Parasitic participles and ellipsis in VP-focus pseudoclefts

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1. Introduction

This paper 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 apparently 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 *deed* 'did' has the effect that the past participle in the focus VP is starkly ungrammatical.

   In this paper 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 a lot going for it, 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, where the focus VP enters the derivation as the output of a separate subderivation (as understood in Zwart 2009). Our discussion shows the importance of the feature 'anterior' (as distinct from 'past') in the morphosyntactic realization of Continental West Germanic verbs (cf. Zwart 2016).

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*, the copula (COP) = *is*, and B = *een boek*. The wh-clause is marked by a fronted wh-element (*wat* in (4)) associated with an empty position ('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 (7a)(cf. (5)), but requires the more involved paraphrase in (7b).

(7)   a. * I'm reading interesting
       b.   I'm reading book x, and book 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 also not possible with 'become' instead of 'be'.

Other processes affecting the copula, such as adjusting its tense morphology or marking

agreement with the focus NP on it, 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 that concept *x* means 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* 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).

Notice now that the dummy verb cannot be maintained in a declefted paraphrase (a 'scaled back' version) of a specificational pseudocleft construction. Thus, from (17) we can scale back to (18a), not to (18b).

(17) *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.'

(18) *Dutch*
a.   Ik werk-te   keihard
      I work-PST.SG   real.hard
      'I worked real hard.'
b. * Ik deed   keihard   werk-en
      I do:PST.SG   real.hard   work-INF
      (intended) 'I worked real hard.'

This is also true when the antecedent VP contains a past participle, as in (1). Here the scaled back version comes out as (19a), not (19b), regardless of the presence of the parasitic participle (and in any order of the elements of the verbal cluster).

(19) *Dutch*
a. Ik heb   keihard   ge-werk-t
    I AUX:1SG   real.hard   GE-work-PTCP
    'I worked real hard.'
b. * Ik heb   keihard   ge-werk-t   ge-daan
    I AUX:1SG   real.hard   GE-work-PTCP   GE-do:PTCP
    (intended) 'I worked real hard.'

It can be shown that the function of the dummy verb cannot be to express finiteness features:

(20) *Dutch*
    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.'

Here, the dummy verb *doen* 'do' is an infinitive, and is nevertheless obligatorily present. In the 'scaled back' version, the dummy verb again disappears:

(21) *Dutch*
    Ik heb   hem keihard   zie-n   (*doe-n)   werk-en
    I AUX:1SG   him real.hard   see-INF do-INF   work-INF
    'I saw him work real hard.'

Presumably, then, the dummy verb acts as a thematic licenser for the variable ⟨*e*⟩ bound by *wat* 'what' and specified by the focus VP.

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:

(22) *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)/(22), can only appear when the antecedent VP contains a past participle (cf. (3)):

(23) *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 the participle that takes an infinitival complement is itself also realized with infinitive morphology. In that case, the focus VP must be infinitive as well:

(24) *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*:

(25) *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:

(26) *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 (27) can have both a specificational and a predicational interpretation:

(27) *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 (28):

(28) 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:

(29) *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:

(30) *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:

(31) *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)

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

In (32), 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)

(33) *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)

(34) *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)

(35) *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.'

(36) *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 (35) is absent outside circumscribed dialects, including Standard Dutch. In Alemannic (36), 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 morphological phenomenon if I am not mistaken (cf. Zwart 2016). 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. (37) is an example from Nupe (Kandybowicz 2008:83):

(37) *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):

(38) *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:

(39) *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:

(40) *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 (REF) also allow predicate clefting with the object included in the fronted predicate, but the semantics is that of topicalization rather than focusing. (41) is an example from Yiddish (Cable 2004:2).

(41) *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:

(42) *English*

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

In (42b), 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 (42a) may be derived from the asyndetic construction (42b) via deletion of the focus related topic *he reads*:

(43) *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

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[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.'

only be of the specificational type. Recall that in a specificational pseudocleft the focus NP provides a value for the variable $\langle e \rangle$ 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 (43), 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:

(44) *No ellipsis for predicational pseudoclefts*
    What John reads $\langle e \rangle$ 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:

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

Wat	ik heb	$\langle e \rangle$	ge-daan	is	~~ik heb~~	[keihard	ge-werk-t]
what	I AUX:1SG		GE-do:PTCP	be:3SG	I AUX:1SG	real.hard	GE-work-PTCP

    'What I did is work real hard.'

In (45), 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 to the variable in the same position in the antecedent clause *wat ik heb gedaan* 'what I did' (assuming that the dummy very *gedaan* 'done' in the antecedent clause is present just to support the variable and can be ignored for the purpose of clausal parallelism). As a result, (45) 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 (23)-(24)). None of the examples in (23)-(24) can be derived via ellipsis from a grammatical source clause:

(46) *No source for ellipsis*

a. * Ik	deed		keihard	gewerkt	(23a)
I	do:PAST.SG		real.hard	GE-work-PTCP	
b. * Ik	doe		keihard	gewerkt	(23b)
	do:1SG				
c. * Ik	wil		keihard	gewerkt	(23c)
	want:SG				
d. * Ik	heb	willen	keihard	gewerkt	(24b)
	AUX:1SG	want-INF			

The ellipsis analysis also explains the observation illustrated in (25) 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:

(47) *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 (26), showing the IPP-effect in the focus VP, also follows naturally on an ellipsis analysis:

(48) *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.

7. Problems for the ellipsis analysis

7.1   How is the source for ellipsis derived?

A general problem associated with the ellipsis analysis (also known as the deletion analysis in the literature) of pseudocleft constructions, noted as early as Blom and Daalder 1979:20), is that the supposed source construction has a particular, anakolouthic character:

(49) What John likes is || he likes books

In (42b)/(49) there is an interruption of the natural flow of the sentence, indicated by '||', which marks a restart. It is clear that there is a compatibility between *books* in (42a) and *he likes books* in (42b)/(49), as can be seen in (50), where *He likes books* does little more than expand on *books*.

(50) What John likes is books. He likes books.

It follows that we might equally well ascribe the occurrence of (42b)/(49) to a process of syncopation, replacing the focus NP *books* with the expanded clause *He likes books* in which *books* has narrow focus:

(51) What John likes is ~~books.~~ He likes books.

The question raised by Blom and Daalder's concern is whether we want the specificational pseudocleft to have an irregular, anakolouthic source. Should we not rather want to describe the anakolouthon (49) in terms of ellipsis from a bisentential source such as (51)?

  Let us try to make this more precise. We have already noted that *What John likes is books* entails *John likes books*:

(52) What John likes is books > John likes books

Let us say that whenever such an entailment is possible, we can expand *What John likes is books* to (50). And then, under conditions of identity to be defined, we can collapse (50) to (49).

  On this approach, a problem for the ellipsis analysis of specificational pseudocleft noted by Green (1971) and discussed in Higgins (1973:56f) (under the rubric of 'nonexistent deep structure sources' for deletion), ceases to be problematic. This problem is illustrated by examples like (53).

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

On an ellipsis analysis, this goes back to:

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

But of course:

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

However, now we can say that *What I like about John is his sense of humor* entails:

(56) I like his sense of humor

And so by our reasoning we are allowed to resume the focus NP by a clause as in:

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

This can then be collapsed as:

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

To avoid circularity, we now have to say that *books* in *What John likes is books* and *his sense of humor* in *What I like about John is his sense of humor* are not the result of ellipsis, but are 'base-generated' as noun phrases.

  In this connection it is interesting to note a slight discrepancy between the sets of (i) parasitic participle pseudoclefts and (ii) the anakolouthic constructions that must be supposed to be underlying them in Dutch. Because while (59), as we have seen, is

ungrammatical (cf. (3)), the anakolouthic (60), which could be its source, is not:

(59) *Dutch*
  * Wat   ik deed   is   keihard   ge-werk-t
     what   I do:PST be:3SG real.hard GE-work-PTCP
     (intended) 'What I did is work real hard.'

(60) *Dutch*
     Wat   ik deed   is || ik heb   keihard   ge-werk-t
     what   I do:PST be:3SG   I AUX:1SG   real.hard GE-work-PTCP
     'What I did is I worked real hard.'

The question is, what process gave rise to (60). From the perspective outlined just now, underlying (60) must be a regular pseudocleft construction:

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

As (62) entails (63), the anakolouthic (60) can be derived without problems.

(63) Ik heb   keihard   ge-werk-t
     I AUX:1SG   real.hard GE-work-PTCP
     'I worked real hard.'

The ungrammaticality of (59) can then be ascribed simply to a feature incompatibility of the participial focus VP and the simple past antecedent VP, so that (61), but not (59) can be base-generated.
    Consider also the example in (64), with negation:

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

(The negative marker *niet* is capitalized to make sure it has the prosodic properties associated with polar negation.) On a deletion analysis, *keihard gewerkt* 'worked real hard' would have as its source a negative clause, as in (65).

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

But the negative marker is arguably not part of the focus related topic (it lacks the low and flat intonation that gives rise to ellipsis, cf. Tancredi 1992), so it is not clear how (65) could be the source for (64). Of coure *Ik heb niet keihard gewerkt* 'I did not work real hard' is entailed by either (64) or its counterpart without parasitic participle (cf. (3)), so that (65) can be the result of collapsing (3) with *Ik heb niet keihard gewerkt*.

7.2   Lack of generalization

The ellipsis analysis of pseudoclefts with parasitic participles cannot be straightforwardly applied to regular VP-focus pseudoclefts (the one with an infinitive). This is because, as we have seen, pseudoclefts in Dutch often feature a dummy verb *doen* 'do'. With parasitic participles, the dummy verb does not have to appear in the source clause underlying the ellipsis, but in most regular pseudoclefts, it must.
   Consider a simple case like (66)(cf. (3)).

(66) *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 (66) via ellipsis, we must posit a source clause like (67), which is ungrammatical.

(67) *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 variant we find instead is (60), without the dummy verb. The ellipsis analysis now must either posit an ungrammatical source, or must apply to pseudoclefts with parasitic participles only. Neither option is very attractive.
   There is a way out, however, which is to assume that prior to ellipsis, the focus VP is fronted (along the lines of the analysis of right dislocation of Ott and De Vries 2016). This provides a way out, because VP-fronting in Dutch requires the use of the dummy verb:

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

On this analysis, the source for (66) would not be (67), but (69).

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

We consider this analysis in the next section, where we will see reasons to reject it.

8. Remnant ellipsis

Ott and De Vries (2016) propose an analysis of right dislocation involving ellipsis from a biclausal source. Consider the example in (70).

(70) *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 (71), which is juxtaposed to the clause *Tasman heeft ze gezien* 'Tasman saw them.' Call this the dislocation clause.

(71)
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:

(72)
[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. (70), then, is derived from a biclausal analysis via fronting and deletion in the second clause.

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 (42a) and (42b), here repeated as (73c) and (73a), there is an additional step of fronting, illustrated in (73b).

(73) *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 anakolouthic clause, or (ii) between the focus related topic and the corresponding material in the anakolouthic 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 anakolouthic clause.

To see what I mean by such 'discrepancies', consider again example (66)-(67), here repeated.

(66) *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.'

(67) *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 (67), 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 as noted, after fronting of the focus VP (68), the dummy verb is allowed (in fact, obligatorily present), removing the discrepancy.

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

Cases like this can be multiplied:

(74) *Dutch*
a. 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. Ik heb hem **keihard** zien (*doen)   **werk-en** (nonconstituent)
c. **Keihard werken**   heb ik hem zien doen (constituent)

(75) *Dutch*
a. 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. Hij   heeft   **'m** gisteren   **op-ge-lad-en** (nonconstituent)
c. **'m op-ge-lad-en** heeft   hij   gisteren (constituent)

(76) *Dutch*
a. 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. Hij   heeft   { **geen** / #niet   een } boek ge-lez-en (fused negation)
c. **Een** boek ge-lez-en heeft   hij   **niet**   (no fused negation)

(77) *Dutch*
a. 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. Hij   gaa-t   prober-en een boek *(te) schrijven   (+*te*)
c. Een   boek schrijv-en gaa-t   hij   prober-en   (−*te*)

In all these cases fronting prepares the anakolouthic clause for the deletion that yields the required focus VP in the pseudocleft construction.

9. Problems with the remnant ellipsis analysis

However, the remnant ellipsis analysis is not without problems (over and above the general problems with ellipsis noted in section 7). These can be listed as follows.

We saw in (74)-(75) that the material making up the focus VP in the pseudocleft construction is scattered (hence a non-constituent) in the anakolouthic 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, (74)-(75) 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 (76) or the infinitival marker *te* is lost (77) 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 the argument against ellipsis advanced by Green (1971). Here we adapt the argument to the domain of VP-focus pseudoclefts.

(78) *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 (order irrelevant):

(79) *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:

(80) *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 anakolouthic clause ('elliptic clause', in Ott and De Vries 2016), but the logic would seem to be that the material of the anakolouthic clause is copied from the antecedent clause, with no exceptions predicted.

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

(81) *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 (81) 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 anakolouthic clause, regardless of fronting of the focus-VP:

(82) *Dutch*
a. Hij wil (*nou) componist word-en
b. Componist word-en wil hij (*nou)

Another problem is that negative polarity items (NPIs) in Dutch do not like to be fronted. In (83), the NPI is *ook maar iets*, an indefinite marked by the minimizer *ook maar*:

(83) *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 (83), 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:

(84) *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 anakolouthic (elliptic) clause, is unable to derive the pseudocleft in (84).

The next section considers the merits of the ellipsis analysis from a different perspective, the nature of *it*-clefts (cf. Reeve 2012, Den Dikken 2013).

10. *It*-clefts

Space prevents me from discussing *it*-clefts in any depth or detail. But there are important differences between *it*-clefts and pseudoclefts in Dutch. The general structure of an *it*-cleft is as in (85):

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

The clause in (85) can be introduced by a generic *wh*-word *wat* 'what' or by a relative pronoun:

(86) *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 a novel 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 (86b)).

It appears to me that 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:

(87) *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 (87c), which is incompatible with the degree modifier *je*

reinste 'utter', which brings out the predicational reading (87a,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:

(88) *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 (88b) 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:

(89) *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:

(90) *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.

11. Taking stock

We have now seen several reasons to be skeptical of an ellipsis analysis of pseudoclefts, even in the 'fronting + remant ellipsis' variant of Ott and De Vries (2016):

(91) *problems with ellipsis*
a.   circularity if (as seems reasonable) the construction on which ellipsis operates is itself derived from a pseudocleft
b.   material in the focus related topic that is not included in the ellipsis clause (such as 'about John' and discourse particles)
c.   material outside the focus related topic that is included in the ellipsis clause, and elided there (such as negation)
d.   material that cannot be fronted in the ellipsis clause, yet ends up being the focus-XP in the pseudocleft (such as negative polarity items)
e.   parasitic participles in *it*-clefts (if the data hold up) cannot be derived from ellipsis
f.   the ellipsis analysis cannot be generalized to predicational pseudoclefts

Alternatively, 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, 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.

   A base-generation analysis faces the problem of accounting for connectivity effects in pseudoclefts, such as illustrated in (92)(cf. Den Dikken 2005:313f).

(92) *Connectivity*
     [What John saw in the mirror] is [himself]

We turn to these connectivity effects in section 13. First, we turn to the more pressing problem, when it comes to parasitic participles, of how to derive the parasitic participial morphology where we find it.

12. Morphological realization of the focus VP

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 2016), but it will probably do for now.

   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 2016), 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 (93), where ANCHORING and POINT OF VIEW are functional heads in the clausal spine, representing classical T and Asp heads, respectively.

(93)   [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 (93), preceded by an additional projection hosting the wh-element (presumably CP), and with the variable ⟨e⟩ contained in VP:

(94)   [_CP   *what*   [subject ANCH   [POV   [_VP   V ⟨e⟩]]]]
                                                  [+ant]

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:

(95) *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 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. As (96) shows, the subject position of the variable does not preclude the anakolouthic construction on which ellipsis operates to produce the pseudocleft:

(96) *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 (95) with parasitic participle must be (and probably can be) excluded by recourse to independent conditions on ellipsis.

    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 (25). This cannot be ascribed to absence of the feature [+anterior], as *willen* and *proberen* themselves do show participial morphology.

(25) *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. (23), 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, recalling that the sole purpose of the dummy verb appears to be to act as a host to the variable (and not so much to express tense, cf. (20)).

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

(97) *Summary of analysis*
a.   the focus VP is associated with ⟨*e*⟩
b.   the dummy verb optionally shares the feature [+anterior] 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. How this relation leads to the correct morphological realization is the subject of the final section of this article, section 14. First, however, we consider further evidence for the existence of this association relation.

13. Connectivity

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 $\langle e \rangle$ 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:

(98) *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 (98).
    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

(99) *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 (99a)), at least in specificational pseudoclefts. In predicational pseudoclefts (99b), the reflexive pronoun must be generic.

B. Negative polarity connectivity

(100) *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

(101)   *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 (98).

About the nature of the association relation between the variable ⟨e⟩ and the focus XP, I have not much to say at this point, but see Heycock and Kroch (1999), Sharvit (1999) for an analysis of this relation in semantic terms.

14.   The feature ANTERIOR

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 2016). 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've argued in Zwart (2016), 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:

(102) *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]

Agreement in Dutch requires tense, so (102c,d) are not attested. But the remaining six feature combinations have morphological exponents (some have even many, depending on the values for tense and agreement—we will illustrate the two values for tense only):

(103) *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 (104) and nonfinite (105), where *toen ik binnenkwam* 'when I came in' provides the reference point in the past.

(104)   *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.'

(105)   *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:

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

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

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

Werken (103g) is the unmarked verb form, the bare infinitive, not expressing any features. This leaves (103h) 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.

This leaves (103h) as the remaining logically possible feature combination, marked by pure
    Recall that our analysis contains the two elements in (104);

(104)   *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 (102h), 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

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