Chapter 15

Past/passive participles and locality of attachment

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In this short chapter I outline some properties of the structure "I'm done writing Chapter 3", which does not appear to have been formally analysed before. Concentrating on the *-en*/*-ed* participle and the structure's semantics, I suggest that this is a kind of stative passive, of a kind not previously known. I offer a syntactic analysis, in which an aspectual projection can stativize the eventive syntax it hierarchically embeds.

1 Introduction

English is traditionally described as having three participles of the same form: the stative passive, verbal passive, and perfect (1).

(1) a. The letters are well written.
b. The letters were written by her.
c. She has written a letter.

Establishing points of difference and commonality in the syntax and interpretation of the structures in (1) has played a central role in the development of theories of syntax and word formation.

A particular pattern of interest for statives has been whether the states they describe follow from a prior event. In this, "resulting state" statives (2a), which do follow from a prior event, can be distinguished from "pure" statives (2b), which lack event implications altogether (Parsons 1990; Embick 2004).

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(2) a. The soup is cooled. *resulting state*
b. The soup is cool. *pure state*

It is often observed that in modern English, the participle (potentially) has a resulting state interpretation (as opposed to any other kind of state) only where the past/passive morpheme *-ed/-en* attaches to the item that describes the event from which the state results (e.g. Parsons 1990; Kratzer 2000; Alexiadou & Anagnostopoulou 2008; Alexiadou et al. 2015).

As illustration, in (3a) *-ed/-en* attaches to the main verb, and a surface subject is interpreted as being in a state that results from a (writing) event. In contrast in (3b), *-ed/-en* attaches to non-main verb *be*, with the present/active form *-ing* attaching to the main verb, and does not describe a resulting state.

(3) a. Chapter 3 is written.
b. She has been writing Chapter 3 for days.[1]

The contrast in (3) can be captured by some version of (4):

(4) A resulting state interpretation requires an embedded lexical predicate in past/passive participle form.

The structure in (5) ('*be done* VP-ing') seems to present an exception to this generalization. (5) can describe the object as in a state resulting from the (writing Chapter 3) event, but the past/passive morphology attaches to *do*, with the embedded verb form a present/active participle.

(5) She is done writing Chapter 3.

As far as I can tell the structure in (5) has not been analysed before, and I label it the *done*-state. (5) has some unusual properties: for example, morpho-semantically it is a stative passive; syntactically, however, (5) is transitive and active, in the sense that it licenses a direct object. The key point to be investigated in this paper is that (5) describes a resulting state, even though the past/passive affix attaches to the embedding item *do*, apparently violating (4).

The paper is structured as follows. Section 2 makes precise that the "resulting state" interpretation of the *done*-state can be a target state. Section 3 discusses the structure of the *done*-state, highlighting some implications for previous analyses of target state participles. Section 4 discusses and rejects an alternative perfect analysis. Section 5 concludes.

[1]The present/active is often analysed as a state in temporal semantic terms (e.g. Parsons 1990). Temporal semantic states are not usually analysed in the same way as resulting states of the kind of interest here.

2 The interpretation of the *done*-state

"States" form a heterogeneous class (see especially Kratzer 2000). Of interest in this chapter are target states.

Target states are those which describe a temporary or reversible state, i.e. the state held by the surface subject of (6a) (Parsons 1990; Kratzer 2000); these are interpreted as being characteristic of or resulting from the prior event. Target states are typically contrasted with resultant states, which simply describe the post-state of an event; this post-state is interpreted as holding forever after the prior event, e.g. the state held by the subject of (6b).

(6) a. The soup is cooled. *target state*
b. I've eaten lunch. *resultant state*

One surprising interpretation of the *done*-state is a target state of the direct object. The target state of the *done* structure in (7a,b) is the state resulting from the event described by the embedded VP. An important point I will not address here is that the stateholder subject of the *done*-state is also interpreted as the agent of the embedded VP.

(7) a. I'm done cooling the soup.
b. She's done writing Chapter 3.

Target and resultant states describe states that follow a prior event, but differ in the characterisation of the prior event.[2] Target states refer to states that describe results of events, and the result is understood as ongoing at the time of reference or evaluation (Kratzer 2000), an effect known as "current relevance". Current relevance can be demonstrated by certain kinds of modifiers, which are licit with target state interpretation only if the adverb can be construed as modifying a result of the state. It is said to follow that target states are not possible with adverbs of quantity or cardinality (Mittwoch 2008) (8a,b). (Ungrammaticality refers to the target state interpretation).

(8) a. I'm done cutting his hair (*twice). *done-state*
b. The windows are closed (*each evening). *adjectival passive*

[2]Target states always entail a resultant state reading, e.g. (6a). As such the *done*-state also has a resultant state reading.

As the resultant state describes the post-state of an event, the event may be over by the time of reference or evaluation, and the state does not require current relevance. Lack of current relevance (despite present tense) is illustrated by the perfect in (6b) and adjectival passive in (9a). (9b) illustrates that quantity/cardinality adverbs can modify resultant states.

(9) a. The theory is proven.
b. The windows are closed three times each evening.

The target state interpretation is also clearly distinct from a second interpretation of the *done*-state that I call the "cessation" or "termination" reading, in which the surface subject is interpreted as having ceased or terminated engagement in the activity described by the embedded verb. The cessation reading of (10) is simply that Maria is no longer *writing Chapter 3*, i.e. it relates to her agency rather than her (resulting) state. Cessation is therefore clearly different from the target state that results from the embedded VP.[3] For reasons of space I leave to future work whether the cessation interpretation derives from the same structure as that of the target state.

(10) Maria's done writing Chapter 3 for the moment – she has to run more subjects before writing more.

One reason to analyze *done* as a stative participle is that it only occurs with the auxiliary *be*.

(11) * I've done baking the cake.[4]

This makes *done* unlike aspectual predicates, which can appear with the auxiliary *have*.

[3]Cessation bears a superficial similarity to the *done-with* construction (*I'm done with baking cakes*), a structure which also, to the best of my knowledge, has not been analysed before. Like the *done*-state, *done-with* is morpho-semantically a stative passive; however, *done-with* is syntactically intransitive, while the *done result* is transitive. The PP in *done-with* presumably has a nominal complement. There are many syntactic and semantic differences between the constructions, but for reasons of space I will point out just one: *done-with* requires an agentive surface subject, while the *done*-result does not: *The water is done (*with) boiling/The machine is done (*with) washing that load.*

[4]A reviewer accepts *have* in (11), and highlights that Google returns attested examples. I found: *I've done watching the 6 seasons, I have watched the movie countless time* [sic.], *I've done reading the book.*, retrieved 10/11/2017, http://sachzca.blogspot.co.uk/2008/11/. This is ungrammatical for all speakers I consulted, but, judging from context, the *have* variant does not seem to have a target state reading, so I have left the asterisk in the main text. The observation of variation clearly requires further investigation.

(12) a. I've finished/stopped running.
b. I've finished/stopped writing Chapter 3.

With the stative *be* (13a), on the other hand, *finish* also has the target state interpretation. Some speakers also accept *be finish*-VP-ing (13b) (although not most of the British speakers I consulted, including myself), apparently again with the target state interpretation.

(13) a. I'm finished.
b. % I'm finished baking the cake.

Pending further investigation, I take the auxiliary *be* to be indicative of the structure that derives the target state interpretation.

3 The structure of the *done*-state

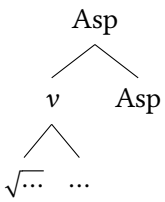
Different stative interpretations (such as the difference between target and resultant states) are known to be built in different ways.

Target states are classically characterised by their having both an event and (target) state argument (Kratzer 2000):

(14) λsλe [cool(e) ∧ event(e) ∧ cooled(the soup)(s) ∧ cause(s)(e)]
'The soup is cooled' (Kratzer 2000: 391)

Comparative investigation of the syntax of target state participles has shown that this interpretation derives from a syntactic configuration where a stativizer (labelled Asp) attaches to an eventive component (for example, verbalising *v*, or Root_{event}) (Alexiadou & Anagnostopoulou 2008; Embick 2009; Anagnostopoulou & Samioti 2013; Alexiadou et al. 2015).[5]

(15) Target states: *v* attachment of Asp



[5](15) essentially derives the relevant aspect of the generalization in (4), that the past/passive morpheme attach directly to the lexical predicate: for target states, this can be regarded as a reflex of the local attachment of the aspectual and eventive components in the verbal structure.

Abstracting over (14) and (15), target states have a structure defined by a local relation between an event and a stativizer (Kratzer 2000; Alexiadou & Anagnostopoulou 2008; Embick 2009):

(16) [event, stative] → target state interpretation

At first blush, the *done*-state seems to present an exception to (16), given that in the *done*-state the stative *(be) done* clearly embeds the eventive VP. Evidence that *done* has the stativizing aspectual function is confirmed by the pair in (17), which show that while the present/active is aspectually unbounded or ongoing (17a), the structure with *done* has a result state (17b).

(17) a. I'm writing Chapter 3.
b. I'm done writing Chapter 3.

However, closer analysis of the *done*-state structure indicates that the generalisation in (16) can be retained.

I propose that the stativizer (*-en*) attaches to a semantically vacuous *v*, and it is this local attachment that is responsible for deriving the target state, in line with (15 and (16).

(18) [$v_{vacuous}$-stative [event]] → target state interpretation in the *done*-state

This *v* is realized as *do*. As such, *do* is a dummy item, a form of *do*-insertion that supports the aspectual morpheme. Dummy *do* can similarly appear in the participial form *done* (rather than *do, did, does*, etc.) in the British varieties of English that allow *do* to appear at the edge of a VP-ellipsis site following a modal or auxiliary thanks to Dave Embick (p.c.) for this point.

(19) a. He didn't eat it but he should have done.
b. Have you looked up the scores yet? I haven't done, but will do.

The intuition is then that because the eventive item that the stativizer attaches to is semantically vacuous, the event that v_{vacuous} describes is anaphoric with that described by the embedded VP. This vacuity means that the *done*-state only describes one prior eventuality, and not two: (20) says that there was only a *cutting* event, for example.

(20) I'm done cutting his hair.

For reasons of space I cannot address whether participial forms of *do* are eventive when they lack the VP complement (i.e., *She's done*); for observations that it may not (at least syntactically) see Fruehwald & Myler (2015) in connection with the dialectal form *I'm done my homework*.

Although on this account the target state itself is created by the local event-state relation, the non-local relation between the stativizer and the VP event makes a prediction with respect to possible target state interpretations. It has often been observed that local attachment in (16) restricts sets of possible interpretations in a way that non-local attachment does not (in the context of participles, see especially Anagnostopoulou & Samioti (2013), and references there). In particular, under local attachment of Asp to the eventive component, root meaning interacts with Asp so that a Root that is not typically a good property of states does not easily appear in the target state structure without significant context or coercion; Kratzer (2000) and Embick (2009) give a range of examples of this of the type in (21). Embick (2004) suggests the target state reading of *kicked* can be coerced with a factory scenario where all of the tyres have to be kicked before employees can leave; a similar factory scenario can improve a target state interpretation of hammered nails.

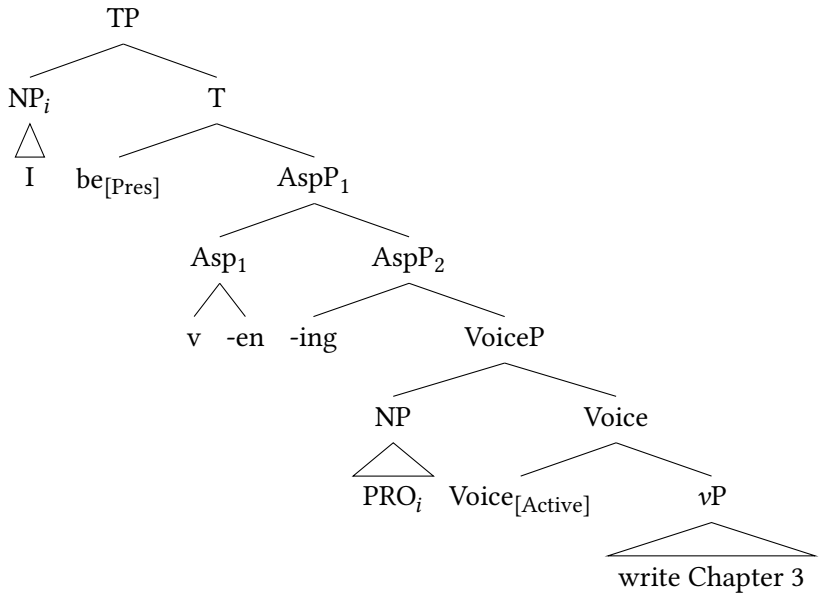
(21) a. ? The tyres are kicked.
b. ? These nails are hammered.

As the relation between the target state component and the (lexical) event in (18) is non-local, Asp and eventive v (or Root_{event}) should not exhibit such restrictions, and *done* should create a target state even with those verbs that do not easily form target state interpretations via direct attachment. This prediction is borne out. A target state reading is readily available with *kick* and *hammer* under *done* (22), even in out of the blue contexts.

(22) a. I'm done kicking the tyres.
b. I'm done hammering the nails.

In sum, given the findings of the previous Section, I propose the structure of the *done*-state is as in (23).

(23) The *done*-state structure: *I am done writing Chapter 3.*



The auxiliary *be* is in T, and T takes a stativizing projection, AspP$_1$ as its complement. This "top part" of the structure lacks an argument introducing projection, such as Voice. This "top part" is, in effect, a stative passive.

A second aspectual projection is realised as the present/active morphological form. In the lower component of (23), an active VoiceP has a transitive syntax, introducing an argument in its specifier, and valuing Case on an internal argument. It is the argument in the specifier of Voice that is the agent of the embedded event; this argument is proposed to be PRO. The surface subject is then interpreted as both the agent and state holder of the clause via a control relation.

The remainder of this chapter briefly discusses a possible alternative analysis of the *done*-state.

4 Against a perfect syntax

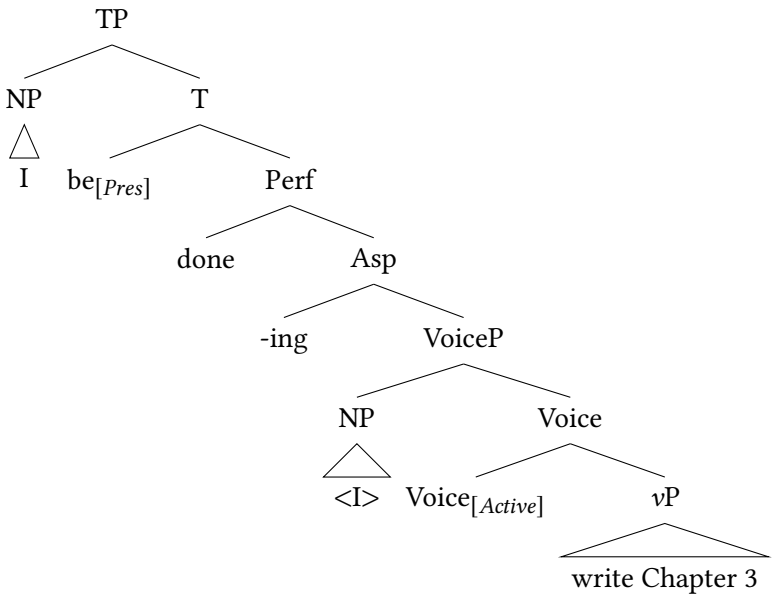
An alternative analysis of the *done*-state might draw a comparison with the English perfect.

Such *be*-perfects are found in Bulgarian, where a (resultative) perfect can be expressed with the perfective participle:

(24) Bulgarian
Ivan e postroil pjasâčna kula.
Ivan be-3SG.PRS build-PRF.M.SG sand castle
'Ivan has been building a sandcastle.' (Pancheva 2003: 296)

Perhaps, then, the *done*-state has a syntactic structure like (25), with *done* a marker of perfectivity.

(25) A present perfect: *I am done writing Chapter 3.* (To be rejected)



Syntactically, though, the *done*-state has different syntactic properties to the English *have*-perfect. Building on tests discussed in Fruehwald & Myler (2015), the *done*-state is ok with *all* modification (26a), just like other stative passives (26b). The perfect is ungrammatical with *all* modification.

(26) a. I'm all done washing the dishes.
b. I'm all ready.
c. * I've all washed the dishes.

Second, the *done*-state can appear in a reduced relative clause, while the perfect of a transitive cannot.

(27) a. Would all the students done signing the petition please leave?
b. * Would all the students signed the petition please leave?
c. Would all the students who have signed the petition please leave?

I do not pursue a perfect analysis further; see Fruehwald & Myler (2015) for a similar conclusion for other forms of *be done* based on study of the dialectal *done my homework* construction.[6]

5 Summary

An extensive body of work has shown that a target state interpretation derives from a structure in which an eventive and stative component are in a local syntactic relationship. This paper investigated an apparent counter-example to this analysis. It showed that statives of the form *I'm done VP-ing* (*She's done writing Chapter 3*) have a target state interpretation. However, in this structure the stativizing past/passive morpheme attaches to *do*, so that it is in a non-local configuration with the event described by an embedded verb phrase, the event from which the target state is interpreted as resulting.

I argued that the target state interpretation of the *done*-state is nonetheless derived via a local relation between a state and eventive component, as in previous work. However, in the *done*-state, the eventive component that the stativizer attaches to is semantically vacuous, so that the prior event from which the target state follows is understood to be that of the embedded VP. The non-local relation between the stativizer and eventive VP component permitted regular derivation of target state interpretations of events out of which target states are not typically possible. Further research is needed to address the general challenge of determining how the target state of the event is accessed by the stativizer, whether in a local or non-local configuration.

[6]The *I'm done my homework* construction (DMH), found across Philadelphia, Canada, and Scotland, can also be syntactically and semantically distinguished from *done*-state structures. Fruehwald & Myler (2015) show at length that the state described by DMH does not come about as a result of a semantically or syntactically identifiable prior event (Fruehwald & Myler 2015: 154–157) (thanks too to Meredith Tamminga and David Wilson for discussion). As such, Fruehwald & Myler (2015) analyse the DMH structure as a complex aP *done* (which does not a have a VP component), an aP that Case licenses an NP complement in a "transitive adjectival passive" configuration.

Despite the syntactic and semantic differences between DMH and *done*-VP-ing, Fruehwald & Myler (2015) make the intriguing observation that the availability of DMH across varieties of English correlates with also having the form *X-en*-VP-ing. Some (Montreal) speakers, for example, have DMH with *start* (*I'm started NP*), and this seems to correlate with also having *I'm started VP-ing*, ungrammatical in most varieties of UK and US English. I leave examination of possible structural parallels between the two constructions to future work.

Abbreviations

3	third person	PRF	perfect
DMH	*done my homework* construction	PRS	present
M	masculine	SG	singular

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