

9 Collocational frameworks in English

ANTOINEITE RENOUF and JOHN McH. SINCLAIR

9.1 Introduction

In the OSTI Project (Sinclair *et al.* 1970) it was demonstrated that grammatical words have collocates, and in our 1988 paper on the Lexical Syllabus we went on to observe that common grammatical words also combine with each other in various ways. At that stage, we briefly pointed to the discontinuous pairings, or 'frameworks', in which they occurred, and to the tendency of these frameworks to 'enclose' characteristic groupings of words. In this paper we should like to move on to investigate aspects of the framework phenomenon in a more detailed and, where appropriate, quantitative way, and to raise questions that seem to us to warrant future attention.

Goran Kjellmer has defined collocation in a 1987 paper as follows: 'a sequence of words that occurs more than once in identical form. . . and which is grammatically well-structured'. In this paper we are also looking at collocations of a type, although our definition differs from Kjellmer's. Our 'frameworks' consist of a discontinuous sequence of two words, positioned at one word remove from each other; they are therefore not grammatically self-standing; their well formedness is dependent on what intervenes. At this early stage of enquiry we are also considering single occurrences of completed frameworks, in order to be able to spot generalities that might otherwise be lost. A group of single occurrences may be seen to be constituting a class, and in frameworks of this kind, classes are to be expected.

Co-occurrences in the language most commonly occur among grammatical words, far more commonly than among combinations

of grammatical and lexical words. So it would seem justifiable to study their patternings with a view to understanding more about the phenomenon. The 'framework' is an integral part of the language, yet it is currently not accounted for in descriptions of the language. In grammar, it lies somewhere between word and group; in lexis, it is missed by conventional definitions of collocation, lexical item and phrase; semantics has no means of dealing with such grammatical co-occurrences, either as two individual items or as a unit with interdependent meaning.

Our focus of study will be on the framework and its intermediate word, or 'collocate'. The frameworks that we have selected consist of different pairings of high-frequency grammatical words:

<i>a + ? + of</i>	<i>be + ? + to</i>	<i>for + ? + of</i>
<i>an + ? + of</i>	<i>too + ? + to</i>	<i>had + ? + of</i>
		<i>many + ? + of</i>

The first two, *a + ? + of* and *an + ? + of*, have been chosen because we know them to be very productive, and the remainder represents a range of lexical combinations.

Our investigation will be based on two sections of the Birmingham Collection of English Text: a one-million-word corpus of spoken British English, and a 10-million-word corpus of written British English.

9.2 Analysis

We shall begin by looking at a profile of the frequencies of occurrence of the different frameworks and their collocates.

Table 9.1 Frequency of occurrence of frameworks

Framework	Spoken corpus			Written corpus		
	Tokens	Types	Ratio	Tokens	Types	Ratio
<i>a + ? + of</i>	3830	585	6:1	25416	2848	8.9:1
<i>an + ? + of</i>	208	94	2.2:1	2362	479	4.9:1
<i>be + ? + to</i>	790	216	3.6:1	5457	871	6.3:1
<i>too + ? + to</i>	59	36	1.6:1	1122	367	3:1
<i>for + ? + of</i>	127	56	2.3:1	1230	332	3.7:1
<i>many + ? + of</i>	63	36	1.8:1	402	159	2.5:1

The data shown in Table 9.1 allow us to make two observations. The first relates to the type-token ratio for each framework. There is, on average, a very high rate of recurrence of types in proportion to the number of framework tokens. This indicates that the frameworks are highly selective of their collocates. It is, of course, also consistent with the frequent usage of the words involved, and the fact that shorter word combinations, such as triplets, are proportionally more recurrent in text than longer ones (cf. Altenberg 1990b and Renouf, forthcoming).

The second noticeable feature is the differing degree of productivity of the different frameworks. This is not attributable simply to the absolute frequency of the individual collocate types. If we find that the *a + ? + of* and *an + ? + of* frameworks attract nouns as their middle element, the fact that these frameworks, taken together, are the most productive may be explicable in grammatical terms, with reference to Kjellmer's observation (1990: 167) that nouns have a high 'constructional tendency'.

To shed further light on this, we shall look at the commonest triplets formed by each of these frameworks. Tables 9.2 to 9.6 present the top twenty types in each case (twenty is chosen as a matter of convenience).

Table 9.2 Collocational types for frameworks *a/an + ? + of* in the written corpus

<i>a + ? + of</i>		<i>an + ? + of</i>	
1322 lot	320 pair 302	125 act	38 image
864 kind 762	member 293	77 example	33 examination
number 685	group 268	73 average	31 account
couple 550	result 222 part	71 expression 66	29 atmosphere
matter 451	216 variety	air	29 idea
sort 438	205 state 175	58 element	28 instrument
series 415	bottle 174 man	54 understanding	27 age
piece 379 bit	174 quarter	45 extension	23 indication 22
356 sense		39 area	impression 22
		38 hour	object

These frameworks attract a range of collocates that are both similar and different. They are all nouns in the broadest sense, but of different types, and we shall look at the classes that are represented a little later on. Within these particular frameworks, the order of

Table 9.3 Order of occurrence of the top twenty *a/an + ? + of* collocates as items in the written corpus

<i>a + ? + of</i>	<i>an + ? + of</i>
10639 man	1996 bit 1322
4412 part	result 1138
4212 kind	piece 1105
2836 state	couple 1019
2731 sense	bottle
2727 matter	900 member
2646 group	766 series
2540 number	615 variety
2505 lot 2150	589 pair 490
sort	quarter
	2826 air
	2499 idea
	2402 age
	1814 act
	1802 example
	1596 area
	1578 hour
	872 account
	849 expression
	813 average
	770 image
	716 understanding
	686 object
	550 impression
	429 atmosphere
	421 examination
	352 element
	217 extension 190
	instrument 131
	indication

frequency in which the collocates occur does not correspond with their ranking in the same corpus as individual items, which is shown in Table 9.3.

The discrepancy in the ordering of the lists in Tables 9.2 and 9.3 is informative. It indicates the hierarchy of attraction between the collocates and the *a/an + ? + of* framework; for instance, the promotion of *lot* to the top of the list indicates that *a lot of* is the tightest collocation, and so on. To see how significant the triplets are in the language as a whole, we turn to Table 9.4. Here we indicate the proportion of corpus occurrences accounted for by the words in their function as collocates in the *a/an + ? + of* framework.

Table 9.4 Proportion of occurrences in the written corpus contributed by words as *a/an + ? + of* collocates

<i>a + ? + of</i>		<i>an + ? + of</i>	
% Collocate	% Collocate	% Collocate	% Collocate
62 couple	21 sort	21 extension	5 image
57 series	20 matter	18 indication	4 account
54 pair	20 result	17 element	4 example
		4	
53 lot	19 bit	15 instrument	impression
		9 average	3 object
36 piece	17 bottle	8 examination	2 area
36 quarter	13 sense	8 expression	2 hour
35 variety	11 group	8 understanding	2 air
34 member	7 state	7 act	1 idea
30 number	5 part	7 atmosphere	1 age
21 kind	2 man		

These percentages show how central to the language the *a + ? + of* framework is. For instance, they show that the triplet *a couple of* accounts for 62 per cent of all the occurrences of *couple of* in the corpus, that *a series of*, *a pair of* and *a lot of* each account for over 50 per cent of the total corpus instances of *series*, *pair* and *lot*, and so on.

We also see that *an + ? + of* makes a significant impact in somewhat different areas of the lexis, such as nominalization. The triplet *an extension of* accounts for 21 per cent of the total corpus instances of *extension*, while *an indication of*, *an element of* and *an instrument of* each contribute 15 per cent, or more of the total corpus occurrences for the individual words. However, these percentages do not quite match the high degree of influence exerted by the previous framework. It is not clear why this is so - whether the selection of this framework is governed by phonological, lexical, psycholinguistic or other factors. Whatever the reason, other frameworks will doubtless prove to be more or less central according to this statistical criterion.

It might be interesting at this point to move on and compare the triplets in Table 9.2 with those created by other types of frameworks. It is predictable, perhaps, that *a* and *an*, on the one hand, and *of*, on the other, will attract nouns in their immediate environment, and Sinclair (1989) has endorsed this in a study of corpus data relating to *of*. We shall look at the *be/too + ? + to* frameworks to see which types of items fill their slots and what grammatical explanation there might be for the selection of those items. In the left-hand environment of *to*, the items shown in Table 9.5 occur at the top level. Again, only the top twenty types are provided in each case.

Table 9.5 Collocational types for *be/too + ? + to* in the written corpus

<i>be+?+to</i>		<i>too + ? + to</i>	
1108 able	56 forced	67 late	17 early
171 allowed	53 necessary	65 much	16 hard
119 expected	50 glad	40 young	15 busy
91 said	48 given	38 easy	15 ready
79 put	47 done	27 small	14 dark
74 made	46 ready	26 close	13 big
71 prepared	45 seen	25 tired	12 long
70 possible	40 better	22 weak	12 poor
67 used	40 brought	21 good	12 proud
57 unable	39 difficult	18 old	11 far

Both lists in Table 9.5 contain a preponderance of adjectival items, but only one of these is shared, namely *ready*. In the first list, several of the adjectives are of the verbal kind, such as *prepared*, whereas those in the second, with the exception of *tired*, are non-verbal. The difference in these selections shows that they are not governed by *to* alone but by the combined influence of the framework pair. In some cases, however, there seems to be a closer collocational pull exerted by one of the pair on some items rather than others. For example, in the framework *too + ? + to*, *to* would be able to collocate in the absence of *too* with *easy*, *hard*, *good*, *close*, *ready* and *proud*: (a) *easy to*, *hard to*, *good to*, *close to*, *ready to* and *proud to*, but not with the other items, except in a marked way: (b) *? late to*, *? much to*, *? young to*, *? small to*, *? tired to*, etc.

A number of overlapping grammatical categories occur in the environment of Group (a), so that a grammatical explanation is hard to find. It seems that Group (b) combinations do not take cataphoric *it*, whereas *easy*, *good* and *hard* do in Group (a) (e.g. 'it is easy to do it' corresponding to 'to do it is easy'); that *close* has a different complementation pattern, and so on. A semantic explanation might be that the word *to* in Group (b) has a 'condition of purpose' sense of 'for this purpose to be achieved', so that *It's too late to save him* can be paraphrased as 'It's too late for the purpose of saving him to be achieved', whereas *He's too proud to ask for help* does not paraphrase as 'He's too proud for the purpose of asking for help to be achieved'. More study is needed to establish the precise set of constraints operating here, but one begins to get a feeling that it is the collocational frameworks that dominate, and that somehow the grammar has developed to accommodate their use.

By way of comparison with the framework extracts offered in Tables 9.2 and 9.5 above, three others pairing *of* with high-frequency words are offered in Table 9.6. Grammatically speaking, these three frameworks attract collocates of the word classes that one would expect: nouns for *many + ? + of*, verbs for *had + ? + of*, and quantifiers or nouns for *for + ? + of*. However, there is a degree of overlap that is perhaps surprising. The common elements are chiefly quantifiers and abstract, 'support' nouns (see Sinclair's classification later). This is partly indicative of the influence of *of* in its specifying function, and also that these frameworks share some high-frequency items which, by definition, collocate widely. Actual items that occur

Table 9.6 Collocational types for *for/many/had + ? + of* in the written corpus

<i>for + ? + of</i>		<i>many + ? + of</i>	
118 most	28 much	28 thousands	8 ways
65 all	26 each	28 years	7 aspects 7
65 one 57	26 those	years	species 6
fear	24 want	24 kinds	hundreds 6
41 both	23 thousands	24 parts	types
40 some	19 any	19 millions	6 varieties
39 lack	17 signs	9 cases	5 others
32 many 31	14 control 13	9 hours	4 details
reasons 28	purposes 11	9 members	4 forms
hundreds	out	8 examples	4 points
		8 more	
<i>had+?+of</i>			
31 enough	8 dreamed 7		
30 plenty	said		
29 thought	7 something		
23 heard	7 visions		
20 one 19	6 lots		
died 17	6 seen		
spoken 15	5 made		
been 12	5 moments 5		
none 10	read		
some	4 hundreds		

in all three of these top-frequency listings are shown in Table 9.7.

At the top levels of frequency, there is generally quite a high degree of correspondence between the framework listings from the written and spoken corpora. A fairly representative sample of those we have examined is *many + ? + of*, shown in Table 9.8 (with shared items in italics).

Table 9.7 Shared collocates for *many/had/for + ? + of* in the written corpus

Collocate	<i>many + ? + of</i>	<i>had + ? + of</i>	<i>for + ? + of</i>
one		20	65
some		10	40
lots		6	3
many	1	1	32
hundreds	6	4	28
thousands	28 19	1	23
millions all			7
		3	6
			6

Table 9.8 The commonest collocational types within the framework *many + ? + of*

(a) <i>The spoken corpus</i>			
7 members	2 sort	1 heads	1 out
6 hundreds	2 tens	1 historians	1 people
4 parts	2 thousands	1 languages	1 pieces
3 examples	2 ways	1 layers	1 schools
3 millions	1 acres	1 lessons	1 sources
3 aspects	1 cases	1 many	1 things
2 branches	1 citizens	1 men	1 units
2 facets	1 countries	1 more	1 varieties
2 kinds	1 er	1 other	1 years
(b) <i>The written corpus</i>			
28 thousands	2 schools	1 dozens	1 perils
28 years	2 scores	1 echoes	1 periods
24 kinds	2 sheets	1 elements	1 photographs
24 parts	2 teachers	1 even	1 pictures
19 millions	2 variants	1 evidences	1 portraits
9 cases	2 volumes	1 expressions	1 possibilities
9 hours	2 walks	1 families	1 programmes
9 members	1 accounts	1 feet	1 qualities
8 examples	1 activities	1 fewer	1 races
8 more	1 advertisements	1 fields	1 rains
8 ways	1 advocates	1 foreigners	1 relatives
7 aspects	1 ambiguities	1 frames	1 relics
7 species	1 attitudes	1 friends	1 reports
6 hundreds	1 bales	1 gardeners	1 reservations
6 types	1 bands	1 glimpses	1 results
6 varieties	1 bells	1 gradations	1 scraps
5 others	1 billions	1 heads	1 shades
4 details	1 bottles	1 herds	1 sort
4 forms	1 boxes	1 hues	1 spheres
4 points	1 brands	1 imprints	1 springs
4 problems	1 busloads	1 institutions	1 studies
4 stories	1 calabashes	1 investors	1 subvarieties
4 weeks	1 categories	1 items	1 tablets
3 areas	1 centuries	1 kilos	1 taken
3 branches	1 characteristics	1 laws	1 tales
3 changes	1 children	1 lighthouses	1 tens
3 featu res	1 cities	1 many	1 things
3 layers	1 citizens	1 matters	1 think
3 people	1 clones	1 men	1 thoughts
3 sections	1 colours	1 methods	1 times
2 as	1 communes	1 miles	1 town
2 causes	1 components	1 mistakes	1 treasures
2 discussions	1 copies	1 modes	1 tricks
2 gallons	1 countries	1 moons	1 units
2 months	1 courses	1 necklaces	1 uses
2 opportunities	1 days	1 opponents	1 variations
2 pairs	1 descriptions	1 pages	1 victims
2 permutations	1 disapproved	1 paintings	1 virtues
2 pieces	1 discomforts	1 parents	1 works
2 portions	1 divisions	1 patrons	

Obviously the written corpus data are more extensive and make use of a wider range of lexis, the precise nature of which depends on the particular framework pair.

At this point we return to one of our first frameworks, *an + ? + of*, as a focus for further investigation. This framework offers a more manageable body of data than does its *a + ? + of* counterpart. A first observation concerns the kinds of words that complete the triplet *an + ? + of*. We have already noted, in Table 9.2, that the commonest of them are nouns, and the remainder are also. We shall attempt to classify all of them that occur ten times or more, in a tentative way. For this purpose we shall draw on Sinclair's provisional, and largely functional, classification of nouns preceding *of* (1989). The collocates in the *an + ? + of* framework are obviously a subset of these, and all fall within Sinclair's subcategory of 'NI in a double-headed nominal group'. Sinclair divides this subcategory again, into classes of noun I(a), I(b), I(c), in which the NI is in some sense subordinate to the N2 (in which case Sinclair argues that the N2 is functionally the head of the nominal group), and classes of noun (2), (2a), (2b), in which neither NI nor N2 seems to be 'pivotal or dominant', and the nominal group is truly double-headed. The classes of noun that are applicable in this study are as follows.

(1) NI in nominal group of which N2 is head

- (1a) *Measurement* of the second noun in a nominal group
 - (1aii) lexically rich quantifiers - *ounce, article*
- (1b) *Focus* on the second noun in a nominal group
 - (1bi) lexis naming part of N2 - *edge, end, part*
 - (1bii) lexis specifying part of N2 - *evening, hour*
 - (1biii) lexis specifying attribute of N2 - *array, index*
- (1c) *Support* to the second noun in a nominal group
 - (1ci) 'delexicalized' noun - *act, example*

(2) *First head* in double-headed nominal group

(2b) Propositional relationship with N2

- (2bi) Nominalization (of V in V-S, V-O) - *extension, explanation*
- (2bii) Complement (N2 as quasi-subject) - *absence, awareness*
- (2c) other types of NI in double-headed nominal group

Given these categories, the list in Table 9.8 can be classified as shown in Table 9.9.

Table 9.9 Classes of noun within the *an + ? + of* framework

1a) <i>Measurement</i>	1b) <i>Focus</i>	1c) <i>Support</i>	2) <i>First head, nominal group</i>
73 average	38 hour	125 act	54 understanding
18 attack	14 end	77 example	45 extension
18 ounce	13 assortment	71 expression	33 examination
17 army	12 index	66 air	31 account
17 inch	11 array	58 element	28 instrument
15 acre	10 arrangement	39 area	27 age
10 article		38 image	23 indication
		29 atmosphere	21 analysis
		29 idea	20 explanation
		22 impression	19 awareness
		22 object	18 increase
		20 attitude	16 enemy
		16 agony	14 absence
		16 aspect	14 illusion
		14 effect	13 agent
		13 issue	12 acceptance
		11 aura	12 officer
		11 inkling	11 invasion
			11 order
			10 appearance
			10 appreciation
			10 era
			10 exchange
			10 indictment
			10 injection
			10 upsurge
<i>Tokens</i>	16	98	677
	8		49
			2
<i>Types</i>	7	6	18
			26

The type count in this analysis indicates that the core collocates in the *an + ? + of* framework are predominantly Class (2) and that within this class, the commonest subclass, (2bi), is that of nominalization; that the second and third commonest classes in the

hierarchy are (1ci) and (1aii) respectively; and that the fourth class is (1b), of which the commonest subclass is (1biii) and contains 'attribute' nouns. The token count, meanwhile, tells us that, while most nouns belong to Class (2), Class (1ci) actually contributes more instances to the language (or corpus).

Sinclair's set of classes is based on his observation of a modest, random sample of concordance lines for the word *of*. To apply them to all of the top 1435 instances that we have for *an + ? + of* presents difficulties, but these are informative in themselves.

The first problem is that the classes postulated by Sinclair are not mutually exclusive; this is acknowledged in his paper (1989). Problems of assignation expose the overlap and dual interpretation that is possible for some words. For example, the collocates *illusion*, *instrument*, *area*, *effect* and *image* can be seen at the same time as being support nouns and *bona fide* emancipated first noun heads in the double-headed nominal group. Similarly, *assortment* could be a noun of measurement or focus, depending on interpretation. *Age* and *era* seem to fit almost all classes. The second problem of classification is that, when viewed in their range of contexts in the corpus, many of the collocates prove to have more than one meaning or function. This is different from the matter of overlap, and interesting; it tells us that many triplets seem to hold good over a range of functions, for some reason. *Agent* is one example, which occurs in text as shown in Table 9.10.

Another case in point is *issue*, shown in Table 9.11, which also serves to exemplify the tendency towards fixed phraseology that makes word classification irrelevant for some aspects of the collocate. Many collocates have this phrasal inclination, including *idea*, *agony*, *inkling* and *order*.

A number of other interesting observations can be made on the basis of the *an + ? + of* data. For instance (in contrast perhaps to the *too + ? + to* triplets in Table 9.5), most of its triplets lie clearly within a unit; only rarely is there a boundary within them, as in:

- . . . a continuous output over *an hour of* up to one litre of sweat
- . . . seen that the cost to *an employer of* laying off workers
- . . . the secession did not come to *an end of* its own accord

On the other hand, it is perhaps not surprising to discover that some triplets function more or less typically as part of a larger lexical unit, often an idiomatic one, for example:

Table 9.10 Multi-functionality of the noun collocate *agent*

(a) *Focusing noun*

does not attempt revolution: it is	an agent of democratic change. One ca
's greatest resource, will then be	an agent of destruction, in accordance
business, because he was a demon,	an agent of destruction. His job was to
ancing of the welfare state itself	an agent of redistribution (in addition
tribution element has not been made	an agent of redistribution of wealth
instream of the Labour movement as an agent	of revolution. Related to the

(b) *N1 in double-headed nominal group*

elf employs, in the unlikely event	an agent of equal courage and dexterity
t was the name? – all the time was	an agent of M16.' 'She didn't know it had
uch clerk to hand over the mail to	an agent of R.3 had failed. The man ha
er Uncle Nick thugt that she was	an agent of the 'enemy'. (she <P22>
planned if it had been the work of	an agent of the govenement. Hours, da
lican Army. It has just been ruled	an agent of the IRA by a federal judge.
sed, and in the heated discussions	an agent of the landlords was killed. S

Table 9.11 Multi-functionality of the noun collocate *issue*

(a) *Measurement noun*

The General Chen Cheng dominated an issue of Time as the Defender of Ch

(b) *Support noun*

volt on what they considered to be	an issue of confidence, and announced
But Wilson turned the strike into	an issue of confidence. He accused 'a t
up Poll samplle thought immigration	an issue of national importance; afterw
the first time that Man has faced	an issue of this kind. At the beginning

(c) *Verbal noun*

raise about another \$200m through an issue of common stock to sharehold

(d) *Phrasal component*

et some adoptive parents make such	an issue of adoption, of the fact that
as you know.) Children rarely make	an issue of day-time urination. It seem
but wasn't prepared, yet to make	an issue of it. 'Cecilia you eat the
rom their fat child without making	an issue of it. They can't cut out rich
or even months. If you don't make	an issue of them, the chances are grea
frica. If Mr Muldoon wants to make	an issue of this he could make the Melb
ing up. It isn't necessary to make	an issue of this. He'll get the idea so

(come/came/been)	+ <i>within an ace of</i> + (verb -ing)	
(verb)	+ <i>in an agony of</i> + (noun; semantics of negative emotion or sensation)	
(verb + obj)	+ <i>with an air of</i> + (noun)	
(we live)	+ <i>in an age of</i> + (abstract noun) + <i>as an instrument</i>	
(seen/considered)	<i>of</i> + (verbal noun)	
	[give] <i>an account of</i> + (noun)	
	[make] <i>an issue of</i> + (noun, often pronoun)	
(noun, pronoun) + [have] <i>an inkling of</i>	+ (what, it) + (what, how, determiner)	
(to give/get/have) + <i>an idea of</i>		

Another way of viewing this phenomenon is perhaps to see it as a series of collocational units flowing into each other - that in fact, the last element or elements of one frame form the beginning of the next.

Such a model, in which the linguistic unit for selection is a series of words rather than a single word, and the units blend into each other, is quite different from the 'slot-and-filler' models of old. Given that frequent grammatical words very roughly alternate with lexical ones in text, we can represent this patterning as follows:

G L G L G L G L G

where L is lexical and G is grammatical. This can be split into frames which, in the case of successive triplets, might look as follows:

G1 L1 G2
 G2 L2 G3
 G3 L3 G4
 G4 L4 G5 ... etc.

If we move on and undertake a brief investigation of the literal and non-literal meanings of triplets, we discover that there is a range, from the primarily literal *an injection of* or *an ounce of* (Table 9.12),

Table 9.12 *An ounce of* - literal and figurative meaning

(i) *Literal*

elpful to have the baby drink farms a thousand acres with never poonfuls of each. And so on, up to in them. Fat is rich in calories; ts into energy. A horse wastes not example, in terms of carbohydrate 0 ozof milk. And in terms of fat, til 15 months or even later. Put Cheese is a useful form of milk. For breast-fed babies, pour half empty can that had once contained n ounce of it has twice as many as milk comes in cups, too. Four half employed when they were deprived of

an ounce of boiled water or suck it fr an ounce of chemicals, and whose yield an ounce of each. Then gradually decree an ounce of it has twice as many as an ounce of its food: what it doesn't c an ounce of jam is equivalent to 1 oz o an ounce of lard equals 1 oz of butter, an ounce of milkd in a small glass that An ounce of most varieties contains ab an ounce of pasteurized into a cup an ounce of pipe tobacco, Three Nuns E an ounce starch, sugar or protein. B an ounce of the formula into a small cu an ounce of their three penny bar of so

(ii) *Figurative*

irly brainless I should think. Not cottage producers, and so forth? made me feel better." "She hadn't ounds rather like you." "I haven't

an ounce of education. She wouldn't sa An an ounce of practice is generally worth an an ounce of spite in her, she shouted an an ounce of talent as a painter." "Ross

to the triplets that are equally literal and figurative, like *an army of*, *an ingredient of*, to those that are essentially figurative as in *an agony of*, or primarily so, as in *an avalanche of*, shown in Table 9.13.

This shift from literal to figurative meaning can be said to reflect the productivity of the individual word. To what extent the surrounding framework is also integral to the process needs further study. One of the most powerful arguments for studying the framework phenomenon is, in fact, the degree to which it seems to be productive in the language. As an example, we note that certain measurement nouns - those relating to parts of the body or buildings/ containers - can become partitives by the addition of certain suffixes.

(a) *-ful*

a man came in with an armful of cardboard boxes
 he began to whimper with an eyeful of sand with a
 noise like an officeful of typewriters

Table 9.13 An avalanche of-literal and figurative

meaning

(i) *Literal*

s landed on the cliff top, sending an avalanche of earth and stones in thr
o one – a roller coaster ride down an avalanche of white water. We were al

(ii) *Figurative*

volutionary path is buried beneath an avalanche of containment mechanisms
anted children disappeared beneath an avalanche of dirty dishes, stale tak
am looking for! I step inside an an avalanche of memory, loosened by the
she loaded her daughter down with an avalanche of peripheral data. Rather
renewal began to grow and grow into an avalanche of thought and awareness o

(b) *-load*

entered the barred room with an armload of clothes

These cases are supported by a more substantial number of instances from the *a + ? + offramework*, including those in Table 9.14.

Another local observation concerns triplets containing measurement nouns relating to 'time'. These occur within a distinctive patterning, i.e. *an + (time noun) + of + (verb -ing)*, as follows:

- ... after half an *hour* of *circling* and backtracking. . .
- ... about an *hour* of *cooking* to produce one pan of. . .
- ... after an *hour* of *crawling* on hands and knees. . .

Table 9. 14 Productive suffixes

(a) <i>-ful</i>	(b) <i>-load</i>	(c) <i>-worth</i>
handful	wagonload	pennyworth
fistful	boatload	hair's breadth
mouthful	barrowload	
spoonful		
teaspoonful		
tablespoonful		
scoopful		
plateful		
saucerful		
glassful		
jugful		
panful		
	thimbleful	
	bucketful	
	pailful	
	barrelful	
	spadeful	
	pocketful	
	drawerful	
	classful	
	choirful	
	roomful	
	houseful	

. . . we still had an *hour* of *floundering* in front of us. . .
There's at least an *hour* of *scraping* and *blowing* in. . . After
an *hour* of *wrangling* and *snapping* at one another. . . . in
the cafeteria after an *evening* of *studying*. . .
. . . faced with an *evening* of social tight-rope *walking*. . .
. . . ordered an *afternoon* of *wrestling*. . .

As a final example of the value of studying the framework phenomenon and of the productive potential of frameworks, we draw attention to the fact that a triplet within a conventional idiomatic nominal phrase can function as an idiomatic platform from which to diversify. A case in point is the triplet *an accident of*, which allows linguistic movement from conventional to creative use:

to a whole way of life, not simply	an accident of birth. Appro
was forgotten. It was, of course	an accident of history at wh
ated traditions. The peerage was t	an accident of history or bir
is that the town's appearance is of	an accident of history, creat
minor members of staff, and by	an accident of fate exactly
person who got into high office by	an accident of post-war poli
were stretched to breaking, it was	an accident of war, the Cou

9.3 Conclusion

Linguists are accustomed to seeing the language as divisible into coherent units such as phrase, group or clause. The simple frameworks proposed here are intended to raise consciousness of the many different and eminently sensible ways we might develop to present and explain language patterning.

We have sought to demonstrate that two very common grammatical words, one on either side, offer a firm basis for studying collocations. We have shown that the choice of word class and collocate is specific, and governed by both elements in the framework; and we have pointed to the high type-token ratio as a clear indication that the frameworks are statistically important.

We have also offered evidence in support of a growing awareness that the normal use of language is to select more than one word at a time, and to blend such selections with each other (Sinclair 1987a; cf. Altenberg 1990b).