3) *Dutch*

Wat	ik	deed	is	[	keihard	werk-en /	*ge-werk-t]
what	I	do:PST	be:3SG		real.hard	work-INF	GE-work-PTCP

'What I did is work real hard.'

Replacement of the antecedent VP past participle construction *heb gedaan* 'did' by a simple past form *deed* 'did' has the effect that the past participle can no longer be used in the focus VP.

In this article I present an analysis of the properties of parasitic past participles in VP-focus pseudoclefts, in the context of what we know about pseudoclefts more generally and about parasitic participle constructions crosslinguistically. The analysis leads me to consider an ellipsis analysis of the focus VP, which can be shown to have several advantages, especially in the variant of ellipsis espoused by Ott and De Vries (2016), where ellipsis is preceded by fronting of the focused material. However, my conclusion is that the relevant facts can be equally well understood in a 'base-generation' analysis, not involving ellipsis. Our discussion shows the importance of the feature 'anterior' (as distinct from

'past') in the morphosyntactic realization of Continental West Germanic verbs (cf. Zwart 2017).

2. Pseudoclefts

Pseudoclefts (Higgins 1973, Blom and Daalder 1979, Den Dikken 2005) are copular constructions of the type [A COP B] where A is a wh-clause and B a focused element:

(4) *Dutch*

[	Wat	ik ⟨*e*⟩	lees	]	is	[een	boek]
	what	I	read:1SG		BE:3SG	INDF	book

'What I'm reading is a book.'

In (4), A = *wat ik lees*, COP (the copula) = *is*, and B = *een boek*. The wh-clause is marked by a fronted wh-element (*wat* in (4)) associated with an empty position (a variable) inside the clause (indicated by ⟨*e*⟩ in (4); the variable precedes the finite verb, because of the verb-final character of embedded clauses in Dutch). B (the focused element) can be interpreted as providing the value for the variable, so that (4) entails (5).

(5) *Dutch*

Ik	lees	een	boek
I	read:1SG	INDF	book

'I'm reading a book.'

On this interpretation, the pseudocleft construction is called *specificational*.

Alternatively, A refers to a separate concept *x*, and B identifies or specifies a property of *x*. This is easier to see when B is not a noun phrase or not a suitable complement of the verb in A:

(6) *Dutch*

[	Wat	ik ⟨*e*⟩	lees	]	is	[interessant	]
	what	I	read:1SG		BE:3SG	interesting	

'What I'm reading is interesting.'

This is a *predicational* pseudocleft construction. It does not allow a paraphrase like (5)(cf. (7a)), but requires the more involved paraphrase in (7b).

(7) a. * I'm reading interesting
b. I'm reading *x*, and *x* is interesting

When B is a noun phrase, as in (1), the pseudocleft construction is ambiguous between a specificational and a predicational interpretation, and we need diagnostic tests to tell the two readings apart.

For Dutch, the following tests can be applied:

(i) A pied-piped wh-phrase brings out the specificational reading.
This is illustrated in (8):

(8) *Dutch*
a. Met wie hij ⟨*e*⟩ praat is de nieuw-e directeur
with who he speak:SG be:3SG DEF new-AGR director
'He is talking to the new director.' (specificational)
b. * Met wie hij ⟨*e*⟩ praat is een eikel
with who he speak:SG be:3SG INDF acorn
(intended) 'The person he's talking to is a jerk' (predicational)

The contrast between (8a) and (8b) is reminiscent of the difference between embedded wh-questions and free relative clauses, the latter not allowing pied-piped wh-expressions:

(9) *Dutch*
a. Ik weet met wie hij praat
I know:SG with who he speak:SG
'I know who he is talking to.' (embedded question)
b. * Ik ken met wie hij praat
I know:SG with who he speak:SG
(intended) 'I am familiar with the person who he is talking to.' (free relative)

I take this to suggest that the wh-clause in specificational pseudoclefts is an embedded question, while the wh-clause in predicational pseudoclefts is a free relative clause (see Den Dikken 2005 for extensive discussion of the status of the wh-clause in specificational pseudoclefts).

(ii) Changing the copula brings out the predicational reading.
In (10), we change the copula from 'be' to 'become':

(10) *Dutch*
a. Wie jij ⟨*e*⟩ noem-t word-t de nieuw-e directeur
who you mention-2SG become-3SG DEF new-AGR director
'The person you mention will be the new director.' (predicational)
b. * Met wie hij ⟨*e*⟩ praat word-t de nieuw-e directeur
with who he speak:SG become-3SG DEF new-AGR director
(intended) 'The person he is talking to will be the new director.' (predicational)

In (10a), the specificational reading ('You are mentioning the new director') is not available. (10b) shows that wh-pied piping, which brings out the specificational reading, is not possible with 'become' instead of 'be'.

Other processes affecting the copula, such as adjusting its tense morphology or marking it for agreement with the focus NP, also bring out the predicational reading.

(iii) Degree modification of the focus element brings out the predicational reading.
Such degree modification is illustrated in (11), using *je reinste* 'utter':

(11) *Dutch*
Wat hij schrijf-t is je reinste porno
what he write-3SG be:3SG utter porn
'The stuff he writes is utter porn.' (predicational)

The effect of the degree modification is that *porno* 'porn' can only be understood as predicating over whatever it is that he writes (i.e. the predicational reading). The simple reading 'He writes porn' is not available.

3. VP-focus pseudoclefts

Let us now return to pseudoclefts of the type in (1)-(2), where A and B are not noun phrases but verb phrases. These, too, can be specificational or predicational. Before turning to the type involving a parasitic participle, consider first the example in (12), where A contains a modal auxiliary and an empty complement to the modal auxiliary:

(12) *Dutch*
Wat ik ⟨*e*⟩ wil is [keihard werk-en]
what I want:SG be:3SG real.hard work-INF
'What I want is to work real hard.'

In (12), the focus VP *keihard werken* 'work real hard' provides a value for the variable ⟨*e*⟩, so that (12) can be paraphrased as (13):

(13) *Dutch*
Ik wil keihard werk-en
I want:SG real.hard work-INF
'I want to work real hard.'

But (12) can also be interpreted as a predicational pseudocleft, as can be seen when we change the copula:

(14) *Dutch*
Wat ik ⟨*e*⟩ wil word-t [keihard werk-en]
what I want:SG become:3SG real.hard work-INF
'What I want entails that I have to work real hard.'

Here the antecedent *wat ik wil* 'what I want' stands for some concept *x*, say finish your dissertation within four years, and what (14) means is that achieving *x* will mean a lot of hard work.

Another construction that brings out the predicational reading of the pseudocleft is when the focus VP expresses a meta-comment, as in (15):

(15) *Dutch*
Wat ik ⟨*e*⟩ wil is [vrag-en om moeilijkhed-en]

what I want:SG be:3SG ask-INF for trouble-PL
'What I want is asking for trouble.'

Although (15) also has the specificational reading ('I want to literally ask for trouble'), the more natural meta-comment reading as given in the translation is clearly predicational: what I want is some concept *x*, say enforce the smoking ban on Dutch train platforms, and *x* (enforcing the smoking ban) means asking for trouble.

As expected, this predicational reading of VP-focus pseudoclefts invites the use of degree modifiers such as *je reinste* 'utter':

(16) *Dutch*
Wat ik ⟨*e*⟩ wil is je reinste [vrag-en om moeilijkhed-en]
what I want:SG be:3SG utter ask-INF for trouble-PL
'What I want is a clear case of asking for trouble.' (predicational)

VP-focus pseudoclefts in Dutch require the presence of verbal material in A. In (12)-(16), the verbal material is a modal auxiliary. Elsewhere, a dummy verb *do* must employed, as we saw already in (1) and (3).

4. Parasitic participles in VP-focus pseudoclefts.

Let us return now to the pseudocleft construction in (1), with a past participle in the focus VP:

(17) *Dutch*
Wat ik heb ge-daan is [keihard ge-werk-t]
what I AUX:1SG GE-do:PTCP be:3SG real.hard GE-work-PTCP
'What I did is work real hard.'

This participle, *gewerkt* 'worked' in (1)/(17), can only appear when the antecedent VP contains a past participle (cf. (3)):

(18) *Dutch*
a. * Wat ik deed is [keihard ge-werk-t]
what I do:PST be:3SG real.hard GE-work-PTCP
'What I did is work real hard.'
b. * Wat ik doe is [keihard ge-werk-t]
what I do:1SG be:3SG real.hard GE-work-PTCP
(intended) 'What I do is work real hard.'
c. * Wat ik wil is [keihard ge-werk-t]
what I want:1SG be:3SG real.hard GE-work-PTCP
'What I want is to work real hard.'

The condition has to refer to the morphology, not to the grammatical feature expressed by the morphology. The relevant feature is anteriority (relative tense), which is also present

in the so-called IPP-construction, where a past participle that takes an infinitival complement is itself also realized with infinitive morphology (Lange 1981). In that case, the focus VP must be infinitive as well (in these examples, the infinitive *willen* 'want' replaces the expected participle *gewild* 'wanted'):

(19) *Dutch*

a. Wat ik heb wil-len doe-n is [keihard werk-en]
what I AUX:1SG want-IPP do-INF be:3SG real.hard work-INF
'What I wanted to do is work real hard.'

b. * Wat ik heb wil-len doe-n is [keihard ge-werk-t]
what I AUX:1SG want-IPP do-INF be:3SG real.hard GE-work-PTCP
(intended: same as a.)

Descriptively, then, the participle of the focus VP is parasitic on the participle of antecedent VP.

The triggering participle needs to be a dummy verb *do*:

(20) *Dutch*

a. Wat ik heb ge-wil-d is keihard { werk-en / *ge-werk-t }
what I AUX:1SG GE-want-PTCP be:3SG real.hard work-INF GE-work-PTCP
'What I wanted is to work real hard.'

b. Wat ik heb ge-probeer-d is keihard { werk-en / *ge-werk-t }
what I AUX:1SG GE-try-PTCP be:3SG real.hard work-INF GE-work-PTCP
'What I tried is to work real hard.'

The IPP-effect remains in force in the parasitic participle. That is, when the verb in the focus VP has an infinitival complement, that verb cannot have participial morphology:

(21) *Dutch*

a. Ik heb keihard { lat-en / *ge-lat-en } werk-en
I AUX:1SG real.hard cause-INF GE-cause-PTCP work-INF
'I made [them] work real hard.'

b. Wat ik ge-daan heb is keihard { lat-en / *ge-lat-en }
what I GE-do:PART AUX:1SG be:3SG real.hard cause-INF GE-cause-PTCP
werk-en
work-INF
'What I made [them] do is work real hard.'

Importantly, a pseudocleft construction with a parasitic participle lacks a predicational interpretation. Recall that a VP-focus pseudocleft like (22) can have both a specificational and a predicational interpretation:

(22) *Dutch*

Wat ik ge-daan heb is vrag-en om moeilijkheden
what I GE-do:PTCP AUX:1SG be:3SG ask-INF for trouble
'What I did is ask for trouble.'

The two interpretations can be paraphrased as in (23):

(23) a. specificational: I literally asked for trouble
b. predicational: The thing I did invited trouble for me

The second, predicational reading is lost when the parasitic participle appears:

(24) *Dutch*
Wat ik ge-daan heb is ge-vraag-d om moeilijkheden
what I GE-do:PTCP AUX:1SG be:3SG GE-ask-PTCP for trouble
'What I did is ask for trouble.'
✓specificational: I literally asked for trouble
✗predicational: The thing I did invited trouble for me

This is a striking effect, given that the predicational reading is the more natural one, yet it is unavailable when the focus VP contains a parasitic participle.

As we now expect, the degree modifier (which calls out the predicational reading) cannot be used together with the parasitic participle:

(25) *Dutch*
Wat ik ge-daan heb is je reinste
what I GE-do:PTCP AUX:1SG be:3SG utter
{ vrag-en / *ge-vraag-d } om moeilijkheden
ask-INF GE-ask-PTCP for trouble
'What I did is a clear case of asking for trouble.'

Also, changing the copula from 'be' to 'become' (which forces the predicational reading) is impossible with the parasitic participle:

(26) *Dutch*
Wat ik ge-daan heb werd (op den duur)
what I GE-do:PTCP AUX:1SG become:PST.SG after some time
{ vrag-en / *ge-vraag-d } om moeilijkheden
ask-INF GE-ask-PTCP for trouble
'What I did became asking for trouble (after some time).'

We return to the obligatory specificational reading of the VP-focus pseudocleft construction with parasitic participle in section 6, where we will see that this aspect of the construction gives initial support to an ellipsis analysis (as proposed for pseudoclefts as early as Peters and Bach 1968). First, however, we compare the pseudocleft parasitic participle to other parasitic participles crosslinguistically.

5. Parasitic participles crosslinguistically

5.1 Germanic

Several cases of parasitic participles in Germanic have been discussed in the literature. At least four types may be distinguished (cf. Wurmbrand 2012):

A. Mainland Scandinavian parasitic supine constructions (Wiklund 2001, 2007)

(27) *Swedish*
Han hade kunnat **skrivit**
he AUX:PST can:PTCP write:PTCP
'He could have written.'

In (27), the verb selected by the modal shows participial rather than the expected infinitival morphology. As this does not happen when the modal is not itself a participle, the morphology seems parasitic.

B. Frisian Participium-pro-Infinitivo constructions (Den Dikken and Hoekstra 1997)

(28) *West Frisian*
Hy sol it dien ha **kinne-n**
he AUX.MOD:3SG it do:PTCP AUX:INF can-PTCP
'He would have been able to do it.' (MOD > can > AUX > do)

Here, the verb *kinne* 'can' is selected by the modal auxiliary *sol*, and would normally show infinitival morphology.

C. The 'scandalous' construction in German (Vogel 2009)

(29) *German*
... ohne es **verhinder-t** hab-en zu könn-en
without it prevent-PTCP AUX-INF to can-INF
'... without having been able to prevent it.' (AUX > can > prevent)

Again, *verhindern* 'prevent' is selected by *können* 'can' and should have infinitival morphology. The scandalous monicker is due to the fact that the infinitival marker *zu* and the auxiliary *haben* are also wrongly placed (it should read *verhindern können zu haben*, with the IPP-effect on *können*).

D. The perfect doubling construction of Dutch and German dialects (Koeneman, Lekakou and Barbiers 2011, Brandner 2008)

(30) *Brabantish Dutch*
Ik heb vandaag nog niet ge-rook-t **ge-had**
I AUX:1SSG today yet NEG GE-smoke-PTCP GE-AUX:PTCP
'I have not smoked today yet.'

(31) *Alemannic*
Er isch grad kum-me **g-si**

he AUX:3SG just come-PTCP GE-AUX:PTCP
'He had just arrived.'

The participial auxiliary *gehad* in (30) is absent outside circumscribed dialects, including Standard Dutch. In Alemannic (31), the doubling seems to be a device to express the relative past, an innovation brought about by the disappearance of the simple past.

These parasitic participle constructions share a property that is absent from the Dutch pseudocleft constructions with parasitic participles, namely that they appear in the context of verbal embedding or clustering. Consequently, the phenomenon may promisingly be approached as one of perseveration or 'cross-wiring' inside a verbal complex, essentially a (postsyntactic) morphological phenomenon if I am not mistaken (cf. Zwart 2017). By contrast, in the Dutch pseudocleft parasitic participle construction, with its copular structure ground plan, the parasitic participle cannot easily be explained as the result of a misconstrued dependency inside a verb cluster.

5.2 Beyond Germanic

Predicate doubling in connection with focus has been attested widely in so-called predicate clefting constructions (PCC), going back to Koopman (1984, chapter 6) on Vata. See Kandybowicz (2008:80) for a survey. (32) is an example from Nupe (Kandybowicz 2008:83):

(32) *Nupe*

bi-ba	Musa	à	ba	nakàn	sasi	èsun	làzi	yin	o
RED-cut	Musa	FUT	cut	meat	some	tomorrow	morning	PRT	FOC

'It is cutting that Musa will do to some meat tomorrow morning.'

Semantically the PPC seems to involve narrow focus on the verb (e.g. Larson and Lefebvre 1991:256), and the clefted predicate may not be accompanied by a complement (example from Larson and Lefebvre 1991:248):

(33) *Haitian creole*

Se	manje	(*pen	an)	Jan	manje	pen	an
IT.IS	eat	bread	DEF	Jean	eat	bread	DEF

'John *ate* the bread.'

This restriction does not apply to the Dutch pseudoclefts with parasitic participles:

(34) *Dutch*

Wat	ik	ge-daan	heb	is	alle	boek-en	van	Chomsky
what	I	GE-do:PTCP	AUX:1SG	be:3SG	all	book-PL	of	Chomsky
ge-lez-en								
GE-read-PART								

'What I did is read all books by Chomsky.'

Buli (Hiraiwa 2002), Yoruba (Kandybowicz 2004), Krachi (Kandybowicz and Torrence 2016), and doubtless other languages, do allow object pied-piping with predicate clefting. In Buli, pied-piping is limited to objects, so no adverbs or other adjuncts may be included (Hiraiwa 2002:555-556), perhaps suggesting an incorporation analysis. No such restrictions apply to Dutch pseudoclefts with parasitic participles:

(35) *Dutch*
Wat ik ge-daan heb is gisteren uitgebreid met Chomsky
what I GE-do:PTCP AUX:1SG be:3SG yesterday extensively with Chomsky
ge-praat
GE-talk:PART
'What I did is talk extensively with Chomsky yesterday.'

Closer to home, Yiddish (Cable 2004), Russian (Abels 2001) and Hebrew (Landau 2006) also allow predicate clefting with the object included in the fronted predicate, but the semantics is that of topicalization rather than focusing. (36) is an example from Yiddish (Cable 2004:2).

(36) *Yiddish*
a. Ge-gess-en hot Maks ge-gess-en fish
GE-eat-PTCP AUX:3SG Max GE-eat-PTCP fish
'As for eating, Max ate fish.'
b. Ge-gess-en fish hot Maks ge-gess-en
GE-eat-PTCP fish AUX:3SG Max GE-eat-PTCP
'As for eating fish, Max ate them.'

Similar constructions have been reported for Iberian Romance languages (Vicente 2009, Cable 2004). Semantically this is quite different from the Dutch pseudocleft construction featuring parasitic participles, which express contrastive focus.[1]

I conclude that the existing literature on predicate clefting does not provide a model for the analysis of Dutch parasitic participle pseudo-clefts.

6. Ellipsis analysis

It has been observed as early as Peters and Bach (1968) that pseudocleft constructions alternate with an asyndetic construction where the focus NP is represented as part of a full clause:

[1] Interestingly, though, the participle in Yiddish alternates with an infinitive, suggesting that the participial morphology, when it appears, is again parasitic:

(i) Ess-en hot Maks ge-gess-en a fish
eat-INF AUX:3SG Max GE-eat-PTCP INDEF fish
'As for eating, Max ate a fish.'

(37) *English*

a.	What John reads ⟨*e*⟩ is BOOKS	(pseudocleft construction)
b.	What John reads ⟨*e*⟩ is he reads BOOKS	(asyndetic construction)

In (37b), where *books* is in focus, we may describe *he reads* as the focus related topic, a natural target for ellipsis (Tancredi 1992). This suggests that the pseudocleft construction (37a) may be derived from the asyndetic construction (37b) via deletion of the focus related topic *he reads*:

(38) *Ellipsis analysis*
What John reads ⟨*e*⟩ is ~~he reads~~ BOOKS

While the ellipsis analysis has been criticized and rejected early on (Higgins 1973, Blom and Daalder 1979), it has been revived in recent years (cf. Den Dikken, Meinunger and Wilder 2000), and has some immediate advantages for the analysis of pseudocleft constructions with parasitic participles.

First, a pseudocleft construction derived from an asyndetic construction via ellipsis can only be of the specificational type. Recall that in a specificational pseudocleft the focus NP provides a value for the variable ⟨*e*⟩ of the antecedent clause. This is different from a predicational pseudocleft, where the antecedent clause refers to a concept *x*, which is then predicated over by the focus NP. The status of the focus NP, then, is different in the two types of pseudocleft: in specificational pseudoclefts, it is a complement to the verb, while in predicational pseudoclefts, it is a predicate. In the ellipsis analysis (38), it is clear that the focus NP must be interpreted as a complement to the verb, so that only the specificational reading should be available.

Put differently, there is no source for the derivation of predicational pseudoclefts via ellipsis:

(39) *No ellipsis for predicational pseudoclefts*
What John reads ⟨*e*⟩ is ~~he reads~~ INTERESTING

Recall now that pseudoclefts with parasitic participles are uniquely specificational. This is explained if they are derived via ellipsis from an asyndetic clausal source:

(40) *Ellipsis analysis for parasitic participle pseudoclefts (Dutch)*

Wat	ik ⟨*e*⟩	ge-daan	heb	is	~~ik heb~~
what	I	GE-do:PTCP	AUX:1SG	be:3SG	I AUX:1SG

[keihard ge-werk-t]
real.hard GE-work-PTCP
'What I did is work real hard.'

In (40), the only interpretation that is available for the focus VP *keihard gewerkt* 'worked real hard' is that of complement to the temporal auxiliary *heb* 'have', leading us to interpret the VP as providing a value for the variable in the antecedent clause *wat ik gedaan heb*

'what I did'. As a result, (40) can only be specificational.

Second, the ellipsis analysis immediately explains the distribution of the parasitic participle in pseudocleft constructions. Recall that the parasitic participle can only occur when the antecedent clause contains a past participle as well (see (18)-(19)). None of the examples in (18)-(19) can be derived via ellipsis from a grammatical source clause:

(41) *No source for ellipsis*

a. *	Ik	deed		keihard	gewerkt	(18a)
	I	do:PAST.SG		real.hard	GE-work-PTCP	
b. *	Ik	doe		keihard	gewerkt	(18b)
		do:1SG				
c. *	Ik	wil		keihard	gewerkt	(18c)
		want:SG				
d. *	Ik	heb	willen	keihard	gewerkt	(19b)
		AUX:1SG	want-INF			

The ellipsis analysis also explains the observation illustrated in (20) above, that the participle in the antecedent clause must be a form of the dummy verb. All other verbs would destroy the parallelism between the antecedent clause and the asyndetically linked clause hosting the focus VP:

(42) *No source for ellipsis*

a. * Wat ik heb ge-wil-d is ik heb keihard ge-werk-t
what I AUX:1SG GE-want-PTCP be:3SG I AUX:1SG real.hard GE-work-PTCP
(intended) 'What I wanted is I worked real hard.'

b. * Wat ik heb ge-probeer-d is ik heb keihard ge-werk-t
what I AUX:1SG GE-try-PTCP be:3SG I AUX:1SG real.hard GE-work-PTCP
(intended) 'What I tried is I worked real hard.'

The observation in (21), showing the IPP-effect in the focus VP, also follows naturally on an ellipsis analysis:

(43) *IPP in the focus VP with ellipsis*

Wat ik ge-daan heb is ik heb keihard
what I GE-do:PART AUX:1SG be:3SG I AUX:1SG real.hard
{ lat-en / *ge-lat-en } werk-en
cause-INF GE-cause-PTCP work-INF
'What I made [them] do is work real hard.'

These two observations, the uniquely specificational interpretation and the limited distribution, provide immediate support for the ellipsis analysis of pseudocleft constructions with parasitic participles.

However, the ellipsis analysis of VP-focus pseudoclefts with parasitic participles also faces two immediate problems. First, the analysis cannot be generalized to regular VP-focus pseudoclefts, of the type in (3), repeated here:

(44) *Dutch*
Wat ik deed is keihard werk-en
what I do:PST be:3SG real.hard work-INF
'What I did is work real hard.'

To derive (44) via ellipsis, we must posit a source clause like (45), which is ungrammatical.

(45) *Dutch*
* Wat ik deed is || ik deed keihard werk-en
what I do:PST be:3SG I do:PST real.hard work-INF
(intended) 'What I did is I worked real hard.'

The ellipsis analysis now must either posit an ungrammatical source, or must apply to pseudoclefts with parasitic participles only. Neither option is very attractive. (This argument may be carried further by considering the inapplicability of the ellipsis analysis to *it*-clefts, for which see Appendix 1.)

Second, while VP-focus pseudoclefts with parasitic participles may be considered somewhat marked, they lack the disjointed, anakolouthic character of the proposed asyndetic source for the ellipsis illustrated in (40). This raises the question how the asyndetic source construction for the ellipsis may have been derived. In the spirit of Zwart (2009) one might think that the derivation of a construction of this type requires derivation layering: an analysis in which part of the structure is derived in a separate derivation and included in the numeration for the current derivation as the single item [*ik heb keihard gewerkt*].[2] But if that is the case, what is to exclude an analysis in which the separate derivation simply yields the sequence [*keihard gewerkt*], obviating the need for any ellipsis?

The first problem can be solved by assuming that ellipsis is preceded by VP-fronting (cf. Ott and De Vries 2016), as the next section discusses. But this analysis faces problems of its own, suggesting that an analysis without ellipsis might be preferable.

7. Remnant ellipsis

Ott and De Vries (2016) propose an analysis of right dislocation involving ellipsis from a biclausal source. Consider the example in (46).

(46) *Dutch*
Tasman heeft ze ge-zie-n de Maori-s
Tasman AUX:3SG them GE-see-PTCP DEF Maori-PL
'Tasman saw them, the Maoris.'

In the analysis proposed by Ott and De Vries, *de Maori's* 'the Maoris' is all that remains of a full clause (47), which is juxtaposed to the clause *Tasman heeft ze gezien* 'Tasman saw

[2] Arguably, both the A and the B part in the A COP B construction making up the pseudocleft are best viewed as outputs of separate derivations.

them.' Call this the dislocation clause.

(47) Tasman heeft de Maori-s ge-zie-n
Tasman AUX:3SG DEF Maori-PL GE-see-PTCP
'Tasman saw the Maoris.'

Inside the dislocation clause, *de Maori's* is fronted before ellipsis takes place:

(48) [De Maori-s]$_i$ heeft Tasman t_i ge-zie-n
DEF Maori-PL AUX:3SG Tasman GE-see-PTCP

Ellipsis then targets everything to the right of *de Maori's*, so that the fronted noun phrase is all that remains of the dislocation clause. (46), then, is derived from a biclausal analysis via fronting and deletion in the second clause, as illustrated in (49).

(49) *Remnant ellipsis analysis of Right Dislocation*
Tasman heeft ze ge-zie-n || [[de Maori-s]$_i$
Tasman AUX:3SG them GE-see-PTCP DEF Maori-PL

~~heeft Tasman t_i ge-zie-n~~]
AUX:3SG Tasman GE-see-PTCP

'Tasman saw them, the Maoris.'

Let us take this analysis of Ott and De Vries (2016) to provide the model for ellipsis in the deletion approach to pseudoclefts. That means that between (37b) and (37a), here repeated as (50a) and (50c), there is an additional step of fronting, illustrated in (50b).

(50) *English*
a. What John reads ⟨*e*⟩ is he reads BOOKS (asyndetic construction)
b. What John reads ⟨*e*⟩ is BOOKS he reads (fronting)
c. What John reads ⟨*e*⟩ is BOOKS ~~he reads~~ (pseudocleft construction)

We will now show that this approach to ellipsis (in general) strengthens the ellipsis analysis of pseudoclefts, in the sense that discrepancies that exist (i) between either the focus XP and the corresponding material in the asyndetic clause, or (ii) between the focus related topic and the corresponding material in the asyndetic clause (i.e. the material to be deleted under identity with non-focus material in the antecedent clause), are resolved after fronting of the focus XP inside the asyndetic clause.

To see what I mean by such 'discrepancies', consider again example (44)-(45), here repeated.

(44) *Dutch*
Wat ik deed is keihard werk-en
what I do:PST be:3SG real.hard work-INF
'What I did is work real hard.'

(45) *Dutch*

* Wat ik deed is || ik deed keihard werk-en
what I do:PST be:3SG I do:PST real.hard work-INF
(intended) 'What I did is I worked real hard.'

In (45), the focus VP is *keihard werken* 'work real hard', and the focus related topic is *ik deed* 'I did'. The problem is that the anakolouthic clause *ik deed keihard werken* 'I worked real hard' is ungrammatical in Dutch. Yet the presence of the dummy verb is required by parallelism with the focus related topic material in the antecedent clause (roughly, *I did x*), hence the discrepancy. But after fronting of the focus VP (51), the dummy verb is allowed (in fact, obligatorily present), removing the discrepancy.

(51) *Dutch*

[Keihard werk-en] *(deed) ik
real.hard work-INF do:PST I
'I worked real hard.'

Cases like this, where VP-fronting removes discrepancies between the source construction (the asyndetic construction underlying ellipsis) and the target construction (the VP-focus pseudocleft) can be multiplied:

(52) *Dutch*

a. *VP-focus pseudocleft*
Wat ik hem heb zie-n doe-n is keihard werk-en
what I him AUX:1SG see-INF do-INF be:3SG real.hard work-INF
'What I saw him do is work real hard.'

b. *asyndetic ellipsis source*
Ik heb hem keihard zien (*doen) werk-en
I AUX:1SG him real.hard see-INF do-INF work-INF

c. *asyndetic ellipsis source with VP-fronting*
Keihard werken heb ik hem zien doen
real.hard work-INF AUX:1SG I him see-INF do-INF

In (52), the asyndetic ellipsis source (52b), in addition to containing the ungrammatical dummy verb *doen* 'do', features a nonconstituent *keihard werken* 'work real hard' as the source for the focus VP in the VP-focus pseudocleft (52a). Fronting of *keihard werken* restores both the dummy verb and the constituent status of the VP.

(53) *Dutch*

a. *VP-focus pseudocleft*
Wat hij gisteren ge-daan heeft is 'm op-ge-lad-en
what he yesterday GE-do:PTCP AUX:3SG be:3SG OCL up-GE-charge-PTCP
'What he did yesterday is charge it.'

b. *asyndetic ellipsis source*
Hij heeft 'm gisteren op-ge-lad-en
he AUX:3SG OCL yesterday up-GE-charge-PTCP

c. *asyndetic ellipsis source with VP-fronting*

'm	op-ge-lad-en	heeft	hij	gisteren
OCL	up-GE-charge-PTCP	AUX:3SG	he	yesterday

In (53), the third person object pronoun *'m* is part of the focus VP *'m opgeladen* 'charged it', but since the object pronoun is a clitic, it is separated from the verb in the asyndetic ellipsis source (53b), creating a non-constituent VP. Fronting of the VP again restores the constituency, creating a suitable source for the ellipsis (54b).

(54) *Dutch*

a. *VP-focus pseudocleft*

Wat	hij	niet	ge-daan	heeft	is	een	boek	ge-lez-en
what	he	NEG	GE-do:PTCP	AUX:3SG	be:3SG	INDF	book	GE-read-PTCP

'What he didn't do is read a book.'

b. *asyndetic ellipsis source*

Hij	heeft	geen	boek	ge-lez-en
he	AUX:3SG	no	book	GE-read-PTCP

c. *asyndetic ellipsis source with VP-fronting*

Een	boek	ge-lez-en	heeft	hij	niet
INDF	book	GE-read-PTCP	AUX:3SG	he	NEG

In (54), the asyndetic ellipsis source (54b) contains a negative article *geen* 'no', in which the negation *niet* and the indefinite article *een* have been fused. This fused negative article is absent from the focus VP in the target construction (54a). In the asyndetic ellipsis source with VP-fronting (54c), the fused negative article no longer appears.

(55) *Dutch*

a. *VP-focus pseudocleft*

Wat	hij	gaa-t	prober-en	is	een	boek	schrijv-en	
what	he	ASP.AUX-3SG	try-INF	be:3SG	INDF	book	write-INF	

'What he is going to try to do is write a book.'

b. *asyndetic ellipsis source*

Hij	gaa-t	prober-en	een	boek	*(te)	schrijven
he	ASP.AUX-3SG	try-INF	INDF	book	to	write-INF

c. *asyndetic ellipsis source with VP-fronting*

Een	boek	schrijv-en	gaa-t	hij	prober-en
INDF	book	write-INF	ASP.AUX-3SG	he	try-INF

In (55), the asyndetic ellipsis source contains the infinitival marker *te* (55b), which is absent from both the target construction (55a) and the VP-fronting construction (55c).

In all these cases fronting prepares the asyndetic clause for the ellipsis that yields the required focus VP in the pseudocleft construction. The approach to ellipsis proposed in Ott and De Vries (2016), then, improves the ellipsis analysis of VP-focus pseudoclefts with parastic participles considerably, by removing the first of the two problems noted at the conclusion of section 6.

However, the remnant ellipsis analysis is not without problems either. These can be

listed as follows.

We saw in (52)-(53) that the material making up the focus VP in the pseudocleft construction is scattered (hence a non-constituent) in the asyndetic source clause, and only appears as a constituent after fronting. This creates the desired input for remnant ellipsis, but it raises the question how non-constituent material can be fronted as a single constituent. From this perspective, (52)-(53) are just as much of a problem for the ellipsis analysis as an argument in its favor.

Likewise, it is not clear how negation is defused (54) or the infinitival marker *te* is lost (55) under fronting. These facts showing a discrepancy between fronted and in situ VPs have in fact been taken to support a base-generation analysis of 'topicalization' (Weerman 1989). Of course, if a VP can be base-generated in topic position, it can also be base-generated in pseudocleft constructions, and the similarities between the two are in fact predicted.

We may also return to an argument against ellipsis advanced by Green (1971) and discussed in Higgins (1973:56f) (under the rubric of 'nonexistent deep structure sources' for deletion).[3] Here we adapt the argument to the domain of VP-focus pseudoclefts.

(56) *Dutch*

Wat	we	aan	dat	probleem	ge-daan	heb-ben	is
what	we	about	that	problem	GE-do:PTCP	AUX-PL	be:3SG
veel	vergader-d						
a.lot	meet-PTCP						

'What we did about that problem is hold a lot of meetings.'

As expected in the remnant ellipsis analysis, the *about*-constituent cannot appear together with the focus-VP without fronting (the PP is ungrammatical in any position):

(57) *Dutch*

We	heb-ben	(*aan	dat	probleem)	veel	vergader-d
we	AUX-PL	about	that	problem	a.lot	meet-PTCP

'We held a lot of meetings.'

But here fronting does not remedy the situation:

(58) *Dutch*

Veel	vergader-d	heb-ben	we	(*aan	dat	probleem)
a.lot	meet-PTCP	AUX-PL	we	about	that	problem

'We held a lot of meetings.'

We have not explicitly addressed the derivation of the asyndetic source clause ('elliptic clause', in Ott and De Vries 2016), but the logic would seem to be that the material of the

[3] This argument questions the derivation via ellipsis of examples like (i), as the asyndetic source clause underlying the ellipsis (ii) is ungrammatical.

(i) What I like about John is his sense of humor

(ii) *I like his sense of humor about John

asyndetic source clause is copied from the antecedent clause, with no exceptions predicted.

An imperfect match between the antecedent clause and the asyndetic source clause is also in evidence with discourse particles:

(59) *Dutch*

Wat	hij	nou	wil	is	componist	word-en
what	he	PRT	want:SG	BE:3SG	composer	become-INF

'Well, what he wants is to become a composer.'

Nou 'now' in (59) is a discourse particle that guides the flow of the argument, announcing the main point or a return to the main line of argumentation. Such discourse particles cannot appear in the asyndetic source clause, regardless of fronting of the focus-VP:

(60) *Dutch*

a.	Hij	wil	(*nou)	componist	word-en
	he	want:SG	PRT	composer	become-INF
b.	Componist	word-en	wil	hij	(*nou)
	composer	become-INF	want:SG	he	PRT

Another problem is that negative polarity items (NPIs) in Dutch do not like to be fronted. In (61), the NPI is *ook maar iets*, an indefinite marked by the minimizer *ook maar*:

(61) *Dutch*

a.	Geen	STUDENT	wil	ook maar	IETS	voorbereid-en
	NEG.INDF	student	want:SG	MINIM	anything	prepare-INF

'No student wants to prepare the slightest thing.'

b. *	Ook maar	IETS	voorbereid-en	wil	geen	STUDENT
	MINIM	anything	prepare-INF	want:SG	NEG.INDF	student

In (61), the NPI apparently needs to remain within the c-command domain of the negative subject *geen student* 'no student', so that fronting of the focus-VP *ook maar iets voorbereiden* 'prepare anything' is blocked. But the same focus-VP can appear in a pseudocleft without losing the negative polar (minimizing) interpretation:

(62) *Dutch*

Wat	geen	STUDENT	wil	is	ook maar	IETS	voorbereid-en
what	NEG.INDF	student	want:SG	be:3SG	MINIM	anything	prepare-INF

'What no student wants is to prepare the slightest thing.'

The biclausal analysis, with fronting and remnant ellipsis in the asyndetic source clause, is unable to derive the pseudocleft in (62).

It appears, then, that while the remnant deletion analysis of ellipsis achieves some improvement over traditional approaches to ellipsis, it cannot derive all cases of VP-focus pseudocleft constructions, and it creates some new problems all its own. This adds to the other problems of the ellipsis analysis, already noted:

(63) *problems of the ellipsis analysis of VP-focus pseudoclefts with parasitic participles*
a. the ellipsis analysis cannot be generalized to other pseudoclefts, not involving parasitic participles
b. the ellipsis analysis relies on an asyndetic source construction which has a marked character absent from the pseudocleft construction
c. the asyndetic source construction must arguably be derived via derivation layering, removing much of the intuitive appeal of an ellipsis approach.

In the final section of the paper we elaborate on (63c).

8. A 'base-generation' analysis.

As an alternative to ellipsis, we may consider a base-generation analysis, in which the focus XP is created in a separate derivation layer (cf. Zwart 2009) and is merged as a single element in the B position (recalling the A copula B structure of pseudoclefts). This base-generation analysis can be applied to both specificational and predicational pseudoclefts (and *it*-clefts, cf. Appendix 1), thus generalizing over these constructions as far as the derivation of the B-part is concerned. Moreover, we may take the discrepancies noted above between in situ and fronted VPs to suggest that 'topicalization' of VPs is likewise not the result of movement but of base-generating in left-peripheral position the same constituent that is also merged in clefts and pseudoclefts.

The basic principle of layered derivations, a variant of the Multiple-Spell Out idea of Uriagereka (1998), is that a derivation is typically a network of derivations, each consisting of the three components of any minimalist derivation: (i) a Numeration (of elements to be merged), (ii) Merge (i.e. Narrow Syntax), (iii) Externalization (i.e. the interface components dealing with sound, including morphology, and meaning). Idiosyncratic properties of form and meaning are determined at the Externalization stage of each (sub-)derivation, which can lead to a clause or verb phrase being reanalyzed as a noun phrase before being included in the Numeration of another derivation (see Zwart 2009 for more discussion).

Both ellipsis and 'base-generation' of VP-focus pseudoclefts can be described in terms of a layered derivations architecture. In the case of ellipsis, a clause is derived in a separate derivation layer, and reinterpreted as a noun phrase before being included in the Numeration for the next derivation. In the case of 'base-generation', the separate derivation yields not a clause but a VP, which is likewise reinterpreted as a noun phrase before being included in the Numeration for the next derivation. The difference between ellipsis and 'base-generation', then, would be that ellipsis requires derivation of a clause *cum* fronting and ellipsis, whereas 'base-generation' requires derivation of a VP without any further operations.

From the base-generation perspective, the difference between VP-focus pseudoclefts with and without parasitic participles (cf. (1)) is purely morphological: the VP that is created in a separate derivation and included in the Numeration for the next derivation as a noun phrase gets spelled out as a participle in some situations, but not in others. The success of the analysis depends on how easily these situations can be defined.

Recall that past participle morphology in Dutch occurs only in the presence of a temporal auxiliary (*have*/*be*) or the passive auxiliary *worden* 'become'. (I ignore the passive in what

follows.) We may assume, for the time being, that the morphology reflects a dependency of the participle on the auxiliary. Let us say that the auxiliary assigns a feature to the verb which is spelled out as participial morphology. This is surely an oversimplification (cf. Zwart 2017), but it will probably do for now.[4]

We may also assume, uncontroversially, that the relevant dependency requires a relation of c-command, such that the auxiliary (or the functional head with which it is associated) c-commands the verb (and α c-commands δ iff δ is [contained in] the sister of α, making c-command a function of Merge; cf. Epstein 1999). As I've argued elsewhere (Zwart 2017), the feature relevant to past participle morphology in Dutch is anteriority (relative tense), and I adopt here the structure of the clause proposed by Wiltschko (2014), roughly as in (64), where ANCHORING and POINT OF VIEW are functional heads in the clausal spine, representing classical T(ense) and Asp(ect) heads, respectively.

(64) [subject ANCHORING (tense) [POINT OF VIEW (anteriority) [VP]]]

In the pseudocleft constructions we have seen so far, the wh-clause in the A-position includes the structure in (64), preceded by an additional projection hosting the wh-element (presumably CP), and with the variable ⟨*e*⟩ contained in VP:

(65) [$_{CP}$ *what* [subject ANCH [POV [+ant] [$_{VP}$ V ⟨*e*⟩]]]]

It follows that POV c-commands ⟨*e*⟩ and may assign the feature [+anterior] to it. We may then hypothesize that the feature [+anterior] is replicated on the focus-VP by its association with the variable ⟨*e*⟩.

Obviously the feature [+anterior] is also assigned to V, as are the tense and agreement features, and this entire complex of features is spelled out as *heb gedaan* in (1). But as tense and agreement are never realized on the focus-VP in pseudoclefts, we have no reason to suppose that the features [tense] and [agreement] are assigned to ⟨*e*⟩ as well.

The analysis predicts that when the variable ⟨*e*⟩ is outside the scope of (i.e. not c-commanded by) POV, the focus-VP will never show parasitic participle morphology. This prediction is correct, as can be seen when the focus-VP is associated with a variable in subject position:

(66) *Dutch*

Wat ⟨*e*⟩	hem	ge-nek-t	heeft	is	keihard
what	him	GE-do.in-PTCP	AUX:3SG	is:3SG	realhard

{ werk-en / *ge-werk-t }
work-INF GE-work-PTCP

'What did him in was to work real hard.'

It seems, then, that the parasitic participle in focus-VP pseudoclefts is limited to constructions where the variable ⟨*e*⟩ is in the scope domain of the functional element

[4] As I argue in Zwart (2017), the auxiliary-participle combination is best viewed as a periphrastic morphological realization of a single terminal node V, spelling out the feature [ANTERIOR] (among others).

responsible for the participial morphology.

Note that this generalization linking parasitic participial morphology to the scope relation between POV and ⟨*e*⟩ cannot be achieved in an ellipsis analysis (without or without fronting). As (67) shows, the subject position of the variable does not preclude formation of the asyndetic construction on which ellipsis operates to produce the pseudocleft:

(67) *Dutch*
Wat ⟨*e*⟩ hem ge-nek-t heeft is || hij heeft
what him GE-do.in-PTCP AUX:3SG is:3SG he AUX:3SG
keihard ge-werk-t
real.hard GE-work-PTCP
'What did him in was he worked real hard.'

Instead, on the ellipsis analysis the parasitic participle in (66) must be excluded by recourse to additional conditions on ellipsis, and it is unclear what those would be.

We now need to restrict the occurrence of parasitic participles in VP-focus pseudoclefts to situations where the VP in the antecedent clause contains a dummy verb. Recall that when V = *willen* 'want' or *proberen* 'try', the parasitic participle is excluded (20). This cannot be ascribed to absence of the feature [+anterior], as *willen* and *proberen* themselves do show participial morphology.

(20) *Dutch*
a. Wat ik heb ge-wil-d is keihard { werk-en / *ge-werk-t }
what I AUX:1SG GE-want-PTCP be:3SG real.hard work-INF GE-work-PTCP
'What I wanted is to work real hard.'
b. Wat ik heb ge-probeer-d is keihard { werk-en / *ge-werk-t }
what I AUX:1SG GE-try-PTCP be:3SG real.hard work-INF GE-work-PTCP
'What I tried is to work real hard.'

Apparently, the feature [+anterior] is only associated with the variable ⟨*e*⟩ when V is a dummy verb with the feature [+anterior] (cf. (18), where the dummy verb lacks the feature [+anterior]), and the parasitic participle does not appear).

This suggests that ⟨*e*⟩ gets the feature [+anterior] not from POV directly, but indirectly, via the dummy verb. I will assume that it is somehow in the nature of a dummy verb to (optionally) share relevant features with the empty category.[5]

The base-generation analysis of parasitic participle VP-focus pseudoclefts, then, requires:

(68) *Summary of analysis*
a. the focus VP is associated with ⟨*e*⟩
b. the dummy verb optionally shares the feature [+anterior] with ⟨*e*⟩

[5] The analysis would be simplified considerably were we to assume that the dummy verb is just an empty V-position in Narrow Syntax, creating a contrast with non-empty V positions such as those occupied by *want* and *try* in (20), which may be thought of as absorbing the [anterior] feature rather than sharing it with <*e*>.

This predicts that when the focus VP is not associated with ⟨*e*⟩, parasitic participle morphology will not show up. Precisely this situation obtains with predicational pseudoclefts, where the focus VP is not interpreted in the position of ⟨*e*⟩, but is interpreted as a predicate of the referent of the wh-clause.

The analysis posits a particular relation of 'association' between the variable ⟨*e*⟩ and the parasitic participle. Space precludes a further discussion of the nature of this association relation, but see Heycock and Kroch (1999), Sharvit (1999) for an analysis of this relation in semantic terms. Den Dikken (2005:313f) discusses a number of tests suggesting that the focus XP in specificational pseudoclefts is interpreted in the position of the variable ⟨*e*⟩ in the antecedent clause. The relevant observations are often taken to support an ellipsis analysis of specificational pseudoclefts (e.g. Den Dikken et al 2000), but they are also predicted by the association relation between the focus XP and the variable, provided we state:

(69) *Specificational pseudocleft*
The focus XP is interpreted at the position of the variable in the wh-clause

As we have seen, it is a defining property of specificational pseudoclefts that the focus XP provides the value for the variable in the wh-clause. This property now follows directly from (69).[6]

It remains to discuss the particulars of the morphological realization of the focus VP.

The tense system of Dutch can be characterized by the features tense (ANCHORING) and anteriority (POINT OF VIEW), such that [–anterior] expresses simultaneity with a temporal reference point, the location of which depends on the value for tense (present = the here and now, past = prior to the here and now). Likewise [+anterior] expresses that the event referred to takes place prior to the reference point, i.e. prior to the present or prior to the past (see Verkuyl 2008, Zwart 2017). The [–anterior] tenses are morphologically realized by the present (when tense = present) and the simple past (when tense = past), the [+anterior] tenses by the periphrastic past, i.e. the past participle in combination with a temporal auxiliary (*have*/*be*), the tense marking of which determines that the reference point is in the present (when tense on the auxiliary =present) or in the past (when tense on the auxiliary = past).

As I have argued in Zwart (2017), there is no need to assume that the auxiliary has a syntactic position: narrow syntax produces constituents and terminals with certain feature specifications, and the terminal V of the verb phrase VP can have any of eight feature combinations, if we limit ourselves to agreement, tense, and anteriority:

(70) *Feature combinations of V*

a.	[+agr, +tense, –anteriority]	e.	[–agr, +tense, –anteriority]
b.	[+agr, +tense, +anteriority]	f.	[–agr, +tense, +anteriority]
c.	[+agr, –tense, –anteriority]	g.	[–agr, –tense, –anteriority]
d.	[+agr, –tense, +anteriority]	h.	[–agr, –tense, +anteriority]

[6] See Appendix 2 for a discussion of connectivity effects supporting the association relation between the variable and the focus VP.

Agreement in Dutch requires tense, so (70c,d) are not attested. But the remaining six feature combinations have morphological exponents (some even have many, depending on the values for tense and agreement—we will illustrate the two values for tense only):

(71) *Dutch verbal morphology*
verb = werken 'work', person = 3SG

a. [+agr, +tense, –anteriority]
tense = present **werk-t**
tense = past **werk-te**

b. [+agr, +tense, +anteriority]
tense = present **heeft ge-werk-t**
tense = past **had ge-werk-t**

e. [–agr, +tense, –anteriority]
tense = present **te werk-en**
tense = past **te heb-ben ge-werk-t**

f. [–agr, +tense, +anteriority]
tense = present/past **te heb-ben ge-werk-t**

The combination [–agr,+tense] yields the set of infinitives, which are expressed periphrastically as soon as tense = past or anteriority is positive. That tense is relevant in infinitives is clear from the morphological adjustment that takes place when a reference point in the past is made explicit, and the event is understood to be simultaneous with that reference point in the past. Compare finite (72) and nonfinite (73), where *toen ik binnenkwam* 'when I came in' provides the reference point in the past.

(72) *Dutch, finite*
a. Hij beweer-t [dat hij werk-t]
he claim-3SG C he work-3SG
'He claims that he is working.'
b. Hij beweer-t [dat hij werk-te toen ik binnen kwam]
he claim-3SG C he work-PAST.3SG when I in come:PAST.SG
'He claims that he was working when I came in.'

(73) *Dutch, nonfinite*
a. Hij beweer-t [te werk-en]
he claim-3SG INF work-INF
'He claims to be working.'
b. Hij beweer-t [ge-werk-t te heb-ben toen ik binnen kwam]
he claim-3SG GE-work-PTCP INF AUX-INF when I in come:PST.SG
'He claims to be have been working when I came in.'

The explicit reference point in the past, with which the event is simultaneous, forces a morphological adjustment of the verb in both the finite and the nonfinite paradigm, yielding a simple past *werkte* 'worked' in the finite paradigm and a periphrastic infinitive *gewerkt te hebben* 'to have worked' in the nonfinite paradigm. (This shows that the characterization of infinitives as tenseless categories, as found e.g. in Wurmbrand 2001, needs to be refined; see also Stowell 1993, Ter Beek 2008.)

This leaves two feature combinations unaccounted for, but these, too, have their exponents:

(71) *Dutch verbal morphology, continued*
verb = werken 'work'

g. [–agr, –tense, –anteriority] **werk-en**

h. [–agr, –tense, +anteriority] **ge-werk-t**

Werken (71g) is the unmarked verb form, the bare infinitive, not expressing any features. This leaves (71h) as the remaining logically possible feature combination, marked by pure anteriority. Given the interdependence between anteriority and tense one expects this feature combination to have only a limited use. But if we are correct in this article, the position inside the focus VP in specificational pseudoclefts is precisely where this morphological exponent can be attested.

Recall that our analysis contains the two elements in (68), repeated here:

(68) *Summary of analysis*
a. the focus VP is associated with ⟨*e*⟩
b. the dummy verb optionally shares the feature [+anterior] with ⟨*e*⟩

It follows that the focus VP, and hence its head V, is characterized by the feature combination (71h), i.e. pure anteriority. We suggest that this explains the optional occurrence of the parasitic participle in specificational VP-focus pseudoclefts, as well as its absence elsewhere.

15. Conclusion

I have argued that the main properties of VP-focus pseudoclefts (in Dutch) can be explained without recourse to ellipsis, if we assume a model of grammar in which derivations are layered (i.e. where the output of a derivation may enter the Numeration of the next derivation as a single item). Specificational pseudoclefts require that the focus VP (in VP-focus pseudoclefts) be associated with the variable in the antecedent clause. The parasitic participle in VP-focus pseudoclefts derives its morphology from a feature [+anterior] which the focus VP inherits from the variable in the antecedent clause (which in turn receives the feature [+anterior] from a functional head in the antecedent clause, mediated by the dummy verb. The analysis derives the fact that VP-focus pseudoclefts with parasitic participles are uniquely specificational, not predicational.

Appendix 1.

This appendix considers the merits of the ellipsis analysis of pseudoclefts from the perspective of *it*-clefts (cf. Reeve 2012, Den Dikken 2013). There are important differences between *it*-clefts and pseudoclefts in Dutch. The general structure of an *it*-cleft is as in (i):

(i) het copula [focus XP] [clause]

The clause in (i) can be introduced by a generic *wh*-word *wat* 'what' or by a relative pronoun:

(ii) *Dutch*
a. Het zijn roman-s wat ik lees
it be:3SG novel-PL what I read:1SG
'The stuff I'm reading is novels.'
b. Het zijn roman-s die ik lees
it be:3SG novel-PL REL:CG I read:1SG
'It's novels that I'm reading.'

Notice that an ordinary relative clause (modifying a head noun) in Dutch carries the clausal nuclear pitch accent. In the *it*-cleft, the relative clause has low and flat pitch throughout, and the pitch accent rests on the focus NP (*romans* in (iib)).

The morphology of the pronoun introducing the clause correlates with the predicational/specificational interpretation of the *it*-cleft construction. With the generic *wh*-word *wat*, the interpretation is predicational, and with the relative pronoun it is specificational:

(iii) *Dutch*
a. Het is je reinste porno { wat / *dat } ik lees
it be:3SG utter porn what REL:N I read:1SG
'The thing I'm reading is utter porn.'
b. Het word-t porno { wat / *dat } ik schrijf
it become:3SG porn what REL:N I write:1SG
'The thing I'm writing becomes turns out as porn.'
c. Het is (*je reinste) porno *het* *lez-en* *waarvan* hem
it be:3SG utter porn DEF.N read-NMLZ of.which him
ge-teken-d heeft
GE-mark-PTCP aux:3SG
'It is porn which the reading of marked him.'

As before, pied piping (here the complex *het lezen waarvan* 'the reading of which') brings out the specificational reading (iiic), which is incompatible with the degree modifier *je reinste* 'utter', which brings out the predicational reading (iiia,b)).

Turning to VP-focus *it*-clefts now, we expect the same predicational/specificational opposition to be signaled by the use of either *wat* (predicational) or *dat* (specificational), and this seems to be partly borne out:

(iv) *Dutch*

a.	Het	is	je reinste	vragen	om	moeilijkhed-en	wat/*dat	hij	doe-t
	it	be:3SG	utter	ask-INF	for	trouble-PL	what/REL:N	he	do-3SG
	'It is a clear case of asking for trouble what he is doing.'								
b.	Het	is	keihard	werk-en		wat/dat	hij	doe-t	
	it	be:3SG	real.hard	work-INF		what/REL:N	he	do-3SG	
	'It is working really hard what he does.'								

My intention was for (ivb) to show the specificational reading, but both *wat* and *dat* seem possible here, suggesting the example is ambiguous between a predicational and a specificational reading. (This seems to be generally the case with *it*-clefts that are not specifically predicational.)

However, since parasitic participle clefts are uniquely specificational, we have a way of bringing out the specificational reading:

(v) *Dutch*

Het	is	keihard	ge-werk-t	dat / *wat	hij	heeft
it	be:3SG	real.hard	ge-work-PTCP	REL:N / what	he	AUX:3SG
'It is working really hard that he's been doing.'						

If the judgments hold up (they are somewhat tough), it seems we can establish the predicational / specificational opposition with *it*-clefts, and in fact with VP-focus *it*-clefts as well. (These observations are not completely in line with those in Den Dikken 2013, based on Declerck 1988.)

The upshot now is this: there is no way in which VP-focus *it*-clefts can be derived via ellipsis, as the biclausal source construction needed for that type of analysis cannot be created:

(vi) *Dutch*

*	Het	is	[	keihard	ge-werk-t	heeft	hij	]	dat	hij	heeft
	it	be:3SG		real.hard	ge-work-PTCP	AUX:3SG	he		REL:N	he	AUX:3SG
	'It is working really hard that he's been doing.'										

Of course it is entirely possible that pseudoclefts and *it*-clefts arise from different types of derivations, but the focus-XP is still a common element in the two types of cleft constructions, suggesting that a unified analysis of at least this part of the two constructions would be desirable.

Appendix 2.

It can be shown that connectivity effects in VP-focus pseudoclefts in Dutch are limited to those pseudoclefts that receive a specificational interpretation. This supports the existence of an association relation between the variable <*e*> and the focus VP argued for in the text.

As discussed by Den Dikken (2005), not all connectivity tests are equally reliable. The ones that work well for pseudoclefts are the following.

A. Reflexivity connectivity

(i) *Dutch*

a. Wat hij ge-daan heeft is zichzelf benoem-d
what he GE-do:PTCP AUX:3SG be:3SG REFL:3 appoint:PTCP
'What he did is appoint himself.' (specificational)

b. Wat hij ge-daan heeft is je reinste { jezelf / *zichzelf }
what he GE-do:PTCP AUX:3SG be:3SG utter REFL:GEN /REFL:3
in de voet schiet-en
in DEF foot shoot-INF
'What he did is a blatant case of shooting oneself in the foot.' (predicational)

When the focus VP contains a reflexive pronoun, the reflexive pronoun agrees with its antecedent in person (*zichzelf* in (ia)), at least in specificational pseudoclefts. In predicational pseudoclefts (ib), the reflexive pronoun must be generic.

B. Negative polarity connectivity

(ii) *Dutch*

a. Wat geen STUDENT heeft ge-daan is ook maar IETS
what NEG.INDF student AUX:3SG GE-do:ptcp be:3SG MINIM anything
voorbereid
prepare:PTCP
'What no student did is prepare the slightest thing.'

b. * Wat geen STUDENT heeft ge-daan is ook maar IETS
what NEG.INDF student AUX:3SG GE-do:ptcp be:3SG MINIM anything
om het milieu gev-en
about DEF:N environment give-INF
(intended) 'The thing no student did is a case of not having the slightest concern about the environment.' (predicational)
geven om = care about

C. Floating quantifier connectivity

(iii) *Dutch*

a. Wat de blank-en ge-daan heb-ben is allemaal Trump
what DEF white-PL GE-do:PTCP AUX-INF be:3SG all Trump
ge-stem-d
GE-vote-PTCP
'What the whites did is all vote for Trump.' (specificational)

b. Wat de blank-en ge-daan heb-ben is (*allemaal) je reinste
what DEF white-PL GE-do:PTCP AUX-INF be:3SG all utter
Trump in het zadel help-en
Trump in DEF:N saddle help-INF
'What the whites did is a clear case of launching Trump.' (predicational)
in het zadel helpen = launch

Here *allemaal* is associated with (hence, floated away from) the plural noun phrase *de blanken* 'the whites' in the wh-clause, leading to the interpretation 'the whites, one and all'. This yields an interpretable sentence only when the pseudocleft is specificational, showing again the validity of the association relation (69) in the text.

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