Constructions are Patterns and so are Fixed Expressions

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1. Introduction[1]

In traditional theories of syntax, there are words, rules of syntactic combination that combine words and multiword expressions (like *fill the bill* and *with flying colors*) that sit uncomfortably in between, having less internal cohesion than words and far fewer potential permutations than syntactic rules. Construction Grammar replaces these categorical distinctions with a continuum. In Construction Grammar, the grammar is conceived as an inventory of form-function-meaning complexes of varying degrees of internal complexity and lexical fixity (Fillmore et al. 1988, Kay 1992, Kay and Michaelis 2012, Michaelis 2017). We will refer to this continuum as the *continuum of idiomaticity*. The complexes range from single lexemes like the verb *deign* to multiword expressions like the VP *sweep x under the rug* to syntactic templates lacking any lexical content, like that used to form polar interrogative questions. But despite what has been implied in some constructionist works (Boas 2010, Dabrowska 2009), words and constructions are two different things. A construction is a description of a class of language objects (*constructs* or, equivalently mother-daughter configurations), while a word is a language object, a type of sign (Sag 2012).[2] Even if we were to

[1] This paper draws on research collaborations with Josef Ruppenhofer (Ruppenhofer and Michaelis 2016) and Paul Kay (Kay and Michaelis 2012, Kay and Michaelis *to appear* and Kay and Michaelis 2017). I gratefully acknowledge the contributions that each of these collaborators have made to my understanding of linguistic patterns. Special thanks are owed to Paul Kay for his keen insights about the data discussed here, and for all of the many ways in which he furthers my understanding of constructionist syntactic theory. I am additionally thankful to an anonymous reviewer for helpful feedback on this chapter. Finally, I owe a debt of gratitude to my fellow constructionists and *Patterns* authors Elizabeth Traugott and Peter Petré for discussion and constructive criticism that have enriched and improved the exposition here.

[2] Peter Petré (p.c.) points out that this passage might be construed as claiming that "lexical items are objects, not classes of objects". The passage, however, pertains to *words* rather than to lexical items (*qua* lexical signs) in general. In the SBCG type hierarchy, the type *lexical sign* has two immediate subtypes: *word* and *lexeme*. Signs of the type *word* share with phrases the ability to be daughters in phrasal constructs—an ability that lexemes lack (Sag 2012: 90). To participate in phrasal syntax, a lexeme must give rise to a corresponding word. This is accomplished through an inflectional construction (Sag 2012: 101). Rather than participating in syntax, signs of the type *lexeme* represent the syntactic and semantic constraints common to the various inflectional and derivational instances of that lexeme. For example, the lexeme *love* "enforces the basic form-meaning correspondence that permeates nominal and verbal words based on this lexeme" (Sag 2012: 97). In sum, while a word is indeed a single object (a sign), a lexeme might be viewed as a class of objects, or, more

understand *construction* as *construct* when interpreting the dictum "A word is a construction", the equivalence would not be valid: a construct is a phrase, a combination of words.[3] There is a reason, however, that Construction Grammar proponents have tended to see words and phrasal patterns as the same thing: both words and phrases are signs, and as such have specifications for phonological structure, morphological form, syntactic category, semantics and use conditions.[4] The phrasal patterns range from those that are very constrained (partially lexically filled patterns of the 'snow clone' variety, e.g., *I x therefore I am*) to those that are very open (like the construction that pairs a lexical head with its complements). What this means is that while the term *construction* has typically been used to refer to patterns with restrictive conditions both on form and use, canonical phrase-structure rules are constructions too:

> *The [Construction Grammar] approach supposes a grammar to consist of a repertory of conventional associations of lexical, syntactic, and pragmatic information called constructions. Familiar grammar rules are simply constructions that are deficient in not containing any lexical information except for specification of rather gross syntactic categories—and, in some cases, lacking any pragmatic values as well. Every such conventional association that must be learned or recognized separately by the speaker of a language is a construction. This includes all idioms and partially productive lexico-grammatical patterns* (Kay 1992: 310)

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accurately, as capturing what is common to a range of words based on that lexeme.

[3] In assuming this definition of *construct*, I depart from the practice of Traugott (this volume), who describes her use of the term as follows (p.c.):

Construct is an attested token (spoken or written), not necessarily licensed by a [construction], since in some cases historically there was no [construction] to license it. Replicated use of constructs in some cases enables the rise of a particular [micro-construction] such as all but X.

[4] Peter Petré (p.c.) interprets the claim that words are signs to entail that words are not classes of language objects, and that they lack "open slots": He says: "While I agree that there have to be units in language without open slots (the atomic elements of grammar, one might say), I'm not convinced 'word' is actually such an atomic unit. In the intuitive interpretation of what a word is, a word is a paradigmatic class of objects, including a singular and a plural form". I offer two responses here. First, the question of whether an expression has "open slots" is a distinct question from whether or not it represents a paradigmatic class of objects. A main point of this chapter is that words, like lexemes, most certainly can have open slots, represented by their VALENCE and ARG-ST sets. In fact, we distinguish lexical classes according to their combinatoric properties, and these combinatoric properties are inherited by words. For example, while the proper-noun word *Kim* has no valence, the transitive-verb word *eat* has two valence elements. Second, SBCG recognizes a word-lexeme distinction, as discussed in footnote 2. This means that while a word is not a "paradigmatic class of objects" a lexeme is. Words in SBCG are members of such paradigmatic classes rather than representing classes themselves.

Whether we are describing a lexeme with highly constrained selection properties (e.g., the adjective *blithering*), a class of lexemes (e.g., the class of ditransitive verbs), an inflected word (e.g., the plural noun *copies*) or a way to create a headed phrase of a particular type, we are describing patterns, because in each case we are describing the combinatoric properties of words. But if we take *pattern* to mean a recurrent configuration containing some fixed and some variable components (which is presumably the standard sense of the term) only a phrasal template would seem to qualify. A verb by itself does not constitute a configuration, and a fixed expression like *call it a day*, while arguably phrasal, does not contain any open slots—it is inflexible. So can a word or a word class or a fixed formula really be a pattern?

This puzzle is resolved in Sign Based Construction Grammar (SBCG; Sag 2012, Michaelis 2012, Kay and Sag 2012): all linguistic expressions are modeled as (functional) feature structures, whether these are signs or sign configurations; sign configurations are referred to as *constructs*. A functional feature structure maps each feature in its domain to an appropriate value (Sag 2012: 63). While feature structures are widely used in linguistic representation (as in Generative Phonology), the feature structures used to model signs in SBCG contain the particular array of features needed to represent the pairing of form with meaning. These features include those required to represent the expression's phonology (PHON), its morphological form (FORM), its syntactic category (CAT), its combinatoric potential or valence (VAL), its frame-semantic meaning (FRAMES), its semantic index (IND), and its contextual indices (CNTXT). The VAL feature is of particular importance, as it is the basis of lexicalist representation: we represent lexical classes (e.g., verb classes), lexically headed constructions (like the English *be-Ving* progressive construction) and idiomatically combining forms (like *take x to task*) by reference to the combinatoric properties of their head words. Constructs are sign configurations rather than signs, but they are represented as feature structures as well. The representation of constructs requires two additional features: MOTHER (MTR), whose value is a single sign and DAUGHTERS (DTRS), whose value is a non-empty list of signs. These features represent the hierarchical structure that tree-structure representation captures: constructs are in essence local trees with signs 'at the nodes'.

SBCG maintains a strict separation between descriptions and the linguistic objects that instantiate them: constructs and signs, as feature structures, contain determinate values for every feature, while combinatory constructions (descriptions of classes of constructs), listemes (lexical entries) and lexical-class constructions are partial descriptions, which characterize

large classes of feature structures.[5]

The question of what form-meaning pairs the grammar licenses comes down to the question of whether a given feature structure of the type *sign* is well formed. SBCG analyzes lexical signs and constructs in much the same way: each kind of model object is deemed well formed (or not) according to its conformity to a feature-structure description of the type *sign*. The repertoire of signs includes lexemes with idiosyncratic valence requirements, e.g., the idiomatic verb *spill* that heads the idiomatic expression *spill the beans*. The well formedness of a construct is determined indirectly, according to whether the construct's mother sign conforms to a phrasal sign of the grammar. Because lexical signs and constructs are licensed in the same way, SBCG offers a uniform approach to all of the expressions—both lexemic and templatic—that populate the idiomaticity continuum, and the meanings to be discovered at each point along this continuum. In SBCG, every linguistic pattern is a feature-structure description. Thus to the question *what makes a construction a pattern?* we reply: the same thing that makes a lexical entry a pattern. Both constructions and lexical entries describe combinatory possibilities in a language and both do so by means of feature-structure descriptions.

The remainder of this paper will elaborate on this point, and the lexicalist perspective that it entails. Using illustrations from the idiomaticity continuum laid out in prior works (Kay and Michaelis 2012, Michaelis 2017), this paper will attempt to make the case for a lexicalist view of grammar in which, paradoxically, phrasal patterns are lexical and lexical patterns are phrasal. In the following section, Section 2, I will describe the idiomaticity continuum as a scale of lexical fixity, using linguistic exemplars to describe each point on the scale. I will then choose two patterns, representing antipodal points on the continuum, to subject to formal analysis. The first, to be discussed in Section 3, is a fixed expression: a noun phrase that functions as a negative-polarity item, *a red cent* (Ruppenhofer and Michaelis 2016). The second, to be discussed in Section 4, is an abstract phrasal configuration that

[5] It is important to note that in SBCG, not all constructions license phrases. Another way of saying this is that not all constructions have phrasal signs as mothers. Some constructions, which we can call *lexical constructions*, describe unary-branching constructs, in which both mother and daughter are single signs. There are two kinds of lexical constructions: (1) derivational constructions, which describe lexeme-lexeme relationships and are used to represent valence-augmenting constructions like the English Ditransitive construction (e.g., *We sent them a bill*), and (2) inflectional constructions, which describe word-lexeme relationships like that between a verbal lexeme and its past-tense form (Sag 2012). In addition to lexical-rule constructions, SBCG recognizes *lexical-class constructions*. These do not describe constructs but rather basic (non-derived) sign types. Lexical-constructions describe both broad classes, like the class of strict transitive verbs, and narrow ones, like the class of auxiliary verbs.

represents properties common to a family of 'auxiliary inversion' patterns, the Auxiliary-Initial construction (Sag 2011, 2012). The upshot of both analyses will be that apparent phrasal patterns, whether lexically fixed or open, can and should be described in a manner that (a) highlights the dependency relations that define particular words and word classes and (b) leaves the work of phrase formation to the general-purpose phrasal constructions that license such configurations. In Section 5, I will summarize the purpose of the analytic enterprise: to capture what unites lexical entries and constructions by leveraging the selectional requirements of lexemes and lexeme classes. In this lexicalist framework, both syntactic patterns and lexical patterns are seen to arise from the combinatoric properties of words, including idiom words.

2. The Continuum of Idiomaticity

Meanings are assembled in various ways in a construction-based grammar, and this array can be represented as a continuum of idiomaticity. As depicted in Figure 1, this continuum is a gradient of lexical fixity; it is based on Michaelis *in press* and Kay and Michaelis 2012.

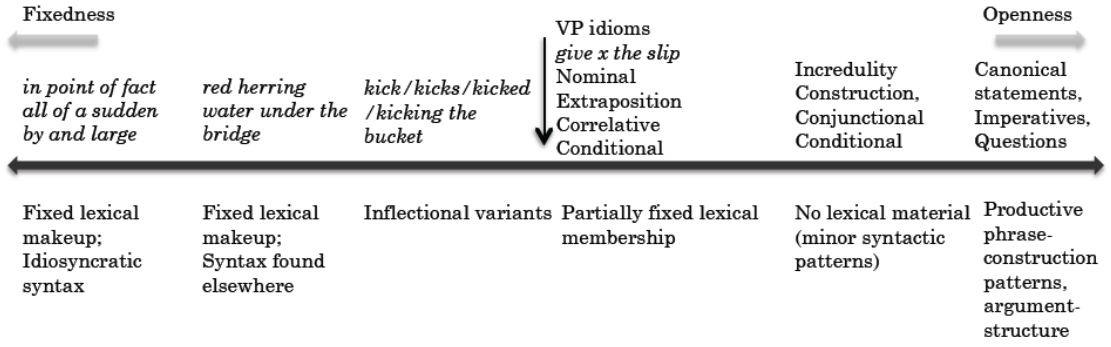

Figure 1. The idiomaticity continuum

This continuum distinguishes types of complex expressions according to their relative degrees of productivity, and in particular the range of lexical, inflectional or syntactic variants attested for each type. The least lexically fixed types are canonical phrase-structure rules like the NP construction, which constrain the grammatical category of each daughter but do not invoke specific lexemes. What is crucial here is that every pattern of the language, from the fixed formulas to the fully productive phrase-structure rules, falls at some point along the idiomaticity continuum.

At the leftmost, or 'fixed', extreme of this continuum are frozen idioms, like *the salt of the earth* and *in the know*. As indicated, the set of frozen idioms includes those with idiosyncratic syntactic properties. For example, the fixed expression *by and large* (originally a nautical term referring to two different sailing conditions) represents an exceptional pattern of coordination, in which

a preposition and adjective are conjoined. The expression *all of a sudden* is syntactically odd in a similar way: the complement of the quantifier head all is a PP whose complement is an adjective (*sudden*) rather than a NP. Other frozen idioms, like the modified noun *red herring*, feature syntax found elsewhere.

Next we encounter lexically fixed idiomatic expressions, verb-headed and otherwise, that are inflected in the same way they would be if their meanings were not idiomatic. One such expression is the VP idiom *chew/chews/chewed the fat*, meaning 'engage in conversation'. It is important to note, however, that the direct objects of VP idioms like *kick the bucket* and *chew the fat* are syntactically inert. We do not encounter variants like **Buckets were kicked,* **She kicked an unfortunate bucket* or **the bucket that was kicked*—or at least such variants do not preserve the idiomatic meaning. A class of expressions that features greater flexibility is that of patterns that have only partially fixed lexical membership. This class includes phrasal idioms like *spill the beans*, whose component words map in a one-to-one fashion to their literal paraphrases (e.g., 'tell the secret(s)' in the case of *spill the beans* and 'exercise influence' in the case of *pull strings*). In this respect, such VP idioms differ from those like *kick the bucket*, in which the literal paraphrase ('die') assigns no role to the direct object, *the bucket*. Crucially, such idioms behave just like non-idiomatic VPs with regard to the allowable syntactic instantiations of their arguments; this is shown in (1-4):

1. Quantification: The Washington *Post* spilled lots of beans on this Bush brother.
2. Adjectival modification: The pop icon's estranged sibling […] spilled some dirty beans.
3. *Wh*-extraction: the beans that were spilled under the effects of the drug
4. Passive: Beans will be spilled if they need to be.

The syntactic flexibility exhibited by such VP idioms sets them apart from VP idioms like *kick the bucket*, which lack all but inflectional variants, as observed above. The permutability of VP idioms like *spill the beans*, which Nunberg et al. 1994 refer to as *idiomatically combining forms*, has led several theorists to analyze them as products of lexical selection (an idiomatic head verb selects for one or more idiomatic arguments), with phrasal properties determined by independently motivated phrasal constructions of the grammar (Kay et al. 2016, Kay and Michaelis *forthcoming*). The strategy used to prevent idiom words—like *beans* in *spill the beans*—from appearing without the appropriate idiom predicator is to constrain the valence set of the idiomatic predicator, such that that an idiomatic *spill* verb (which carries semantic features that represent its 'reveal' meaning) seeks to combine with a definitely determined, plural nominal whose lexical identifier is *beans*, and

which carries semantic features that represent its literal meaning ('secrets').[6] A similar 'lexical hardwiring' strategy will be employed in the analysis of *a red cent* in Section 3 below. Somewhat more open than idiomatically combining forms are those multiword expressions (MWEs) that contain variables in place of lexically filled arguments; an example is the VP idiom *give x the slip* ('abandon x') and the NP idiom *thorn in x's side* ('persistent problem for x'). SBCG represents idioms with variable by constraining the lexical identities of the fixed members of the head word's valence set but not the variable ones.

In addition to flexible and partially open MWEs, the 'partially fixed lexical membership' class includes clausal constructions that resemble MWEs in evoking particular words (rather than word classes more broadly). The downward arrow in the figure indicates a decreasing amount of pre-specified lexical content among the expressions in this class. One such clausal construction is Nominal Extraposition (Michaelis and Lambrecht 1996), exemplified in (5-6):

5. It's amazing the difference.
6. It's remarkable the people you see here.

Nominal Extraposition is an exclamatory pattern in which an epistemic adjective (e.g., *amazing, remarkable, unbelievable*) takes expletive *it* as its subject and a definite NP as its complement. The complement NP metonymically denotes a scalar degree (amount, number, magnitude, etc.). Accordingly, sentence (6) means not 'People seen here are remarkable' but rather 'The number/variety/unusualness of the people seen here is remarkable'.

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[6] Peter Petré (p.c.) comments:

> Spill the beans *is a word with spaces because there is no lexical choice. As for verbal inflection of* spill*, that's easy to account for, because it's a normal verb (heading an idiom). There are, in that sense, no idiomatic restrictions on it. As for* the beans*, while one may modify* beans *(*the bad-tasting beans *or whatever), I wonder whether such an operation does not, de facto, destroy the idiom, turns it into a normal phrase, albeit with idiomatic function: this being some kind of word play that is precisely the effect that one's after: to put more emphasis on the idiom by 'de-idiomatizing' it.*

I offer two responses. First, *spill* cannot be a "normal verb" heading an idiom, because it has abnormal selectional restrictions. One cannot preserve the idiomatic ('tell') sense of *spill* if one does not combine it with a NP headed by the idiomatically interpreted noun *beans*. Second if the option of converting an idiom to a non-idiom for the purpose of passive, modification, *wh*-extraction, etc. is always open to a VP idiom why is it demonstrably not open to VP idioms like *kick the bucket*? I maintain that the solution to this question is to distinguish two kinds of VP idioms, one of which is headed by a verb that assigns a meaning to the direct object on its valence list, and the other of which is headed by a verb that does not.

The set of partially lexically fixed constructions also includes the Correlative Conditional construction (Fillmore 1986, Michaelis 1994, Culicover and Jackendoff 1999, Capelle 2011), as illustrated by the proverbial expressions in (7-9):

7. The more, the merrier.
8. The bigger they come the harder they fall.
9. The more you have, the more you want.

This biclausal construction (which has elliptical variants, as in (20)) is formally characterized by the presence of two clause-initial comparative phrases, each of which is introduced by the word *the*—a reflex not of the definite article but of Old English instrumental-case demonstrative pronoun *þy* 'by that much'. In this construction, the word *the* serves as a degree marker. Predications built from this construction express a causal relationship between the values of two variables, with first clause expressing the independent variable and the second the dependent (Fillmore 1986, Michaelis 1994). In the case of (9), for example, the independent variable is the number of possessions, while the dependent variable is the degree of desire for possessions.

As we move toward fully open patterns, we encounter specialized syntactic patterns without lexical fillers, including the Incredulity Response (10), analyzed by Lambrecht (1990) as an unlinked topic construction, and the Conjunctive Conditional, illustrated in (11):

10. **What, me go to the gym? Never!** I do ride my bike round Richmond Park, though, and I play a bit of golf, but that's all.
11. One more remark like that and you're out of here.

While containing no lexical fillers, these minor patterns are not fully open: an Incredulity Response must contain a non-finite (or non-verbal) predicate and the Conjunctive Conditional must contain the conjunction *and*. At the rightmost, or 'open' end of this continuum are fully productive patterns without lexically fixed portions (although they do contain lexical-class constraints of varying grains). This group of patterns includes argument-structure constructions like the Caused Motion construction (e.g., *The kids swam the logs upstream*), the Resultative construction (e.g., *You hurt my eyes open*) and the Ditransitive construction (e.g., *We recently adopted her a sister*). These correspond to both derivational constructions and lexical-class constructions in SBCG (see Sag 2012 for discussion). As described by Goldberg, these constructions express kinds of actions (e.g., transfer, caused motion, directed motion). Frame-semantic representations are used to represent these meanings. Each of these representations includes the array

of participant roles appropriate to the denoted event type (agent, theme and recipient in the case of the Ditransitive construction). When 'constructional' participant roles are distinct from those of the verb lexeme with which the construction combines, the construction alters the combinatoric potential of the verb lexeme. As an illustration of this effect, consider (12):

12. A patient at the Samsung Medical Center became a "superspreader" of Middle East respiratory syndrome after a misdiagnosis, leaving him to **wheeze and cough around the hospital**. (NY *Times* 6/17/15)

In (12) the verbs *wheeze* and *cough*, which are otherwise single-argument verbs of sound emission, are combined with a PP describing direction of motion (*around the hospital*). The interpreter's challenge in such contexts is to combine verb meaning and construction meaning in a coherent way. This exercise involves identifying the agent of motion with the emitter of the sound: wheezing and coughing are construed in this context as manner-of-motion verbs.

As is widely acknowledged (Pinker 1989, Goldberg 1995, 2006), argument-structure constructions have restricted or 'partial' productivity owing to lexeme-class restrictions (e.g., certain classes of transfer verbs, including most Latinate verbs, do not generally combine with the Ditransitive construction). By contrast, phrase-building patterns exhibit few lexical-class restrictions; these are the patterns that correspond to the local trees built by phrase-structure rules. Among these rules (constructions) are those that license canonical *wh-* and polar-interrogative questions, imperatives and declarative sentences like *Kim blinked*, known as the Subject-Predicate construction. Constructional meanings are the meanings to be discovered at every point along the idiomaticity continuum. Constructional meanings are as rich and varied as the frames evoked by lexical items: they include metaphorical figures like that associated with the VP idiom *spill the beans* (Kay et al. 2016), event-structure frames like those associated with the Ditransitive construction (Goldberg 1995), temporal schemas like those associated with the progressive and perfect constructions (Michaelis 2011), scalar and conditional meanings like that associated with the Correlative Conditional (Fillmore 1986, Michaelis 1994, Sag 2010), exclamatory meanings like that associated with Nominal Extraposition (Michaelis and Lambrecht 1996) and information-packaging functions like those associated with various cleft constructions (Lambrecht 2001). Constructional meanings include those traditionally analyzed as conventional implicatures, as well as less commonly recognized illocutionary forces like the 'allusive pretense' function of the Split Interrogative, e.g., *What am I, chopped liver?* (Michaelis and Feng 2015).

While it might seem reasonable to assume that open patterns are licensed in SBCG by combinatory constructions and fixed expressions (like *water under the bridge*) by lexical entries, the picture is not that simple. Some patterns that are intuitively describable as clause types, like Nominal Extraposition (5-6), are modeled instead as lexical-class or lexical-rule constructions (see fn. 1). In the case of Nominal Extraposition, the class described is a class of exclamatory predicators with a shared valence value: <*it*, NP> (Michaelis 2015). The epistemic adjectives *amazing*, *remarkable* and *astonishing* belong to this class, among others. And, as mentioned in Section 1, most MWEs, e.g., *spill the beans*, are not represented in SBCG as 'words with spaces' but rather through combinatoric restrictions on individual idiom words, e.g., idiomatic *spill* (Kay et al. 2016). The following section, Section 3, will illustrate this 'bag of words' approach to MWEs by focusing on a polarity-sensitive nominal expression, *a red cent*; it relies on the analysis of Ruppenhofer and Michaelis (2016). Section 4 will focus the lexicalist lens on a clausal construction, the Auxiliary-Initial construction (e.g., *Have you no decency?, Long may you reign, Was I shocked!*). As described by Sag (2011, 2012), this construction is an abstract construct type from which several more specific patterns inherit constraints. Key to this approach is the set of feature values that define the class of auxiliary verbs in English and the manner in which these features interact with those assigned to the head daughter of the Auxiliary-Initial construction. By comparing the treatment of the MWE *a red cent* to that of the Auxiliary-Initial construct type, we will eventually see (in Section 5) that SBCG highlights the properties shared by these two very different kinds of patterns: both representations take the form of feature-structure descriptions and both feature lexical constraints, although of very different kinds.

3. The Fixed Expression *a red cent*

The expression *a red cent* (meaning 'a piddling amount of currency') is, like *water under the bridge* or *red herring*, a fixed lexical expression featuring syntax found elsewhere. Its syntax is that of an ordinary indefinite noun phrase. This expression belongs to the general class of polarity-sensitive items (PSIs) and in particular the class of negative-polarity items (NPIs). PSIs like *lift a finger* and *all the time in the world* play a crucial role in discourse routines like understatement and emphasis. Some PSIs, known as positive polarity items (PPIs), are confined to reports of actual or anticipated situations, e.g., *It's (gonna be) hot* ***as hell***. By contrast, NPIs occur only in utterances that evoke multiple potential outcomes, typically an array of things that failed to happen (*She didn't* ***ever*** *say a word*), but also multiple standards of comparison (*It's better than* ***ever***) and various contingencies, as in conditional sentences (*If you* ***ever*** *need anything…*).

Following Israel (1996), we view NPIs as triggering certain patterns of scalar inference, as part of their conventionalized meanings. Israel (1996) assumes

four types of PSIs. These are shown in Table 1, taken from Table 1 in Ruppenhofer and Michaelis 2016.[7] The binary features *emphatic/attenuating* and *minimizing/maximizing* are used in combination to represent two types of NPIs and two types of PPIs, as shown in the first column of Table 1. The feature ±q refers to the scalar degree denoted by the particular polarity-sensitive expression, i.e. the quantity referred to by that expression. A value of +q reflects an extreme point on some contextually evoked scale; for example, both the PPI *tons* and the NPI *much* have the feature value +q. The feature ±i refers to the information value of the resulting predication—whether it entails upward relative to a scale in negative contexts (e.g., someone who does not have a penny lacks a dime, etc.) and downward in affirmative contexts (e.g., someone who is utterly exhausted is also somewhat exhausted, etc.). An attenuating sentence, by contrast, contextually implicates that what is meant is more specific than what is said. An attenuating sentence is a form of understatement; as patent violations of the Gricean lower bound on informativeness, such sentences generate particularized conversational implicatures. For example, someone who denies being 'made of money' may be avoiding the admission that she has no money at all, just as someone who claims to be somewhat disappointed may intend to imply that she is very disappointed.

Features	Polarity	Quantity, informativeness values	Example
emphatic, minimizing	NPI	-q, +i	*a red cent, sleep a wink, the first thing*
emphatic, maximizing	PPI	+q, +i	*tons, utterly, awfully*
attenuating, minimizing	PPI	-q, -i	*sorta, somewhat, a little bit*
attenuating, maximizing	NPI	+q, -i	*all that, much, long*

Table 1. PSI Types

The focus of our attention here is the emphatic, minimizing NPI *a red cent*. As an expression referring to a small amount of currency (a copper penny), the NP *a red cent* (henceforth ARC) is typically used in predications describing commercial activities like valuation of goods, as in (13), payment, as in (14), and collection, as in (15):[8]

[7] Ruppenhofer and Michaelis 2016 is a corpus study of the Fillmorean frames evoked by a range of PSIs, with a focus on those that denote monetary units (e.g., *a king's ransom, a small fortune, a red cent*). This section relies heavily on that work.

[8] All numbered examples are from the Corpus of Contemporary English (COCA; Davies 2008) except as otherwise noted.

13. In the old days, apartments belonged to the government, which assigned them to the people. They weren't worth **a red cent**. You couldn't buy an apartment and you couldn't sell one.
14. She pointed to our record player. "I'll give you one dollar for it, and not **a red cent** more."
15. I had this customer, a builder, who said to the Potawatomi band in Wisconsin[:] "I will build you a bingo hall, for free. You don't have to pay me **a red cent**. You just pay me out of cash flow when you get it up and running…."

The use of ARC to denote a unit of currency typically "evokes a scenario in which a potential buyer is unwilling to expend even minimal resources for a potential reward", which is "thereby implied to be unattractive or worthless" (Ruppenhofer and Michaelis 2016: 274). Unlike other polarity-sensitive monetary-unit expressions investigated by Ruppenhofer and Michaelis, including *a king's ransom*, *a song, a small fortune* and *a pittance*, ARC has an alternate, emphatic form (the predominant one in COCA, in fact) in which it is determined by cardinal *one* rather than the indefinite article. In this respect, ARC has the syntactic behavior of other indefinite, singular NPs denoting units of currency, e.g., *a dollar/one dollar*. Examples of *one red cent* are given in (16-18):

16. Very few of those who are loudest in support of the Democrats have contributed **one red cent** to the great national wealth of which Clinton and Gore so love to boast.
17. Now would you think a jury in America would give this guy **one red cent**?
18. The bottom line is that Simpson has thumbed his nose at the courts, the criminal justice system. He has dared them to collect **one red cent**.

ARC has both lexical fixity and flexibility: while it necessarily contains the adjective *red* and the noun *cent*, and it is necessarily singular,[9] the determiner may be either the indefinite article or cardinal *one*. The main

[9] We overlook apparent attested plural exceptions found on the web:

a. Many tramps refuse nothing that they can sell for **two red cents**.
b. Poor Boger Oxenhope hasn't **two red cents** to knock together.

Example (a) appears to be a literal reference to cost and (b) exemplifies an idiomatic relative-clause construction (albeit a NPI): *two [monetary units] to knock/rub toget*her ('sufficient financial resources'). In addition, we overlook a minor usage of red cent in which it functions as PSI:

c. Would I, like that faithful widow of old, give **my last red cent**?

In cases like (c), Ruppenhofer and Michaelis (2016: 276) argue that "'red cent' occurs as a part of a larger phrase, 'every last + N', that is listed as a PPI by Israel".

point here is that two idiom words—*red* and *cent*—are combined with a non-idiomatic determiner to compose the expression. Thus, ARC has something in common with the nominal fixed expression *the wrong tree*, in its role as a prepositional object in the verbal idiom *bark up the wrong tree* ('make the wrong choice'). Kay et al. (2016) assume that "*bark, up, the, wrong,* and *tree* are all idiom words" while "*the* and *wrong* […] have the same semantics as the corresponding canonical words" (fn. 27). When we look at the words that make up the core of ARC—*red* and *cent*—we find the inverse of the *wrong tree* situation: I will postulate below that while the modifier *red* is an idiomatic word, *cent* is the ordinary noun denoting a one-penny monetary unit. But when we look at ARC's determination behavior, we find that the article (or cardinal) makes the semantic contribution it makes elsewhere: it flags the nominal expression with which it combines as one that refers to a type-identifiable entity.

We assume here the Gundel et al. 1993 Givenness Hierarchy, according to which the morphosyntactic type of a referring form encodes the user's assumptions about the amount of information required to construe that particular act of reference. Gundel et al. identify six cognitive states, each of which represents necessary conditions on the appropriate use of a particular referring form. Use of an indefinite NP (identified with the lowest status, *type identifiable*) is indicated when the speaker assumes that the hearer knows the category expressed by the nominal but need not recover a specific exemplar of that category. As fungible resources, units of currency are typically denoted by indefinite NPs in commercial-event predications. If I were to say *She bought it with a dollar*, you would have no need to ask 'Which dollar?' because every instance of that monetary unit is equivalent in value to every other one. In sum, ARC acts like any other count noun that expresses a monetary unit.

While ARC, as regularly formed NP, is interpreted by the same compositional mechanism that yields the interpretations of other indefinite singular NPs—as a function of the meaning of the article and the manner in which it is combined with its nominal sister—the *adjective* red and the noun *cent* mean something together that neither means individually. The expression *a/one red cent* does not mean 'a penny' or even, more generally, 'a unit of currency', but rather 'an insufficient monetary resource'. When filling the role of Theme in predications describing acts of payment, collection or giving, ARC creates highly informative propositions in negative and other non-veridical contexts. This is so because such predications entail upward relative to a numerical scale. For example, (17) is a strong critique of the merits of the plaintiff's case because it suggests that an American jury would not award a *tiny* settlement to this plaintiff, and thereby implies that this plaintiff could never receive an *adequate* settlement.

Here now is a summary of the properties of ARC as we understand them:

- ARC has an idiomatic interpretation: 'piddling/inadequate monetary unit'.
- ARC is an emphatic NPI, and for this reason transfer predications in which it serves as theme argument entail upward relative to a numerical scale. For example, if I question your willingness to pay one red cent for a particular film, I am also questioning your willingness to pay $10 for it.
- Both the head noun *cent* and the adjective *red* are obligatory parts of ARC.
- The determiner in ARC is an indefinite article or cardinal.
- ARC is, so far as syntactic and semantic properties are concerned, an ordinary indefinite NP.

The final fact makes a lexicalist approach like that offered by SBCG particularly appealing, as it allows us to use rich lexical descriptions to capture the mutual dependence that exists between the two idiom words *red* and *cent* while turning over the job of noun-phrase assembly to major combinatory constructions of the grammar—that which pairs a head noun with a pre-nominal adjectival modifier and that which pairs a determiner with a nominal expression (N'). In SBCG, both determination and modification are products of the Head-Functor construction (Sag 2012: 150-152). In order to describe the Head-Functor construction and the dependency between the two fixed words in ARC, we must introduce three SBCG features beyond those discussed in Section 1: LEXICAL IDENTIFIER, SELECT and MARKING:

- LEXICAL IDENTIFIER (LID) is used to distinguish lexical items according to their frame-semantic meanings: "the value of LID is a list of semantic frames that canonically specify the (fine-grained) meaning of a lexeme" (Sag 2012: 76). Idiomatic lexemes have idiomatic frames that enable headwords of multi-word expressions to select their idiomatic dependents. Sag uses the English MWE *pull strings* to illustrate idiomatic frame values:

  > *We might treat the MWE pull strings via two listemes: an idiomatic* pull *whose meaning is 'manipulate' and an idiomatic* strings *whose meaning is 'connections'. The frames required for such an analysis, presumably grounded in a metaphorical relation between situation types, will be indicated as* pulling$^{\text{manipulating}}$-fr *and* i-strings$^{\text{connections}}$-fr*, respectively.* (Sag 2012: 122)

We will follow the practice of Kay et al. 2016 and use square brackets to indicate the literal meanings of listemes with idiomatic LID values. Thus the LID of idiomatic adjective *red* will be shown as *i-red [tiny-monetary-unit]-fr*. The LID value of a head noun is shared with that of its phrasal projections, and thus the (non-idiomatic) LID value of *cent* will percolate up to the NP *a/one red cent*, but not the idiomatic LID value of the modifier *red*. This is the result we want, because red cent is not an idiomatically combining expression; in other words, it behaves just like unmodified, transparently interpreted *cent*.

- SELECT (SEL) allows a word to constrain what it can modify or combine with as a 'marker'. An expression whose SELECT value is a nominal sign is either a modifier or a determiner. What is selected is the LID value of the expression that is modified or determined. I will assume here that the adjective *red*, the selector of the nominal lexeme *cent*, is the bearer of idiomatic meaning in ARC.

- MARKING (MRKG) is primarily used to distinguish between a nominal that is 'ready to go' as a complement within a head-complement configuration and one that is not. MRKG is a feature both of noun lexemes and the functors (adjectives and determiners) with which they combine via the Head-Functor construction. All nominal and adjective lexemes carry the MRKG value *unmk*. All determiners bear a determinate MRKG value; for example, the MRKG value of the definite article is *def* while that of the indefinite article is *indef*. The marking value of the nominal mother of a Head-Functor construct (e.g., *the issue, real issue*) will be the same as that of its functor daughter. What this means, for example, is that while the MRKG value of the listeme *cent* is *unmk*, and the MRKG value of the Head-Functor construct *red cent* is *unmk*, the MRKG value of the Head-Functor construct *a red cent* will be *indef*. This will be seen in the derivation of *a red cent* in Figure 3.

Figure 2 shows the listeme *cent*. This listeme describes a typed feature structure. The type is that of *noun-lexeme*. What is noteworthy about this listeme is its semantic transparency: the same listeme covers both the head word of ARC and the vanilla noun *cent* that means "the 100th part of a US dollar". The commercial-event frame is included in the FRAMES set of *cent* to indicate that projections of the word play the role of the 'currency' participant in commercial-event predications like those in (13-18). Using the lexeme's semantic index (*x*), we identify it with (a) the sole argument of the *cent-frame* (its LID value) and (b) the currency argument of the commercial-event frame.

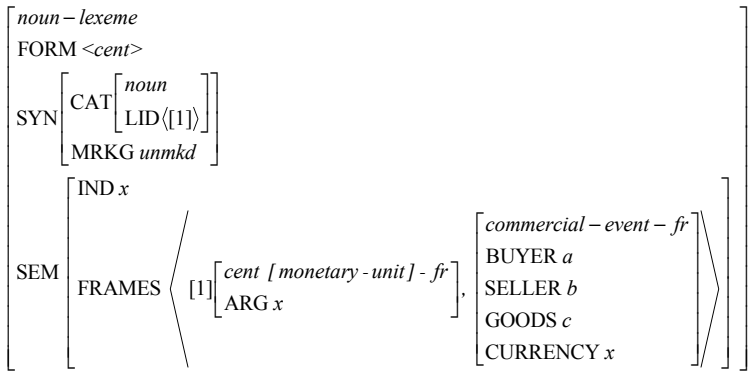

Figure 2. The listeme cent

Figure 3 shows the listeme (lexeme description) for the idiomatic adjective *red* that appears as the modifier of the idiomatic head noun *cent* in ARC. By making the selector of *cent* an idiomatic adjectival lexeme, we are in essence pushing the burden of idiomatic signification onto the adjectival selector. This moves ensures that *red cent* does not have an idiomatic LID, which would prevent it from having a non-idiomatic 'governor' (in this case a determiner functor). It also requires us to assume that the adjective is the bearer of polarity-sensitivity. Thus, the CNTXT value of this listeme contains a feature POL(ARITY), whose values are the two binary features used to classify PSIs in Table 1. This combination of features (low-quantity, high-information-value) predicts that head-functor constructs in which this lexeme plays the role of functor are confined to non-veridical contexts of the kind that characterize NPIs in general.

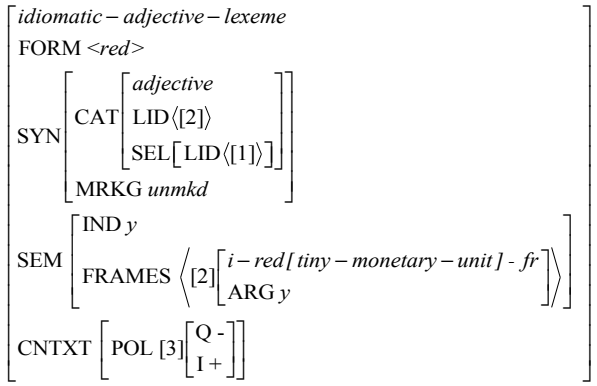

Figure 3. Idiomatic listeme red

Figure 4 shows the derivation of an ARC token, *a red cent*, through recursive application of the Head-Functor construction. The Head-Functor construction license both the determiner-noun construct *a red cent* and the modifier-noun construct that is its head daughter, *red cent*. The representation of the

indefinite article *a*, which we see here for the first time, includes a CNTXT feature, GIVENNESS (GVNS), that is intended to represent the discourse-pragmatic status signaled by indefinite determination, type-identifiable status (*ti*). The value of this feature, like the values of the POLARITY feature, percolate to the NP mother, as does the MRKG value of the indefinite article (*indef*). In addition, the idiomatic FRAMES values of both the modifier *red* and the modified noun *cent* are passed up to the phrasal mother.

The foregoing exposition has shown that the idiomatic nature of ARC, like that of many other MWEs, is lexical: it consists of two words with idiosyncratic combinatory requirements, as represented by the value of the SELECT feature in the idiomatic adjective *red*, the carrier of ARC's idiomatic content. As Kay and Michaelis (to appear) observe, the syntactic assembly of MWEs is indifferent to the special meanings and idiosyncratic combinatory properties of the individual idiom words.

> *For most idioms, the phrase-structural configurations in which their words can appear derive exclusively from the syntactic potentials of the words themselves, which often mirror the syntactic properties of canonical words with similar meanings, subject of course to idiosyncratic limitations. The syntactic privileges of occurrence of* the beans *of* spill the beans *is a subset of the syntactic privileges of occurrence of the word* secrets. *The meanings of the phrases and sentences in which most idioms occur are composed by the same processes as compose the meanings of phrases and sentences that contain no idiom words, and most phrasal idioms, properly analyzed, contain no phrasal information*. (Kay and Michaelis *to appear*: 33).

What matters then are the dependencies that exist among idiom words, and we need only lexical entries to state these—as long as these entries captures the combinatory constraints of those idiom words, whether through use of the SELECT feature, the VALENCE feature or something else. With these points in mind, let us revisit the question posed at the outset of this paper: if, as we generally assume, a pattern must contain at least one open slot, how can a fixed expression like ARC qualify as a pattern? The answer is that fixed expressions are resolvable into the dependencies among idiom words, and in particular that there is an idiom head word calling for each of its idiomatic dependents via the lexical identifiers of these dependents. These patterns of dependency, which are captured by feature-structure descriptions, define each sign within an MWE. The pattern comes about because the presence of one thing entails the presence of another. In essence, a MWE is a bag of signs that becomes a sign configuration only when those signs are at the nodes of a local tree licensed by some construction.

In Section 4, we will move from the combinatoric behavior of lexemes to that of lexeme classes. We will apply the lexicalist model to a phrasal pattern with far greater flexibility than ARC: the Auxiliary-Initial pattern, as described by Sag (2011, 2012). Although the Auxiliary-Initial pattern is a construct (a mother-daughter configuration) and hence 'syntactic' in a manner that ARC is not, we will see that it, like ARC, features lexical constraints. The moral of the story offered here is that we can rarely avoid evoking classes of words when describing syntactic patterns.

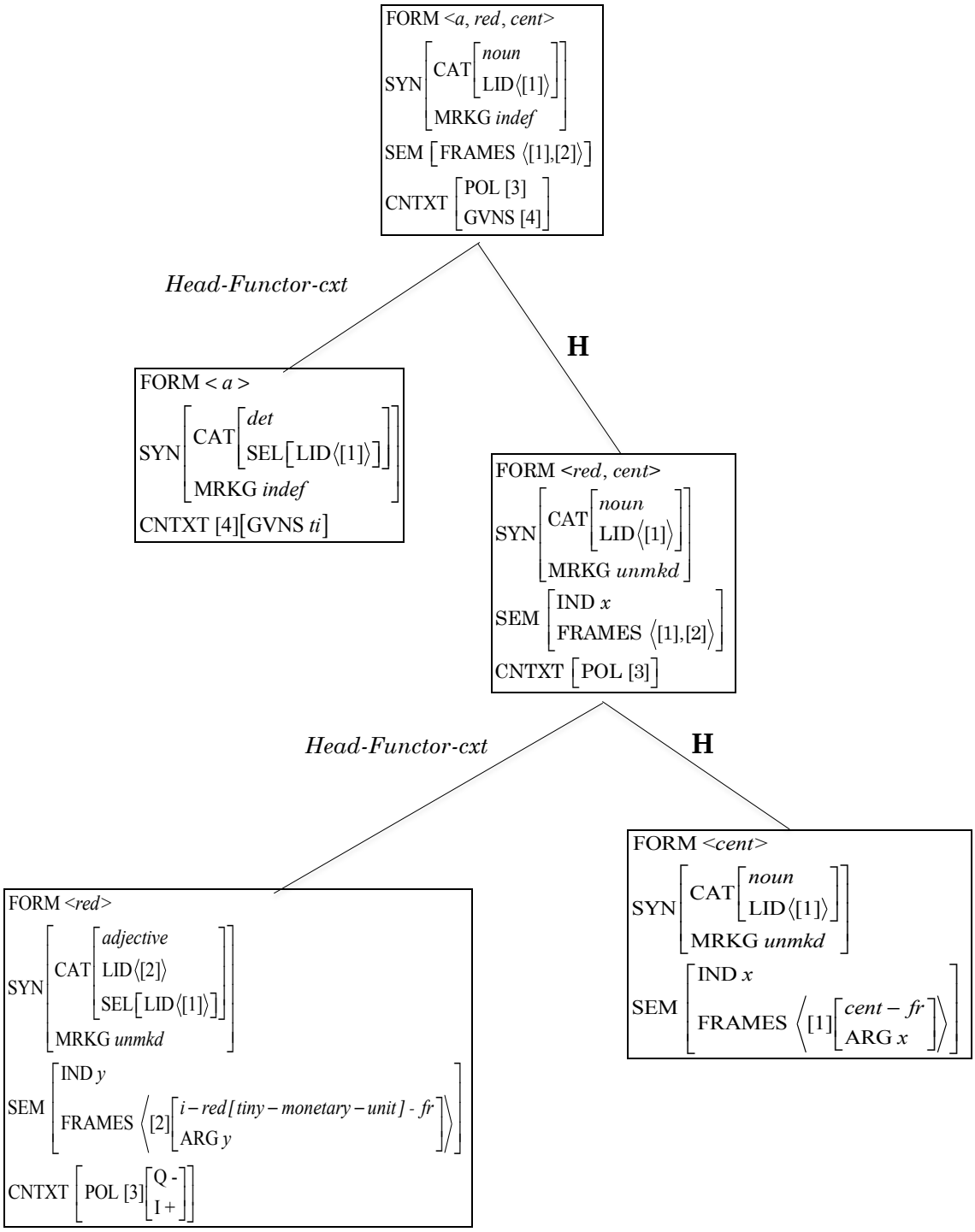

Figure 4. An ARC derivation

4. The Auxiliary-Initial Construction

Having examined a pattern with fixed lexical structure, we will move to the opposite end of the idiomaticity continuum: the point occupied by productive

phrase-construction patterns. Although such patterns are constructs (mother-daughter configurations with signs 'at the nodes') rather than individual signs, they too are represented in SBCG as feature structures. An important property of feature structures is that they have types, indicated by italic labels, e.g., *noun lexeme*, *transitive verb, phrasal construct*.[10] A construction describes a feature structure of a particular type: one that contains a MTR feature whose value is a sign and a DTRS feature whose value is a list of signs. Any such feature structure is a construct. The construction that we will focus on in this section, the Auxiliary-Initial (AI) construction, is a *combinatoric construction*. This means that it describes a construct whose mother is a phrasal sign (i.e. a construct whose type of *phrasal-cxt*).[11] The AI construction is a *non-maximal construction*. Non-maximal constructions express cross-constructional generalizations and have subtypes, while maximal constructions license the types that occupy terminal nodes in an inheritance hierarchy of typed feature structures.

English features a wide variety of auxiliary-initial clause patterns, illustrated by the following Google hits:[12]

19. Polar-interrogative cxt: *Have you left yet?*
20. Inverted-exclamative cxt: *Boy, was that disappointing.*
21. Adverbial-inversion cxt: *Rarely have I felt so ridiculous.*
22. Inverted-wish cxt: *May it never come to that.*
23. Counterfactual-protasis cxt: [*Had I needed it for anything other than a very short distance], I would have needed the windows cleaned.*

The AI construction, described by Sag (2011, 2012), is used to represent properties that these patterns have in common. By exploring how this works we will gain insight into the means by which SBCG represents 'constructional inheritance': the type hierarchy. SBCG allows a construction to define the characteristic properties of a construct type A, and another

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[10] Following SBCG convention, *construct* will be abbreviated in type labels as *cxt*.

[11] It is important to bear in mind that not all constructs have mothers that are phrasal signs, because derivational and inflectional relationships are modeled in SBCG as constructs, i.e. *lexical constructs*. Inflectional constructs describe lexical constructs in which the MTR sign is of the type *word*, while derivational constructs describe lexical constructs in which the MTR sign is of the type *lexeme*.

[12] An alert reader will have noticed that this list of auxiliary-initial patterns contains no example of the non-subject *wh*-question, e.g., *What do you have to lose?* The omission is warranted because the auxiliary-initial pattern within the *wh*-question pattern is not licensed by the AI construction in SBCG. SBCG constructions can describe only local trees (mother-daughter combinations), and for this reason a construction cannot describe a construct embedded in another construct, e.g., the AI construct embedded as the head daughter in the non-subject *wh*-question construct. In observing this locality constraint, SBCG is not different from other grammars based on phrase-structure rules. We would not, for example, find a phrase-structure like VP→V (PP→P NP).

construction to define the properties of a type B. The type hierarchy tells us that B is a subtype of A and therefore that all feature structures of type B also obey the constraints that the grammar places on type A. What this means is that constructions describing the maximal construct types exemplified in (19-23) need only specify the properties that are particular to that subtype. These subtypes can add constraints to those of the dominating type but they cannot cancel any of the 'inherited' constraints. The additional constraints that characterize the maximal constructions involve syntactic, semantic and discourse-pragmatic properties. Syntactic properties include the fact that the Counterfactual Protasis subtype is a subordinate clause. Semantic properties include the fact that the Inverted Exclamative subtype presupposes a property scale and asserts of some topical entity that it occupies an extreme position on that scale. Discourse-pragmatic properties include the fact that the Polar Interrogative subtype directs the addressee to confirm or deny the validity of a proposition.

Figure 5 depicts the AI construction, following Sag (2012: 183). It describes a feature structure of the type *headed-cxt*. This means that the AI construction is itself an 'heir' to dominating types within the type hierarchy: as a type of headed construct—one that is in fact almost identical to the construct type described by the Head-Complement construction (see Sag (2012), (114))—it is also a type of *phrasal construct*. A phrasal construct in turn belongs to the type *construct*, along with the type *lexical construct*.

$$\begin{bmatrix} headed-cxt \\ \text{MTR} \begin{bmatrix} \text{S} \\ \text{VAL} < > \end{bmatrix} \\ \text{DTRS} \left\langle \begin{bmatrix} \text{V} \\ \text{AUX+} \\ \text{INV+} \\ \text{VAL } L \end{bmatrix}, L \right\rangle \end{bmatrix}$$

Figure 5. The Auxiliary-Initial construction

The AI construction describes a valence-saturated clause that consists of a lexical head verb specified as [AUX+] and [INV+], followed by all of the valence members of that verb. The order in which valence members appear is determined by an obliqueness hierarchy, according to which the subject immediately follows the verb and the XP complement of the auxiliary appears follows the subject, as in the inverted exclamative in (20), *Was that disappointing*! (We presume the verb *be* to have the valence <NP, XP>.)

Key to the mechanics of the construction are the binary features [AUX±] and [INV±], which capture lexical constraints of the AI construction. According to

the featural analysis of auxiliaries proposed by Sag (2011), auxiliary verbs are lexically unspecified for both AUX and INV, while non-auxiliary verbs have negative values for both AUX and INV. A clause that is verb-initial is specified as [INV+], ensuring that no non-auxiliary verbs can appear as initial verbs.[13] In English, unlike, say, French and German, only auxiliary verbs can be [INV+]). The feature AUX is not used to distinguish auxiliary verbs from main verbs, but rather distinguishes those syntactic patterns that allow only an auxiliary verb as a head daughter from those, like the Subject-Predicate construction, that allow any class of verb. Because the head daughter of a Subject-Predicate construct can be either an auxiliary verb or a lexical verb, the AUX value of the head daughter is [AUX-], a feature specification to which any verb in the (AUX-unspecified) auxiliary class can accommodate. A syntactic environment restricted to auxiliary verbs is specified as [AUX+]. The critical syntactic environments, illustrated in (24-28) below, are sometimes known by the acronym NICER (Sag 2012, (122)):

24. Negation: We will not stumble. / *We stumble not.
25. Inversion: Have you eaten? / *Eat you?
26. Contraction of *not*: *didn't, can't* / **laughn't*
27. Ellipsis (of VP): They aren't cooperating but I am / *I don't like scallops, but she likes_.
28. Rebuttal (with prosodic peak on verb): I DO like kids.

Because all of these constructions require AUX+ head daughters, they accommodate all auxiliaries, since these are AUX-unspecified verbs. None of these constructions, however, can accommodate lexical verbs, which are [AUX-].

This feature-based system of representation for the auxiliary class, and the unification-based model of verb-construction interactions that it serves, offers a tidy way of representing lexical exceptions that have dogged transformational approaches based on head-to-head-movement. One such exception involves *aren't*. Ordinarily, *aren't* cannot have a first-person-singular subject argument, as shown in (30). In question contexts, however, it can, as shown in (29):

29. Aren't I the right choice?
30. *I aren't the right choice.

[13] We exclude patterns like Locative Inversion and Deictic Inversion, in which subject properties are split across the pre-verbal 'setting' constituent and a post-verbal constituent. See Kay and Michaelis 2017 for a SBCG analysis of these constructions in which they are seen as subtypes of the construct type *Split-Subject-cxt* (a lexical construct type).

This behavior is hard to explain if *aren't* in (29) is presumed to have moved from the syntactic position it would occupy in a declarative clause to the head of a functional projection dominating that clausal unit. How would the requisite input structure have been generated in the first place and what would guarantee movement of the auxiliary? This conundrum disappears in the unification-based approach. By stipulating an *aren't* auxiliary listeme that differs from other auxiliary listemes in having the value [INV +], we ensure that words licensed by that listeme appear only in AI contexts. Another problematic exception is the semi-auxiliary *better*.

31. They better do that.
32. *Better they do that?

Finally, the constructional analysis provides an account of the syntactic behavior of auxiliary verb *do*, which, as Sag (2012: 155) observes, "has required considerable machinery within previous transformational analyses". If *do* is 'moved' from the position it would occupy in a declarative clause, we must presume not only that it is generated in a syntactic position where it would not otherwise occur (see (33) below), but also that a *do* auxiliary so positioned must be earmarked in some way for movement. The unification-based analysis provides a simpler, more plausible account of the facts: auxiliary *do* is lexically specified as [AUX +]. While this allows it to appear in all of the NICER environments, it cannot appear in any syntactic context requiring it to take on the value [AUX-]. This means, for example, that it cannot appear as the head of a VP in a Subject-Predicate construct, as in (33):

33. *Kim did eat apples.

The SBCG approach thus explains why auxiliary *do* 'carries tense' where it does: it serves as the auxiliary daughter in construct types that require an auxiliary but where no perfect, progressive, passive or modal construction supplies one. It also explains why auxiliary *do* appears *only* in such contexts: its markedness prevents it from being used as the head of an ordinary VP.

The lesson of the SBCG analysis is that there can be no auxiliary verbs without auxiliary constructions (the NICER environments). NICER is not a set of properties but rather a set of construct types. Just as in the case of ARC, we find that syntax serves the combinatoric needs of words and word classes—whether these combinatoric needs are idiosyncratic (as when the idiomatic adjective *red* selects the monetary-unit noun *cent*) or characteristic of a class (as when modal verbs select bare VPs headed by base-form verbs as their complements). Patterns, whether they are MWEs or construct types, arise from by the selectional requirements of words.

5. Conclusion

Grammar and lexicon are intimately interlinked. You can't have one without the other, as scholars of linguistic cognition have long observed (see, e.g., Marchman and Bates 1994). SBCG uses a uniform format to represent both words (signs) and constructs (hierarchically organized sign combinations). Both kinds of linguistic objects are modeled as feature structures that contain specifications for syntactic, semantic and contextual features: a listeme describes a feature structure that is a sign, while a construction describes a feature structure that contains a MTR feature (whose value is a sign) and a DTRS feature (whose value is a list of signs). Words and constructs draw from one another: constructs realize word dependents and words and word classes determine what daughter signs co-occur in constructs. Constructs and words are also licensed in the same way: via the Sign Principle (Sag 2012: 97): a sign is listemically licensed if it corresponds to some listeme of the grammar, and a sign is constructionally licensed if it is the mother of a construct described by a construction in the grammar. The licensing construction may describe a lexical construct (one whose mother sign is a word or lexeme) or a phrasal one (one whose mother sign is a phrase).

Feature structures have types and therefore both constructs and words/lexemes participate in the type hierarchy. Rather than seeing syntax, semantics and the lexicon as separate modules, and the lexicon as a jumble of idiosyncratic particulars, SBCG presumes a lexicon structured by hierarchically organized lexical classes and extends this model to relations among types of phrases.

Not every expression on the continuum of idiomaticity is a phrasal pattern, but all expressions, however fixed or flexible, are modeled as a feature structures. Perhaps the most important step toward making idiomatic MWEs part of syntax is to acknowledge that they contain no syntactic information, only dependencies. Idiomatic phrases are licensed by the same constructions used to compile the meanings of phrases that lack idiomatic headwords. Thus to the question "What makes a construction a pattern?" we reply: the same thing that makes a lexical entry a pattern. Both constructions and listemes describe combinatory possibilities in a language and they do so by means of feature-structure descriptions.

Because it promotes a lexicalist version of Construction Grammar in which apparent phrasal patterns are resolved into cascades of lexical dependencies, this chapter might be seen to reject a consensus among constructionist works (see, e.g., the chapters by Petré and Traugott in this volume) concerning the importance of 'going big'. All constructionist works 'go big' in the sense that they allow units bigger than words as the building blocks of syntax. But as

Sag et al. (2012) observe, there is more than one way to go big. Some multi-word expressions, like *add fuel to the fire*, are syntactically inert and are thus more or less like listemes. Others, like *pull strings*, act much like semantically compositional verb phrases with regard to quantification, modification and passive: *Strings were pulled, I pulled many strings, She pulled the right strings.* In sum, the lexicalist approach gives us analytic flexibility—the flexibility to see a multi-word expression as both a phrasal unit and a 'bag of words' lacking any phrasal information. This flexibility is required by a usage-based approach to grammar, in which such multiple encodings are the norm. In such a grammar, the string *drive x crazy* is a multi-word expression, an instance of the resultative construction and an instance of the Head-Complement construction (Goldberg 1995). In such a grammar, the string *Shall we?* is both an entrenched formula and an instance of the Auxiliary-Initial construction. The lexicalist approach gives us multiple routes to an analysis of any given linguistic object. It is therefore a potentially powerful descriptive tool for the study of grammar as a dynamic system—how linguistic generalizations vary across users, how they evolve over historic time and how they change in the course of a learner's development.

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