# A Constructional Analysis for the Skeptical 

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## 1 Introduction

This paper addresses the issue of phonologically null elements in HPSG (e.g. Bender (2001); Müller (2004), Arnold and Borsley (2014)) by providing an analysis of the construction exemplified by the merely skeptical in (1) and in (2) which appears to involve otherwise normal NPs lacking a nominal head. We will point out problems for analyses involving a null head, and provide a constructional analysis that improves on existing accounts.
(1) This will not convince a cynic but may persuade [the merely skeptical].
(2) the (unconventionally) beautiful, the (recently) unemployed, the (chronically) sick, the (truly) lazy, the (merely) incompetent, the (newly) poor, the (obscenely) rich, the old, the young. . .
Apart from the presence of an adjective (potentially modified by an adverb), and absence of a head noun, the most obvious features of the NP in this construction are a definiteness requirement, plurality, and the interpretation (the skeptical means roughly 'people who are skeptical'):
(3) a. *a/several (merely) skeptical
(cf. a/several (merely) skeptical person(s))
b. [The merely skeptical] are $/{ }^{*}$ is easier to convince.

These properties distinguish it from a number of superficially similar, but actually rather different, constructions which we will not discuss here (see e.g. Huddleston and Pullum, 2002, 410ff).
First, there are normal NPs that are headed by nouns which happen to be homophonous with adjectives - nouns presumably derived from adjectives by a morphological conversion process. For example, intellectual as in (4a), behaves like a normal noun in accepting adjectival (rather than adverbial) modifiers, inflecting as a normal nouns (e.g. for plural, (4b)), and taking a full range of determiners (again, see (4b)).
(4) a. She is an (alleged/*allegedly) intellectual.
b. Some/All/Most intellectuals accept these ideas.

There are also constructions which genuinely lack a nominal head but which should also be distinguished from the construction we are concerned with. For example, superlative and definite comparative adjectives can appear without nominal heads, as in (5), but unlike the kind of NP we are interested in, such NPs can be singular and have normal individual reference to inanimates. Elliptical constructions, such as in (6), are also distinct, in the same way (the merely geographical in (6) is interpreted as the merely geographical sense). Finally, one should distinguish NPs which denote abstract objects, as in (7), which are also singular, presumably because they denote uncountables:
(5) [ The older/oldest ] of the books is also [the cheaper/cheapest].
(6) It is a quite distinct entity, in other senses than [the merely geographical]
(7) [The merely implausible] is often mistaken for [the completely impossible].

Of course, in the absence of a formal analysis any classification is at best tentative. However, we believe the construction we are concerned with here is sufficiently distinctive and productive to merit individual attention, and potentially provides a basis for a wider investigation of these other constructions.

In the remainder of the paper we will describe the key features of this construction (Section 2), including some features that seem to have been overlooked. In Section 3 we outline an analysis involving an empty nominal, and discuss the problems it faces. In Section 4 we present a constructional analysis.

## 2 Phenomenon

Typical examples of the construction can be seen in (1) and (2). As will be clear from attested examples like those in (8), it is highly productive (pace Huddleston and Pullum (2002, p41)).
(8) a. Back in The Smoke (i.e. London) amongst [the habitually abusive] and [the floridly psychotic].
b. When they don't find him (i.e. the ideal man), they ... settle for [the sociable but unattractive], [the attractive but unsociable], and, as a last resort, for [the merely available].

Externally, NPs of this kind behave like normal definite plurals - they allow e.g. possessive marking (9), relative clauses (10), and coordination with other (normal) NPs (11):
(9) the very poor's main problem...
(possessive marking)
(10) the very poor who live in rural areas...
(postmodification)
(11) [the very poor] and [some inhabitants of slum areas]. . .
(coordination)
The NP is plural, triggering plural agreement, and taking plural reflexives:
(12) [The very poor] find/*finds themselves/*herself without defence in these conditions.

The interpretation is generic, and primarily human - roughly 'people (or perhaps beings including people) who are Adj', 'the kind of person (being) who is Adj'.
Internally, there is no nominal head, instead there is an adjective (in fact an AP), which (as one would expect) allows modification by adverbs (13), can have complements (14), and can be coordinated (15):
(13) [The merely poor] are everywhere.
(14) the compulsively addicted to chocolate, the excessively fond of self-analysis
(15) [The lazy, ignorant, and stupid] are harder to deal with than the merely stupid.

Most 'normal' adjectives are possible, so long as they are compatible with a generic interpretation in relation to 'people' - the examples in (16) involve what one would normally think of as 'stage level' predicates, in (17) there is an adjective (awake) that is normally postnominal, and (18) features an adjective with its complement which can only appear post-nominally:
(16) the permanently upset, the congenitally unavailable
('stage level')
(17) the barely awake
(*the barely awake people vs people barely awake)
(18) the compulsively addicted to chocolate
(* the compulsively addicted to chocolate people)
However, a restriction that appears not to have been noticed previously is that attributive-only adjectives (i.e. that are only noun modifiers) are excluded. ${ }^{1}$ In particular, 'emotive' uses of adjectives are excluded. For example as a noun modifier poor can either be used descriptively to mean 'financially disadvantaged' or emotively to express the speaker's sympathy. Thus, (19) is ambiguous. This ambiguity is absent predicatively (20), and also in this construction (21). Similarly, an adjective like frigging, which has only an emotive use, is impossible in this construction (*the frigging), though there is nothing wrong with the frigging people interpreted as 'the people' with an negative implication.
(19) The poor people need our help.
(20) The people are poor.
(21) The poor need our help.

It seems to be generally assumed (e.g. in Huddleston and Pullum (2002) and Fillmore et al. (2012)) that the definite article (the) is required - this is incorrect: one can find examples of other kinds of definite, as in attested examples like (22) and (23). However, indefinites are impossible, as are quantifiers.
(22) Most of [Asia's newly rich] are simply the first winners in a rush to own markets.
(23) ... it must be appreciated that [those poor who were included in these surveys] were ...
(24) All/most/some/no very poor *(people) have the same problems.

Finally, and interestingly, though as we have seen above internal modification by adverbs like merely is possible, internal modification by adjectives (like deserving and lazy) is also possible:
(25) the worried well, the less fortunate rich, the under-nourished and deserving poor

We will return to all these properties below.

## 3 An Empty Nominal Analysis

The general outline an analysis involving a phonologically empty nominal is fairly easy to imagine. It would involve a phonologically empty noun which is plural and definite, and whose semantics is roughly 'people', and which we will write as $\phi$, and would give rise to structures like those in (26) (the full paper provides the appropriate lexical entry). ${ }^{2}$

[^0](26)

$\phi$

There are fundamentally two difficulties with such an analysis. First, it is not clear how one can exclude attributive adjectives from modifying $\phi$, wrongly producing examples like *the alleged, \#the poor in its emotive sense (cf. (21)).
Second, it is not clear how one can ensure the presence of an adjective (since heads do not select their modifiers): this analysis will wrongly license examples like the following: ${ }^{3}$
(27) * $[$ The $\phi$ ] can always surprise you.
(intended: 'people in general')
(28) *[The $\phi$ who live in the country] have a hard life.

Thus, in the following section we develop a constructional analysis.

## 4 A Constructional Analysis

Fillmore et al. (2012, p350) provides a Sign-based Construction Grammar analysis of this construction ('Adjective-as-Nominal.human'), as in (29), where a plural NP containing 〈the〉 as part of its FORM dominates a valence saturated adjective (i.e. an AP). Of course, a constructional analysis like this

overcomes the problem posed by examples like (27) and (28) - the presence of an adjective is directly stated.

However, there are several problems with this formulation. First, it is not obvious that it captures the restriction to predicative adjectives observed above (cf. (21)). More importantly, notice that the construction requires the presence of the - but we have seen there are examples of this construction with other specifiers (cf. (22), Asia's newly rich). Third, notice that the structure of an expression like the poor is simply an NP containing an AP - there is no internal Nominal, hence no scope for adjectival modification following the determiner as in examples like those in (25) (the worried well etc.)

[^1]Fourth, notice that the semantics of the NP is of the same kind as that of the adjective (an index with restrictions) - the makes no semantic contribution. Thus, it is not obvious how one would capture the difference in meaning between a coordination of NPs involving this construction, as in (31), and an instance of this construction involving a coordination of adjectives as in (30). But these are not synonymous: the former involves a collection with two sub-collections (viz the rich and the the beautiful) - i.e. a set union. The latter picks out a single collection (people who are both rich and beautiful) - a set intersection.
(30) the rich and beautiful
(31) the rich and the beautiful

However, we can improve on this straightforwardly. We assume, for convenience, the framework of Ginzburg and Sag (2001). What we want is structures along the lines of (32). We can produce these with a construction which we will call nominal-adj-phrase, a sub-sort of non-headed-phrase, as in (33).

(33)

$$
\begin{aligned}
& {\left[\operatorname{SS} \left\lvert\, \operatorname{LOC}\left[\begin{array}{l}
\text { CAT }\left[\begin{array}{ll}
\text { HEAD } & \text { adj } \\
\text { SUBJ } & \langle[]\rangle
\end{array}\right] \\
\text { CONT }\left[\begin{array}{ll}
\text { INDEX } & 1 \\
\text { RESTR } & 2
\end{array}\right]
\end{array}\right]\right.\right]}
\end{aligned}
$$

This allows a definite Nominal denoting a plurality of 'people' (people gen) to consist of an AP (we assume def is a boolean valued head feature). As with Fillmore et al.'s analysis, there is no problem excluding examples like (27) and (28). However, this overcomes the problems of that analysis: since the AP is specified as having an unsaturated subj, only predicative adjectives are permitted (excluding emotives like *the frigging, and the poor, (21)); since the determiner required by the Nominal is unspecified, any determiner which can combine with a definite nominal is allowed, cf. examples like Asia's newly rich (22).
Since the construction produces a Nomimal, rather than an NP, there is no problem with adjectival modification - examples like the worried well will receive a representation along the lines of (34).
(34)



Difficulties arising from the interaction of the construction with coordination can also be avoided (because the Determiner is expected to make its normal semantic contribution). The general idea can be seen in (35), where $1+3$ is intended to indicate some kind of mereological sum.
(35)



## 5 Conclusion

This paper offers (a) a detailed description of a construction that lacks an overt head, (b) an analysis involving a phonologically empty head (only sketched here), and a discussion of the problems it faces, and (c) a novel constructional account that overcomes these and other problems, and which is therefore superior. It leaves open a number of questions which are addressed in the full paper, notably the relation to the other constructions mentioned at the outset, and to other apparently headless constructions, and the question of whether this treatment can be applied to similar constructions in other languages.

## References

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[^0]:    ${ }^{1}$ In some cases there may be a semantic explanation for this. For example, *the alleged and *the utter might be excluded simply because these adjectives are 'property modifying' and there is no property that can be appropriately modified.
    ${ }^{2}$ Empty nominal analyses have been proposed e.g. in Borer and Roy (2010), and in Nerbonne and Mullen (2000). The latter does not suffer from the problems described here, but faces other difficulties, including requiring a DP analysis. These are discussed in the full paper, which also provides a more extensive literature review.

[^1]:    ${ }^{3}$ Notice that no simple appeal to 'licensing by modification' (see, e.g. Dayal (2005) and references there) is possible. 'Licensing by modification' describes the way in which relative clauses can license negative polarity items - compare *Any student signed the petition vs Any student who went to the meeting signed the petition. But as (28) shows, relative clause modifiers do not license $\phi$.

