# FOUR PUZZLES, ONE SOLUTION: THE DEVELOPMENT OF THE PASSIVE VOICE HEAD IN ENGLISH

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#### 1. Introduction

This paper proposes a unified account of three syntactic changes that took place in English in the late 18th century, deriving all of them from a single change in the syntactic representation of Voice and Aspect. The three changes are briefly described here; we turn to a detailed discussion of each one in the subsequent sections.

#### 1.1 The decline of the passival

Before the late 18th century, the standard progressive form of a passive clause had no overt marking of passive voice, and was thus identical in form to an intransitive progressive. This construction, which Visser (1973) calls the passival, is illustrated in (1). The passival declined during the late 18th century, and had disappeared almost completely by the late 19th century.

(1) 《 Whereas a Brass Foundery is now building at Woolwich... (*London Gazette*, 10 July 1716, quoted in OED s.v. *brass*)

## 1.2 The rise of the progressive passive

As the passival disappeared, its function was taken over by the now-standard progressive passive form, illustrated in (2). Before the late 18th century, the progressive passive had been ungrammatical.

(2) D...like a fellow whose uttermost upper grinder is being torn out...
 (R. Southey, letter of 9 Oct. 1795, quoted in OED s.v. be; emphasis omitted)

Prescriptive grammarians resisted this innovation, and continued to deride it well into the 19th century, as in the following comment from March (1870: 465), quoted in Visser (1973):

 $<sup>^1</sup>$ We use the symbol  $\mathbb{C}$ , a waning moon, to indicate a construction whose use was declining, and  $\mathbb{D}$ , a waxing moon, to mark constructions that were becoming more prevalent.

Upon the whole, then, we may say, that the construction 'the house is building' is sustained by the authority of usage, and by many analogies in the English and cognate languages. Nor is it objectionable as an equivocal phrase, because it is very seldom used when the subject is of such a nature that it can be the agent, and always with a context, or under circumstances which show that the participle must be taken in a passive sense. To reject it, therefore, is to violate the laws of language by an arbitrary change; and, in this particular case, the proposed substitute ['the house is being built'] is at war with the genius of the English tongue.

The vehemence of this objection strongly suggests that the progressive passive was in fairly common use by the mid-19th century.

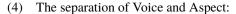
## 1.3 The end of resultative be-perfects

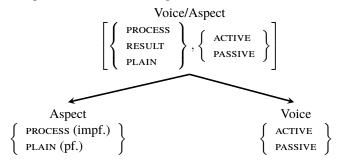
The third change, less obviously related to the first two, was the disappearance of the resultative perfect with *be* (3). The *be*-perfect had coexisted for several hundred years with the *have*-perfect, but after this time, the *have*-perfect was used across the board.

- (3) C...he informs me his son is set out...
  - (O. Goldsmith, She stoops to conquer I.i, 1773, quoted in OED s.v. be)

Following McFadden & Alexiadou (2006, 2010), we assume that the *be*-perfect was a purely resultative form, involving a special resultative Aspect head, while the *have*-perfect was a more general perfect form, involving a higher Perf head.

We propose that all three changes were caused by the reanalysis of this resultative Aspect head as a passive Voice head. The resultative Aspect head,  $Asp_{RES}$ , had been one of a pair of Aspect heads, each of which could be active or passive without further morphological marking. The features of Voice and Aspect were thus bundled on a single syntactic projection. After the change, as shown in (4), Aspect and Voice were mapped to separate syntactic projections. The morphology marking  $Asp_{RES}$  became the marker of passive Voice, while *-ing* remained as an aspectual marker, spelling out imperfective viewpoint aspect.





# 2. The be-perfect and the have-perfect

McFadden & Alexiadou (2006, 2010) argue that in the pre-Old English period, there was no "true" perfect. Rather, there were periphrastic resultative constructions with both *be* and *have*. The auxiliary *be* was used with intransitives, while *have* was used with transitives, as shown in (5).

- (5) a. *Hie wæron cumen Leoniðan to fultume* they were come to-Leonidas as help 'They had come to Leonidas to help him.'
  - b. *þa þa ge hiene gebundenne hæfdon* then when you him bound had

'then when you {had bound him/had him in the state of being bound}' (Alfred's translation of Orosius, ca. 893, quoted in Traugott 1992: 190)

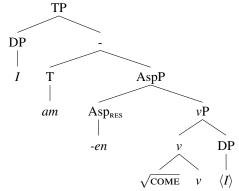
By the time of Old English, there was also a true perfect construction with *have*. McFadden & Alexiadou (2010) argue that this construction, unlike the older resultative constructions, carried the meaning of anteriority. This temporal meaning allowed it to be used in counterfactual constructions and other contexts where the perfect is found. They claim that the resultative perfect construction is headed by a resultative aspectual head (Embick 2004), while the true perfect is headed by Perf, a higher functional head that contributes temporal anteriority. An example of a clause containing both the true perfect and the resultative aspect head is given in (6).

(6) He has been come over about ten days. (Jonathan Swift, *Journal to Stella*, quoted in Rissanen 1999: 215)

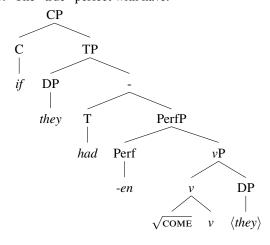
This situation persisted until the late 18th century, with the resultative *be*-perfect used only with unaccusative verbs, and the true perfect in *have* used with all verbs, including unaccusatives. Unaccusative verbs thus appeared in both constructions,

as shown in (7). The structures we adopt for these constructions, adapted from McFadden & Alexiadou (2010), are given in (8).

- a. I am come as 3e bade me.
  'I have come as you asked me.'
  b. ...and if they had come sooner, they could have holpen them.
  McFadden & Alexiadou (2006, 2010)
- (8) a. The resultative be-perfect:



b. The "true" perfect with have:



In Present-Day English, the resultative perfect with *be* is no longer used; only the "true" perfect remains. All perfect constructions therefore use *have*, are headed by Perf, and can express the full range of perfect meanings.

This brings us to the first of four puzzles that arise from the changes just described. Why, after co-existing with the *have*-perfect for several hundred years, did the resultative *be*-perfect essentially disappear around the end of the 18th century? Mc-Fadden & Alexiadou (2010) leave the question open, since the main focus of their

article has to do with auxiliary selection, and not with the particular changes being discussed here.

#### 3. The passival and the progressive passive

Until the late 18th century, the passive took two forms, illustrated in (9):

(9) a. Plain passive: The house is/was built.

b. Passival: The house is/was building.

The difference between them was aspectual. Visser says that the passival "allowed the speaker to focalize the listener's attention on the post-inception phase, and [...] avoided the confusion of *were built* = 'got built' with *were built* = 'had been built'" (Visser 1973: 2007). During this time, the progressive passive was not used; the passival carried the meaning now associated with the progressive passive.

Between the late 18th century and the middle of the 19th, the passival fell out of use, while the progressive passive became the normal way to express what had previously been expressed by the passival, giving the two possibilities in (10).

(10) a. Plain passive: The house is/was built.

b. Progressive passive: The house is/was being built.

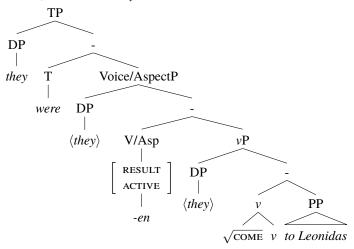
These changes leave three more puzzles to be solved. First, why was the progressive passive ill-formed in earlier English? Second, why was the loss of the passival simultaneous with the loss of the resultative be-perfect? Third, how did the progressive passive become possible at the same time as the passival was lost?

## 4. Proposal: unbundling Voice and Aspect

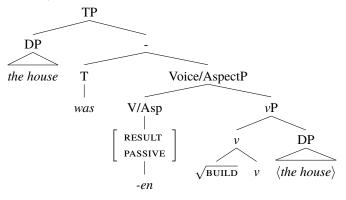
We propose that all four puzzles can be solved by a single hypothesis: that Voice and Aspect, previously bundled on a single syntactic projection, were unbundled and mapped to two distinct projections, with Aspect above Voice. We assume a late-insertion model of the interface between syntax and morphology, along the lines of Halle & Marantz (1993), in which the vocabulary item selected to spell out a syntactic head is the one that is specified for the largest subset of the features of that head.

Before the change, there were four versions of the combined Voice-Aspect head, with the features of Voice (active and passive) cross-classifying with the features of Aspect (process and result). The four structures are shown in (11).

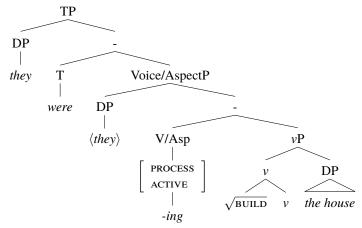
(11) a. Active, resultative: They were come to Leonidas.

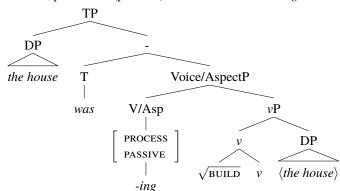


b. Passive, resultative: The house was built.



c. Active, processual: They were building the house.





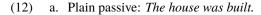
d. Passive, processual (passival): The house was building.

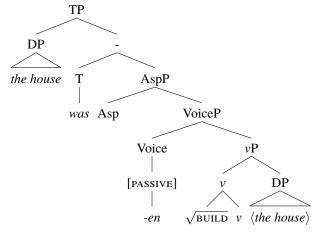
The structures in (11) provide the answer to the second of the four puzzles posed above—why the progressive passive was ill-formed at this stage. The progressive was formed with a Voice/Aspect head bearing the feature [PROCESS] and spelled out by -ing, while a passive clause containing a participle in -en was formed with a Voice/Aspect head bearing the feature [RESULT]. These are two versions of the same functional head and are thus in complementary distribution. Indeed, at this stage of the language there was no particular association between the participial suffix -en and the passive voice. Rather, the two participial suffixes mark a purely aspectual distinction, and both are equally compatible with passive or active structures.

Around the end of the 18th century, the syntactic head carrying Voice and Aspect split into two distinct functional projections, with Voice projecting below Aspect. Each of the two heads became the locus of a single, binary opposition: Voice distinguishes passive from active, while Aspect distinguishes imperfective (formerly process) from perfective. The marked Voice feature, [PASSIVE], is marked by the formerly resultative suffix -en, while the marked Aspect feature, [IMPERFECTIVE], is spelled out by the formerly processual suffix -ing.

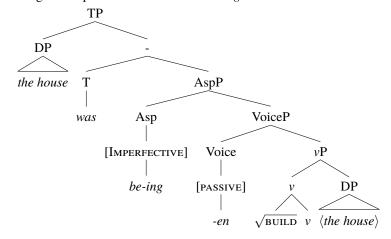
One result of this change was a simplification of the aspectual system: Aspect became a viewpoint aspect head encoding a binary viewpoint aspect distinction, where it had previously encoded a three-way distinction between resultative, process, and plain. Another result was that passive clauses came to have a consistent and distinct morphological marker—the now-familiar be + -en pattern, with be spelling out the Tense head and -en spelling out Voice. As before, -en also spells out the Perf head, so the -en participle still appears in active perfect clauses as well.

After the change, there were two possible passive structures, as shown in (12):





b. Progressive passive: The house was being built.



We are now in a position to solve the three remaining puzzles. First, the loss of the *be*-perfect follows automatically from the loss of the resultative participle. The reanalysis of *-en* as a marker of passive Voice eliminates the defining element of the resultative *be*-perfect: a non-passive, purely aspectual participle in *-en*. The only non-passive use of the *-en* participle in the new system is to spell out the Perf head, which has the temporal property of anteriority, and which appears not with *be*, but with *have*.

The disappearance of the passival also follows automatically. The construction of the passival crucially required that the feature [PASSIVE] not have any overt morphological marking. In the earlier system with Voice and Aspect bundled, [PASSIVE] was effectively an optional feature on a head whose morphology was entirely aspectual. Now, [PASSIVE] characterizes the marked version of a pure Voice projection, and has its own spellout, -en. A structure lacking a participle in -en thus

lacks a passive Voice projection, and cannot be interpreted as passive.

Finally, the advent of the progressive passive is straightforward. Whereas the two morphological components of the progressive passive, -ing and -en, had previously spelled out two aspectual heads in complementary distribution, they now spell out two distinct heads, Aspect and Voice. Nothing now prevents them from co-occurring; indeed the progressive passive is the now only way to express a passive clause with imperfective viewpoint aspect.

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