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Idiomatic singleton or prototype? A productivity analysis of *be*-ADJ-*and*-V

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Abstract: This article addresses the morphological constraint on the 'formulaic frame' *be-sure-and*-V (*Be sure and wear flowers in your hair!*), whose idiomatic reading disappears in inflected uses (**She was sure and wore flower in her hair*). This constraint also applies to certain verbal patterns (*go*/*come*-V, *try-and*-V) and is at least probabilistic for others (*wait and see*, *go-and*-V). A recent usage-based approach suggests that the so-called Bare Stem Condition follows from the semantics of the affected patterns, which are schematically non-assertive and thus functionally inappropriate for use in inflected, assertive environments. The same can be shown to apply to hortative *be-sure-and*-V, suggesting that the morphological behaviour of both verbal and adjectival pseudo-coordination have the same underlying functional-semantic constraint motivation.

Supporting evidence comes from the status of *be-sure-and*-V relative to instantiations of the pattern: rather than being an idiosyncratic, isolated idiom, *be-sure-and*-V is a subtype of a moderately productive *be*-ADJ-*and*-V construction (*be honest and admit*, *be patient and wait*). *Be*-ADJ-*and*-V shows many of the characteristics of other pseudo-coordinated constructions, including the combination of semantically coherent slots fillers (*flexible–adapt*, *glad–rejoice*) and the asymmetric framing of single events. Methodologically, the article showcases how Collostructional Analyses can be used as diagnostic tools to identify (sub)types and slot-filler consistency in a bottom-up fashion, separating schema instantiations from syntagmatic 'noise' (i.e., the compositional adjectival predicate, *My raspberries are ripe and taste delicious*). Thus, the method identifies (and confirms) *be-sure-and*-V as the morphological, semantic, and statistical prototype of the more general schema.

Keywords: Bare Stem Condition, morphological constraint, collostructional analysis, pattern identification, pseudo-coordination

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1 Introduction

The subordinative 'formulaic frame' (Huddleston and Pullum 2002:1303) *be-sure-and*-V as illustrated in (1) is an interesting construction in two respects. First, it is a non-canonical coordination of two syntactically non-identical constituents – coordinating a predicative adjective (*be* ADJ) and a verb – rather than, e.g., two verbs (*sit and wait*, *go and see*). Second, it is subject to the bare stem condition (BSC), i.e., it is restricted to plain *be* (cf. 1a–c). This constraint neither applies to the 'paraphrase' with a *to*-complement (2a), nor to other pseudo-coordinated constructions such as *go-and*-V (2b), *try-and*-V (2c), or *go*-V (2d):

(1) a *Be sure and wear* flowers in your hair!
b. **He was sure and wore* flowers in his hair.
c. *We *are sure and wear* flowers in our hair.

(2) a. *He is sure to wear* flowers in his hair.
b. We *went and wore* flowers in our hair.
c. We *try and wear* flowers in our hair
d. We *go wear* flowers in our hair.

The latter two – *go*-V and *try-and*-V – are also said to be subject to the constraint, but they can occur in bare present tense uses (cf. 2c–d), which *be-sure-and*-V cannot (**am*, **are*).

Since there is yet no full(er) account for *be-sure-and*-V, this paper seeks to contribute to the discussion by addressing a set of interrelated questions: (i) why does *be-sure-and*-V not inflect? Can a recent functional approach to the BSC also be applied to this construction? (ii) Is *be-sure-and*-V an idiomatic 'singleton' or the prototype of a more abstract schema *be*-ADJ-*and*-V? How could additional types be identified? And, (iii), what can the behaviour of *be-sure*/ADJ-*and*-V tell us about pseudo-coordination generally?

Properties of pseudo-coordination and a recent functional approach to the BSC are reviewed in Section 2, followed by a description of data and method in Section 3. Section 4 will showcase a diagnostic application of Collostructional Analyses for pattern identification. Section 5 discusses the findings in a wider context, arguing that *be-sure-and*-V is the prototype of a bare-form *be*-ADJ-*and*-V construction, whose behaviour converges with canonical pseudo-coordination. Generally, the propensity towards inflectional bareness of (non-)canonical pseudo-coordination can be accounted for under a usage-based functional account.

2 Background and assumptions

Be-sure-and-v belongs to a group of multi-verb patterns in English with irregular morphological behaviour. They are either never used in inflectional contexts or at least skewed towards bare forms. The patterns fall into two groups, depending on how 'hard' this constraint is. In the first group, the BSC is absolute, which includes asyndedic serial verb constructions alongside *be-sure-and*-v (e.g., **He is sure and wears flowers in his hair*, **She goes gets the paper*, **He is coming joining us*, **They tried and got it done*). In the second group, syndedic pseudo-coordination is generally acceptable in inflectional environments (*She went and saw a doctor*, *They sat and waited*). This could suggest that inflectional behaviour depends on syntagmatic structure. There are however three issues that need to be addressed.

First, given the behaviour of *try*/*be-sure-and*-v, there is no straightforward correlation between syntagmatic structure and morphological behaviour (i.e., asyndedic = BSC; syndedic ≠ BSC). Although *be-sure-and*-v has yet to be addressed, this makes arguments that the constraint results from syntactic structure alone hard to argue for (for generative-formal approaches to the BSC, cf. Bjorkman 2015; Carden and Pesetsky 1977; Jaeggli and Hyams 1993; Shopen 1971; for a critical review, cf. Pullum 1990).[1]

A recent usage-based account suggests that the BSC results non-causally from the correlation of semantic scope of *go*/*come*-v and the morphological make-up of English (Flach 2015, 2017a). In brief, it analyses *go*/*come*-v as non-assertive, hortative-mandative constructions (encoding directives or commissives). This *semantic* constraint leads to a *morphological* constraint: the semantic restriction renders *go*/*come*-v incompatible with inflectional environments, which prototypically encode assertiveness in English (i.e., present, preterite, progressive, perfect). The assumption of a 'hard', but functionally motivated BSC accounts for both *go*/*come*-v's strong distributional preference for imperatives, as well as their significant skew against bare indicatives. On the other hand, usage data reveal that the BSC is a 'soft constraint' for *go*/*come-and*-v (being less hortative): they occur much less frequently in inflected forms than expected if they were ordinarily inflecting constructions (Flach 2017a:§5). Thus, contingent on functional scope, inflectional behaviour is viewed as graded rather than binary.

1 From the theory-internal perspective of Minimalism, Bjorkman's analysis is likely capable of accounting for the BSC on *be-sure-and*-v, as she hints at in a footnote (Bjorkman 2015:fn7).

Second, the skew towards bareness is a property that *go*/*come-and*-V share with other types of asymmetric coordination (Hopper 2002). These exhibit auxiliary-like properties, including the marking of aspect, event-initiation, and agentivity; similar tendencies are also cross-linguistically attested (Ekberg 1993; Flach 2017a; Hopper 2002; Newman and Rice 2008; Stefanowitsch 1999; Wulff 2006). In 'formulaic frames' (Huddleston and Pullum 2002:1302), the first conjunct acts as an intensifying 'supporting satellite' for the second (Quirk et al. 1985:979). Crucially, pseudo-coordinated constructions designate a single event (cf., e.g., Ekberg 1993; Hopper 2002; Stefanowitsch 1999, 2000; Wulff 2006).

Thus, bareness on (a)syndedic constructions is argued to have a functional motivation rather than constituting a purely formal property. Moreover, since the constraint on *go*/*come*-V is contingent on functional scope (non-assertiveness), *be-sure-and*-V does not behave differently – quite to the contrary. Consider imperative uses in (3) and non-imperative ones in (4):

(3) a. *Be sure and check* it out - the pics are priceless.
b. Just *be sure and follow* the label direction.
c. *Be sure and let* me know if I can help you.

(4) a. Tell him to *be sure and send* me an invitation to his wedding.
b. Perhaps she best *be sure and mix* the two.
c. And would you *be sure and ask* Clorinda Rogers not to forget to send her the receipt for the pudding sass.
d. I will *be sure and order* more from you shortly.

Not only do 80% of instances occur in imperatives in the data set (cf. Section 3), the remaining uses (cf. (4)) occur in syntactic environments of 'indirect directives', i.e., as complements to requestive phraseology (*tell NP to*) or deontic (semi-)modals. In turn, the functional contribution of *sure* is increasingly harder to parse the lesser the degree of hortatoriness (e.g., intention-based *I will be sure and order more from you shortly*). Thus, *be-sure-and*-V is subject to a semantic constraint much more strongly than *go*/*come*-V, for which similar tendencies have been identified qualitatively and distributionally (Flach 2015, 2017a).

While this is evidence for a functionally conditioned BSC independent of structure, *be-sure-and*-V may be a (somewhat coincidental) idiomatic 'singleton' that simply happens to be in the form of non-canonical pseudo-coordination. If, however, *be-sure-and*-V can be shown to be part of a more productive abstract pattern, this would (i) provide additional support for the BSC as a functional phenomenon, but also (ii) offer insights into the nature of pseudo-coordination.

It is a methodological question of how pattern productivity can be approached in a bottom-up fashion rather than by intuiting variants of *be-sure-and*-V (like *Be safe and V!*). In other words, how can a potential *be*-ADJ-*and*-V construction

be separated from unrelated uses of the syntagma, i.e., ordinary coordination? Following from the discussion above, we will assume that *be*-ADJ-*and*-V is functionally restricted, and thus expect it to be morphologically skewed towards bare forms. This assumption lends itself to Collostructional Analysis, which can distinguish between two conditions; the procedure will be briefly introduced along with the data in the next section.

3 Data and method

The discussion is based on 19,412 tense-harmonic <BE ADJ *and* V> strings from ENCOW14AX01 (616m tokens, web data; Schäfer and Bildhauer 2012), which is well-suited to investigate informal phenomena like pseudo-coordination (cf., Hopper 2002; Newman and Rice 2008; Quirk et al. 1985:507). The query retrieved the lemma *be*, followed by an uninflected adjective (JJ), case-insensitive <*and*>, and a non-modal verb (V.*); uses with *be* in V_2 were excluded (likely another copula construction). The set was reduced to data from the US, based on the geolocation information provided in ENCOW14AX01.

Tense-harmony is operationalized as pos-tag identity of copula *be* and the slot 2 verb (i.e., VB: *we must be*$_{\text{INF}}$ *honest and admit*$_{\text{INF}}$ *it*; VBZ: *she is*$_{\text{VBZ}}$ *brave and has*$_{\text{VBZ}}$ *a big jump*; or VBG/VVG: *being*$_{\text{VBG}}$ *flexible and adapting*$_{\text{VVG}}$ *a plan is common sense*). To counterbalance tagging inaccuracies, instances are treated as tense-harmonic if either V_1 or V_2 are tagged VBD and/or VBN (e.g., *staff were*$_{\text{VBD}}$ *patient and assisted*$_{\text{VBN}}$ *people*) or VB/VBP (e.g., *I have to be*$_{\text{VB}}$ *honest and admit*$_{\text{VBP}}$ *that...*). Such cases were rare, suggesting extraction and operationalization of tense-harmony is highly accurate. Every data point was coded for ADJ (*sure*, *patient*, *creative*, etc.) and BARENESS (BARE/INFL). An occurrence counts as bare if both verbs are uninflected. This captures the contrast in acceptability judgements of (1) and (2) above. Of 19,412 tokens, 5,464 (28.1%) are bare.

Distinctive Collexeme Analysis (DCA; Gries and Stefanowitsch 2004) and Co-Varying Collexeme Analysis (CCA; Stefanowitsch and Gries 2005) are suitable procedures for approaching the 'productivity' of *be*-ADJ-*and*-V. While DCA is conventionally used to distinguish two or more pre-defined alternating constructions, the underlying principle of comparing two conditions is applied here to the morphological behaviour *within* a polyfunctional syntagm (<BE ADJ *and* V>). Thus, DCA can identify which adjectives in the syntagm are attracted to bareness, providing pointers to identify potential sub-types. In a second step, CCA is applied to *be*-ADJ-*and*-V to identify systematically co-occurring ('co-varying') combinations of a 'framing' adjective and a verb, which together constitute

a single event. Proceeding in this way, DCA and CCA are used as diagnostic tools for construction *identification*, rather than for construction *evaluation* (cf. Stefanowitsch and Flach submitted).[2]

4 Pattern identification

Recall that (canonical) pseudo-coordination has two principal properties: morphological skew towards bare forms and an asymmetric (though coherent) relationship between the first and second element. Thus, the question of whether *be-sure-and*-V is an idiosyncratic 'singleton' or part of a larger non-canonical pseudo-coordination construction is addressed in two steps. First, the analysis identifies adjectives that occur with bare *be* more often than expected and are thus indicative of a hidden paradigm (via DCA). Second, single-event asymmetry is expected to show in systematic, coherent co-occurrence between the adjective and the verb (via CCA).

4.1 Morphological behaviour

Table 1 lists the top 30 adjectives in the two conditions in a DCA, and *sure* is most strongly attracted to the bare form. Two patterns emerge in addition, indicating that the morphological behaviour in the polyfunctional syntagm is distributionally insightful. First, the adjectives associated with the bare condition are highly agentive, pertaining to the mental state or behaviour of a volitional individual (*patient*, *creative*, *careful*, *proactive*, *realistic*, *brave*, *generous*, *civil*, *smart*, *alert* etc.). By contrast, the adjectives in the inflected condition are descriptive and non-agentive, pertaining to properties of people or objects, such as size, strength, or amount (e.g., *great*, *huge*, *small*, *spacious*, *powerful*, *unique*, *rare*, *big*), age or 'life status' (e.g., *young*, *old*, *new*, *pregnant*, *married*, *dead*), or evaluation (e.g., *amazing*, *beautiful*, *fantastic*, *gorgeous*).

Second, the 'bareness' adjectives fall into narrow conceptual categories, broadly HONESTY (*honest*, *bold*, *realistic*), VIRTUE (*patient*, *generous*, *charitable*, *respectful*, *responsible*, *civil*), ATTENTION (*vigilant*, *careful*, *cautious*, *safe*, *aware*, *alert*), BRAVERY (*brave*, *strong*), STATE-OF-MIND (*glad*, *happy*, *realistic*, *cynical*), or ACTIVITY (*quiet*, *proactive*, *creative*). Interestingly, the suspected prototype *sure* does not allow easy classification into any of these categories (cf. below).

2 All analyses were perfomed with the R package {collostructions} (Flach 2017b)

Table 1: Top 30 adjectives in bare vs. inflected *be*-ADJ-*and*-V; ENCOW14AX01-US.

	BARE					INFLECTED			
	BE-ADJ	O:E_{BARE}	O:E_{INFL}	G^2		BE-ADJ	O:E_{BARE}	O:E_{INFL}	G^2
1	*be sure*	105:21.7	1:84.3	325.41	2996	*be great*	3:18.7	88:72.3	23.63
2	*be patient*	120:28.9	21:112.1	275.46	2995	*be young*	3:16.4	77:63.6	19.34
3	*be honest*	117:33.2	45:128.8	203.58	2994	*be excellent*	0:8.4	41:32.6	18.84
4	*be fruitful*	62:13.3	3:51.7	174.76	2993	*be important*	1:11.1	53:42.9	17.58
5	*be creative*	65:16.2	14:62.8	139.82	2992	*be clean*	2:13.1	62:50.9	17.04
6	*be careful*	46:11.5	10:44.5	98.43	2991	*be dead*	1:10.2	49:39.8	15.89
7	*be quiet*	44:14.8	28:57.2	56.51	2990	*be pregnant*	1:9.6	46:37.4	14.63
8	*be brave*	33:9.4	13:36.6	56.06	2989	*be huge*	1:9.6	46:37.4	14.63
9	*be vigilant*	22:5.1	3:19.9	52.90	2988	*be amazing*	0:6.4	31:24.6	14.24
10	*be proactive*	25:6.4	6:24.6	51.70	2987	*be old*	1:9.2	44:35.8	13.80
11	*be generous*	22:5.7	6:22.3	43.52	2986	*be powerful*	0:5.5	27:21.5	12.40
12	*be happy*	41:16.4	39:63.6	37.30	2985	*be wrong*	6:17.0	77:66.0	11.32
13	*be successful*	31:10.9	22:42.1	36.62	2984	*be married*	2:10.0	47:39.0	11.22
14	*be glad*	20:5.5	7:21.5	35.81	2983	*be small*	3:11.9	55:46.1	11.17
15	*be strong*	33:12.9	30:50.1	31.37	2982	*be beautiful*	1:7.8	37:30.2	10.92
16	*be realistic*	20:6.4	11:24.6	28.21	2981	*be fantastic*	0:4.7	23:18.3	10.56
17	*be cautious*	17:5.1	8:19.9	26.28	2980	*be new*	1:7.6	36:29.4	10.51
18	*be safe*	29:12.1	30:46.9	24.05	2979	*be unique*	2:9.2	43:35.8	9.73
19	*be aware*	21:7.6	16:29.4	23.38	2978	*be wonderful*	0:4.3	21:16.7	9.64
20	*be flexible*	26:10.7	26:41.3	22.37	2977	*be ridiculous*	0:4.1	20:15.9	9.18
21	*be bold*	15:5.3	11:20.7	17.21	2976	*be rare*	0:4.1	20:15.9	9.18
22	*be respectful*	9:2.5	3:9.5	16.43	2975	*be spacious*	0:3.9	19:15.1	8.72
23	*be charitable*	5:1.0	0:4.0	15.86	2974	*be solid*	0:3.9	19:15.1	8.72
24	*be responsible*	17:7.0	17:27.0	14.60	2973	*be low*	0:3.9	19:15.1	8.72
25	*be civil*	6:1.4	1:5.6	13.75	2972	*be white*	0:3.7	18:14.3	8.26
26	*be smart*	25:12.7	37:49.3	12.68	2971	*be illegal*	0:3.7	18:14.3	8.26
27	*be alert*	7:2.0	3:8.0	11.36	2970	*be gorgeous*	0:3.7	18:14.3	8.26
28	*be faithful*	7:2.0	3:8.0	11.36	2969	*be alive*	3:10.0	46:39.0	8.07
29	*be cynical*	6:1.6	2:6.4	10.95	2968	*be straightfwd*	0:3.5	17:13.5	7.81
30	*be considerate*	5:1.2	1:4.8	10.91	2967	*be big*	0:3.5	17:13.5	7.81

At face value, does this indicate a productive pattern? On the one hand, the most strongly associated adjectives occur in non-assertive environments that are also highly characteristic of *go*/*come*-v (cf. Flach 2017a). Besides imperatives, where they are used non-finitely, they tend to occur as complements to hortative patterns (*let's*-cxn, deontic modals, requestive phraseology):

(5) a. *Be sure and check* it out – the pics are priceless. [ENCOW14AX01]
b. Please do *be patient and allow* the artist some time to respond.

c. Let's *be honest and call* this what it is, shall we?
d. Once again I would encourage everyone to *be vigilant and continue* to report suspicious incidents or activity to the police.
e. So we should *be careful and assess* the bones more fully in due course.

On the other hand, there is of course a major caveat for interpretation, i.e., a correlation between form, function, and agentivity. Since imperatives are always bare, the bare condition will include (all) imperative uses and thus disproportionally attract agentive adjectives by default: a person may have (or be told to have) control over *being honest* or *patient*, but one cannot (or only with imagination) be wilfully *excellent*, *spacious*, or *wrong*. It is therefore not at all be surprising to find agentive adjectives in the bare form condition.

However, a first answer to this objection is the second finding from the DCA. The preponderance of distinct classes that pertain to the mental state of an addressee (e.g., HONESTY, VIRTUE, ATTENTION, or STATE-OF-MIND) somewhat downtones the confound. Adjectives that are attracted most strongly to bareness are not simply agentive adjectives; rather, they belong to a relatively confined – and coherent – sub-class of adjectives.

4.2 Semantic coherence

The second answer to the confound objection lies in whether ADJ–VERB combinations systematically and coherently frame a single-event. Recall that one characteristic of pseudo-coordination is that the two conjuncts are in a 'supporting' or 'intensifying' relationship. This is what CCA is suitable to uncover. Thus, all 19,412 string-based instances (including inflections for illustrative purposes) were submitted to a CCA.

Table 2 shows the top co-varying ADJ–VERB doubles. The inflected types are fossilized, conventionalized, or sequential collocations (*alive and remain*, *brittle and break*, *dead and buried*). While inflected types illustrate the appropriateness of the method as a diagnostic tool in pattern identification, they also reveal that bare forms are overrepresented amongst the top-ranked co-varying collexemes. This gives more weight to the interpretation of detecting a reasonably systematic pattern within a seemingly noisy syntagm.

As assumed, the first conjunct acts as a frame for the second, and together they refer to a single, simultaneous event. To illustrate how this becomes clear via a CCA, consider the example of *honest*. Being honest is, intuitively, an eternal virtue or a person's property. In *be*-ADJ-*and*-V, however, bare *honest* occurs almost exclusively with communication verbs (*say*, *tell*, *admit*, *list*, *call*, *acknowledge*,

Table 2: Top 25 co-varying collexemes (by string); ENCOW14AX01-US.

	PATTERN (string-based)	TYPE	F_{ADJ}	F_{V2}	O:EXP$_{comb}$	G^2
1	*be fruitful and multiply*	bare	62	60	59:0.3	715.83959
2	*be honest and say*	bare	117	97	46:0.9	317.27599
3	*be glad and rejoice*	bare	20	19	16:0.0	208.62423
4	*are alive and remain*	inflected	20	42	18:0.1	201.26117
5	*be patient and wait*	bare	120	36	25:0.3	193.84664
6	*be sure and check*	bare	105	17	13:0.1	107.51186
7	*be honest and admit*	bare	117	25	13:0.2	88.59319
8	*are brittle and break*	inflected	8	9	6:0.0	83.27580
9	*be honest and tell*	bare	117	41	14:0.4	80.40369
10	*is married and has*	inflected	18	688	15:1.0	71.49283
11	*been dead and buried*	inflected	5	13	5:0.0	70.94159
12	*be lucky and find*	bare	12	40	7:0.0	65.48667
13	*was dead and buried*	inflected	19	13	6:0.0	62.10029
14	*is good and bestows*	inflected	40	5	5:0.0	58.12322
15	*be quiet and listen*	bare	44	17	7:0.1	57.32539
16	*be patient and let*	bare	120	53	12:0.5	56.80898
17	*am married and have*	inflected	10	802	10:0.6	55.09747
18	*be flexible and adapt*	bare	26	7	5:0.0	54.43907
19	*are welcome and have*	inflected	23	802	15:1.5	54.05381
20	*be happy and enjoy*	bare	41	39	8:0.1	53.81364
21	*was huge and had*	inflected	15	355	10:0.4	52.74044
22	*are married and have*	inflected	9	802	9:0.6	49.57713
23	*was clean and had*	inflected	28	355	12:0.8	48.58141
24	*is broad and includes*	inflected	10	76	6:0.1	48.33304
25	*'s opaque and flakes*	inflected	3	7	3:0.0	46.46362

answer, *spill*, *mention*, *question*, *talk*, *ask*). Hence, *honest* in this pattern frames an anticipated event of 'having it out now/finally', where honesty is crucially relevant only temporarily (for the duration of the acts of admitting, calling, or spilling the beans):

(6) a. The fact is, you must *be honest and admit* you can't prove your suspicions.
b. Let's *be honest and call* this what it is, shall we?
c. I'll *be honest and spill* any relevant beans.

Thus this pattern has a salient hortative-mandative flavour (hence, directive and requestive contexts are very frequent). This is also characteristic for other top ADJ-VERB combinations. For instance, based on the most frequent verbs they occur with, *quiet* frames situations pertaining to ATTENTION or PERCEPTION (*listen*, *reflect*, *conceal*), *patient* frames ENDURANCE or PERMISSION (*wait*, *let*,

allow, *understand*, *encourage*, *persevere*, *chill*), and *brave* frames COURAGE (*try*, *embrace*, *jump*):

(7) a. *Be brave and try* new foods – who knows, you might find a new favorite!
b. *Be patient and allow* peaches to ripen on the tree before harvesting.
c. In verse 31 he appeals to Job to *be quiet and listen* to him.

For such cases, being *brave* or *patient* (and certainly *quiet*) is not advice that is prospected to be eternal, but rather one to bring about a temporary state for the duration of the anticipated action. Thus, there is a 'core' hortative-mandative *be*-ADJ-*and*-V pattern, instantiated by semantically compatible ADJ–VERB doubles, which is reflected in their preponderance for directive functions and requestive syntactic patterns (imperatives, 'indirect requestives' in *need to*, *force NP to*, *appeal to*).

To this group we can add *fruitful* and *glad*, despite the intuition that *fruitful* is descriptive rather than purely agentive or even psychological (*fruitful concept*, *fruitful cooperation*). The CCA results show that *fruitful* is near-exclusive to the biblical expression *be fruitful and multiply*. Given the directive force of the dogma, which is reflected in *fruitful*'s restricted occurrence in imperatives and requestive phraseology (*command NP to*, *tell NP to*), its association with the emerging *be*-ADJ-*and*-V is not surprising. An identical argument can be made for *glad*, which is restricted to *rejoice* and the variant *sing* (*Let's be glad and rejoice*, *May the nations be glad and sing for joy*).

Finally, returning to the point of departure, the co-varying collexemes of *sure* are of a very broad nature by comparison, denoting general activity (*check*, *get*, *add*, *use*, *catch*, *point*, *ask*, *bring*). While this seems to run counter the argument of semantic coherence identified above, it underlines its centrality for the pattern as a whole.[3] While the adjectives in semantically compatible types (e.g., *patient*, *brave*, *honest*) retain much of their compositional meaning, *sure* is much more opaque, roughly meaning 'to ensure', and thus capable of framing general activities. Conversely, this idiosyncratic *ensure* meaning – being inherently hortative – blocks its occurrence in assertive uses. In other words, *be-sure-and*-V is the least likely to be extended to assertives (if it is to retain a framing reading; cf. *?We were sure and spilled the beans*). Morphogically, it is least likely to be acceptable or occur in *any* inflecting context for functional reasons. In other words, the morphological constraint on *be-sure-and*-V is absolute, because the *semantic* constraint

3 Among the top-ranked adjectives, *sure* has the highest type-token ratio (55/105, .52) compared to *honest* (35/117, .30), or frozen idioms *glad* (3/20, .15) and *fruitful* (4/62, .06).

is absolute. More generally, *be-sure-and*-V is the most strongly morphologically and semantically restricted type of a productive pseudo-coordinated *be*-ADJ-*and*-V schema, lying at the extreme ends of both continua.

5 Concluding remarks

This paper had three primary aims to contribute to the discussion of morphological restrictions on (a)syndedic patterns. First, it applied a usage-based perspective to a formal constraint, in this case to a non-canonical pseudo-coordinated pattern that combines two syntactically non-identical constituents. The argument of a functionally conditioned restriction can account for the BSC on *be-sure-and*-V, which shows similar, if not more pronounced, semantic constraints than *go*/*come*-V. Thus, pure form of the pattern (i.e., syndedic vs. asyndedic) seems of secondary importance for morphological behaviour in pseudo-coordination. This suggests two things: on the one hand, going by this evidence, the final type that is subject to the BSC, *try-and*-V, can be hypothesized to be functionally constrained to (some form of) non-assertiveness. On the other hand, functional scope explains why the 'paraphrase' of *be-sure-and*-V with a *to*-complement (*He was sure **to** wear flowers in his hair*) is not subject to the BSC: the patterns are structurally and hence functionally very different. Unlike *be-sure-and*-V, the *to*-complement construction comprises two separate clauses, with a finite, i.e., grounding matrix clause and a non-assertive, i.e., ungrounded complement clause (cf. Langacker 1987).

Second, *be-sure-and*-V is not an idiosyncratic 'singleton', but the central type of a productive bare-form, single-event *be*-ADJ-*and*-V pattern. The morphological constraint is probabilistic for most adjectives (e.g., *patient*, *vigilant*, or *respectful*) and idiomatic formulas (*be fruitful and multiply*), but 'hard' for *sure*. For the latter, the bare form is strongly entrenched, which restricts its extension to other contexts. Given the paradigm of *be*, this blocks extensions to bare indicatives (**We are sure and wear flowers in our hair*), in contrast to *go*-V, where bare indicatives are possible, but rare in actual usage and not unanimously accepted (cf. Flach 2017a; Pullum 1990). Thus, gradable semantic and morphological behaviour of the pattern tie in well with evidence from canonical pseudo-coordination.

The third aim was methodological: appropriate diagnostic tools, like Collostructional Analysis, can identify highly latent patterns that seem either unsystematic (by raw frequency inspection) and/or which are unavailable to intuition beyond salient oddities (**We are sure and wear flowers in our hair*).

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References

Bjorkman, Bronwyn M. 2015. *Go get*, *come see*: Motion verbs, morphological restrictions, and syncretism. *Natural Language & Linguistic Theory*. aop. doi:10.1007/s11049-015-9301-0.

Carden, Guy & David Pesetsky. 1977. Double–verb constructions, markedness, and a fake co-ordination. *CLS*(13). 82–92.

Ekberg, Lena. 1993. The cognitive basis of the meaning and function of cross-linguistic *take and V*. In Jan Nuyts & Eric Pederson (eds.), *Perspectives on Language and Conceptualization*, 21–42. Amsterdam: John Benjamins.

Flach, Susanne. 2015. Let's go look at usage: A constructional approach to formal constraints on *go*-VERB. In Thomas Herbst & Peter Uhrig (eds.), *Yearbook of the German Cognitive Linguistics Association (Volume 3)*, 231–252. Berlin: De Gruyter Mouton. doi:10.1515/gcla-2015-0013.

Flach, Susanne. 2017a. *Serial verb constructions in English: A usage-based approach*. Freie Universität Berlin Doctoral dissertation.

Flach, Susanne. 2017b. *Collostructions: An R implementation for the familiy of collostructional methods*. http://bit.ly/sflach.

Gries, Stefan Th. & Anatol Stefanowitsch. 2004. Extending collostructional analysis: A corpus-based perspective on "alternations." *International Journal of Corpus Linguistics* 9(1). 97–129.

Hopper, Paul. 2002. Hendiadys and auxiliation in English. In Joan L Bybee & Michael Noonan (eds.), *Complex sentences in grammar and discourse. Essays in honor of Sandra A. Thompson*, 145–173. Amsterdam & Philadelphia: John Benjamins.

Huddleston, Rodney D. & Geoffrey K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.

Jaeggli, Osvaldo A. & Nina M. Hyams. 1993. On the independence and interdependence of syntactic and morphological properties: English aspectual *come* and *go*. *Natural Language & Linguistic Theory* 11(2). 313–346.

Newman, John & Sally Rice. 2008. Asymmetry in English multi-verb sequences: A corpus-based approach. In Barbara Lewandowska-Tomaszczyk (ed.), *Asymmetric events*, 3–23. Amsterdam: John Benjamins.

Pullum, Geoffrey K. 1990. Constraints on intransitive quasi-serial verb constructions in modern colloquial English. In Brian D. Joseph & Arnold M. Zwicky (eds.), *When verbs collide: Papers from the 1990 Ohio State mini-conference on serial verbs*, 218–239. Columbus, OH: Ohio State University.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.

Schäfer, Roland & Felix Bildhauer. 2012. Building large corpora from the web using a new efficient tool chain. In Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Mehmet Uğur Doğan, Bente Maegaard, Joseph Mariani, Jan Odijk & Stelios Piperidis (eds.), *Proceedings of the Eighth International Conference on Language Resources and Evaluation (LREC'12)*, 486–493. Istanbul: ELRA.

Shopen, Timothy. 1971. Caught in the act. *CLS*(7). 254–263.

Stefanowitsch, Anatol. 1999. The *go-and-VERB* construction in a cross-linguistic perspective: Image-schema blending and the construal of events. In Dawn Nordquist & Catie Berkenfield (eds.), *Proceedings of the Second Annual High Desert Linguistics Society Conference*, 123–134. Albuquerque, NM: High Desert Linguistics Society.

Stefanowitsch, Anatol. 2000. The English GO-(PRT)-AND-VERB construction. *Proceedings of the Twenty-Sixth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on Aspect*, 259–270.

Stefanowitsch, Anatol & Susanne Flach. submitted. *Too big to fail* but *big enough to pay for their mistakes*: A collostructional analysis of the patterns [*too* ADJ *to* V] and [ADJ *enough to* V]. In Gloria Corpas & Ulrich Heid (eds.), *Current trends in Computational Phraseology*. Amsterdam: John Benjamins.

Stefanowitsch, Anatol & Stefan Th. Gries. 2005. Covarying collexemes. *Corpus Linguistics and Linguistic Theory* 1(1). 1–43. doi:10.1515/cllt.2005.1.1.1.

Wulff, Stefanie. 2006. *Go-V* vs. *go-and-V* in English: A case of constructional synonymy? In Stefan Th. Gries & Anatol Stefanowitsch (eds.), *Corpora in Cognitive Linguistics*, 101–126. Berlin: Mouton de Gruyter.