Agentive and non-agentive adjectival synthetic compounds in English

In the morphosyntactic literature, there exist two approaches to the issue of the presence of the external argument in adjectival passives. Early accounts (e.g. Wasow 1977, Levin and Rappaport 1986) argue that adjectival passives are constructed in the lexicon (as opposed to verbal passives which are constructed in the syntax) and as such do not project the external argument. This view has been rejected by syntactic approaches to word formation, according to which the external argument is present in the structure of adjectival passives (e.g. McIntyre 2013, Alexiadou et al. 2014, Bruening 2014). The objective of this study is to shed new light on the issue of agentivity in adjectival passives by examining the external syntax of English synthetic compounds based on the passive participle (henceforth synthetic -en compounds).

In English, nouns can be merged with the passive participles of verbs to form synthetic compounds; such compounds can appear both in the attributive and the predicative position as shown below:

- (1) a. a state-appointed director/This director is state-appointed.
 - b. computer-generated music/This music sounds computer-generated.
 - c. a home-made sweater/This sweater looks home-made.
 - d. an action-packed book/This book is very action-packed.
 - e. a family-oriented community/This community remains family-oriented.
 - f. an age-related side-effect/This side-effect seems age-related.

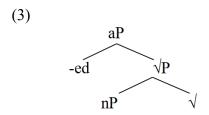
Synthetic -en compounds appear to fall into two classes. Compounds such as home-made or computer-designed are deverbal due to the fact that the left-hand side constituent in such compounds side element is an event modifier. Such compounds project the external argument which is often incorporated in the compound itself (e.g. student-written, pencil-drawn). On the other hand, compounds of the action-packed type behave syntactically like underived adjectives, as illustrated in (2).

- (2) a. The furniture looked (home)-made by an experienced carpenter.
 - b. Everything seemed (computer)-designed by someone with no imagination.
 - c. a (*carefully) action-packed film (cf. a carefully packed basket)
 - d. This company is customer-oriented (*by the management). (cf. The telescope was oriented towards the Moon by the astronomer.)
 - e. This condition seems ageing-related (*by the doctor). (cf. John's condition was related to ageing by the doctor.)
 - f. This box looks heart-shaped (*with a hammer). (cf. The lawn seems shaped with a ruler.)

¹ Synthetic -en compounds can also incorporate adverbs (e.g. ill-prepared). Such compounds are beyond the scope of this study.

² As noted by Botha (1980), the left-most element in deverbal synthetic -en compounds is usually interpreted as an agent (e.g. student-written, expert-tested), an instrument (e.g. pencil-drawn, computer-designed) or a location (e.g. home-made, field-collected).

Adjectival compounds such as those in (2c-f) appear to correspond to the class of stative participles postulated by Embick (2004), which, despite the presence of overt passive morphology, lack the vP layer. The stative syntactic behaviour of compounds of the *action-packed* type indicates that they have the structure without vP or VoiceP which introduces the external argument (Kratzer 1996).



Our analysis of the syntactic properties of synthetic *-en* compounds leads to the following conclusions: firstly, while synthetic *-en* compounds which belong to the eventive class seem to inherit the ability to project the external argument from the head participle, the same is not true for compounds such as *action-packed* or *customer-oriented*, as evidenced by the data in (2); secondly, adjectives overtly marked with passive morphology need not be eventive. Thirdly, roots such as \sqrt{PACK} , \sqrt{SHAPE} or \sqrt{ORIENT} can give rise to both deverbal and non-deverbal adjectives.

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