1. Introduction

It is generally assumed that compound words are formed by combining words together. For example, a noun can be combined with any lexical category forming compound nouns, as in (1).

1. a. Noun + Noun: ปากกาก /p̥aak-kaa/\(^1\)
   (beak/mouth-crow) "a pen"

   b. Noun + Adjective: ปากกาก /khɔŋ-kɔː/\(^2\)
   (thing-old) "an antique"

   c. Noun + Verb: คนดู /kʰon-duu/
   (person-look) "an onlooker"

   d. Noun + Preposition: ละครใน /lakhoon-nai/
   (play-in/inside) "a court's play"

The same process can be done with other lexical categories, namely, a verb, an adjective, and a preposition\(^2\). The difference is the productivity of each lexical category. The open class categories like a noun, a verb and adjective seem to be more productive, while, the closed class as a preposition is less productive\(^3\). Generally, this type of compounds is called primary compounds\(^4\).

There is another type of compound which has been assumed that it is formed in the same way as that in (1), that is, a mere combination of words. However, it can be noticed that this type of compound differs from (1) in that it is similar to phrase or sentence construction. Furthermore, the interpretation is straightforward. Noticeably, those compounds in (1) are traditionally called exocentric, while the following compounds in (2) below endocentric, compounds.
This type of compounds is similar to that of English which is usually called synthetic compounds. The question to be addressed here is how these lexical categories are combined. Is it a mere combination of lexical items or is there any rule or principle governing this process of these lexical combinations at all? And most of all, how can those compounds in (2) be distinguished from sentences in (3)? Are they stemmed from the same source or they are merely accidently identical?

(3) a. คนขับรถ /khon khâp rōt/ "a person drives a car".
   b. ไก่ย่าง (ย่าง) /kâi yâng (yuu)/ "a chicken is being BBQed"
   cf. คนขับ /khon-yâng and คน(กิน)ย่าง /khon (kamlây) yâng/
   "BBQ person" and "a person is BBQing (something)", but
   unlikely "a BBQed man, of course".
   c. หม้อหุงข้าว(ใหญ่) /mâo hûng khâîâu (yuu)/ "a pot is
   cooking rice".
   d. สถาบันสอนภาษา /sathâaban sôn phaâsââa/ "an institute
   teaches languages".
   e. "วันไหว้ครู /"wan wîîai khrûu/ "the day is paying
   respect to teachers". But ไหว้ครูวันนี้ /wîîai khrûu wan
   nii/ "to pay respect to teachers on the day" is fine
It is argued in this paper that in fact compounds in (2) and sentences in (3) are underlyingly related. They are derived from the same origin. This can be observed by looking at their grammatical relations or functions. This evidence leads to the rejection of the assumption that compounding is a mere combination of words.

2. The Theory of Grammatical Relations

First of all, let us assume that a word, a phrase, a sentence, construction must have its head. A word, for example, can be a head itself or a nonhead constituent. In a word like นักศึกษา /nāk-sīksāa/ "student", it can be argued that นัก /nāk/, an affix is a head of this word construction; following Williams (1981), Selkirk (1982), but following Witayasakpan (1990), the head is ศึกษา /sīksāa/. The head of a compound in English is almost always on the right hand side, for example, country road, chicken wing, university lecturer, where road, wing, and lecture are heads of these compound constructions. Whereas in Thai the situation is the opposite. The heads of the following compound constructions are on the lefthand side: ถนนหลวง /thanǒn-lāng/ "highway" ปลาทู /plik-kāi/ "chicken wing", and อาจารย์มหาวิทยาลัย /ʔaajaan-mahāwīthayaalai/ "university lecture". Let us assume that these head and nonhead constituents are grammatically related and call it the head-complement relation.

Like words, phrases also have their own heads. It has been argued that phrasal construction are normally endocentric. A noun phrase, for example, has a noun as its head, followed by its complement(s). The same is true for a verb phrase, adjective phrase, and preposition phrase. Each constituent of a phrase is grammatically related as well. And the relation is that of head and its complement(s). In formal grammar the head of a sentence could be either a verb or an inflection (INFL) element. Other constituents of a sentence can be considered as complement(s) of a head. Thus a sentence construction can also be viewed as a combination of a head and its complement(s), both of which are grammatically related.
In short, every construction in a language must have a head as its basic, and optionally with one or more complements. The occurrence of any complement must be subcategorized or licensed by the head.

3. Grammar and Subcomponents of Grammar

Following Chomsky (1981, 1986), let us assume that the grammar consists of various subcomponents as follows:

(4) (i) lexicon
    (ii) syntax
      (a) categorial component
      (b) transformational component
    (iii) Phonetic Form (PF) component
    (iv) Logical Form (LF) component

The lexicon consists of lexical items, irregular phrases or sentences and other irregularities\textsuperscript{10}. The lexicon and the categorial component constitute the base, which generates D-structures. These D-structures are mapped onto S-structures by the rule of Move Alpha (Affect-Alpha), which constitutes the transformational component. The S-structure then are assigned PF and LF representations by PF- and LF-, components, respectively. The grammatical processes can be illustrated as follows.

(5)
\[
\begin{array}{c}
\text{Lexicon} \\
\mid \\
\text{D-structure} \\
\mid \\
\text{Move Alpha} \\
\mid \\
\text{S-structure} \\
\downarrow \\
\text{LF} \\
\uparrow \\
\text{PF}
\end{array}
\]