

What's (in) a construction?

Complete inheritance vs. full-entry models

Arne Zeschel

1. Introduction

In spite of the obvious importance that is accorded to the notion *grammatical construction* in any approach that sees itself as a *construction grammar* (CxG), there is as yet no generally accepted definition of the term across different variants of the framework. In particular, there are different assumptions about which additional requirements a given structure has to meet in order to be recognized as a construction besides being a 'form–meaning pair'. Since the choice of a particular definition will determine the range of both relevant phenomena and concrete observations to be considered in empirical research within the framework, the issue is not just a mere terminological quibble but has important methodological repercussions especially for quantitative research in areas such as corpus linguistics. The present study illustrates some problems in identifying and delimiting such patterns in naturally occurring text and presents arguments for a usage-based interpretation of the term *grammatical construction*.

2. The issue

Different versions of CxG have put forward different elaborations of the generally accepted, yet somewhat unspecific characterization of constructions as 'form–meaning pairs'. Suggestions for a more restricted understanding of the term include the following:

- constructions are *non-predictable* form–meaning pairs (Goldberg 1995:4; Kay and Fillmore 1999:4)
- constructions are (fully) *productive* form–meaning pairs (Kay 2002:3)
- constructions are *entrenched* form–meaning pairs (Croft and Cruse 2004:288; Langacker 2005:140; Goldberg 2006:5; Bybee 2006:715)
- constructions are *complex* form–meaning pairs (Langacker 1987:82; Taylor 2002:561).

In a first attempt at systematizing these proposals, it will be useful to distinguish between those approaches where constructions (in the intended sense) are regarded as the basic

unit of linguistic organization and those which assume that constructions (in the intended sense) are just one element of linguistic knowledge among others. The latter applies for Langacker's Cognitive Grammar which recognizes semantic, phonological and symbolic structures and does not equate *construction* with "symbolic structure" per se – instead, the term is used to denote internally complex (i.e. composite) symbolic structures and is not intended to distinguish elements with unit status from creatively assembled configurations. By contrast, frameworks that go by the name "Construction Grammar" (with capital initials) in the narrower sense commonly assume that language can be accounted for in terms of constructions alone – in the words of Kay and Fillmore (1999: 1), "to adopt a constructional approach is to undertake a commitment in principle to account for the entirety of each language". However, when it comes to the question of which elements will have unit status in such a grammar and why, opinions differ.

One popular answer is the following: any element (and *only* such elements) that cannot be fully reduced to other, more basic elements. As Fillmore, Kay and O'Connor (1988: 502) put it in a foundational paper, "speakers of English have to know what *red* means and that it is an adjective, and they have to know what *ball* means and that it is a noun. They have to know that adjectives can co-occur with nouns in a modification structure (as in a phrase like *red ball*), and they have to know the proper strategies for giving a semantic interpretation to such adjective-noun combinations. But they do not have to know separately, or to be told, what the phrase *red ball* means. That is something which what they already know enables them to find out". On such approaches, *non-predictability* is therefore the defining criterion for constructional status: structures that can be fully reduced to other structures have no independent status but are viewed as productively assembled epiphenomena.

Elaborating on this distinction, Kay (2002) introduces the additional criterion of (full) *productivity* that is intended to separate "true constructions" from "non-productive, non-constructional pattern[s] of coining" (p. 7).¹ The latter term is used for generalizations over groups of stored expressions that are clearly discernible as a pattern and may occasionally license novel formations of the relevant type, but cannot be invoked freely. Kay's example for a pattern of coining is the schema [A as NP] that is implicit in many intensifying expressions of the type *easy as pie*, *happy as a lark*, *dark as night* etc. Kay acknowledges the existence of singleton instances of the pattern that are not plausibly viewed as fixed expressions themselves (cf. his example *wide-eyed as a marigold* from the BNC), but still contends that the pattern itself should not be accorded constructional status since the acceptability of potential instantiating expressions cannot be predicted. This shows that his primary concern is actually with non-predictability, too.

In general, it is probably fair to say that it is mainly computational and/or more formally oriented linguists who see this property as the crucial criterion for constructionhood, and it is typically encountered in discussions of *competence models*. By contrast, construction grammarians who are primarily interested in language as a psychological phenomenon often take a different view. Specifically, proponents of *usage-based models* (Langacker 1990, 2000; see also Croft and Cruse 2004) emphasize that if the goal is to characterize speak-

1. Kay (2002: 2) actually attributes the distinction between "constructions proper" and "patterns of coining" to Fillmore.

ers' linguistic knowledge, the term *construction* should not be restricted to the minimum of strictly non-predictable structures on grounds of aprioristic economy expectations. Instead, speakers are assumed to store large numbers of (more or less) concrete structures in addition to any (putative) general schemas that subsume them (provided these instances are sufficiently *entrenched*, i.e. cognitively routinized). For instance, Bybee (2006: 713) observes that "[s]peakers recognize prefabs as familiar, which indicates that these sequences of words must have memory storage despite being largely predictable in form and meaning". Consequently, Langacker (2005: 140) proposes that "an assembly is accepted as part of 'the grammar' to the extent that it is psychologically entrenched and conventional in the speech community". Furthermore, he observes that the elements thus included cannot be neatly partitioned into 'lexical' and 'grammatical' structures but are more profitably viewed as occupying a particular position on clines in three dimensions, namely degree of generality (schematicity), degree of productivity and degree of compositionality.

The main difference between the two approaches therefore resides in the balance that they strike between aspects of representation and computation: the predictability criterion is typically employed in the context of so-called 'complete inheritance' models that seek to formulate maximally parsimonious grammars (at the expense of processing load), whereas the entrenchment criterion is central to so-called 'full entry' models that privilege processing economy (through direct retrieval) over storage demands. Metaphorically speaking, both approaches assume that constructions can be characterized as complex network-like structures (inheritance hierarchies or schematized exemplar clusters), but they differ in what is assumed to be 'in' these networks, i.e. what constitutes the nodes: in the complete inheritance view, the lattice consists of maximally generalized templates, and there is no redundant representation of specific instances of a given pattern; in the full-entry view, it is the concrete exemplars which are assumed to be stored, whereas more schematic regularities are merely implicit in their instantiations.

It is clear that linguists (especially corpus linguists) who are conducting empirical research within the framework must take sides in this discussion, since the choice of a particular definition will directly influence the obtained results: even though they are sometimes left implicit, any study of course has to formulate sufficiently detailed criteria for including particular observations in the data set, and the formulation of these criteria for the specific purpose at hand in turn reflects general assumptions (also often left implicit) about what distinguishes instances of a construction from certain isomorphic structures in the first place. I will argue that accounts based on non-predictability face a two-fold problem of indeterminacy here when analysing large amounts of noisy naturalistic data: on the one hand, deciding which structures do and which structures don't possess a particular *semantic* feature is often like drawing a line in the sand – there are not always clear-cut tests, and it is often the case that particular aspects will be *more or less salient* in a given instance as compared to other tokens rather than either unambiguously present or absent in a binary fashion. On the other hand, since there is variation between different speakers, there is also variation in the accumulated productions of these speakers/writers that constitute the corpus. As a result, certain properties of the investigated pattern will have the character of statistical tendencies rather than strictly mandatory features. However, adopting the criterion of (non-)predictability forces the analyst to be fully explicit about

precisely which features are required for inclusion and exactly where (i.e. on which level of schematicity) they are encoded, which, as I will show, may be quite difficult to determine. I will illustrate these problems with a corpus study of the fairly inconspicuous expression in bold face in (1):

- (1) *She'll probably also tell us about Tony the Toddler putting Domestos in the jelly, or whatever embarrassing things he did as a kid. Might be good for a laugh.* [BNC J1F]

The question to be pursued here is: what is the status of this string?

3. Case study: *good* XP

3.1 A first approximation

At first glance, the expression NP *be good for a laugh* may not seem very interesting – a particular idiom, fully specified except for the subject position, as such quite unremarkable. Like hundreds of other such items, we find it listed in dictionaries such as The Longman Dictionary of Contemporary English (LDOCE), where it has its own entry: “*good for a laugh* – ‘to be enjoyable, amusing’”. If we turn to another dictionary, the Cambridge Advanced Learner’s (CALD), we also stumble across an example sentence containing the phrase *good for a laugh* – here, however, it is listed as an instance of a less specific pattern: “*be good for something* – ‘to be able and willing to provide something’”. If we now return to LDOCE and have a more thorough look at the impressive entry for *good*, a number of further mentions of expressions of the format *good for* NP crop up, among them the following three under the common subentry *good for something*:

- (2) a. ‘able to be used for a particular period of time’
Your passport is good for another three years.
- b. ‘likely to continue living or being useful for a particular time or distance, even though old or not in good condition’
This old truck is good for another 100,000 miles.
- c. ‘likely to give you something or provide something’
Dad should be good for a few bucks. (LDOCE)

Whereas the paraphrase in (2c) is a close variant of the gloss in CALD, both of which are not far away from the more specific meaning of *good for a laugh*, (2a) and (b) are different again, but resemble two further paraphrases that we find in the OED: “capable of producing, valid for etc.”, and “safe to live or last so long, well able to accomplish so much”. The third entry in the OED again resembles (2c): “of a person, that may be relied on to pay so much”.

These meanings are obviously related in some way. As a first approximation, it seems possible to subsume them to the following more schematic characterization:

- (3) NP BE *good for* NP – ‘X can {be used for, produce, provide} Y’

The fact that we are now dealing with a partially schematic structure associated with a number of intuitively related meanings of course raises the question of what it is that we are dealing with in these examples – is it a construction? Is it several constructions? Is it nothing special at all?

For one thing, the fact that we find the pattern listed in several dictionaries seems to suggest that it is somehow more than the sum of its parts, i.e. a string that the lexicographers classified as a meaningful unit that should be part of a dictionary because it must be independently memorized by learners of English. As indicated in the preceding section, the observation that a particular structure possesses an inherent, non-predictable meaning is commonly taken as an indication of constructional status. But are the meanings postulated in (3) really non-predictable? It is widely acknowledged that much of language is considerably vague, so it could be argued that the different context-specific meanings ascribed to the pattern in (3) are simply the product of flexible inferential enrichments applying to vague but otherwise perfectly compositional semantics. An argument against this suggestion is (4):

- (4) ?*Might be bad for a laugh.*

If expressions like *be good for* NP were indeed assembled and evaluated fully compositionally, it is difficult to see why *bad for* NP should not work equally well, here giving the meaning that something will probably *fail* to amuse somebody. Note that the problem does not just arise for *good for a laugh*, which belongs to the class of substantive idioms that are known to often disallow lexical substitutions: *?Dad should be bad for a few bucks* is not a conventional way of saying that *Dad* is ‘unable and unwilling to provide something’ either. Taking these observations as an indication that we might indeed be dealing with a partially schematic prefab here, we are now faced with the question of what the precise formal and semantic specifications of this structure are. The following section illustrates some problems involved in inducing these properties from corpus data.

3.2 Problems

As it turns out, the semantic characterization proposed in (3) becomes too narrow once we move beyond the dictionary examples reported above and consult a corpus – among others, running a search of the BNC for the string “*good for*” also produces examples like the following, which rather mean ‘X can receive Y’:

- (5) a. *Digital workers were always good for a car loan or a mortgage, perceived as being in secure, well-paid jobs.* [BNC K58]
- b. *By dint of a couple of birdies and a fortunate eagle on the long fourteenth hole, Jack was looking good for a share of the prize money.* [BNC CS4]

While it is not impossible in principle for a schematic construction to comprise constructs with converse subsenses (cf. e.g. transfer vs. privative ditransitives), the semantics of the present target pattern becomes substantially more difficult to characterize in view of this discovery: even assuming an already quite coarse-grained specification in terms of

traditional semantic role labels, if we still have to infer contextually whether X is an AGENT, an INSTRUMENT or a RECIPIENT in the encoded scene, the putative construction obviously does not specify a great deal of information by itself.

This underspecification appears to be more drastic once we consider a complementary difficulty that is illustrated by the contrast in (6):

- (6) a. *For now, pen software is good for data collection where users are picking from pre-defined lists, or marking in check boxes.* [BNC FT8]
- b. *Computers are particularly good for finding, storing and retrieving information.* [BNC HXH]
- c. *Portable computers are good to access information while travelling.* [BNC J75]

Here, examples (6b) and (6c) illustrate the opposite case in which we get roughly the same meaning as in (3) (namely, 'X can be used for Y'), yet now an aspect of the form side is different: rather than having *good for NP*, we now get *good* combining with different types of VPs. In fact, the main difference between *good for NP* on the one hand and *good for V-ing* and *good to V* on the other may appear to be that in the case of the latter two, the specific process that X 'can be used for' is explicitly specified by the verb, whereas in *good for NP* it must be inferred. Example (6a) is actually untypical in this respect since an action noun like *data collection* already specifies the relevant process in itself. However, the difference is quite marked in examples like the following:

- (7) a. *They are good for inflammation of the bowel, breathing difficulties, heart problems, high blood pressure, reducing mucus and it also has a calming effect on the body, especially during nausea.* [BNC CGH]
- b. *Incidentally, this cream cheese mixture, spread on little fingers of bread and cooked in just the same way, is extremely good for a cocktail party as a change from those eternal sausages.* [BNC EFU]
- c. *A basic page printer has a rated life; Canon engines are good for 3,000 pages per month, Ricoh's can handle 5,000, and you should expect them to last around three years at the full rated use.* [BNC G00]

We understand these sentences to mean that the subject of (7a) (i.e. *elderflowers*) is good for *curing* inflammation of the bowel, the *cream cheese mixture* in (7b) is good for *serving* at a cocktail party, and *Canon printers* are good for *printing* 3,000 pages per month. An interesting account of the way in which the different implicit predicates are inferred in such examples is offered by Pustejovsky (1995). Drawing on earlier observations by Katz (1964) and Vendler (1967), he notes that the adjective *good* does not denote some invariant quality but merely ranks an entity with respect to a specific scale:

- (8) a. *Mary finally bought a good umbrella.*
- b. *After two weeks on the road, John was looking for a good meal.*
- c. *John is a good teacher.* (Pustejovsky 1995:43)

Pustejovsky points out that "[t]he conditions which make an umbrella 'good for something' [...] are very different from those which make John a 'good teacher'", suggesting that the selection of an appropriate semantic dimension is driven by the lexical semantics of the noun that *good* applies to. He goes on to develop a model in which a particular set

of parameters in the lexical semantics of nouns (relating to how the noun's denotatum came into being, what it consists of, what its canonical purpose or function is and a few more features) may interact with predicates that the noun is in construction with in order to warrant particular inferences during composition. This approach offers a both more general and more flexible account of the semantics of *good for NP* than (3), which comes out as the context-specific spell-out of the schematic meaning 'suited for V-ing NP'. If we accept this (or something similar which also takes the semantics of the subject NP into account) as a promising approach to how the implicit predicate is inferred in examples like (7), and if we furthermore see no principled difference between the type *good for NP* and the types *good for VP* and *good to VP* except that the latter are more explicit in this respect, it would appear that the hypothesized meaning of the target string is in fact not peculiar to the pattern after all. Interestingly, the meaning 'suited for, fitting, appropriate' instead appears to be a meaning of the lexical item *good*, and quite a special one, too: etymological dictionaries list it as the original, i.e. oldest sense of the adjective, which is furthermore characterized as a two-place predicate 'with a purpose-specification in a dependent construction,' i.e. precisely what we find in the above examples.

At this point, then, we have almost come full circle: having suspected that certain expressions involving the string *good for NP* may instantiate a partially schematic idiom that has unit status in its own right, it has now turned out that the precise formal and semantic specifications of this unit are in fact rather difficult to pin down. What is more, there seems to be a way of arriving at the hypothesized constructional meanings proposed in (3) within a particular approach to lexical semantics, and here specifically the lexical semantics of *good*. Now, seeing that we are essentially left with a particular (underspecified) reading of the lexical item *good*, is a constructional perspective on *good for NP* obsolete after all?

Having developed these objections at some length, the second part of my paper will be devoted to showing that this is not the case. On the one hand, I will show that not all instances of *good XP* behave alike and that the interpretation of *good* in particular is subject to constructional top-down effects. On the other hand, I will argue that a strict dichotomy between lexical and phrasal constructions is to a certain extent misleading anyway, at least if it is taken to imply that lexical and phrasal characterizations must be mutually exclusive and that phrasal constructions should only be posited if all else fails.

3.3 A constructional approach

The observation that there are particular instances of the three realizations of *good XP* that convey similar meanings cannot obscure the fact that the three structures are not generally interchangeable. To begin with, consider the meaning of *good* in (9):

2. "teleologische verwendung mit zweckangabe in abhängiger konstruktion", Grimms Deutsches Wörterbuch (DWB); online: <http://germazope.uni-trier.de/Projects/WBB/woerterbuecher/dwb/wbgui?lemid=GG27807>

- (9) a. *He gets a bit bolshie in the box, and paws at the floor. If he starts being really difficult and kicking at the partitions we sometimes have to put hobbles on him. Fortunately, he is always good to load.* [BNC ASH]
 b. **He is always good for a load.*
 c. **He is always good for loading.*

(9a) is an example of ‘tough movement’ or Object-to-Subject Raising (OSR for short), so called because the classical transformational analysis assumed that the subject of such clauses was derived from an embedded object position in deep structure (i.e. *This book is easy to read – It is easy to read this book*). Cognitive Grammar and construction grammar analyses of OSR (Langacker 1995; Hilpert and Koops 2005) have argued that the ‘raised’ variant is an independent and inherently meaningful construction that is typically used to “describe the quality of the experience of the subject in someone who interacts with it in the way specified by the oblique complement” (Langacker 1995: 51), and which therefore imposes certain semantic constraints on the slot containing the ‘raised’ predicate. In (9a), the most congruent of the dominant meanings associated with this slot (i.e. ‘easy’ rather than ‘difficult’) is coerced on *good*, indicating that *good* behaves like such different predicates as e.g. *unproblematic*, *a bitch* and *horrible* here in that it can be construed as matching the semantic requirements of this slot. Consequently, (9a) receives its interpretation in virtue of an interaction of the semantics of *good* with the semantics of the OSR-construction, which is why it cannot be paraphrased by either (9b) or (9c). Next, consider the meaning of *good* in (10):

- (10) a. *MPs were usually made to feel welcome; they were always good for a comment (Outrageous, says senior Tory MP), or a piece of gossip.* [BNC HNK]
 b. **They were always good for commenting.*
 c. **They were always good to comment.*

Here, the CALD paraphrase ‘able and willing to provide’ quoted in 3.1 seems quite appropriate, especially if we cut out the ‘provide’ and leave the predicate to be inferred as suggested above (‘make’ in (10)). As illustrated by (10b) and (10c), the meaning ‘able to + PRED’ is not compatible with the other two structures.

On the other hand, the existence of such differences does not preclude the possibility that there may also be points of overlap, as argued for the ‘suited (+ PRED)-reading in Section 3.2:

- (11) a. *The music was extremely good to dance to and the skins were excellent dancers, although they turned to the slow, deep soul music for close dancing.* [BNC ARP]
 b. *It was good for dancing.*
 c. *It was good for a dance.*

We can therefore hypothesize that on the one hand, the three meanings of *good* observed in (9) to (11) are not associated with any of the three formal patterns directly, but rather arise in the context of different semantic role configurations (notably with different types of subject arguments). On the other hand, each of the three complementation patterns in turn appears to be restricted to a particular subset of such configurations: for instance, *good for NP* seems fine with AGENT subjects (*good for a comment*), but not with PATIENTS

Table 1. Significant combinations of structural pattern and semantic role of subject NP

	Attracted subjects	Repelled subjects
<i>good for NP</i>	AGENT ($p < .001$)	PATIENT ($p < .001$)
<i>good for VP</i>	–	AGENT ($p < .01$)
<i>good to VP</i>	PATIENT ($p < .001$)	INSTRUMENT ($p < .01$)

or THEMES (**good for a load*), whereas *good to VP* works well for the latter (*good to load*), but is not compatible with AGENTS (**good to comment*).

In order to investigate this possibility, I conducted a corpus study and extracted all 3566 instances of *good to* (2020 tokens) and *good for* (1546 tokens) from the BNC, by far the most of which were unwanted hits for present purposes. The criterion for including a particular observation in the study was semantic fit with one of the three relevant paraphrases of *good*, i.e. ‘able to + PRED’, ‘suited (+ PRED)’ and ‘easy’. Most of the examples thus excluded involved benefactive uses (12a), constructions with an extraposed expletive subject and the meaning ‘desirable’ (12b), combinations of these two patterns (12c) and expressions where the XP following *good* was actually licensed by a preceding *too* (12d):

- (12) a. *Maastricht is good for Britain says Major.* [BNC K1Y]
 ‘beneficent’
 b. *It would be good to meet up sometime.* [BNC GXG]
 ‘desirable’
 c. *It is not good for a player to be considered a poor sport.* [BNC K5A]
 ‘beneficent’/‘desirable’
 d. *That sounds too good to be true.* [BNC ABJ]
 ‘desirable’

Apart from that, there were also numerous other idioms such as *hold good for something*, *bode good for something*, *make good for something* etc. which likewise did not convey the requisite meaning. The remaining 373 observations (206 *good for NP*, 106 *good for VP*, 61 *good to VP*) were coded for semantic role of the subject argument. The following categories were used: AGENT/EFFECTOR, INSTRUMENT, THEME, STIMULUS, RECIPIENT, PATIENT, LOCATION, OTHER. The resulting table showed a highly significant interaction between complementation pattern and semantic role of the subject argument ($\chi^2 = 185.44$, $df = 14$, $p < .001$). However, since several of the cells had an expected frequency of less than five, this result should be interpreted with some caution. Still, looking at the individual contributions to this result, there are five individually significant combinations between structural pattern and subject role that stand out from the rest; they are reported in Table 1 (where ‘attracted’/‘repelled’ means ‘occurring significantly more/less often than expected’).

Taken together with the observations in (9) and (10) that the patterns are not freely interchangeable, these results confirm the suspicion that there are principled semantic grounds for favouring one pattern over the other in a particular context. Specifically, the target pattern *good for NP* is shown to be significantly associated with AGENT/EFFECTOR subjects, even though all other roles that were coded for are in principle possible in this slot too. The most frequent ones are INSTRUMENT (81), AGENT (53) and STIMULUS (25), which make up for 77% of all occurrences (inferred predicate in square brackets):

- (13) a. *So what do you reckon's good for [curing] a hangover, then?* [BNC HW8]
 (INSTRUMENT)
 b. *So I doubt if our hero would have been good for [performing] many heroics after swigging that.* [BNC FF0]
 (AGENT)
 c. *After all, asking him why my pay's late is always good for [inducing] a laugh.* [BNC JY7]
 (STIMULUS)

In fact, expressions with an INSTRUMENT-subject and ‘suited’-meanings like (13a) do not seem to be quite the same as (13b) and (13c) – as illustrated in (11), it is *only* the ‘suited’-type where there is overlap between *good for* NP and *good for/to* VP, and such expressions also allow the kind of regular lexical substitutions of *good* that are ruled out in (13b) and (13c) (cf. *these pills here are good, but those ones are bad/excellent/lousy for a hangover*).³ It seems reasonable to suspect therefore that the pattern in (13a) is the source structure of the more specialized/ idiosyncratic uses of *good for* NP illustrated in (13b) and (13c).⁴ Having identified expressions like (13) as the dominant subtype of *good for* NP, we can now further zoom in on relevant expressions. For instance, it would also be interesting to see whether individual subtypes have a preference for specific implicit predicates in the oblique phrase. This is what we would expect to find if indeed there is some specialization going on, which is but another way of saying that a previously inferred aspect of relevant expressions comes to be routinely associated with the respective (sub-)pattern and hence semanticized. For reasons of space, I will merely give one example from the AGENT class here, a type that is interesting because agentive subjects are in principle compatible with a large range of predicates. What we find instead is a small number of recurrent scenarios that have been conventionalized for the construction. Consider (14):

- (14) a. *I mean he knew you were good for a few lire more than usual.* [BNC ASN]
 b. *Following a request for a reference in 1989, NatWest wrote to Mr Maitland stating that the company to which he proposed to send the games was good for £5,000 credit.* [BNC AHB]
 c. *Payment is over a number of years. We choose our customers carefully: only those who can underwrite the loan, give pledges that they are good for the money they have borrowed.* [BNC H98]

(14) is about TRANSFER: an AGENT is said to be able to give/supply/restore etc. the oblique THEME argument to a RECIPIENT. The interesting thing about the recurrence of such transfer-implications in agentive *good for* NP-expressions is not so much how they arise (they are invoked by the semantics of the oblique arguments, all of which refer to elements of financial transactions in (14)), but the very fact that *there is a recurrence* of this scenario in the construction – rather than, say, the occurrence of CONSUMING or BREAKING scenarios or whichever other type of event that involves an AGENT. This observation suggests that speakers have quite detailed knowledge about the functions that the individual subtypes

3. I thank Anatol Stefanowitsch for pointing this out to me.

4. Since it was often difficult to sharply distinguish between the putative source meaning and its semantic spin-offs, examples like (13a) were nevertheless included in the data.

of the idiom can be put to in conventional usage. The existence of such restrictions is an argument for a constructional approach, since they are difficult to reconcile with a purely inferential solution according to which more or less anything should be possible here as long as we can recover the implicit predicate from the semantics of the oblique NP.

Another indication that relevant constraints are encoded on the fairly specific level of these individual subtypes is provided by the example that marked the starting point of my investigation, repeated here as (15):

- (15) *She'll probably also tell us about Tony the Toddler putting Domestos in the jelly, or whatever embarrassing things he did as a kid. Might be good for a laugh.*

With 14 out of 208 observations (7%), *laugh* is the most frequently occurring noun in the oblique NP slot; the percentage rises to 11% (22 tokens) when close semantic variants such as *chuckle*, *giggle*, *snigger*, *joke* and *a bit of ribbing* are included as well. In fact, however, such nouns only occur in a particular subtype of *good for* NP-idioms, namely those with STIMULUS subjects. Since there is also an established agentive schema, there should be nothing to prevent us from interpreting (16) as meaning that it is the subject referent who is laughing, rather than being laughed at:

- (16) *It is a world that ought to have vanished, and has largely done so, yet it persists in certain tired imaginations. The forelock-touching peasant is still around in print, and always good for a condescending laugh.* [BNC AHA]

However, this is not what (16) means. If speakers wish to use *laugh* in an agentive setting, they can use the closely related idiom in (17) instead:

- (17) *Droning Dot and nerdish Nigel do have the odd laugh, but there's never been a character who you could call easy going and game for a laugh.* [BNC K37]

This suggests that different subtypes of *good for* NP such as the variants with AGENT and STIMULUS subjects come with different restrictions on the oblique NP-slot – though obviously related, they are not quite the same.

It might be possible to zero in even further on the different usage patterns of such structures, but there is also an end to splitting at some point, at least if we want to be reasonably confident about the general acceptance of the proposed distinctions. In fact, maybe particular aspects of what has been suggested so far are already controversial. Apart from the fact that I am not a native speaker of English and that there is a directly equivalent idiom in my native tongue German that could possibly influence my judgments, this is quite generally what is to be expected at a certain level of detail, and even more so when discussing something as rare and peripheral as the present example: little exposure to a structure means that speakers are not constantly forced to align and possibly accommodate their perceptions of its conventional usage patterns, something that happens automatically for more frequent constructions. As a result, it is well possible that speakers extract slightly different generalizations about the kinds of meanings that can be expressed with this structure, and they will occasionally come across usages that sound deviant and somehow not quite felicitous from their point of view. With the help of corpora, however,

it is possible to identify those patterns in speakers' productions that are *dominant* and, if robust, not compromised by the odd counterexample.

3.4 Implications

Having argued for the general appropriateness of a construction-based approach, it is now time to turn to the predictability vs. entrenchment issue and to consider how the above observations are most plausibly accommodated within an overall model of linguistic knowledge. I will argue that the complete inheritance view with its reliance on the predictability criterion is unsuitable for delimiting the range of elements that speakers really work with in producing and comprehending language (i.e. constructions). By the same token, I will also argue that a certain strategy for modelling the fine-grained aspects of linguistic knowledge that are illustrated by the behaviour of idiomatic chunks such as the present example in formal linguistic complete inheritance models is inappropriate from a cognitive point of view.

Beginning with the first question, it may appear that the above observations do not run counter to a characterization of constructions as form–meaning pairs that are in some respect unpredictable – if indeed there is a highly specific variant with the meaning ‘AGENT is able to (+PRED) PATIENT’ that behaves differently from a second type with the meaning ‘STIMULUS is able to (induce) RESPONSE (in EXPERIENCER)’, then that would be a reason for positing two highly specific constructions here that cover relevant expressions. In fact, a schema like ‘STIMULUS is able to (induce) RESPONSE (in EXPERIENCER)’ is still not specific enough, though: the response is furthermore restricted to certain types of behaviour that imply a particular evaluation of the stimulus on the part of the EXPERIENCER. (In the case of *good for a laugh*, the implication that it is ‘enjoyable or amusing’.) This points to a general problem with the non-predictability criterion: if indeed there is an attempt to cover such kinds of phenomena at all, one is forced to make ever more fine-grained subdistinctions in the data, and once these are set up, everything that is sanctioned or licensed by some element of the resulting system should be on equal footing (namely, fine). But this is not the case. Especially in such idiom variants, there are clearly expressions that involve more ‘strain’ (Langacker 1987: 69f.) in categorization than others because they are further removed from *convention* (i.e. what is *entrenched*). To come back to our example, I believe it is more useful to think of a chunk such as *good for a laugh* as a stored unit that can be subject to certain analogical extensions rather than to postulate a number of fully explicit constructional schemas (or lexical entries – see below) that cover such extensions. As indicated, the BNC contains several substitutions for *laugh* with close semantic variants such as *chuckle*, *giggle*, *snigger*, and web checks with Google quickly produce more far-flung extensions such as *good for a cheer*, *good for a cry*, *good for a puke* etc. The fact that these are much rarer and probably also less acceptable for many speakers directly follows from the fact they are presumably modelled on *good for a laugh* (and more removed from it) rather than ‘generated by rule/schema’. Note that this is not to argue against the existence of schematic constructional templates as such: the more variants of this type a speaker encounters, the more likely it is that a schema with some sort of cognitive permanence will be extracted (cf. Langacker 2000: 59f.). The point remains, however, that it is

difficult to account for the connection between acceptability and semantic proximity to an entrenched exemplar in a model that does not recognize such units in the first place.

We have at this point already arrived at the second question, i.e. the implications of such observations for cognitively plausible models of linguistic knowledge. The present paper has argued for an analysis in terms of partially schematic phrasal templates plus fully specific instances, and I have furthermore assumed that such structures are not in principle different from fully schematic constructions. Other approaches do see a principled difference here. For instance, Müller (2006) argues against positing phrasal constructions altogether. Focusing on resultative constructions in German, his argument is that a phrasal solution as proposed by e.g. Goldberg and Jackendoff (2004) interacts with various other phenomena such as constituent reordering and valence-changing processes in undesirable ways because it leads to a strong proliferation of constructional schemas that are needed to license relevant expressions. As an alternative, expanding suggestions by Nunberg, Sag and Wasow (1994) and Erbach and Krenn (1993), Müller makes a case for encoding non-compositional meanings in a special lexical entry of the head of the construction rather than specifying them directly at the phrasal level. Though focusing on a lexically unfilled construction, the paper also touches on more substantive idioms, arguing that “even the tiniest bit of a sentence may be controlled from within a lexical entry” (p. 879): “As it is possible to shift syntactic information around between lexicon and syntactic rules (Constructions), it is also possible to represent semantic information at non-canonical places and, by doing so, to obtain a grammar that can derive the meaning of all utterances compositionally” (p. 877). The approach thus acknowledges the need to account for certain apparently non-compositional phenomena and endorses their treatment in terms of specialized constructions, albeit as ‘lexical constructions’, i.e. elements that are accounted for ‘in the lexicon’. The main motivation behind stipulating the enormous amount of multiple lexical entries that would be needed to cover the full range of idiomatic and collocational idiosyncrasies found in naturally occurring language is thus to maintain a sharp distinction between grammar and lexicon, rule and list. Whereas the assumption of such a design may be desirable in the context of certain contemporary formal approaches like the one in which this particular discussion is framed (HPSG), proponents of Cognitive Grammar and cognitively oriented versions of construction grammar have pointed out that there is no reason to assume that the architectural assumptions and ideals of such models actually mirror the way in which language is instantiated in and processed by the human mind. In other words, having a fully compositional grammar may be desirable from a formal (especially a computational) perspective, but it does not follow that the necessary stipulations carry over to the psychological domain that cognitively oriented linguists seek to describe.

Coming back to the question of lexical vs. phrasal constructions, the classical argument for positing phrasal constructions are constructional coercion effects (Michaelis 2005) and the type of linguistic creativity exhibited by examples like Goldberg's (1995) famous *He sneezed the napkin off the table*. As I see it, the main problem of a lexical approach here is not so much that positing a special caused-motion entry for a verb like *sneeze* is ‘implausible’, but that this strategy is inevitably *post hoc* and hence not fit to accommodate the inherent flexibility of linguistic categorization. Humans are very adept at establishing

partial correspondences between different elements of conceptual structure (such as the semantics of the verb slot of the caused-motion construction and particular aspects of the conceptual representation associated with the verb *sneeze*) that cannot be exhaustively predicted and enumerated in advance. From a cognitive linguistic perspective, however, Langacker (2005: 147f.) observes that the possibility of construing *sneeze* as matching the semantic requirements of the caused-motion construction is straightforwardly accommodated as a manifestation of the quite general process of conceptual blending (cf. also Fauconnier and Turner 1996). Clearly, though, a verb like *sneeze* can only be ‘made to fit’ into the slot of the construction if the pattern does have independent existence in some way: we can only construct the relevant link and match the (unprofiled) implication of *sneeze* that there is a forceful expulsion of air to the construction’s requirement of there being some sort of force that is causing some sort of motion *if* there is something to map to in the first place. Whether this ‘something’ is then called a construction, a lexical rule or a “defective lexical item” (Jackendoff 2002: 180) is only important insofar as the choice of a particular term will also suggest whether or not the element in question is viewed as something that is fundamentally different from other elements of linguistic knowledge, rather than one endpoint of a continuum. Usage-based construction grammar assumes that there is no such fundamental difference.

4. Conclusion

The present paper has discussed two conflicting views about the crucial criterion for constructional status, i.e. whether constructions are more profitably defined as *non-predictable* or as *entrenched* form–meaning pairs. Departing from a corpus study of a particular schematic idiom, I have argued that speakers have quite detailed perceptions about what can and what cannot be done with such structures, and that such facts are straightforwardly accommodated within an usage-based system (in which entrenchment is the key criterion) but problematic for a maximally lean complete inheritance model that strictly relies on (non-)predictability. What is it that makes item-specific knowledge and stored exemplars relevant? In the case of non-predictable elements, their relevance is obvious: they are what a speaker *must know* in order to speak the language. However, if indeed the goal is to account for *what speakers know*, then non-predictable elements are just the bare minimum, and it is not difficult to show that speakers actually know a lot more: first, I have argued that either fully concrete or only partially schematic ‘fixed expressions’ are the standard of comparison for various analogical extensions that we find evidenced in corpus data (i.e. they are what people seem to work with in production). Second, they are ‘idioms of encoding’ in the sense of Makkai (1972) that speakers ‘must know’ in the same sense that they ‘must know’ opaque idioms of decoding – for instance, idiomatic English has *good for a laugh*, but not **good for laughing*, **good to laugh*, **good with respect to a laugh* or any other conceivable variant that might have become conventionalized instead. Third, research on formulaic language has found that pre-patterned speech, fixed collocations and readymade prefabs also play an important role in discourse/production because they relieve time pressure on the speaker (Wray 2002). Finally, they also impinge

on comprehension, where stored chunks and (possibly conflicting) higher-level schemas compete for activation as the categorizing structure to be selected for a particular target (Zeschel 2008).

Summing up, since all these different aspects point to the significance of concrete exemplars in linguistic knowledge and processing, it would seem strange to exclude them from a model that explicitly seeks to account for “the entirety of each language” (Kay and Fillmore 1999: 1).

References

- Bybee, J. 2005. From usage to grammar: the mind’s response to repetition. *Language* 82 (4): 711–733.
- Croft, W. & Cruse, D. A. 2004. *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Erbach, G. & Krenn, B. 1993. Idioms and support verb constructions in head-driven phrase structure grammar. Claus-Report Nr. 28, Department of Computational Linguistics, Saarland University [also published under Krenn, B. & Erbach, G. 1993, in Nerbonne, Netter, K & Pollard (eds), 365–396. CSLI Lecture Notes Nr. 46. Center for the Study of Language and Information Publications, Stanford, CA.]
- Fauconnier, G. & Turner, M. 1996. Blending as a central process of grammar. In *Conceptual Structure, Discourse, and Language*, A. Goldberg (ed.), 113–130. Stanford: CSLI.
- Goldberg, A. E. 1995. *Constructions. A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Goldberg, A. E. 2006. *Constructions at Work. The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, A. E. & Jackendoff, R. 2004. The English resultative as a family of constructions. *Language* 80 (3): 532–568.
- Hilpert, M. & Koops, C. 2005. A constructional approach to Object-to-Subject Raising. Paper presented at the 9th ICLC, Seoul, Korea.
- Jackendoff, R. 2002. *Foundations of Language*. Oxford: Oxford University Press.
- Kay, Paul. 2002. *Patterns of Coining*. Ms.
- Kay, P. & Fillmore, C. J. 1999. Grammatical constructions and linguistic generalizations: the What’s X doing Y? construction. *Language* 75 (1): 1–33.
- Katz, J. J. 1964. Semantic theory and the meaning of ‘good’. *Journal of Philosophy* 61: 739–766.
- Langacker, R. W. 1987. *Foundations of Cognitive Grammar. Volume 1: Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, R. W. 1990. *Concept, Image and Symbol. The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.
- Langacker, R. W. 2000. A dynamic usage-based model. In *Usage-Based Models of Language*, S. Kemmer & M. Barlow (eds), 1–63. Stanford: Center for the Study of Language and Information.
- Langacker, R. W. 2005. Construction Grammars: cognitive, radical, and less so. In *Cognitive Linguistics. Internal Dynamics and Interdisciplinary Interaction*, F. J. Ruiz de Mendoza Ibáñez & M.S. Pena Cervel (eds), 101–159. Berlin: Mouton de Gruyter.
- Makkai, A. 1972. *Idiom structure in English*. The Hague: Mouton.
- Michaelis, L. A. 2005. Entity and event coercion in a symbolic theory of syntax. In *Construction Grammars: Cognitive Grounding and Theoretical Extensions*, J.-O. Östman & M. Fried (eds), 45–88. Amsterdam: John Benjamins.
- Müller, S. 2006. Phrasal or lexical constructions? *Language* 82 (4): 850–883.
- Nunberg, G., Sag, I. & Wasow, T. 1994. Idioms. *Language* 70 (3): 491–538.