

On the Descriptions of the <CONTAINER> in *-ful* Nominals in English*

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1. Introduction

It has been often argued that syntactic operations cannot analyze the internal structure of words. (Cf. Chomsky's (1970) lexical hypothesis, Di Sciullo and Williams' (1987) thesis of atomicity of words, among many others.) As Kageyama and Shibatani (1989) and Giegerich (2005), for example, point out, the internal elements of certain kinds of compounds seem to welcome some of the syntactic operations and descriptions.¹

In this paper I would like to examine and consider a particular type of English compounds like (1), and point out that there is another type of compounds that allow prenominal adjectives to modify the composing element of the entire compound:

- (1) handful, spoonful, bucketful, glassful, mouthful, pailful, bowlful, roomful, houseful, bagful, basketful, scoopful, pocketful, thimbleful, tinfu, trayful, tankful, tableful, spadeful, snootful, skepful, shovelful, shopful, shelf-ful, saucerful, sackful, quiverful, potful, plateful, pitcherful, pipeful, panful, palmful, netful, nestful, mugful, lungful, lapful, ladleful, jugful, jarful, hornful, hatful, forkful, fistful, ...

Those nouns are created by attaching *-ful* to the concrete nouns which denote certain containers that are considered to be filled with something. Henceforth, we will refer to the type of the nouns in (1) as "*-ful* nominal".

The organization of this paper is as follows. Section 2 deals with the data which seem to indicate that a component (container) of a compound word is modified by the element outside the compound. Section 3 is concerned with its implications to the Di Sciullo and Williams' thesis of atomicity of words. Section 4 is a conclusion.

2. Modification of the <CONTAINER> in *-ful* Nominals

The container denoted by the first element of the *-ful* nominal, for example, *spoon* of a *spoonful of sugar* has a function of measuring the amount of sugar. Thus, we usually understand that a tablespoonful of sugar is larger in quantity than a teaspoonful of sugar. There are plentiful examples, however, which suggest that a more minute distinction can be made by modifying the container inside the *-ful* nominal. Let us consider some concrete examples, since few detailed descriptions and analyses of the common but problematic *-ful* nominals seem to have been made so far.

2.1. *Big and Little*

of powder or granules and then I can drink it black.

(*How, What and Why*)

- (8) Tommy Brock watched him with one eye, through the window. He was puzzled. Mr. Tod fetched a large heavy pailful of water from the spring, and staggered with it through the kitchen into his bedroom.

(Beatrix Potter, *The Tale of Mr Tod*)

2.2. *Cartoon Character-shaped*

Consider the next:

- (9) ... just think...he is eating a mouthful of that, cleverly disguised as a cute little cartoon character-shaped spoonful of cereal! ...

(*The Controversy over Food Dyes*)

In this example it is natural to interpret that the phrase *cute little cartoon character-shaped* modifies *spoon* of the compound *spoonful*.

2.3. *Broken*

The word *broken* semantically selects the things that are breakable:

- (10) Seemingly, it's also Andrew's arm tattoo kit. A broken basketful of bird shit ...

(*DumbassBozo*)

You cannot break the amount, nor the bird shit. Here again, we see a case of modifying the component of the *-ful* nominal compound.

2.4. *Wooden*

Consider the relationship between *wooden* and *pail* in the next example:

- (11) I looked at a wooden pailful of angle-worms that I have been looking after all winter, so that Steve can have bait ...

(*Journal of Charles Edwin Hewes*)

In (11), we see a description of the material of the container; either the amount of the things contained or the things contained in the pail cannot be wooden.

2.5. *Moss-corked*

Much more closely related are *moss-corked* and *bottle* in (12):

- (12) In silence, telling beads and bare-foot, they reverently perform the traditional Stations, partaking of the water and bearing away with them the moss-corked bottlefuls for the use of the sick and infirm at home or to send to relatives and friends in far distant lands.

(*Tobar an Duin - Doon Well*)

2.6. *Heaped*

Some particular persons would talk about how much heaped the spoon is when they drink coffee. Consider the next:

- (13) a. heaped spoon (of sugar)

b. *heaped sugar

As the example in (13a) shows, the adjective *heaped* can modify the container, while it cannot modify the thing contained as (13b) shows. Then the following example strongly suggests that *gloriously heaped* describes the container *spoon* of the *-ful* nominal:

- (14) a gloriously heaped spoonful of ice-cold caviar
(*The Kitchen Crusader*, 2006)

2.7. *What Kind of*

The next example is very interesting in that the *wh*-question operation seems to analyze the internal structure of the word *spoonful*:

- (15) ...also **what kind of spoonful** are you referring to? there are so many different sizes?
(*Avant Labs*)

This question is interpreted just as if it were ‘what kind of spoon are you referring to?’ In the subsequent question in example (15), the word *sizes* seems to refer to the sizes of spoons.

2.8. *How Big a Handful of Spagetti*

We can ask the amount of the handful of spaghetti, by asking the degree of the amount directly:

- (16) We use statistics when deciding **how big a handful of spaghetti** we need to cook to feed our family or in...
(*Punchbuggy*)
- (17) Every morning I ask the Lord **how big a handful of raisins** I should put on my oatmeal.
(*The World of Righteousness*)

Interestingly, according to my informants, in the case of *handful* the amount of content (spaghetti / raisins) is modified, but not the container *hand*. This is true of the next example:

- (18) Feed each rabbit a **small handful of hay** twice weekly, i.e. two evenly spaced days such as Monday and Thursday.
(*Veterinary Clinical Services*)

It seems, however, that this is due to the close relationship between the smallness/bigness of the grabbing hand/fist and the amount of grabbed content: the variable size of the hand correlates with the amount of the content. Therefore we can predict that if this relation is not found concerning the word *handful*, the modification of the container can be available. In fact, this seems to be the case:

- (19) **a loosely cupped handful of coriander leaves**
(*Garden Party*, Nigel Slater)

In (19), the word *hand* in the word *handful* is interpreted as modified by the adjective phrase *loosely cupped*, since the word *cupped* semantically select the first element

hand of the word *handful*.

The examples considered above provide good evidence to show that <CONTAINER> elements of *-ful* nominals accept the descriptions by the pronominal modifiers.

3. Theoretical Implications and Speculations

3.1. *Thesis of the Atomicity of Words*

Di Sciullo and Williams (1987) claim “the inability of syntactic rules to analyze the internal constituency of words” and they also state that “words are ‘atomic’ at the level of phrasal syntax and phrasal semantics.” In other words, words are opaque to all sentence-level operations or descriptions. (p. 52) The “atomicity of words” explains the problems of genericness, pronominal reference, referential island, and *wh*-movement as in the following examples:

- (20) [bank robber] (genericness)
- (21) *[it robber] (pronominal reference)
- (22) *[Bill admirer] (referential island)
- (23) a. *Who is John an [*t* admire]
- b. *[How complete –ness] do you admire
- c. *The who-killer did the police catch

They claim that the atomicity of words holds of everything below and including compounds in the hierarchy (p. 52):

- (24) Sentences, NPs and VPs, compounds, affixed words, stems, roots

It is true that the clear line between phrases and compounds explains a lot, but it is not totally adequate. Giegerich (2005), analyzing associative adjective-noun (henceforth, associative AdjN) constructions, argues that some of them have phrasal properties and others have lexical properties, with former examples being *bovine disease/tropical fish*, latter examples being *papal murder/musical clock*.

Giegerich points out that even the lexical associative AdjN constructions, which are analyzed as clearly “compounds” by the consideration of stress patterns, allow the *pro-one* construction:

- (25) a. Is this the medical building or the dental one?
- b. Do you have a medical appointment or a dental one?
- c. Is this the general hospital or the mental one?
- d. Is this the Arts Faculty or the Medical one?
- e. Is he a legal advisor or a financial one?

He concludes that “there are actually individual associative AdjNs (*dental building, mental hospital* etc.) which are simultaneously lexical entities (compounds) in some

respects and syntactic entities ('phrases') on other respects," and claims that "the lexicon and the syntax are not separate, distinct modules in the grammar. They overlap." (p. 588)

The facts about associative AdjN compounds as well as *-ful* nominals exemplified in section 2 strongly suggest that the thesis of the atomicity of words proposed by Di Sciullo and Williams should be modified so as to account for the complexity of compounds in English. Compound words should be treated more carefully with respect to "atomicity of words."

In the next section, some ideas for analyzing *-ful* nominal compounds will be considered.

3.2. *Why the <Container> in the -ful Nominal Is Describable*

This section considers why you can modify the container elements of the *-ful* nominals.

Let us consider the categorial status of *-ful* nominals first. I have been following Jespersen (1933) and Quirk et al (1985) in assuming that *-ful* nominals are compounds, although dictionaries such as *The Concise Oxford Dictionary of Current English*, *COBUILD*, *Kenkyusha English Japanese Dictionary* treat *-ful* of *-ful* nominals as a suffix with the implication that the *-ful* nominals are derived nouns.

Jespersen refers to "*-ful* words" as compounds in his works. If we understand his use of the word *compound* literally, it follows that the *-ful* nominals are compounds and in turn *-ful* is a word. Jespersen also states that "the original meaning and vowel are preserved in the substantive like *spoonful*, *basketful*, etc." (p. 46) The pronunciation of *-ful* in the examples in (1) is [ful], not [fəl].² See also Quirk et al (1985) for the treatment of words like *spoonful* and *bucketful* as compounds.

The question we must consider next is the internal structure of *-ful* nominals. Consider the following examples:

(26) [[apron]_N [string]_N]_N, [[head]_N [strong]_A]_A, [[out]_{Ad} [live]_V]_V

As Selkirk (1982) defines, in most compounds in English the category of the whole word is the category of the rightmost element of the compound.

Di Sciullo and Williams (1987, p. 26), considering more extensive data of compounds of various languages, defines heads "relatively," as in (27):

(27) Definition of "head_F" (read: head with respect to the feature F)

The head_F of a word is the rightmost element of the word marked for the feature F.

This definition implies that the rightmost elements of compounds are not always a head of compounds. This definition is applied to the words with the inflectional affix, the words with the derivational affix, and the compound words. The head defined in

this way is referred to as “relativized head.”

Keeping these definitions in mind, let us consider the structures of *-ful* nominals:

- (28) a. [spoonful] (singular)
 b. [spoonsful] (plural)
 c. [spoonfuls] (plural)

Consider first the categorial features of *-ful* compounds. It is reasonable to assume that the category of the whole nominals in (28) is Noun. *Spoon* is a noun. Assuming Jespersen’s treatment of *-ful* nominals as compounds, the element *-ful* is reasonably taken to be a word and more specifically an adjective. (Remember the pronunciation and the meaning of *-ful*.) Then two possible structures of (28a) are the following (where ct is short for container):

- (29) a. [[bucket]_{N +sing, ct}, [ful]_{A, (Loc, Th)}]_{N +sing, ct, (Loc, Th)}
 b. [[[bucket]_{N +sing, ct}, [ful]_A]_(Loc, Th)[zero affix]_N]_{N +sing, ct, (Loc, Th)}

Just suppose that (29a) is the structure of *spoonful*, putting aside (29b) that contains the zero affix whose existence is not clear. Notice that the head with respect to the categorial feature is *bucket* in (29a).

Let us now turn to the point at issue, that is, why the <container> part of the *-ful* nominal compound is modified, using the example in (14). The partial structure of *gloriously heaped spoonful* in (14) would be as the next:

- (30) ...[[gloriously heaped]_{AP} [[spoon]_{N +sing, ct}, [ful]_{A, (Loc, Th)}]_{N +sing, ct, (Loc, Th)}

In (30) the adjective phrase *gloriously heaped* modifies the noun *spoon* across the outer brackets labeled as Noun. So the outer brackets of this compound are “see-through” with respect to the prenominal modification. The brackets of *-ful* compounds are not “strong” enough to prevent the prenominal description. I assume that the properties of the head of the word determine the properties of the whole word. Because we assume the relativized heads, the properties of the component parts of the word can be those of the whole word. If the brackets of the whole word represent the unity of the elements inside and its property, it is reasonable to assume that the strength/property of the brackets depends on the type of elements inside the brackets and some property of the brackets may allow the external description. A container noun plus *-ful* adjective compound may be such a unit.

In the case of *-ful* nominal compounds, *pro-one* construction is not available differently from the case of associative Adj N compounds. So it seems natural to assume that the applicability of the syntactic operations and descriptions depends on the features/properties of the individual entire compound.

My proposal, though speculative and informal and very intuitive, is to put into consideration the features of the whole compound which are determined by the

composing elements of that compound. What kinds of the features on the entire compounds make them opaque to what kinds of syntactic operations and descriptions still remains as a future topic to pursue.³ Assuming the atomicity of words and the hierarchy (24), it can be said at least that the single label of *compounds* does not explain the facts about compounds thoroughly.

4. Conclusion

The present study has investigated the English <CONTAINER> plus *-ful* constructions in English, called *-ful* nominals in this paper, and clarified that *-ful* nominal compounds allow the prenominal adjectives to modify the element of the compound.

The reason for the ability of the adjective phrases to modify the container nouns of *-ful* nominals is not clear to me, but intuitively, I speculate that some strength of the unit of the container noun and *-ful* is not strong enough to bar that modification. That strength might be related to a special combination of the composing elements of the compounds, or the history of the individual compound, or to the familiarity of the compounds.

I believe, however, that *-ful* nominals considered in this paper as well as other types of compounds such as associative AdjN compounds will give some clues to the better understanding of the relation between the atomicity of words and the compounds.

NOTES

* This is a modified version of the part of my paper “Setsubiji *-ful* Saikou (Reconsideration of the Suffix *-ful*),” read at the 58th annual meeting of Chugoku-Shikoku Branch of English Literary Society of Japan, held at Kagawa University, on October 29th, 2005. I would like to express my thanks to those who gave me useful suggestions and warm words of comments at the meeting.

¹ As for compounds in Japanese, see Kageyama and Shibatani (1989), which claim that a distinction between “syntactic compounds” and “morphological compounds” should be made.

² Consider the pronunciation of adjectives with the suffix *-ful*:

i) careful, dreadful, cheerful, beautiful, joyful, regretful...

In (i) adjectives are created by attaching the suffix *-ful* to the abstract nouns that denote the entities that are considered to fill some place with.

³ There also seem to be many minute restrictions on the descriptions of the container elements of *-ful* nominal words. One such restriction can be seen in the next example, which Akmajian and Lehrer (1976) judge not to be totally acceptable:

i) ?A green wallful of paintings is the decorator’s plan.

It seems that the prenominal modifier has to be “relevant” enough to the primary functions and properties (size, shape, material etc.) of the container described by the container noun of the *-ful* nominal.

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