# A PEDAGOGIC GRAMMAR OF SIGNALLING NOUNS IN DISCOURSE*

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ABSTRACT

This paper develops a pedagogic grammar of a major class of vocabulary, signalling nouns, which have important discourse functions in establishing links across and within clauses. The grammar is developed from a review of a diverse body of literature which focusses on various sub-classes of signalling nouns, supported by the author's own corpus data. The synthesis, which is the first attempt to bring this diverse work together under one umbrella, is presented as a set of rules for the use of signalling nouns, which are likely to be of value to materials writers and learners in English for Academic Purposes.

KEY WORDS: noun, signalling noun, abstract noun, cohesion, lexical cohesion, anaphora, cataphora, exophoric, homophoric.

RESUMEN

En este artículo se desarrolla una gramática pedagógica de una clase de vocabulario primordial, los nombres deícticos, los cuales tienen funciones discursivas importantes a la hora de establecer conexiones entre oraciones y dentro de ellas. La gramática se desarrolla a partir de una revisión de diversos trabajos que se centran en varias sub-clases de nombres deícticos, a su vez complementada con los datos de un corpus recopilado por el propio autor. La síntesis, que es el primer intento por aunar todos estos trabajos, se presenta como un conjunto de reglas para el uso de los nombres deícticos, los cuales pueden ser valiosos como materiales de uso para los académicos y estudiantes del inglés con fines específicos.

PALABRAS CLAVE: nombre, nombre deíctico, nombre abstracto, cohesión, cohesión léxica, anáfora, catáfora, exofórico, homofórico.

## 1. INTRODUCTION

This paper presents a critical review and synthesis of the literature on an important word class, referred to here as "signalling nouns" (words like *arrangement, difference, function, idea, problem, process, reason, way*)[1], and develops a set of rules, or pedagogic grammar, for their use in discourse. Signalling nouns (sub-classes of which have been referred to variously by others as *general nouns* (Halliday &

Hasan, 1976), *type 3 vocabulary* (Winter, 1977), *anaphoric nouns* (Francis, 1986), *advance labels* (Tadros, 1985), *carrier nouns* (Ivanic, 1991), and *metalanguage nouns* (Winter, 1992)) represent something of an oddity in applied linguistics. On the one hand, as the references just cited indicate, they have attracted the attention of a number of eminent linguists and applied linguists. On the other hand, however, despite all this research they have not received systematic pedagogical development and application. This is unfortunate, especially for English for Academic Purposes, as signalling nouns are pervasive in academic language (Coxhead, 2000; Ivanic, 1991; Nation, 1990; Thurstun and Candlin, 1998).

The following examples (1) and (2) each contain an example of the sort of lexis which fulfils the signalling function with which this article is concerned. In both examples the signal indicates a relation with adjoining clauses. In the first example the word *advantages* refers forward (cataphorically) to the series of clauses which follow it; in the second the signalling noun *case* refers back (anaphorically) to the clause which precedes it:

1.  Internal fertilization has two great *advantages*: (1) it is a surer method with bet-ter chances of sperm meeting eggs: (2) it means that the fertilized egg can be enclosed within a protective covering before it leaves the female's body... (author's data)[2]
2.  Clinging to outmoded hypotheses is an occupational hazard in those branches of biology where it is difficult, perhaps impossible, to test predictions ex-perimentally and thus settle the matter once and for all. Such is the *case* with paleontology and certain branches of animal behaviour. (author's data)

As well as across clauses, signalling nouns may also function within the signalling noun's own clause or noun phrase (with the signal acting as head noun). In the following example (3) the signalling noun *function* is realized as the comple-ment of a stative clause:

[1] Signalling nouns are always abstract nouns and any abstract noun has the potential to function as a signalling noun. However, because abstract nouns are not always used with their signal-ling function one cannot equate the two terms. Rather signalling nouns are a particular type of realization of abstract nouns.

[2] The author's data consisted of two corpora. The first of these consists of transcribed recordings of an undergraduate lecture course in biology (92,939 words) given at Sultan Qaboos Univerisity (SQU) by native speaker lecturers to non-native (Arab) audiences. The second corpus was made up of the relevant sections of the prescribed textbook for the lecture course (Roberts, 1986) upon which the lectures were based (90,482 words). Both corpora, therefore, covered the same subject matter. See Flowerdew (1994) for further details of the corpora.

3. The *function* of androgens is to stimulate development of the male's secondary sexual characteristics, such as body hair and deep voice. (author's data)

From a pedagogic or cognitive processing perspective the fact that signalling nouns can function within the clause represents an important insight, for, in decoding a text, a listener or reader will thus have the task, on encountering potential signalling nouns, of deciding if a signal is functioning across clauses or within the clause. Any pedagogical treatment should therefore consider both functions; limiting attention to the cross-clausal function, as has been the thrust of most research to date (with the notable exception of Ivanic (1991), reviewed below) runs the risk of directing the learner to look for a relation which, where the realisation is intra-clausal, does not exist. Any pedagogical treatment should allow for both types of realisation therefore.

Having provided the basic background, I will now move on to review the work on signalling nouns as it has developed, highlighting the key insights of each study. In this way, I will build up to the final stage of the paper, where, based on the insights described in the literature review, I will present a set of rules which can form the basis of a pedagogic grammar.

## 2. HALLIDAY AND HASAN (1976)

Although devoting only a very short penultimate chapter of their seminal "Cohesion in English" to lexical cohesion, Halliday and Hasan (1976) were the first to draw attention to the important role played by lexis in textual cohesion. For Halliday and Hasan lexical cohesion establishes anaphoric links between a clause and its preceding clause. Lexical cohesion can be established by either reiteration (repetition of same word, use of synonym/near synonym, superordinate, or general word) or collocation (use of meronyms and antonyms) (Halliday and Hasan, 1976:228).

Of these categories, it is the general nouns which have the most clear-cut signalling role and which are of relevance to the present study. Halliday and Hasan characterize general nouns as a small set of nouns which have a generalized reference within the major noun classes (e.g. human noun, fact noun, place noun). Examples of general nouns include *person, man, child, thing, business, move, place, question, idea*. Halliday and Hasan describe general nouns as being, in grammatical terms, "very similar to a reference item". Citing the examples of "it seems to have made very little impression on the man" and "it seems to have made very little impression on him", Halliday and Hasan point out that in both cases interpretation is possible only by reference to something that has gone before. General nouns are described, therefore, as being on the borderline between lexical items (members of an open set) and grammatical items (members of a closed system).

Halliday and Hasan provide a considerable number of examples of the use of general nouns in context. From these examples it is clear that no distinction is made between what are referred to as signalling nouns in this paper and what Francis

(1988) calls lexical equivalents. In the following examples (4) and (5) which Halliday and Hasan give of general nouns the meaning of the items *stuff* and *place* can be recovered with reference to a single noun phrase in the preceding clause, *crockery* and *Geneva* respectively:

4. What shall I do with all this *crockery*? —Leave the *stuff* there; someone'll come and put it away. (Halliday and Hasan, 1976:275)
5. Can you tell me where to stay in *Geneva*? I've never been to the *place*. (Halliday and Hasan, 1976:275)

Other examples provided by Halliday and Hasan, however, have a lexical signalling function:

6. We all kept quiet. That seemed to be the best **move**. (Halliday and Hasan, 1976:275)
7. Henry seems convinced there's money in dairy farming. I don't know what gave him that *idea*. (Halliday and Hasan, 1976:275)

In these examples (6) and (7) the meaning of *move* and *idea* can only be recovered by processing the whole of the previous clause.

Halliday and Hasan's work is important for drawing attention to the general phenomenon of nouns with a generalized reference, but it fails to make the distinction between what this paper is referring to as lexical signalling and the less complex (from the point of view of cognitive processing) lexical equivalents.

## 3. WINTER (1977)

Working at about the same time as Halliday and Hasan, Winter (1977) took a slightly different and more detailed approach to what Halliday and Hasan referred to as general nouns. In line with Halliday and Hasan, Winter pointed out that vocabulary can be divided into two main systems: open system vocabulary and closed system vocabulary. Open system, lexical words refer to things, actions and attributes that exist in the world. Nouns, verbs, adjectives and adverbs —e.g. *book, run, stupid, happily*— belong to this class. The list of system, or lexical words is potentially infinite because new words can enter this system. Closed system, grammatical words, on the other hand, have no referential meaning. Prepositions, determiners, and conjunctions —e.g. *from, the, and*— belong to this class. The list of closed system words is limited to a finite set and new words cannot enter this system. In between these two categories of vocabulary Winter (1977) sets up a third category, which, like Halliday and Hasan's general nouns, have only generalized reference. This third class of words, as Halliday and Hasan pointed out, have both lexical and grammatical properties. Items in this third class Winter describes items in this third class as acting as signals of the pragmatic relations between sentences. They stimulate a cognitive process whereby the meaning of a sentence is interpreted

in the light of adjoining sentences. This third class of words is itself divided into 3 sets: vocabulary 1, vocabulary 2 and vocabulary 3.

Vocabulary 1 consists of subordinators, such as by, *after*, and *unless*. The function of these items is to combine pairs of clauses where one is subordinate to other:

8. *Unless* you finish your meal, I will send you to bed.
9. *After* he finished his meal, he went to bed.

Vocabulary 2 is made up of sentence connectors, such as *alternatively, in any case*, and *therefore*. Their function is to combine pairs of clauses of equal weighting:

10. He won the game. *Therefore* he took the prize.
11. You can do this. *Alternatively*, you can do that.

Vocabulary 3, which is the focus of interest here, is composed of lexical items which "constitute a special vocabulary of context for the clause relations of English; they are words which can function as special signposts of what a word means in sequence with its adjoining sentences" (Winter, 1977:2). According to this definition, Winter would seem to be claiming the same function for vocabulary 3 items as Halliday and Hasan did for their general nouns. However, in contrast to Halliday and Hasan, who point to an anaphoric function for their general nouns, Winter stresses the predictive, or cataphoric function of vocabulary 3. Vocabulary 3, like the subordinators and sentence connectors of vocabularies 1 and 2, function prospectively, i.e. vocabulary 3 items allow the reader to anticipate the information that is to follow in the next sentence or sentences. Thus in example (12), which follows, the vocabulary 3 item *reason* allows the reader to anticipate that the reason for the error will be provided in the following sentence, in the same way that the subordinator *because* or the sentence connector *therefore* would in examples (13) and (14):

12. There is a *reason* for your error. Your calculations are wrong.
13. There is an error *because* your calculations are wrong.
14. There is an error. *Therefore* your calculations are wrong.

Winter lists 106 type 3 items. Included in his list are words such as *action, cause, compare, differ, kind, reason, result, similar, solution, thing, way*.

Although Winter's work has the great merit of drawing attention to the prospective potential of lexical items in discourse, as Francis (1986) has noted, there are a number of problems with the analysis. First, although type 3 items are primarily cataphoric (Winter's paper was sub-titled "Some *predictive* lexical items in written discourse" [emphasis added]), a number of the examples provided demonstrate anaphoric relations.

Second, although Winter describes his list of type 3 items as a closed set, he himself admits that the list is not complete and it is indeed possible to think of (or

identify in a corpus) other items which function in the same way. *Category, factor, fashion, process, purpose* are just a few such examples from the author's data. Francis (1986), making this same point, claims that there is such a large range of synonyms or near synonyms for Winter's type 3 vocabulary that almost any item can achieve cataphoric or anaphoric signalling and would thus need to be taken into account in the study of the cohesion of any one discourse. The system may in principle be a closed set, she argues, but in practice it would probably be impossible to draw up a complete list. Foreign borrowings are one source of new type 3 items Francis mentions. The creation of metaphors offers another possible source of new members of the type 3 set. Francis (p.8) cites a number of near synonyms for *nonsense* from Roget's Thesaurus —*gibberish, piffle, poppycock*, etc.— but other more vulgar metaphors also spring to mind —*crap, shit, bull-shit*, to mention just a few.

Third, one of the criteria for inclusion as a type 3 item is its parallel function to the subordinators and sentence connectors of types 1 and 2. But as Winter himself admits again, there are exceptions to this rule, e.g. *characterise, correct, error, feature, function, kind/sort of, state, problem, solution, evaluation* (Francis, 1986:69). In addition, Francis (1986:68) makes the point (previously made by Halliday and Hasan in relation to their category "general nouns") that an important function of signalling nouns is to introduce additional attitudinal meaning; so type 3 items are not merely substitutes for the subordinators and sentence connectors.

Fourth, although Winter claims his type 3 items to signal particular clause relations, an analysis of any text demonstrates that many of the clause relations Winter is concerned with are not signalled lexically. The following examples illustrate the relations of "exemplification" and "contrast" respectively, without using any overt signalling nouns of such relations:

EXEMPLIFICATION

15. Some people live in crowded conditions. In parts of Hong Kong one often finds a large number of people living in a tiny flat.

CONTRAST

16. I took the train. My wife took the bus.

The fact that clause relations may or may not be signalled is an important one for pedagogy in so far as learners need to be able to identify the relations in both cases.

## 4. FRANCIS (1986)

Francis, like Winter, sets out to characterise a particular organizational principle in written (argumentative) discourse dependent upon the use of a closed

set of lexical items. Francis refers to this set of items as *anaphoric nouns*. Anaphoric, or a-nouns, like Halliday and Hasan's general nouns and Winter's type 3 vocabulary, are devoid of specific meaning when taken out of context, but are made specific in meaning by their context. To qualify as an a-noun items must be metadiscursive i.e. they must refer to the development of the argument of the discourse itself and not relate to the real world. Other "superordinate" nouns such as *fact, issue, cause, development, move, process*, etc. which are included by Winter as type 3 items are not included by Francis in her class of a-nouns on the grounds that they exist in the world outside the discourse, while a-nouns are labels for language which has been developed through the discourse itself. A-nouns, Francis notes, are nominalized forms of verbs referring to cognitive and linguistic processes. The following are examples of a-nouns from the the approximately 250 Francis cites from her corpus:

> accusation, account, abstraction, challenge, discussion, expression, deduction, explanation, implication, opinion, reply, story, summary, supposition, text, view, warning.

Although labelled anaphoric, a-nouns are at one and the same time retrospective and prospective, their function being the incorporation of a preceding stretch of discourse into a writer's ongoing argument. In the following example the a-noun *position* establishes the position of one commentator (J.R. Lucas) on a particular issue as given and at the same time introduces a new stage in the argument, with the contrasting position of another commentator (Hofstadter) who disagrees with Lucas. The two parts of the discourse related by the a-noun are labelled x-member and a-member:

17. (X-MEMBER) J.R. Lucas, in a famous article published in *Philosophy* in 1961, argued that the most important consequence of Godel's work was that the human brain cannot, in principle, be modelled by a computer programme —that minds cannot be explained as machines. For although computers can be programmed to generate formal systems, they can never be programmed to spot the Godelian traps inherent in them. This latter ability, Lucas argued, remains the sole prerogative of the human brain. (A-MEMBER) Surprisingly, perhaps, Hofstadter disagrees with this anthropocentric **position**. (Francis, 1986:4)

As the above example illustrates, a-nouns relate not just pairs of clauses but whole stretches of discourse. In addition to their organizational function, a-nouns, as Halliday and Hasan pointed out for general nouns and Francis herself noted in relation to Winter's type 3 vocabulary, may convey the attitude of the writer to what is being established as given. This may be done through the choice of a-noun itself e.g. *insight* vs. *distortion*; *truth* vs. *fabrication* or by modification to the a-noun e.g. *down-to-earth approach, unnecessarily modest contention, preposterously inaccurate comparison, position full of contradictions.*

# 5. TADROS (1985)

In contrast to Halliday and Hasan and Francis, who emphasise the anaphoric function of lexical signalling items, and together with Winter, Tadros is concerned with the prospective function of signalling devices in discourse. Noting that prediction can occur both within a sentence and across sentences (this is a point which will be taken up again below), Tadros's concern is with the latter phenomenon. Basing her analysis on examples drawn from an economics textbook, Tadros sets up 6 categories of inter-clausal prediction, four of which —enumeration, advance labelling, reporting, and recapitulation— as in Winter and Francis, are signalled by means of a closed set of lexical items which only derive their meaning when contextualized.

Included as closed set lexical items to realise enumeration are *circumstances*, *classes*, *concepts*, *examples*, *factors*, *reasons*, *stages*. An example of enumeration is as follows:

18. This kind of company has three important *features*: the number of shareholders may be as few as two..., a shareholder cannot transfers his shares... nor can any invitation be made to the general public to subscribe for shares. (Tadros, 1985:18)

The predictive categories of advance labelling, reporting, and recapitulation are signalled primarily by verbs. Thus advance labelling, in which the writer labels and therefore commits him/herself to perform a discourse act, may make use of a range of illocutionary verbs (e.g. *classify, compare, consider, differentiate, illustrate, make clear, show*):

19. It is important, however, to *distinguish* between real and nominal wages. Nominal wages are... real wages... (Tadros, 1985:25)

Reporting, where the writer detaches him/herself from a reported proposition and thereby predicts a future evaluation of that proposition, makes use of a heterogeneous range of factives (e.g. *show, realise, prove, know*), non-factives (e.g. *claim, suggest, think, state*), and others (e.g. *discuss, develop, place*):

20. It was further *pointed out* by those early economists that some land was not worth cultivating, and therefore no one would pay anything for its use while there was no parallel to "wageless labour". There are, however, a few people... who... are unable to undertake ordinary forms of employment. (Tadros, 1985:33)

Recapitulation, in which a piece of information from a previous place in the text is recalled in order to reestablish it as given and thereby predict new information, makes use of verbs such as *assume, consider, examine, give, mention, show*:

21. Three categories of ownership of wealth were *noted* above: personal, business and social. Business wealth or capital can, however, be owned by private individuals or the state. (Tadros, 1985:35)

Although examples provided by Tadros for advance labelling, reporting, and recapitulation take the form of verbs, most of them, it can be noted, have their nominal equivalents. Thus instead of *classify* we might have *classification*, for *compare* we might have *comparison*, for *show* we might have *demonstration*, for *assume* we might have *assumption*, etc.

## 6. IVANIC (1991)

The investigators discussed so far in this review have adopted a broadly functional approach in their analysis of lexical signalling. Their starting point has been the inter-clausal relations —whether these relations be anaphoric, as in the case of Halliday and Hasan and Francis, or cataphoric, as in the case of Winter and Tadros, —and from here they have moved on to specifying the range of items which are used to realise these relations. The approach of Ivanic, in contrast to that of the earlier researchers, is more formal. Ivanic's starting point is a particular set of lexical items —the linguistic forms (albeit with certain semantic properties)— and from here she moves on to investigate the particular discourse properties of these forms. The result of this approach is significantly different from that of the earlier researchers in that in making her starting point the set of lexical items, Ivanic is led to analyzing both their inter-clausal and, in contrast to her predecessors, their intra-clausal relations.

Ivanic starts with a set of abstract nouns, termed "carrier nouns" which, unlike other abstract nouns, are common as plurals and which, unlike other nouns, take a noun clause or nominalisation as complement. Without recovering their complement, carrier nouns have no real meaning. Ivanic provides a representative list of 40 items which can function as carrier nouns. Most, if not all, of these items are to be found in previous lists provided by the various researchers reviewed above. The most significant aspect of Ivanic's analysis is her demonstration that carrier nouns may be realised not only across clauses, but also, importantly, within clauses.[3] Where carrier nouns are realised across clauses their realisation (complement in Ivanic's terms) may be either anaphoric or cataphoric. Where the realisation of the carrier noun is within the clause the clause takes the following structure:

N + is + Nominalisation

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[3] See also (Flowerdew, 1992). Using a concordancer to search for instances of signalling nouns in context, the researcher quickly becomes aware of this phenomenon.

or (less frequently)

> Nominalisation + is + N

where N = carrier noun
nominalisation = that clause, to clause, wh-question clause, or deverbal noun

The following example follows this pattern:

22.  The *purpose* of the following section is to provide an elementary account of the magnetic properties of ferrites.

Here *purpose* is the carrier noun and the "to" clause, "to provide an elementary account...", is its complement, or realisation. Other carrier nouns realised within the clause might take the following forms:

23.  The *explanation* is *that*...
24.  The *question* is *what* we should...

Ivanic unfortunately does not give any examples labelled as containing deverbal nouns. By deverbal nouns she is thinking of nouns which can be seen as derived from verbs, often recognizable by their suffixes -(a)tion, -ment, -nce, -age, -ure, etc. —(see Akimoto, 1988, referred to in Ivanic). This is an important category of noun in academic and bureaucratic language (Halliday, 1989; Martin, 1991). The following is an example (25), with *function* as the carrier noun and the deverbal noun *reproduction* as its realisation.

25.  The *function* of the sex organs is *reproduction*.

Ivanic's insight that carrier nouns may be realised either across clauses or within clauses is important for a cognitive/pedagogical approach to signalling nouns. In processing a stretch of discourse containing signalling nouns, readers and/or listeners need to process the text in such a way as to search for both inter-clausal and intra-clausal realisations. Earlier researchers, in limiting their analysis to inter-clausal functions, lead one to believe that only inter-clausal decoding is involved in the processing of signalling nouns, while, as Ivanic indicates, both inter- and intra-clausal processing is required.

Another insight provided by Ivanic is that signalling nouns may function exophorically. That is to say, their realization may not be found in the text, but depend on readers' or listeners' background knowledge. Ivanic gives the following example:

26.  The merger brought its *problems*. No one would deny that. But gradually the teething *troubles* abated. (p.105)

In this example, the realization for neither *problems* nor *troubles* is to be found in the text; readers are expected to apply their knowledge of the situation to interpret what they refer to.

In a slightly different case sometimes signals may find their realization neither in the text, nor in general background knowledge, but depend on a set of current or specific circumstances with which readers or listeners are familiar. Although Ivanic does not use the term, this particular type of exophoric reference is referred to by Halliday and Hasan (1976) as "homophoric" reference. A typical example of this in academic discourse is when a textbook writer writes something like the following:

27. The *concepts* that were reviewed in the previous chapter will be developed further here.

In this example, understanding is dependent on readers having read the previous chapter. It cannot be said that this is general background knowledge; it is rather knowledge shared between writer and readers. Somebody reading this sentence in its immediate context only would not be able to work out the meaning of the signal *concepts*.

## 7. WINTER (1992)

Following his seminal 1977 paper, Winter later considerably modified his earlier position, reported above. Drawing on the work of Francis (1986) and Ivanic (1991), Winter now claimed type 3 items to belong to a larger group of what he calls "metalanguage nouns".

Like all of the classes of discourse signalling lexis reviewed about, metalanguage nouns are devoid of meaning, or "unspecific", until they are made "specific" by what Winter refers to as "open class specifics". However, importantly, Winter now allows that signalling can occur both across and within clauses and that signalling may be both anaphoric and cataphoric. When signalling occurs across clauses, this is realised by the type 3 vocabulary, as outlined in Winter's earlier paper (and presumably the anaphoric nouns in Francis, although examples are not given of these).

When signalling occurs within the clause the noun is made specific by complementation in a "N + is + Nominalization" or a "Nominalization + is + N" structure, as in Ivanic. In the following example from Winter the meaning of the noun *problem* is specified in the "Noun + is + Nominalization" structure, with the nominalization taking the form of a "that" clause.

28. Although the reserves are vast, this supply will also run out in the not-too-distant future. A further *problem* is that although methane is an excellent fuel, chemically it resists the changes needed to make it into a useful feedstock. (Winter, 1992:157)

In addition, and departing from Ivanic, when the signal is realised within the clause, for Winter, this may also be done by means of post-modification to the signalling noun itself i.e. functioning as complement within a higher clause structure. In the following example the meaning of the noun *problem* is specified within its own noun phrase by the post-modifying "that" clause:

29. The P.W.R. is the world-wide "standard" reactor. While this brings advantages on knowhow, it also brings the *problem* that the U.K. may be influenced by the effects of foreign experience, particularly safety standards. (Winter, 1992:157)

The acknowledgement by Winter, following on the work of Ivanic, that nouns which signal meaning across clauses may also signal meaning within the clause is a significant advance in the study of lexical signalling devices, especially if one is interested in application of the theory to pedagogy. If the lexical items with generalized reference which are the focus of this paper may be made specific both across clauses and within clauses, then, when such items occur in discourse, listeners/speakers need to be able to decode them in such a way as to recognise whether their meaning is made specific within the clause in which they occur or within an adjoining clause or clauses.

## 8. A SYNTHESIS

Having reviewed the various literature sources on various types of signalling noun, supported by examples from the empirical data of the authentic corpus, it is now possible to present a synthesis. The synthesis is presented in point form and makes use of fabricated examples for illustrative purposes.

1. There exists a class of unspecific lexical signalling items the meaning of which is only made clear by their linguistic (or non-linguistic) context. Given the possibility of the coinage of new abstract nouns[4], foreign borrowings, and the use of metaphor, the class is potentially infinite.

2. Most of the lexical signalling items are nouns, but they may also be verbs or adjectives. In this article, for practical reasons, only nouns are studied.

3. The meaning of signalling nouns may be realised in three ways:

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[4] An example of recent coinage would be the term "rodhamisation", the process of a woman retaining her maiden name after marriage as well as taking that of her husband, as in Hillary Rodham Clinton.

I. across clauses
II. within the clause
III outside the text

4. When meaning is realised across clauses the relation may be anaphoric or cataphoric:

ANAPHORIC

30. He cannot borrow enough money. This *problem* is really getting him down.

CATAPHORIC

31. He has a *problem*. He cannot borrow enough money.

5. When meaning is realised across clauses the lexical signal may refer to whole sections of text, not just an individual clause:

32. He has a *problem*. He needs to pay a number of bills, but he has already spent all this month's salary and he cannot borrow enough to pay them.

6. Signalling nouns may be introduced with an evaluative function:

I. through the choice of noun (e.g. *insight* vs. *distortion*, *truth* vs. *fabrication*
II. through the introduction of pre- or post-modifiers: (e.g. *down-to-earth approach*, *unnecessarily modest contention*)

7. When meaning is realised within the clause this may be achieved by:

I. complementation in:

    a. an S+P+C clause (where C = NP containing a deverbal noun)

33. His *problem* is lack of money.

    b. an S+P+C clause (where C = clause introduced by a preposition such as "that" or "to")

34. His *problem* is that he can't borrow enough money.

    c. a reordering of the elements of a.. or b.. above, with S moved from initial to final position, giving a C+P+S clause (where C is clause or NP containing a deverbal noun)

35.  Not being able to borrow enough money is his *problem*.

36.  Lack of money is his *problem*.

II.  in apposition, with punctuation replacing P in a written form or through pro-
sodic features in speech:

37.  His *problem*: not being able to borrow enough money.

38.  His *problem*: lack of money.

III.  modification within the noun group, either pre- or post-:

39.  His money *problem* is really getting him down.

40.  His *problem* of not being able to borrow enough money is really getting him
down.

8.  When meaning is realized outside the text this may be:

I.  exophoric (i.e. depending upon general background knowledge)

41.  Most people have the same *problem* when mortgage rates rise. (*problem* not
realized in the text)

II.  homophoric (i.e. depending upon specific knowledge shared by speaker/writer
and audience).

42.  He has the usual *problem* that he always has at exam time. (parents talking
about their child: they know the problem, but it is not specified in the
ongoing discourse)


## 9. CONCLUSION

In this article I have reviewed a body of literature which has been developed
over two and a half decades. In many ways this body of literature can be seen as a
model of applied linguistics, showing how researchers can systematically build on
the work of others coming before them. However, as noted in the introduction, the
strange thing is that this knowledge has not been exploited pedagogically. My hope
is that in setting out the conclusions from the literature reviewed in the form of the
simple pedagogical grammatical statements in the final part of this article materials
writers and teachers will have a clear basis from which to develop a sound pedagogy
of signalling nouns in discourse.

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