In his (1980a) paper, Hudson argued that 'dependency is necessary in syntax, but constituency is not'. Some of his argumentation was then criticised by Dahl (1980), to whom Hudson (1980b) in turn replied, admitting that the data presented by Dahl did contain one case where one apparently needed to recognise constituency relations in syntax after all, viz. coordinate structures. However, the other arguments by Dahl were not considered insurmountable by Hudson. Among others, the argument about multiple modifiers was found indecisive.

In this brief remark, I would like to consider the argument about multiple modifiers once more, and suggest that, if formulated in a slightly different way (i.e. by using data of a slightly different type), it can be made to hold and that at least one further argument in favour of constituency can therefore be constructed. Dahl’s original argument rested on the fact that the phrase *ordinary French house* is interpreted as meaning ‘a house which is ordinary among French houses rather than a house which is ordinary and in addition French’ (Dahl, 1980: 486). The way Hudson (1980b: 500) proposes to circumvent the argument is by choosing to refer to the order in which the modifiers are applied to the head. Specifically, he suggests that, first, *French* is applied to *house*, and then *ordinary* to the result of this operation, *French house*. In this way, one could make sure, according to Hudson, that the whole of *French house* was there for *ordinary* to apply to when the time came.

It seems to me, however, that even if Hudson’s proposal can be made to work in cases like *ordinary French house*, rather serious difficulties will be encountered when we come to consider cases where a noun is modified also by an adjective of the so-called non-predicating type (cf. Levi, 1976: 1) in addition to a predicating adjective as in (1a–c), for example.

1. a. a famous criminal lawyer
   (a lawyer who is criminal — OK, but on the wrong reading)
   
   b. an energetic chemical engineer
   (*an engineer who is chemical)
c. a simple logical fallacy
(*a fallacy which is logical)

In each of these cases, there is what Hudson would call a head, but it still seems to me that we cannot analyse (1a–c) correctly unless we have constituent structure to tell us that chemical engineer, for example, does not denote an engineer who is chemical but is an item whose total meaning is something over and above the sum of the meanings of its parts. In these cases, I do not think that the meaning of the whole construction could very well be assigned to the head either inasmuch as the head in each case retains its usual meaning (i.e. a criminal lawyer refers to a certain kind of lawyer, a chemical engineer to an engineer, and so on). That is, one can hardly treat chemical engineer, say, as a complex lexical item; a chemical engineer is an engineer just as a chemical substance is a substance. Only the ways in which the head is modified in each of the two cases are different. The former type (chemical engineer) can, I believe, be handled most satisfactorily if we have in the grammar a statement to the effect that a combination of a non-predicating adjective with its head noun will always yield as a result a constituent of a special type, the whole of which will then be the target of modification if further modification (by predicating adjectives) is to be performed.

Also, it seems that the order in which the modifiers are applied is of no crucial help in cases like (1a–c), although it clearly needs to be taken into account.

Hudson (1980b: 494) does argue for the possibility of treating items like idioms (Dahl’s red tape, for instance) as complex lexical items with the meaning of the whole idiom being assigned to the head. Thus in the entry for red tape the whole of the idiom’s meaning would be assigned to tape in the lexicon, red being treated as semantically completely empty. In my view, this is not acceptable (even for idioms) since it is a technique which distorts the picture unduly: it is just BECAUSE OF the modifier red that red tape acquires or has the special meaning it has; the contribution of red is quite crucial to the interpretation of the idiom, and it would therefore be odd, to say the least of it, if we had a description of the idiom in which red was explicitly deprived of the possibility of any contribution to the sum total of the interpretation of the idiom. (Incidentally, this seems to be a view which is shared by many practising lexicographers inasmuch as red tape is ordinarily treated under red, the entry for tape only containing a cross-reference to the appropriate subentry for red; cf. e.g. The Oxford Advanced Learner’s Dictionary of Current English; The Shorter Oxford English Dictionary on Historical Principles; s.v. red, red-tape, tape.)

Thus it appears to me that we need to postulate ‘higher nodes’ in syntax.
also for cases like the ones discussed above. Only if we have the information available that *criminal lawyer*, say, amounts to something more (or other) than the sum of its parts, with *criminal* referring to *law* rather than to the whole of *lawyer*, can we satisfactorily account for this and other similar cases.

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References


While welcoming the fact that other linguists are joining the debate about whether or not higher nodes are needed in syntax, I should like to point to some weaknesses in Hietaranta’s two arguments for having them.

1. The first argument is based on expressions like chemical engineer, which as Hietaranta points out have very different semantic structures from ordinary adjective + noun combinations like blue hat. He claims that we need a higher node for examples like chemical engineer because its ‘total meaning is something over and above the meanings of its parts’ — in contrast, I take it, with the more normal pattern of blue hat. But surely this is a misrepresentation of the semantic structure of chemical engineer? The contributions of both chemical and engineer are quite straightforward in themselves, as Hietaranta says (engineer means ‘engineer’, and chemical means something like chemistry, with a relational additive), and there is nothing else ‘over and above’ the meanings of these two words to justify an additional node in the semantic structure. What is peculiar about such examples (in comparison with blue hat) is that the meaning of chemical relates to a part of the semantic structure of engineer, instead of merely being added to the meaning of the noun. Thus, whereas a blue hat is something which has both the property ‘blue’ and the property ‘hat’, a chemical engineer is somebody who has the property of an engineer whose field is chemistry. In other words, if anything examples like chemical engineer are even LESS in need of constituency than are ordinary examples like blue hat (or the example ordinary French house which I discussed in my reply to Dahl), because the meaning of chemical can be firmly embedded WITHIN the meaning of engineer. Needless to say, such an analysis fits very easily into a grammar which locates the meaning of an ordinary adjective + noun sequence in the semantic structure of the head noun rather than postulating an extra constituent to bear the meaning.
2. Hietaranta’s second argument refers to idioms such as red tape or hot dog. He complains that my proposed analysis locates the meaning of such an idiom on the head noun, and in so doing fails to reflect the fact that the adjective is just as important a part of the idiom as the noun is. I think this objection vanishes if it is remembered that the same is true of ordinary literal sequences like blue hat, given the analysis sketched above. If we represent the meaning of blue as \(a\), and the property part of the meaning of hat as \(b\), then the property part of the meaning of hat in blue hat will be the set \(\{a \& b\}\); so the referent of blue hat must have both \(a\) and \(b\) among its properties. Similarly, the properties of ‘red tape’ (however we may define them) will be specified within the structure of the word tape, but this does not mean that the word red has made no contribution to them. On the contrary, the lexicon will only allow tape to have these properties on condition that it is modified by red, so the correct interpretation of the relevant entry would be that the meaning ‘red tape’ is related to the occurrence of the pair of words, red and tape, even if it is shown as part of the structure of the second of these words.

Far from undermining a dependency-based analysis, idioms in fact provide interesting confirmation for it, because it seems likely that it will allow us to explain why certain patterns are not possible for idioms. For example, why is it that (so far as I know) there are no idioms consisting of an object and a prepositional phrase, but not involving the verb on which both depend, whereas there are plenty of examples of idioms in which the constant parts are the verb and one of its following modifiers (kick the bucket, send X to Coventry, etc.)? The general principle seems to be that the constant part of an idiom always includes the word in whose structure the meaning of the whole is located. Dependency theory (of the kind I am advocating) allows two possibilities as far as this word is concerned: either it is the head of a dependency-based structure, so that the idiom consists of a head and one or more of its modifiers; or it is a coordinated string of words, which counts itself as a word (being endocentric), and which has the meaning of the whole string as part of its semantic structure (e.g. the meaning of John and Bill is \(\{a \& b\}\), where \(a\) and \(b\) stand for John and Bill respectively). We have already seen examples of idioms centring on a head, but (as Östen Dahl has pointed out to me) there are also plenty of examples of idioms consisting of a coordinate string (here and there, spic and span), or combining the two types, with a coordinate structure as modifier of a head (through thick and thin, without let or hindrance). But there are no examples of idioms falling outside these patterns. There are other restrictions which I believe can be explained in terms of other properties of this dependency-based theory (e.g. the fact that idioms cannot have a subject and verb as constant elements, and the less well-
known fact that the constant elements cannot include a bare indirect object), but I think the above discussion should have made it clear that it is essential to take account of dependency relations in any discussion of idioms.

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