

COGNITIVE EFFECTS OF SHELL NOUNS

HANS-JÖRG SCHMID

University of Munich

1. Introduction

According to the data collected in a 225 million word corpus of British English¹, the singular forms *case*, *fact*, *idea*, *news*, *point*, *problem*, *report* and *thing* are among the most frequently used nouns in English, with frequencies ranging from 356 occurrences per one million words for *thing* to 207 for *idea*. In view of the finding that "by far the majority of lexical items have a relative frequency in current English of less than 20 per million" (Clear 1993:274) these frequencies are indeed remarkable.

The following scholars, among others, have taken an interest in abstract and nonspecific nouns of this type: Vendler (1967:72ff, 1968:125ff) discussed what he called 'container nouns'; Halliday & Hasan (1976:274ff) 'general nouns'; Bolinger (1977:5f) 'low-content nouns'; Francis (1986) 'anaphoric nouns' and (1994) 'labels'; Sinclair (1990:338, 389ff) and Chalker (1996:94ff) "nouns that are used to refer back to pieces of text"; Ivanic (1991) 'carrier nouns'; Winter (1992) 'unspecific nouns'; and Halliday (1994:263ff) "nouns that occur with embedded locutions, ideas or facts." Although these scholars represent a wide range of approaches and ideologies, they did not raise, let alone answer, the question of why these nouns are used so often. To my mind, the major reason is that the nouns are remarkably powerful and versatile linguistic tools, but this can only be shown from a cognitive viewpoint (which none of the linguists listed above has taken). The best way to demonstrate why speakers use these nouns and how they work with them in discourse is therefore to look at their cognitive effects. Since the terms introduced by previous authors do not reflect their cognitive and textual potential (just think of the negative image of a deficient class evoked by Bolinger's term 'low-content noun'), I propose the new term 'shell noun'.

¹ The corpus is the British section of the so-called Bank of English, collected by and stored at the COBUILD project in Birmingham.

As will emerge in the course of this paper, a second prerequisite for the proper study of the use of shell nouns, besides the cognitive stance, is a contextual and discursive approach. To meet this requirement, the research reported here is based on a systematic contextual analysis of shell nouns in the corpus mentioned above (Schmid, Ms.).²

In the first section of this paper, a description and delimitation of the class of shell nouns will be given, along with a justification for this name. In the second part, I will focus on the most important cognitive effects of their use. These can be observed in the sentential and textual links between the nouns and clauses or longer stretches of discourse, and in their contribution to conceptual packaging as well as to the perspectivalisation of cognitive content.

2. What are shell nouns?

To give a first idea of what shell nouns are, here is an exemplary list of the five major subcategories of shell nouns, whose division has been determined by inductive reasoning on the basis of the corpus data:

Subcategory	Examples
Factual	<i>Fact, thing, problem, reason, result, difference, upshot, snag</i>
Linguistic	<i>News, message, report, declaration, order, rumour, legend</i>
Mental	<i>Idea, notion, belief, knowledge, assumption, aim, plan, hope</i>
Modal	<i>Possibility, probability, ability, obligation, need, truth, permission</i>
Eventive	<i>Act, process, move, measure, reaction, attempt, trick</i>

Though helpful as an introduction, such an extensional definition is rather misleading, because the class of shell nouns is open-ended and the nouns themselves make up only part of what is at stake here. What is more important is the way they are used. The nouns themselves do not have the stable and inalienable property of *being* shell nouns, but they have the potential for *functioning* that way. Therefore the class of shell nouns cannot be defined by properties inherent

² In February 1997, when the data for this research was retrieved, the corpus had the following composition: transcribed recordings of spoken conversation (20.18 million words; henceforth referred to as SPOKEN); junk mail, brochures, leaflets, newsletters etc. (4.72m words; EPHEM); transcripts from BBC broadcasts (18.52m words; BBC); fictional and non-fictional British books (42.13m words; BOOKS); issues of *Today*, *The Times*, *The Guardian*, *The Independent* newspapers (91.07m words; PAPERS); issues of general and special interest magazines (30.14m words; MAGS); issues of *The Economist* (12.13m words; ECON); issues of *The New Scientist* (6.09m words; NEWSCI).

in the nouns, but only by functional properties. The nouns themselves, *qua* lexemes in the dictionary of English, are better thought of as 'potential suppliers of shell-noun uses' than as 'shell nouns' as such. To avoid this long-winded expression, however, I will use the term 'shell noun' with systematic ambiguity to refer to both the lexemes which supply uses of shell nouns and to actual shell-noun uses.

Given that shell-nounhood is determined by the way speakers put nouns to use, it seems reasonable to introduce two examples of shell nouns in typical contexts as reference-points for the further discussion:

- (1) **The problem** is that the water companies are as loath since privatisation as they were before it to transfer the reservoirs of surplus water to where they are needed, (PAPERS)
- (2) **The problem** was to safeguard the many civil radar sites round Britain from encroachment by property development, (NEWSCI)

Like all examples in this paper that are not explicitly marked as invented, (1) and (2) are authentic passages taken from the COBUILD corpus (see footnote 2 for the references to the parts of the corpus given in small capitals). The noun phrases headed by shell nouns are printed in boldface type, and what I will call their 'contents', i.e. what the nouns are linked up with, is underlined.

The two examples demonstrate that the relation between shell nouns and the concepts they activate in given uses is variable. What the noun *problem* conveys in the two examples (or, in cognitive terminology, what kind of conceptualisations it activates in the speech participants) is not the same. This variability is not a case of polysemy. The difference between (1) and (2) is not due to the fact that the lexeme *problem* has several distinguishable senses. Rather it is due to the fact that the actual conceptual significance of the noun emerges only from its interaction with the context. Shell nouns are, as Ivanic (1991) aptly puts it in the title of her paper, "nouns in search of a context".

I would not go as far as Ivanic, however, who would claim that the *meanings* of *problem* in these two examples are what the underlined passages express. In contrast, I hold the view that the noun *problem* only provides conceptual shells, and that these are filled in by two different *contents* in the two examples. This gives rise to the activation of two different conceptualisations, which are temporary and ephemeral in nature because they are only relevant for one particular speech situation.

In this respect, then, shell nouns are more context-dependent and variable than 'normal' open-class nouns like *girl*, *game* or *democracy*. On the other hand, they are less variable than deictics in anaphoric function, e.g. *it*, *this*, *that* profiling the primary figure in a relation as 'thing' (in Cognitive Grammar terminology), or acting as clausal subjects in so-called 'extended reference' (in Halliday & Hasan's terms, 1976:52f, 66f). The reason is that, as do other nouns, shell nouns also have a stable denotational part: although each noun can be used to describe an enormous variety of cognitive entities, it is also true that *problem* is always used to describe unpleasant or unwelcome states of affairs, *advantage* pleasant states of affairs, *idea* mental entities and *statement* acts or contents of assertive utterances. This shows that shell nouns do have some potential for the characterisation of cognitive content. A similar potential can hardly be attributed to the deictics, whose denotation does not go beyond situation- and context-dependent dimensions like spatial and emotional proximity.

Because of their context-dependence, isolated uses of shell nouns do not activate conceptualisations that are experienced as saturated thoughts (cf. 3.2.1 below). Therefore speakers must link them to clauses or even longer stretches of text. While minimalist expressions such as *look at that boy* can activate fairly specific conceptualisations even without contexts, analogous expressions involving shell nouns such as *look at that fact* or *imagine that beliefs* somehow seem vacuous and empty. The corpus analysis that I have carried out has shown that speakers forge the links between shell nouns and the clauses or passages which function as shell contents by a fairly small number of either grammatical or textual means. Examples (1) and (2) represent the frequent case of a grammatical link established by the copula relation between an NP headed by a shell noun and a clause functioning as subject complement. This type is listed as Pattern A in the survey of the four most frequent types of links (see Table 1).

In pattern B, the shell content is expressed by a clause that functions syntactically as a postmodifier which stands in what has traditionally been called an appositive relation to the head of the NP realised by the shell noun (cf. Quirk et al. 1985:1260ff, 1271ff, 1321; see 2.2.2 below for the Cognitive Grammar perspective on this construction). *That*-clauses and *wh*-clauses as well as infinitive clauses occur in this function. In pattern C, the link between shell noun and shell content is created by anaphoric items, mainly *the*, *this*, *that*, *other*, *same* and *such*. And in pattern D, the link extends over three groups of elements. The pronouns *this*, *that* or *it* mediate between the passages of text which spell out the shell contents and the shell nouns. These pronouns function syntactically as subjects in equational clauses and refer back to the shell contents in extended reference. They transfer this reference via the linking verb *be* to the shell NP

which functions as secondary figure, or 'subject complement' in traditional terminology, in the clause structure. In a way, then, pattern D is a blend of the purely equational type A and the purely anaphoric type C.

Type of link	Lexico-grammatical pattern	Example
A	Shell NP + <i>be</i> + complementing <i>that</i> -, <i>wh</i> - or infinitive clause	(3a) The idea was <u>that the United Nations arms embargo on ex-Yugoslavia should be lifted to enable the Bosnian Muslims to get the heavy weapons they need.</u> (ECON)
B	Shell noun + postmodifying <i>that</i> -, <i>wh</i> - or infinitive clause	(3b) Body Shop rallied 6p to 230p following <u>news that founder Anita Roddick may take legal action over the US business ethics row.</u> (PAPERS)
C	Referring item + (premod) + shell noun as head of NP	(3c) <u>Mr Ash was in the clearest possible terms labelling my clients as anti-semitic.</u> I hope it is unnecessary to say that this accusation is also completely unjustified. (PAPERS)
D	Referring item as subject + <i>be</i> + shell NP	(3d) <u>I won the freshmen's cross-country.</u> - Mm. That was a great achievement wasn't it? (SPOKEN)

Table 1: Common Shell Noun Patterns

A further frequent pattern, whose occurrence is however limited to a smaller number of shell nouns, is the pattern "shell noun + postmodifying appositive of-PP", as in the invented examples *the problem of raising money*, *the idea of going out* or *the question of where to go*.

It is interesting to look at uses of shell nouns in patterns A and B from a mental-space theoretical point of view (Fauconnier 1994, 1997). Although Fauconnier does not mention nouns as possible 'space builders' (1994:17, 1997:39f), the shell nouns in examples (3a) and (3b) (inside Table 1) can undoubtedly be credited with this function. Thus the NP *The idea* in (3a) sets up a mental space of 'beliefs' in the same way as verbal space builders like *he believed* or *he planned* do. The underlined passage represents the companion clause (Fauconnier 1994:22) which specifies the elements and relations holding in that

space. Since the clause provides the internal structure of the 'belief space set up by *the idea*, the clause can also be regarded as the focus space and the NP as the base space (Fauconnier 1997:38, 49f). The two are connected via the identity connector, the copula *be*. The connection in example (3b) corresponds even more closely to Fauconnier's simple examples of verbal space builders. Here the NP *news* sets up 'linguistic content' as base space which is turned into focus space in the *that*-clause in structural and conceptual analogy to expressions of the type *he said* + *that*-clause or *she told me* + *that*-clause.

According to the description so far, shell nouns are nouns which fulfill three functions at the same time: temporary concept formation, characterisation and linking. The capacity and statistically observable tendency of shell nouns to occur in patterns A and/or B provide a way of putting this functional and therefore subjective definition on an objective grammatical basis. As is shown in the invented examples in (4) and (5), not all nouns, not even all nouns commonly regarded as abstract nouns, can be used in these patterns.

- (4) The fact was that I had no money.
 *The boy was that I had no money.
 *The democracy was that I had no money.
 ?My paradise was that I had no money.
- (5) The fact that I had no money made me nervous
 *The boy that I had no money made me nervous.
 The democracy that I had no money made me nervous.
 *My paradise that I had no money made me nervous.

Only nouns which can occur in patterns A and/or B will be regarded as shell nouns in this paper.

In view of the interest of cognitive linguists in metaphors and their explanatory powers (Ungerer & Schmid 1996:143ff), it will not be out of place to close this section with a brief outline of the mapping underlying the term 'shell noun'. The shell metaphor is obviously a variant of the container-metaphor. Shell nouns are thought of as providing conceptual shells for complex chunks of information which are expressed by clauses or longer stretches of text. These in turn are seen as the 'contents' which fill in the nominal shells. Readers familiar with Vendler's work (1967, 1968) will have noticed that a similar image is exploited in his notion of 'container nouns', though he maps it onto the syntax of the nouns in a different way.

I find the shell metaphor helpful and illuminating mainly for two reasons. First, shell nouns help speakers to carry their contents along as they move on in discourse. Discourse without shell nouns, especially expository discourse on abstract topics (for example, scientific topics) would be like an egg-and-spoon race without egg shells. We would not be able to take along all these awkward-to-remember, hard-to-control chunks of information, if not for the conceptual boundaries provided by the nouns. Second, real-world shells tell us something about what is inside them: looking at egg shells, nut shells or the shells of mussels or tortoises, we have an idea of the types of object or organism that will presumably be found inside. Similarly, although their contents are variable, shell nouns give us an indication of the type of cognitive entity they represent, or more precisely, of how the speakers want the hearers to understand the contents; they function, as Francis (1994) has called it, as "labels". Going back to (1) and (2), for example, the speakers portray the information given in the *that*-clauses as something unwelcome, as negatively evaluated states of affairs with potential detrimental effects, in short as *problems*. They could also have shelled the same states of affairs in positive terms by using NPs like *the advantage (is that)* or *the good thing (is that)*, or in emotionally neutral terms, by using such nouns as *idea*, *truth* or *point* as heads.

3. Cognitive effects of shell nouns

I will now turn to the main purpose of this paper, an illustration of some of the more intriguing cognitive effects of the use of shell nouns. I have arranged the cognitive effects in three groups, although it must be emphasised that all these aspects interact with each other and are normally at work at the same time.

3.1 Co-activation of information and control of information selection

We have seen that the conceptualisations evoked by shell nouns must be activated together with the conceptualisations evoked by their contents. From a cognitive point of view, this constraint on the use of shell nouns raises two questions: first, how do speakers trigger such a co-activation, and second, how do they ensure that the 'right' chunks of information are co-activated?

Essentially, the first question has already been answered above. Speakers trigger co-activation by establishing the grammatical and textual links listed in Table 1. At first glance it may seem surprising that such a heterogeneous group of nouns should be earmarked for an apparently equally mixed set of lexico-grammatical patterns. Closer inspection of the patterns suggests, however, that all four of them establish a relation of identity between the cognitive entities they link. Starting with pattern A, these copula constructions equate primary and

secondary figures in relations (Langacker 1987:77). How strong the potential of the copula for construing two entities as identical actually is can be gleaned from the fact that it can even serve as an identity connector between different mental spaces (Fauconnier 1994:143ff; 1997:41). According to Quirk et al. (1985:1300ff), the relation between linguistic units in apposition, i.e. the relation underlying pattern B, is identity of reference, and the same relation has traditionally been ascribed to the anaphoric relation involved in pattern C. We must be careful with these claims, however, because they are based on typical examples of apposition and anaphora respectively, which involve only NPs and other referring expressions. In the lexico-grammatical patterns at stake here, 'reference' in any strict sense of this term cannot be at work because the clauses and text passages that function as shell contents are not referring expressions but whole propositions. Therefore I prefer to think of the underlying relation not as 'identity of reference', but in a more cognitive spirit, as 'experiential identity'. This notion is used here to describe the impression of language users that shell nouns and shell contents are about the same thing and must therefore be activated together.

As far as patterns A and B are concerned, the second question concerning the control of information selection has a straightforward answer. Here the grammatical relations control and determine which information is selected for co-activation. The question is much less easy to answer with regard to patterns C and D. Often pieces of information that are too complex to be rendered by single clauses occur as shell contents in these patterns. The distance between shell nouns and shell contents is often much greater than in patterns A and B, not just structurally speaking but also with respect to real time in speech and with respect to space in written language. To find out how the right chunks of information are selected in these patterns, it will be helpful if we first look a little more closely at the grammatical links. In (6) below, two more examples of pattern B uses are given:

- (6) The quoting of **Lord Rayner's remark** that "government has to provide services which no sane business would undertake" hits upon **the virtually unchallenged, but unproven premise** that all services can be run on business lines, (PAPERS)

While these two instances of shell nouns also include grammatical clues for the co-activation of their shell contents, these must not blind us to the semantic links that support them. Like real-world shells, the two shell nouns *remark* and *premise* have gaps in their structures. These specific semantic gaps are matched and filled in by the shell contents in the same way that the kernel of a walnut fits

into its shell. Being derived from a speech act verb, the linguistic shell noun *remark*, for example, includes a structure-inherent semantic gap where the propositional content of the assertive speech act fits in. This propositional content is expressed by the shell content, which is realised by the quotation introduced by *that*. Shell noun and shell content dovetail nicely.

The claim that shell nouns have structure-inherent semantic gaps is also compatible with mental spaces theory. Once a mental space has been set up by a space builder, it is perfectly natural for it to be "filled up" and provided with a matching internal structure by a companion clause (Fauconnier 1994:19f). *Remark* in (6) sets up a 'linguistic content' space which is naturally filled up by the quotation. The second shell noun *premise*, a modal concept, sets up a mental space involving the domains 'belief', 'linguistic content' and 'contingency'. It creates a gap that is earmarked for an idea or statement which is accepted as being true and can serve as the argumentative basis for a claim; this gap is filled by the indirect report expressed by means of the *that*-clause, namely *all services can be run on business lines*.

A similar kind of dovetailing between cognitive dimensions inherent in the shell noun and matching information provided by the shell content also controls the interpretation of anaphoric links. Examples of pattern-C and pattern-D uses are given in (7) and (8) respectively:

- (7) The company said yesterday that it would sell or close its 12 remaining abattoirs, was cutting chicken production from over three million birds a week to two million, and had abandoned property trading. **These measures** resulted in an extraordinary charge of pounds 92 million, which wiped out the year's profits, (PAPERS)
- (8) .. five years ago Julie's legs were as thin as my arms but when she went to the boarding school she really improved. With all the physiotherapy and swimming she built herself up and has been managing to walk using a frame. That is a marvellous achievement. (PAPERS)

As part of its stable semantic structure, the eventive shell noun *measures* in (7) creates a gap that must be filled by goal-oriented activities carried out by official agents. This gap is matched by the information given in the underlined section of the previous clause. It is not a problem in the interpretation of this example that what is marked as shell content functions as focus of *The company said that* which sets a mental space 'linguistic content'. The internal structure of this space

is construed as representing statements about future, present and past activities by the verb forms *would sell*, *was cutting* and *had abandoned*. The connection established by *these measures* must thus be seen as operating across different spaces, linking the space of real activities to the space of projected activities. Needless to say that this transspatial connection goes unnoticed by language users.

The noun *achievement* in (8) gaps a successfully accomplished activity. Again this type of conceptual entity is matched by the information given in the preceding sentence. The selection of information for co-activation is therefore well controlled.

3.2 *Temporary conceptual packaging*

3.2.1 *Conceptual partitioning*. My notion of 'conceptual partitioning' is related to Talmy's (1991) rather than Fauconnier's (1997:38 *et passim*) conception of the term. Talmy argues that clauses contribute to the conceptual partitioning of events to the effect that what would otherwise be a continuum, e.g. in space, time or other dimensions, is experienced as one bounded conceptual entity. According to Talmy (1991:483), there are various alternative construals of such entities with regard to their granularity. What I would like to claim is that shell-content relations partition two different types of conceptual entities: the *that-*, *wh-* or infinitive clauses (which express what I call the shell content in patterns A and B) partition cognitive entities representing EVENTS or ABSTRACT RELATIONS.³ These entities resemble 'saturated thoughts' (in Fregean terms), in the sense that they represent full propositions that do not depend on further information in order to be experienced as being conceptually complete. The shell nouns themselves, on the other hand, because they are nominal elements and function as heads of NPs, cause information to be partitioned as concepts, i.e. as 'unsaturated' cognitive entities, which cannot evoke full-fledged thoughts corresponding to propositions (see Asher 1993:25).

³ Building on the work of Lyons (1977:442ff), Quirk et al. (1985:202ff), Horie (1991:234), Asher (1993:15ff) and Halliday (1994:250), I see EVENTS as physically perceivable complex cognitive entities (corresponding to Lyons' 'second-order entities') and abstract relations as mentally conceivable cognitive entities (Lyons' 'third-order entities'). Furthermore, I subdivide EVENTS into ACTIVITIES (agentive, dynamic), PROCESSES (non-agentive, dynamic) and STATES (non-agentive, non-dynamic), and ABSTRACT RELATIONS into FACTS (states of affairs), POSSIBILITIES (possible facts), IDEAS (objects of thought) and UTTERANCES (linguistic expressions of ideas). This categorization is derived from the data on shell nouns and tailored for their description. It is not intended to be a generally valid inventory of cognitive entities.

Let us look at authentic data to flesh out these claims. (9) below is an example of the most frequent lexical instantiation of pattern A, the collocation *the fact that*-clause.⁴

- (9) The siskin is an exceptionally pretty, small green bird, a sort of pocket version of the greenfinch. Twenty years ago it was uncommon in England. **The fact that it is now very much a regular winter visitor** is due almost entirely to the efforts of amateur bird feeders, (EPHEM)

The *that*-clause in (9) represents a complex cognitive entity, namely a FACT (in the loose technical sense of the term described in footnote 3). More precisely - and it will be shown in §3.3.1 how important it is to note this - it is portrayed by the speaker as a FACT. This kind of one-to-one mapping between clauses and complex, proposition-like cognitive entities representing EVENTS and ABSTRACT RELATIONS is so natural that it is usually taken for granted by linguists. Among those who draw attention to the relation are van Dijk & Kintsch (1983:37ff), Foley & van Valin (1985), Givón (1990:515 fn.1) and Talmy (1991:482f).

Being a noun, the shell noun *fact* itself does not partition off a complex and saturated ABSTRACT RELATION but a concept. Although other grammatical and functional factors also play a role (e.g. topicalisation and focusing, see §3.3.3), one can claim that this is even the main reason why the speaker uses it: he needs to cast the complex FACT to which it is linked into a concept because he wants to insert this FACT into a causal relation, in which the FACT *that it is now a regular winter visitor* is a result and *the efforts of amateur bird feeders* represent the cause.

In example (9), it would have been grammatically and pragmatically possible to leave out the concept-partitioner *the fact*, as is suggested by the acceptability of (9')

- (9') That it is now very much a regular winter visitor is due almost entirely to the efforts of amateur bird feeders.

In longer sentences expressing more complex relations, however, an omission of *the fact* or similar shell nouns results in an overload of the capacity

⁴ To give at least a vague idea of the observed frequencies, here are the results for the five top scorers of the corpus query "N+that/CONJ" in the 225m word corpus: *fact that* 26106 occurrences; *evidence that* 5007; *idea that* 4812; *doubt that* 4010; and *belief that* 3696.

of the short-term buffer. The hearer is then no longer able to keep track of what the speaker means. Example (10) is a case in point.

- (10) The fact that the head of one of Nigeria's northern-based regiments, based in Kaduna, has already pledged support for President Babangida reinforces the view that the coup is ethnically-based, (BBC)

Since the *that*-clause here contains quite a lot of information, hearers will only be able to process it if it is put into the conceptual shell provided by the noun. It is to this more simple, integrated element (see §3.2.3) that hearers can cling as they are reading on.

3.2.2 *Temporary reification of complex cognitive content as 'thing'*. The second sub-effect of conceptual packaging is also brought about by the use of a nominal expression for the description of a relation. How does the choice of a noun affect the conceptualisation of cognitive content? In Cognitive Grammar, the subjects in both (9) and (9') are analysed as elaborations of the main-clause primary figure (Langacker 1991:439), one a 'normal' nominal and one a nominalisation of a relation. What, then, is the difference between the two?

Langacker's account does not answer this question. He explains such cases as (9) as "a correspondence between the profiles of two full nominals" (1991:432), here *the fact* and *that it is now a regular visitor*. He regards the correspondence as "a kind of apposition" and argues that "two nominals that designate the same conceived entity but describe it in different ways combine to form a higher-order, doubly-grounded nominal with the same profile" (ibid.). In the same context, he calls the clause "a reified proposition" and notes that it is a process with nominal construal which can also function alone as participant of the main clause (see (9')). The reason why speakers tend to use doubly-grounded expressions as in (9) rather than simple ones as in (9') is not addressed by Langacker.

I think that — besides the processing limitations mentioned earlier and the perspectivisation potential to be discussed in §3.3 — one consideration must play the main role here: speakers use two nominals, a noun phrase and a nominalised finite clause, side by side with one and the same profile, because noun phrases have a higher potential for reification than nominalised clauses. While Langacker treats the notion of reification mainly as a process involved in nominalisations (1991:33ff), I would claim that according to a literal understanding of the term, roughly 'turning something into a thing', nouns and noun phrases are better "reifiers" than nominalised clauses. Much more than nominalisations, nouns create the illusion, sometimes called hypostatization (Leisi 1975:25ff; Lipka

1992:16), that what they stand for is neatly bounded and even has a substance of its own. The reason, which I explain in more detail in Schmid (In Press), is that independently of their syntactic function (which seems to be Langacker's main criterion for 'reification'), nouns hypostatize experiences as 'things'. After all, it is precisely this recognition that underlies Langacker's view of the word-class of nouns (Langacker 1987). The ultimate cognitive source of this property of nouns is that prototypical nouns like *book*, *rattle* and *rope* represent (basic-level) categories of concrete things. My claim then is that speakers use the shell nouns because the cognitive entities represented by nouns are better 'things' than those represented by clauses. They are better to grasp, carry along and manipulate, and easier to understand, remember and insert into relations. Therefore they are better conceptual reference points (see van Hoek 1995) than clauses.

It is important to emphasize that in contrast to 'normal' full-content open-class nouns, the concepts partitioned and created by shell nouns, as well as the concomitant reification effects, are highly ephemeral. Both effects are on-line phenomena restricted to the actual use of a given shell noun in a given context.

3.2.3 *Conceptual integration*. The link of experiential identity between shell nouns and shell contents, and the equation of EVENTS OF ABSTRACT RELATIONS with concepts, can only be established if all the details expressed as shell contents in clauses or sentences are integrated, condensed, or conflated in the single nominal concept. This means that an awful lot of information must be dropped, or perhaps better, can be dumped. This provides the necessary relief for short-term memory (Chafe 1994:119) or the short-term working buffer (van Dijk & Kintsch 1983:349).

This process can be observed best in cases of pattern C, because here the shell content is not mentioned alongside the shell noun, as is the case in patterns A and B. In example (7), for instance, the wealth of information rendered in the three co-ordinated clauses that function as shell content is reduced to the slim but fundamental information given by the shell noun *measures*. As a result of this conceptual integration, the speaker can use the information as a new starting-point without putting too great a strain on his own and his hearers' processing capacities. The cognitive match between the gap in the shell noun and the shell content ensures that the information given in the latter is still semi-active or accessible and can be retrieved again at a relatively low activation cost (Chafe 1994:73). Especially in the topicalising patterns A and C (see §3.3.3), combinations of shell nouns with demonstrative determiners should therefore be added to Ariel's (1990:73) 'accessibility marking scale' as marking higher accessibility than demonstratives alone, and to Gundel et al.'s 'givenness hierarchy' (1993:275) between activated and familiar information. Since their antecedents are less well

bounded than the NPs typically discussed by Ariel and Gundel et al., they mark, however, a lower accessibility than demonstratives determining concrete NPs.

It should be mentioned that Fauconnier (1997:184ff) also works with the term 'conceptual integration'. However, it turns out that he has fairly specific phenomena of a different kind in mind. For Fauconnier, integration is the main process involved in what he calls the 'blending' of "two separate domains into a single structure with emergent properties within a third domain" (1997:22). Although we will see in the next section that shell-content relations can indeed be used to connect two separate domains, e.g. 'linguistic content' and 'reality' in example (7), the emergent properties of such links do not operate in an additional third domain, but invariably in one of the two original ones.

3.3 *Perspectivisation*

I use the term 'perspective' in a fairly loose, non-technical way here to refer to the way a speaker construes an EVENT or ABSTRACT RELATION. The notion is meant to include both cognitive and emotive aspects of utterances. I will try to show that by virtue of their balance between informational flexibility and conceptual stability, shell nouns are very powerful tools for the perspectivisation of cognitive content.

3.3.1 *Conceptual (re)construction.* On an informal level, conceptual construction can perhaps best be observed in the speeches, interviews and debates of politicians who tend to shell their own ideas and claims as *facts*, *truths*, *advantages* and *important points*, and the ideas of their political opponents as *theories*, *hypotheses*, *claims*, *problems*, *questions* and *dangers*. The potential of shell nouns for conceptual construction resides mainly in their stable denotation, which is exploited by speakers in the service of the characterisation function discussed in §1. Conceptual reconstruction occurs when someone throws a different light on one and the same chunk of information by shelling it with a different shell noun. An illustration of how inconspicuous such a characterisation can be is given in example (11):

- (11) ... debate about Maastricht. The rest of Europe, they tell us, has not matched up to us and would have avoided many of their own domestic political embarrassments had they done so. There may once have been a certain justice in **this claim**, (PAPERS)

It is hardly imaginable that the persons who made the original utterances that are reported here intended them as a *claim*, i.e. as a tentative statement concerning a

possible state of affairs. More likely they expressed their opinion with a commitment and an intensity which hardly justifies the shell *claim*.

More often than not, this effect goes altogether unnoticed because we tend to overlook two facts. Firstly, all shell nouns, even the most general and unspecific ones such as *thing*, *point* and *fact*, have a meaning of their own. So conceptual construction is always at work. Secondly and more importantly, we tend to overlook the fact that the choice of shell nouns is completely up to the speaker of an utterance. As in example (11), the conceptualisation construed by a particular speech act noun, for example by *accusation*, *affirmation*, *promise* or *excuse*, may in fact not even coincide with the communicative intentions of the original speaker whose utterance is reported. Linguistic, and to an even greater extent, mental shell nouns like *hope*, *belief* or *plan* are always reflections of what the speaker imputes to the original speaker's or experiencer's thoughts and intentions. It is the speaker of a reporting utterance who defines the precise nature of the mental space in which the details of an UTTERANCE or an IDEA are spelled out.

Conceptual construction is also at work with factual and modal shell nouns, perhaps even in a more subtle way. Let me return to example (9) to show how. Looking closely at the central sentence from *The fact that... to ... birdfeeders*, one finds that the underlined shell content as such does not necessarily represent a FACT. The clause *that it is now very much a regular winter visitor* could just as well be the complement of a linguistic shell noun such as *news* or a mental shell noun such as *impression*. Strictly speaking, the speaker of (9) is in fact doing no more than making a claim or expressing a belief. Yet he manages to portray his belief as a FACT by two gambits: he collocates the *that*-clause with the noun *fact*, which, although it is not always factive (Langacker 1991:32), definitely has factual qualities; and he inserts the *that*-clause in such a way into the clause structure, namely as clausal subject, that the information it contains is presupposed as being true. The truth value of the *that*-clause is not affected when the main clause is negated. In short, the speaker construes what is strictly speaking a 'non-fact' factively.

3.3.2 *Evaluation.* A second facet of perspectivisation is the evaluation of cognitive content from the speaker's point of view. Evaluation can be incorporated in the stable meaning of a given shell noun itself, as in *danger* in example (12), or can be expressed by premodifiers, as by *this rather timid approach* in the same example.

- (12) Sylvie Guillem, despite good looks and flawless technique, holds very few photocalls and favours the French photographer Gilles Tapie. However, **the danger**, with **this rather timid approach**, is that most ballet shots can end up looking the same, just one long arabesque. (PAPERS)

Of course the two ways are often also combined as in (8) above, where both the noun *achievement* and the adjective *marvellous* express positive evaluations.

Since the structural constraints of English grammar allow for substantial modification of nouns while providing only limited means of modifying verbal information, the use of shell nouns greatly facilitates evaluative perspectivalisations of cognitive content. Take for example the noun phrase '**the virtually unchallenged, but unproven premise that all services can be run on business lines**' in (6) above. It would be awkward, to say the least, to express such detailed evaluations by verbal or clausal means. That premodifiers are indeed mostly evaluative in nature can be illustrated by reference to a very small section of the corpus. In Table 2, all adjectives which were found to occur as premodifiers of the noun *question* in the pattern *That's a + Adj + question* in the spoken section of the corpus are listed with their frequencies:

Mainly evaluative adjectives:			
<i>That's a</i>	<i>good</i>	(25)	<i>question.</i>
	<i>difficult</i>	(5)	
	<i>interesting</i>	(4)	
	<i>big</i>	(3)	
	<i>daft</i>	(2)	
	<i>hard</i>	(2)	
	<i>obvious</i>	(2)	
	<i>stupid</i>	(2)	
	<i>valid</i>	(2)	
	<i>crunch, dumb, eternal, fair, funny, general, huge, intriguing, intrusive, major, real, rotten, terrible, tricky, wonderful (all 1)</i>		
Cohesive adjectives:			
<i>That's the</i>	<i>next</i>	(5)	<i>question.</i>
	<i>other</i>	(2)	
	<i>different</i>	(1)	

Table 2: Premodifiers of 'question'

The list shows that evaluative adjectives by far outweigh the only other class of adjectives found in this particular collocation, cohesive ones. In addition to evaluative and cohesive adjectives, mostly classifying ones like *classical*, *mathematical* or *philosophical* are found in other patterns and with other nouns, but these are on the whole also less frequent than adjectives with evaluative meanings.

3.3.3 *Topicalisation and focusing.* A final pair of effects of shell nouns that I can briefly discuss here is brought about by uses of shell nouns in pattern A. The best way of explaining the essence of these effects is to turn examples (1), (2) and (3a) into *wh*-clefts, which are among the prime examples of topicalising and focusing constructions. Abbreviated versions of the original examples and paraphrases with *wh*-clefts are given as (1)', (2)' and (3a)' and (1)", (2)" and (3)" below:

- (1)' **The problem** is that the water companies are loath to transfer the reservoirs of surplus water to where they are needed.
- (1)" What is problematic is that the water companies are loath to transfer the reservoirs of surplus water to where they are needed.
- (2)' **The problem** was to safeguard the civil radar sites from encroachment by property development.
- (2)" What was difficult was to safeguard the civil radar sites from encroachment by property development.
- (3 a)' **The idea** was that the United Nations arms embargo on ex-Yugoslavia should be lifted.
- (3a)" What they thought was that the United Nations arms embargo on ex-Yugoslavia should be lifted.

Like their close conceptual *wh*-cleft equivalents, the shell-content relations of pattern A do two things at the same time. First, since the clauses start out from the shell nouns that function as subjects, the information provided by them is construed as given, and marked as being accessible. I have already drawn attention to this topicalisation effect above (see §3.2.1) with reference to Ariel's accessibility marking scale and Gundel et al.'s givenness hierarchy. The effect of topicalisation

is that the characterisational components of shell nouns are taken for granted by the hearer and not understood as being new and asserted, and therefore open to doubt. Whether 'presupposition' (in any technical philosophical or linguistic sense) is also at work depends on the stable meaning of the shell nouns and the patterns in which they are used.

A second, concomitant effect of the clause structure of pattern A is that the shell contents are highlighted for attention because they hold the prominent end-position. In contrast to pattern B, where shell noun and shell content together form the topic from which the speaker starts out, pattern A construes the shell content as new and particularly noteworthy. This point is also made by Tuggy (1996:724ff) who, in his discussion of the double-copula pattern *the thing is (that)*-clause, claims that such constructions are examples of focus formulas (FF's). His FF category also includes some single-copula constructions (the type which I have identified as Pattern A). Tuggy says that

there is a gradation of FF-hood, which tends to correlate inversely with the amount of information included in the FF. *The thing (about it) is* is about as pure an FF as there is: its only function is to focus attention on the following clause. It means 'Hey!', and little or nothing else. Other NP's that add significantly more information do not tend to form FF's. (Tuggy 1996: 725)

The import of this claim is somewhat unclear. It might mean that nouns with specific meanings do not occur in Pattern A constructions. This is clearly not the case, however. My corpus data show not only that highly specific nouns like *upshot*, *snag*, *drawback*, *irony*, *hunch*, *gripe* and *paradox* are frequently found in such constructions, but also that some of them are virtually earmarked for them. *Upshot* and *snag*, for example, were found 313 and 784 times respectively in the 225 million-word corpus; of these, 105 and 250 occurrences respectively, that is roughly about one-third in both cases, were instances of the pattern *the+ N+ is/ was + that*-clause.

Tuggy's comment might suggest however that the focusing effect of the pattern *NP + is that* tends to get lost to the extent that the noun heading the NP has a specific meaning. What this would mean, then, is that the focusing effect of my pattern A is only marked when fairly unspecific nouns like *thing* occur as shell nouns. I am not sure, however, whether this is really true. For one thing, even the five nouns used most frequently in this pattern, namely *problem* with 2672 recorded instances, *thing* with 1532, *truth* with 1235, *fact* with 1218 and *trouble* with 1034, do add information as well. Tuggy himself says that *thing* means something like thing "in disconformity with something normal/established/backgrounded", *problem* "Thing which is in disconformity with something

(established as) desired", and *fact* "Thing in disconformity with what is (only) believed/apparent" (1996:722). *Trouble* and *truth* are semantically and especially pragmatically, though not stylistically, more or less equivalent to *problem* and *fact* respectively. While it is true that the information conveyed by these nouns is backgrounded by topicalisation, it is all the more subtly fobbed off on the hearer, who takes it in but is told to concentrate on what is said in the clause that follows.

As for more specific nouns like *upshot*, *irony* or *paradox*, I entirely agree with Tuggy's claim that they attract more attention than *thing* or *fact*. The question, however, is whether this necessarily means that the attention is diverted from the following clause, subtracted from it as it were. Tuggy apparently subscribes to this view. His tacit idea seems to be that there is only a certain amount of attention-focusing potential available. As a consequence, when the beginning of a sentence is comparatively salient, the end cannot be focused on in the same way as when the beginning is unspecific and therefore unsalient. My feeling is that speakers tend to pronounce focusing constructions of my type A with specific shell nouns as two intonation units, e.g. *the irony is ... that I have no money*. The same pronunciation pattern can also be observed with nonspecific shell nouns (as Tuggy himself also says, 1996:725), but it is typical of the semantically richer ones. This pattern allows speakers to invest the shell noun with a considerable degree of intonatory, and consequently informational, prominence, and still highlight the sentence-final clause for attention. Focus formulas with shell nouns that add specific information may thus be possible after all.

4. Conclusion

Most of the inevitable loose ends of this short paper lead into the textual domain. While I have tried to cover the conceptual and clause-relational cognitive effects of the use of shell nouns as well as space permitted, aspects pertaining to even larger chunks of discourse, for example their contribution to topic continuity and coherence but also their potential to signal topic shifts, have had to be neglected (see Schmid Ms.xh. 15.3). The effects of linguistic and mental shell nouns on, and their potential for, point-of-view management (see van Hoek 1995:333ff; 1997:ch.8) are another area that I have not been able to address here. I see the major merits of this paper in the introduction of a systematic linguistic framework for the description of a group of frequent nouns, and in the discussion of some of the more intriguing cognitive effects that may explain why they are used so often.

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