Patterns, constructions and local grammar

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Introduction

In this paper we offer an updated reinterpretation of the notion of grammar patterns (Hunston and Francis 1999) in terms of Construction Grammar (Goldberg 1995, 2006). We argue that each of the meaning-pattern combinations identified in Francis *et al*. (1996, 1998)[1] can be regarded as a construction, yielding approximately 1,000 constructions at the same level of specificity. Furthermore, as the component elements of each construction can be annotated with functional labels, those constructions that perform an identifiable speech act function can be interpreted in terms of a Local Grammar (e.g. Barnbrook 2002). The semantically labelled constructions, we argue, can be applied to the development of resources for language teaching and may have further applications to the automatic processing of text. This argument is illustrated with a case study of the language function of evaluation. Specifically, the paper proposes that the complementation patterns of adjectives (Francis *et al*. 1998) can be used to identify evaluative constructions and that these constructions in turn may be annotated to derive a local grammar of evaluation.

The paper is organised as follows: following this introduction, the key terms used in the paper are defined, and examples of previous research given; the study that underpins this paper is then reported, and 22 analyses around the concept of evaluation are proposed; the relationship between pattern, construction and local grammar is then discussed in more detail, and potential applications for the study offered. The paper ends with a conclusion pointing to future directions.

Definitions and previous research

In this section the terms 'pattern grammar', 'construction grammar', 'local grammar' and 'evaluation' are defined and some of the previous research in these areas is summarised.

Pattern grammar (Francis 1993; Hunston and Francis 1999; Hunston 2015) is an approach to the grammar of English that generalises from the patterning of individual words as observed through concordance lines from a large corpus of general English (cf Sinclair 1991, 2004). It was developed originally to encapsulate the grammatical behaviour of items in a learners' dictionary (Sinclair *et al*. (eds.) 1995). Although the concept of a grammar pattern can be used to describe any words, the most cited grammar patterns specify the complementation of verbs, nouns and adjectives. The grammar pattern coding used in Sinclair *et al*. (eds.) (1995) and subsequently in Francis *et al*. (1996, 1998) uses abbreviated symbols to stand for word classes or clause types. For example, it expresses verbs, nouns and adjectives, or the groups of which they are head, by '**v**', '**n**' and '**adj**', that-clauses by '**that**', and to-infinitive clauses by '**to-inf**'. In cases where the pattern includes specific words rather than classes, these are conventionally indicated in italics. Mostly they are the prepositions '*at*', '*for*', '*with*' etc. A

string of symbols identifies the pattern, with the node word in capitals. For example, the pattern **V n to-inf** specifies that the verb (**V**) is followed by, and governs, a noun phrase (**n**) and then a to-infinitive clause (**to-inf**), as in … *told us to go home*. The pattern **N *from* n** indicates that the noun is followed by, and governs, a prepositional phrase beginning with *from*, as in … *recovery from the steep recession …* The pattern *it* **v-link ADJ that** indicates that the adjective (**ADJ**) is preceded by an introductory *it* and a link verb and is followed by a that-clause, as in *It now seems certain that St Paul's Cathedral will not be surrounded ….* In total, about 200 grammar patterns are identified (see Francis *et al*. (1996, 1998) for more exemplification).

Grammar patterns relate to form only, unlike, for example, the Corpus Pattern Analysis proposed by Hanks (2013) and developed in the PDEV project (www.pdev.org.uk). For example, whereas the entry for the verb ENCOURAGE in PDEV distinguishes between 'HUMAN *encourages* HUMAN (e.g. *She laughed and encouraged him*) and 'EVENTUALITY *encourages* EVENTUALITY' (e.g. *a lack of public transport encouraged drink-driving*), this distinction is not made in the pattern grammar nomenclature and both instances are coded **V n** ('verb followed by noun phrase'). This means that the grammar patterns are less informative than the PDEV entries. On the other hand, the grammar patterns offer a level of generality associated with a 'grammar', and further semantic information is given in two pattern grammar resource books (Francis *et al*. 1996; 1998), available from 2018 as an on-line resource (www.collinsdictionary.com). In these publications, the words that occur with each pattern are listed in groups based on shared meaning. For example, the pattern **V n to-inf** lists 219 verbs divided into 12 groups, including two groups connected with verbal processes (e.g. *ask, tell; encourage, urge*), one connected with 'causation' (e.g. *cause, compel, oblige*), and one connected with 'helping' (e.g. *aid, enable, help*). The identification of the words in each pattern is based on lexicographical work undertaken as part of the COBUILD project in the 1990s (cf Sinclair *et al*. (eds.) 1995), though the on-line grammar pattern resource includes substantial updating (cf Francis 2015). Groups were identified on the basis of a 'common sense' and largely atheoretical approach to word meaning (Hunston and Francis 1999).

As another example, the pattern *it* **v-link ADJ that** lists 245 adjectives divided into 8 groups relating to: 'likelihood', 'obviousness', 'desirability', 'undesirability', 'importance and necessity', 'interest and surprise', 'relevance' and 'other'. It is immediately apparent that all the specified meanings relate to the domain variously termed 'stance', 'attitude' or 'evaluation'. Indeed, it is found that the majority of adjectives identified as governing complementation patterns have evaluative meanings, and thus the case study in this paper relates to evaluative meaning. Many of the adjectives covered by our analysis, such as *happy, said, astonished, afraid*, appear also in studies of Affect (Martin and White 2005; Bednarek 2008). The 'Affect' category in Martin and White's taxonomy distinguishes personal emotion from appraisal of a target, the latter being covered by Judgement and Appreciation. In those cases where the adjective expressing emotion is complemented by a further element, as in *Anne was afraid that John would soon be sent abroad*, two analyses are possible:

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'emotion + stimulus' or 'evaluation + target'. For the purposes of a case study of evaluation, where only adjectives with complementation patterns are being considered, the second analysis is more relevant, though the first remains a valid alternative.

Turning now to construction grammar: this is an approach to the description of language patterning that has much in common with pattern grammar but that grew up within the traditions of Cognitive Linguistics rather than in the traditions of Corpus Linguistics, and until recently there has been little dialogue between the two (though see Ellis *et al*. (2016) for an exception). Corpora are increasingly used as evidence for constructions as they are for patterns, but whereas patterns are perceived as purely observational phenomena, constructions are an attempt to model the mental representation of language. Dąbrowska (2015), for example, offers construction grammar as a valid alternative to universal grammar, and Ellis *et al*. (2016) use corpus evidence to demonstrate the acquisition of verb complementation constructions by learners of English.

Constructions are a matching of form and meaning at all levels of generalisation. The most basic definition of a construction includes the proviso 'some aspect of its [the linguistic pattern's] form or function is not strictly predictable from its component parts or from other constructions' (Goldberg 2006: 5). Examples would include idioms such as 'jog someone's memory' (ibid.). However, it is also proposed that 'patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency' (ibid.). This permits the pattern/meaning combinations proposed in this paper (see below) to be candidate constructions.

An important aspect of constructions is that although typical lexis can be identified in each construction (see Stefanowitsch and Gries (2003) and Gries and Stefanowitsch (2004) for extended discussion), meaning belongs to the construction rather than to the lexis. Goldberg (2006: 6) illustrates this with examples such as *She smiled herself an upgrade*, where the meaning 'make something happen that is of benefit to oneself' is construed by the construction 'verb oneself something' rather than by the verb SMILE. Bencini and Goldberg (2000) test the effects of verb and construction on the perception of sentence meaning and conclude that construction has the greater effect. Some studied constructions are of a high level of specificity, such as the 'accident waiting to happen' construction (Stefanowitsch and Gries 2003); others are very general, such as the 'interrogative' construction or the 'ditransitive' construction (Goldberg 2006; Stefanowitsch and Gries 2003). The multi-level approach of construction grammar is both a benefit and a disadvantage. On the positive side, all of lexis and grammar can be described in a single model, without the need for an elaborate system of grammatical levels or ranks (as, for example, in Halliday's (1985) model). Constructions might even be said to respond to Hasan's (1996) vision of lexis as the most delicate grammar and certainly coincide with Sinclair's vision of a description of English that does not presuppose a division into lexis and grammar (Sinclair 1991: 3) or with many of Hoey's observations of lexical priming (Hoey 2005). On the negative side, the number of potential constructions is vast, and a listing of them all seems an impossible task. Studies of constructions tend to treat specific

examples which are convincing in terms of the concept of 'construction' but which do not progress towards a systematic description of a language (though see Wible and Tsao (2017) for a proposal for how this systematicity might be achieved).

Of particular interest to this paper are what might be called the 'mid-level constructions' (that is, neither very general nor very specific) such as the 'verb someone into doing something' (or causative 'into' construction) investigated by Wulff *et al*. (2007), which are very like grammar patterns. Indeed, a number of studies (e.g. Mateu Fontanals 2005; Hiltunen 2010) have presented candidates for constructions that are indistinguishable from patterns. On the other hand, it is clearly not the case that 'construction' is directly equivalent to 'pattern'. For example, as shall be illustrated further below, the **ADJ *at* n** pattern includes examples such as *Those new to the area were always <u>astonished at</u> the vivid crimson of the earth*, which might be said to represent a 'reaction *at*' construction with 45 adjectives listed in Francis *et al*. (1998), and examples such as *She was not very <u>good at</u> writing letters*, which might be said to represent an '(un)skilled *at*' construction with 30 adjectives listed in Francis *et al*. (1998). This paper offers a way of integrating pattern and construction; it proposes, not that each pattern is a construction, but that each meaning-pattern combination is a construction. This would suggest that the lists of grammar patterns to be found at www.collinsdictionary.com provide evidence for approximately 1000 constructions at a given level of specificity. We argue that this goes some way to addressing the drawback to construction grammar suggested above. The candidate constructions we propose, however, are based on corpus investigation alone; we have no evidence as to whether or not they are stored as constructions by speakers.

This paper also makes extensive use of the concept of local grammar. A local grammar, as the term is used in this paper, is always a grammar <u>of a discourse function</u>. (This distinguishes these local grammars from Sinclair's (2007/2010) suggestion for a local grammar <u>of a word</u>.) It is therefore closely related to performative speech acts. One of the first local grammars in this sense was Barnbrook's (2002) pioneering local grammar of the definitions used in the *Collins COBUILD Student's Dictionary* (Sinclair *et al*. 1990). Other examples include grammars of requests (Su 2017), apologies (Su and Wei forthcoming), disclaimers in company reports (Cheng and Ching 2016), and Affect (Bednarek 2008). In all these studies, a recurring sequence of forms is identified, and functional labels are mapped on to that sequence. The task of the researcher, then, is to specify the function, the way(s) in which that function is realized (as lexis and grammar), and the functional labels needed to annotate the representative examples. Barnbrook (2002: 135–136), for example, identifies four types of definition in the CCSD and 17 sub-types – an illustration, incidentally, of the heuristic value of local grammar identification. The functional labels he employs include 'Definiendum' (the defined word or phrase), 'Definiens' (the explanation or definition), 'Hinge' (a grammatical operator linking the Definiendum and the Definiens) and 'Co-text' and 'Matching Co-text' (additional explanatory elements mirrored in the two halves of the definition). Table 1 gives an example: the CCSD entry for *life imprisonment* (Barnbrook 2002: 173).

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TABLE 1 ABOUT HERE

Table 2 shows an example from Cheng and Ching (2016), demonstrating the mapping of the functional labels ('Creator of disclaimer', 'Thing denied', 'Restriction on denial' and 'Hinge') on to the pattern elements ('noun group', 'verb', 'to-infinitive clause' etc.).

TABLE 2 ABOUT HERE

These instances also illustrate a key point about local grammars: they depend upon the identification of the sentence being analyzed as an instance of the chosen function. For example, a sentence with the same grammatical structure as the one in Table 1, such as the invented *When criminals are sentenced to life imprisonment, they are sent to a high-security prison* does not have the function of 'definition', and therefore the labels used by Barnbrook are not appropriate ('a high-security prison' is not the Definiens and 'life imprisonment' is not the Definiendum). This is an obvious restriction on the usefulness of local grammars for the automatic extraction of information in text, and indeed for language teaching. For Barnbrook, this is not an issue, as his corpus consists only of definitions from the CCSD. Cheng and Ching (2016) start by manually identifying all disclaimers in their corpus; in doing so they identify a restricted set of vocabulary items (such as *obligation, commitment, reflect*) which could be used to target disclaimers in a larger corpus that had not been pre-processed in this way.

As noted above, local grammars of the type pioneered by Barnbrook account for the meaning elements involved in performing a speech act: giving a definition, making an apology or a request, or disclaiming responsibility. In these cases the selection of local grammar terminology is justified by the speech act being employed. The concept of local grammar has been adopted more broadly, however (e.g. Warren and Leung 2016), in particular by Bednarek (2008) to describe the reporting (as well as the performing) of Affect (Martin and White 2005). Bednarek starts with the patterns of adjectives, nouns and verbs used to report Affect and derives a local grammar expressed as a series of analyses, of which the first line in Table 3 is an example. As noted above, the analysis in this paper focuses on the alternative 'evaluation of target' interpretation, and so relabels this example as shown in the final line in Table 3.

TABLE 3 ABOUT HERE

This leads us to the last in this list of definitions: the term 'evaluation' is used in this paper to mean the expression of an attitude towards an entity (person, object, proposition or situation). Unlike the expression of Affect, which may or may not have an explicit cause or trigger, evaluation, as used here, is always the evaluation <u>of</u> something. This accords with Thompson's (2010: 402) view that 'appraising must have a target'. The discourse function of evaluation has received increasing research

interest in recent years, in part because it has a range of applications, from modelling for students how stance is expressed in academic discourse (Hyland 2005; Biber 2006), to quantifying positive and negative judgements of products from millions of on-line comments (Turney 2002; Su 2016), to identifying ideological stance in news reports (Partington *et al*. (eds.) 2004; Bednarek 2016). Under various guises ('stance', 'appraisal', 'sentiment', for example), it has been studied using diverse methods including corpus searches for specific words or phrases (Conrad and Biber 2000; Hyland and Tse 2005a, b), qualitative discourse analysis (Martin and White 2005), and methods that combine the two (Charles 2006; Fuoli 2012; Partington *et al*. 2013; Trnavac *et al*. 2016; Partington 2017). Evaluative meaning is notoriously difficult to pin down, being cumulative (Hunston 2011: 3–4), often implicitly expressed (Martin and White 2005), and subject to embedding and nesting (Partington *et al*. 2013). Inevitably, local grammars of evaluation target only the most explicit expressions of that meaning; in this paper, only evaluation which is expressed by adjectives occurring with complementation patterns is analysed. Countering that limitation, we can assert that this local grammar is based on a complete listing of all adjective complementation patterns in English and the listing of about 2,500 individual adjectives (Francis *et al*. 1998).[2]

To recapitulate the argument of this paper: we use the notion of pattern grammar to propose form-meaning pairings, thereby contributing to research into construction grammar. More specifically we propose evaluative constructions, based on the lists of adjective patterns given in Francis *et al*. (1998). These constructions can be parsed and annotated with labels that relate them to the function of performing or reporting evaluation, thereby forming a local grammar of evaluation and contributing to research into evaluative meaning and its application.

Method: from pattern to construction

The data for the study are taken from the list of just over 40 adjective complementation patterns in Francis *et al*. (1998), which briefly comprise:

1. Adjectives followed by a that-clause, to-infinitive clause, wh-clause, or –ing clause (e.g. *be amazed that; be cheap to (build); be aware how; be lucky (having)*
2. Adjectives followed by a prepositional phrase (e.g. *be good at; be heavy on; be liable to; be generous with*)
3. Patterns with *it* (e.g. *it is interesting that; it is fashionable to; find it absurd that*)
4. Patterns with *there* (e.g. *there's nothing good about …*)

The rationale for basing the study on adjective complementation patterns has been given above. The aim of the study is to account for examples for each of the adjectives and each of the complementation patterns in the Adjectives component of Francis *et al*. (1998), excluding only the minority of adjectives that do not express evaluative meaning. We proceeded pattern by pattern and

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group by group. For example, we find that the **ADJ *at* n** pattern has three meaning groups, with these rubrics (Francis *et al*. 1998: 428–430):

1. The 'nervous' group: These adjectives indicate that someone reacts to a situation or to an idea in some way, for example, by being surprised, happy, or unhappy. E.g. *aghast; agog; alarmed; amused; anxious; appalled; ashamed; astonished; astounded…* (34 adjectives in total)

2. The 'angry' group: These adjectives indicate that someone is angry about a situation or an idea. E.g. *angry; annoyed; disgruntled; exasperated; furious; incensed…* (12 adjectives in total)

3. The 'good' group: These adjectives indicate that someone does something well or badly. E.g. *adept; bad; brilliant; clever; competent; effective; efficient; excellent…* (30 adjectives in total)

It is clear that whereas the first two groups share the meaning of 'react to a situation', the reaction being alarm, amusement, shame, surprise, or anger, the third group expresses a very different meaning. In other words, the form '**ADJ *at* n**' matches with two meanings, depending on whether the adjective is of the 'reaction' type or of the '(un)skilled' type. Thus, two form-meaning pairings, or constructions, are proposed, one with the meaning of 'react at' and the other with the meaning of 'skilled at'. These might be designated the 'reactive *at*' construction and the '(un)skilled *at*' construction. The distinction is supported by the exercise of local grammar analyses, i.e. by the mapping of meaning elements on to the examples; thus the work of building a local grammar facilitates the identification of construction. Examples (1) and (2) illustrate how the constructions differ in terms of the meaning-form mapping.

(1) *Phillip's parents were annoyed at not being told the full story earlier*
(2) *Some teachers may be adept at introducing their pupils to grammatical concepts*

Example (1) illustrates the 'reactive *at*' construction and reports an evaluation carried out by Phillip's parents whereas example (2), illustrating the '(un)skilled *at*' construction, performs an evaluation (by the speaker) of 'some teachers'. In each case the Evaluation is indicated by the adjective (*annoyed* and *adept*), but in example (1) the Target is the object of the preposition '*not being told the full story earlier*' whereas in example (2) it is the subject of the clause '*some teachers*'. The construction exemplified in (1) may therefore be annotated as 'Evaluator – Evaluation – Target' whereas that exemplified in (2) is annotated as 'Target – Evaluation – Action' (the Action label will be discussed further below).

In the research reported in this paper, this procedure has been repeated for each of the 44 patterns and for each meaning group in each pattern. Although the meaning groups are helpful in distinguishing types of meaning, it is borne in mind that they were compiled originally simply to present the adjective listings in a rational way; we have not considered ourselves bound by the groups in proposing constructions.

The 'reporting' / 'performing' distinction is important in all the patterns examined, and indeed most patterns can be interpreted in terms of a 'person reacts to target' construction and a 'target is evaluated' construction, though with different frequencies in terms of type. In the pattern **ADJ that**, for example, nine out of the twelve meaning groups (107 adjective types out of 115) represent the 'person reacts to target' construction, but in the pattern **ADJ to-inf** only five out of the 17 groups (82 adjective types out of 260) do. In these cases, a large number of meaning groups can be said to instantiate the same construction; in **ADJ that**, for example, the 'surprised', 'angry', 'horrified', 'glad', 'certain', 'aware', 'anxious', 'agreed' and 'consistent' groups may be subsumed under the concept of 'reaction'. In other cases, each group seems to demand a separate analysis. For example, the pattern **ADJ *for* n** can be interpreted as six constructions:

1. The 'reactive *for*' construction. E.g. *The people are <u>impatient</u> for change; We are <u>grateful</u> for being alerted….* The adjectives are found in meaning group 3: *desperate, eager, hopeful, impatient, ready* etc. and meaning group 13: *apologetic, grateful, guilty, sorry, thankful*.

2. The 'proxy *for*' construction. E.g. *She was <u>afraid</u> for her son*. The adjectives are found in meaning group 7: *afraid, concerned, fearful, worried* and meaning group 8: *ambitious, delighted, glad, happy, sad, sorry, thrilled*.

3. The 'purposive *for*' construction. E.g. *Cylinder mowers are <u>ideal</u> for use on ornamental lawns*. The adjectives are found in meaning group 1: *adequate, appropriate, brilliant, excellent, fine, good, great, ideal, inappropriate, wrong* etc.

4. The 'specifying *for*' construction. E.g. *The event is not <u>suitable</u> for children under ten; His team is <u>ready</u> for action; Modern facilities are not <u>necessary</u> for success; The hotel is <u>convenient</u> for the airport*. The adjectives are found in meaning group 1: *suitable, unsuitable* etc, meaning group 2: *available, open, prepared, ready, ripe* etc, meaning group 10: *critical, crucial, essential, necessary, vital*, meaning group 11: *convenient, handy, inconvenient, practical, useful* etc

5. The 'affected *for*' construction. E.g. *Sunshine is <u>good</u> for you*. The adjectives are found in meaning group 5: *advantageous, bad, beneficial, costly, damaging, good, healthy, unfortunate* etc. and meaning group 9: *compulsory, mandatory, obligatory, optional*.

6. The 'reason *for*' construction. E.g. *He is <u>famous</u> for his witty approach to design*. The adjectives are found in meaning group 4: *celebrated, famous, legendary, notable, notorious, well-known* etc.

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It will be noted that meaning group 1 appears under two constructions, distinguishing between 'onions are suitable for making into soup' (the 'purposive *for*' construction) and 'onions are not suitable for children under two' (the 'specifying *for*' construction). Meaning groups 6 (*responsible for* etc), 12 (*pushed for time* etc) and 14 (*bound for Boston*) are not included, because they do not represent evaluative meaning as defined here.

As noted above, identifying local grammar meaning element labels contributes to the distinction between constructions. This can in turn be used to organise the very large number of constructions that is the consequence of this method of analysis; those patterns that share a local grammar analysis are grouped together. This is the next stage in the methodology. The aim is to arrive at as few analyses as possible, where possible fitting several patterns into the same analysis. As a consequence, there is rarely a one-to-one correspondence between pattern and analysis. The outcome of the procedure is a set of analyses, each annotated with labels contributing to a local grammar of evaluation.

The procedure followed here is unusual in two ways. Unlike most studies of evaluative language, original corpus analysis has not been carried out, and we are reliant on previous corpus research for our data. Secondly, we have chosen to proceed pattern by pattern rather than word by word in mapping meaning on to form. We believe there are advantages to these innovations. By using the outcome of previous research we are able to take into account of many more individual words than is possible in other methods.[3] Focusing on one pattern at a time throws the distribution of meaning elements across formal elements into sharp relief and facilitates the task of developing the local grammar, again enabling us to achieve greater coverage in our schema.

Results: evaluative constructions and a local grammar of evaluation

We present the results of our investigation in a set of tables (Analyses 1 – 7). Each analysis brings together a number of constructions, each construction formed of an adjective complementation pattern and some of the sets of adjectives that are used with it. For example, Analysis 2a comprises 16 constructions, each consisting of a pattern and some of the sets of adjectives used with each pattern. For the pattern **ADJ *at* n**, for example, three such sets comprise the construction, with other sets contributing to a section construction shown in Analysis 4a. It must be added, however, that this alignment of pattern and construction is open to debate. In analysis 1, for example, it would be possible to propose a single construction, consisting of all the patterns summarised as *it* **v-link ADJ clause**. Pending further debate, then, the argument in this paper is that the pattern plus selected sets of adjectives comprise the construction.

For reasons of space, the tables are kept as short as possible. The additional on-line resources give fuller tables, including all relevant patterns and kinds of evaluative meaning, though not all the adjectives listed in Francis *et al*. (1998). Each adjective in the tables represents other similar adjectives. For example, the on-line Analysis 1 lists seven adjectives in the pattern *it* **v-link ADJ that**.

Each adjective stands in for the meaning group it comes from, so all the 243 adjectives listed with that pattern are accounted for by the analysis. All the examples in the tables are taken from Francis *et al.* (1998), though some have been shortened. In presenting the patterns and their coding we move from the most straightforward cases to the more complex or marginal. It will be noted that where the pattern includes a prepositional phrase, the preposition should strictly speaking be considered a Hinge rather than part of another element. For example, in *They were keen on the idea of education*, the Target of the reported evaluation is *the idea of education*, the Evaluator is *they* and the Hinges are *were* and *on*. To avoid over-complicating the tables, however, the preposition is placed in the same column as the phrase that follows it.

The first set of examples (Analysis 1) includes only two substantive elements: the Evaluation (i.e. the evaluative adjective) and the Target (i.e. the entity or situation being evaluated). These examples perform an act of evaluation by the speaker and involve patterns with *it* and *there*. These patterns are well known as key indicators of overt evaluation, and all instances of these patterns fit the same analysis. These might be described as 'the evaluative 'it' construction' and 'the evaluative 'there' construction'.

ANALYSIS 1 ABOUT HERE

The second set (Analyses 2a – 2c) report evaluation by an Evaluator. Analyses 2a and 2b include the same elements – Evaluator, Evaluation and Target – but the various patterns place the Evaluator in either subject (2a) or object of preposition (2b) position and the Target likewise in either subject (2b) or object of preposition (2a) position. Analysis 2c includes a further element: Proxy and represents the 'proxy *for*' construction mentioned above. Unlike Analysis 1, only some adjectives in each pattern fit this analysis. The proportions involved vary. For the pattern **ADJ *in* n**, for example, only a few adjectives (e.g. *interested, confident*) fit the analysis, but for the pattern **ADJ *of* n**, at least 70 adjectives do. In Analysis 2a, the adjectives are those which have been discussed in other contexts as realizing Affect. In some cases, as well as evaluation of the Target by the Evaluator, evaluation of the Evaluator by the speaker is implied. For example, *he was dismissive of the idea* reports 'his' feelings towards the 'idea', but also performs an evaluation of 'him' (see also Hunston 2011: 140). The more obvious examples of this layered evaluation are highlighted in italics in Analysis 2(a), both here and in the on-line tables. However, it must be noted that the presence or absence of such multi-layering is not clear-cut and some subjective judgement is necessary here.

ANALYSIS 2(a), ANALYSIS 2(b), ANALYSIS 2(c) ABOUT HERE

The examples in Analysis 3 also report, as opposed to perform, evaluation. Like the examples in Analysis 1 they include an introductory *it*, in object position in Analysis 3a and in subject position in the less common Analysis 3b. As well as the Evaluator, Evaluation and Target elements they include

an indicator (*thought, see, regard*) of the act of evaluation, labelled here Evaluative_act. Analyses 3a and 3b have the same elements but in a different order. Note that the patterns **v** *it* **ADJ that** and **v** *it* **ADJ to-inf** are used with verbs such as *think* (e.g. *thought it curious that*) and also verbs such as *make* (e.g. *made it curious that*). The patterns only fit this analysis when the verb is of the 'think' type.

ANALYSIS 3(a), ANALYSIS 3(b) ABOUT HERE

We now turn to examples that present greater challenges in terms of their analysis, and where more extensive discussion is necessary. We first look at examples where, arguably, what is evaluated is an action rather than a person or thing. Analysis 4a shows the first set of these. There are a number of possible interpretations of these examples, each with a slightly different emphasis. These can be explained using possible paraphrases:

1. Example: *I was daft going into management*. Paraphrase: 'I went into management and this action was daft'. Possible preferred coding: Actor + Evaluation + Action (where Actor + Action = Target)
2. Example: *Mr Gates has been hugely successful in creating a world-beating business*. Paraphrase: 'Mr Gates has been successful and the reason is that he has created a world-beating business'. Possible preferred coding: Target + Evaluation + Reason
3. Example: *She was good at raising money*. Paraphrase: 'She was skilful, but only in respect of raising money'. Possible preferred coding: Target + Evaluation + Restriction

Our proposed compromise between these possibilities is to have a simple coding of Target + Hinge + Evaluation + Action for each example, but to note that the Target is the Actor of the Action, and that the Evaluation covers 'Target … Action', as indicated in Analysis 4a. This analysis is somewhat contentious. Where the pattern involves a verb, either in a clause (e.g. **ADJ to-inf**: *foolish to ignore them*) or in an –ing clause following a preposition (e.g. *good at raising money*), the interpretation of Actor + Action is an obvious one. Analyzing examples where the preposition is followed by a noun phrase (e.g. *I was bad at Maths*) in the same way is less secure. For the sake of consistency, however, *I was bad at Maths* is treated here as *I was bad at doing Maths*, hence fitting the same analysis.

ANALYSIS 4(a) ABOUT HERE

There are a number of borderline cases which are excluded from this analysis. For example, the pattern **ADJ** *in* **n** includes a group of adjectives such as *beneficial, helpful, useful, valuable* (as in *Celery seed extracts are helpful in the treatment of arthritis*). The prepositional phrase indicates an action that the evaluated Target participates in, but as the action is performed by someone other than the Target, these are not seen as fitting this analysis. We also exclude examples such as *Secrets are destructive of relationships* (in the pattern **ADJ** *of* **n**), as although there is an action ('secrets destroy

relationships'), the action is indicated by the adjective, not by the prepositional phrase. These examples are assigned to Analysis 5 (see below).

As is well known (Francis *et al*. 1998: 404–405), the pattern **ADJ to-inf** can be used as in Analysis 4a, where the subject of the main clause is the same as the understood subject of the to-infinitive clause. For example, in *We would be foolish to ignore them,* 'we' is the implied subject of 'ignore them'. The pattern can also be used as in Analysis 4b, where the subject of the main clause is the goal or object of the to-infinitive clause. For example, *Watches have become more attractive to look at* implies 'someone looks at watches'. In the 4b examples, again, we face a dilemma of coding and again this can be exemplified with paraphrases:

1. Example: *These machines are fiddly to clean*. Paraphrase: 'We clean the machines and the process is fiddly'. Possible preferred coding: Goal + Evaluation + Action (where Action + Goal = Target)
2. Example: *Watches have become more attractive to look at*. Paraphrase: 'Watches are attractive, but only in respect of their physical appearance'. Possible preferred coding: Target + Evaluation + Restriction

Again we compromise with the coding Target + Hinge + Evaluation + Action, this time noting that the Target is the goal of the action, and that the Evaluation covers 'Target … Action'. Note that, as in 4(a), the action may be nominalized in the noun phrase following the preposition (e.g. *use* in *for use on*).

ANALYSIS 4(b) ABOUT HERE

We now turn to the set of adjective-pattern combinations that present the most challenging situation. In the labelling shown in the previous tables, there is considerable uniformity in the mapping of semantic elements on to grammar pattern ones. This can be exemplified by looking at the **v** *it* **ADJ that** pattern in Analysis 3a. Francis *et al*. (1998: 506–509) list no fewer than 147 adjectives occurring with this pattern. They represent a variety of types or parameters of evaluation, including 'good' (e.g. *effective*), 'bad' (e.g. *dreadful*), '(un)true' e.g. *plausible*, '(un)usual' e.g. *extraordinary*, 'important' e.g. *essential*, '(un)likely' e.g. *certain*, 'evident' e.g. *clear*.

Whatever the parameter, however, they all fit Analysis 3a. In Analysis 2a, there is a variety of prepositions, and therefore constructions, but the mapping remains consistent. When carrying out the analysis of patterns, however, we encountered a great many instances where there is a Target and an Evaluation and then some other element that is less easy to identify at an appropriate level of generality or granularity. This difficulty arises with respect to adjectives followed by a propositional phrase. Consider, for example:

(3) *Police were vague about the gunman's demands*
(4) *Cream is also helpful against a dry flaky skin*

(5) *The death penalty has proven worthless as <u>a solution to crime</u>*

(6) *Success is achievable by <u>anyone willing to work hard</u>*

(7) *It was not fair on <u>them</u>*

(8) *The language is similar to <u>Turkish</u>*

(9) *She felt drunk with <u>strange emotions</u>*

In each case the role of the underlined element could be said to be specific to the adjective and the preposition: the topic of the vagueness in (3); the specific target of the cream in (4); the respect in which the death penalty is worthless in (5); the achiever of the success in (6); the people affected by the lack of fairness in (7); the similar language in (8); the cause of the feeling in (9). One solution is to propose a cover-all term, such as 'Specifier', or 'Scope'. Another is to attempt a finer-grained analysis that would still achieve an element of generalizability. Analysis 5 (online) shows our proposed solution, which includes the general 'Specifier' label for some cases, but proposes more specific labels where these are possible. The underlined element in (3) is labelled 'Topic', in (4) it is 'Specifier', in (5) it is 'Role', in (6) it is 'Actor/Method', in (7) it is 'Affected', in (8) it is 'Comparator', and in (9) it is 'Cause'.

ANALYSIS 5 ABOUT HERE

Our final sets of evaluative examples (Analyses 6a – c) account for a small number of less frequent patterns that combine *it* patterns with prepositional phrases (e.g. *It is vital <u>for him</u> that he returns home soon*) and where the mapping is once again straightforward.

ANALYSIS 6(a), ANALYSIS 6(b), ANALYSIS 6(c) ABOUT HERE

Finally, there are a number of adjective-pattern combinations where the evaluation shades into other elements. For example, in *she is adamant in her refusal*, the adjective *adamant* offers an intensification of 'her refusal' rather than an evaluation of it (see Analysis 7a). In *Its forests were abundant with wildlife*, the adjective *abundant* quantifies the wildlife, in general terms while still, arguably, assessing this as a positive characteristic of the forest (see Analysis 7b). There is, however, an overlap here between quantity and evaluation. The examples *slow to learn* and *not big on tact* could be included under Analyses 4a and 5 respectively. Beyond these scenarios we are outside the scope of evaluative meaning. For instance, a large number of adjectives followed by *with* or *in* indicate possession or presence, as in *Every surface is scattered with photographs,* and there are adjectives that behave rather like modal auxiliaries, such as *liable to*, as in *The house is liable to problems*.

ANALYSIS 7(a), ANALYSIS 7(b) ABOUT HERE

Discussion: patterns, constructions and local grammars

The starting point for this paper was a set of forms, specifically, adjectives and the complementation patterns that are dependent on them. These forms can be designated as 'grammar patterns'. It has been proposed that the various combinations of pattern and meaning can be interpreted as constructions, though whether they are stored as such by language users remains to be investigated. In some instances, as noted above, there is a one-to-one correspondence between pattern and construction, as in the *it* **v-link ADJ that** pattern or 'evaluative *it*' construction. In most instances, however, there is a one-to-many correspondence, as in the **ADJ *at* n** pattern (the 'reactive *at*' construction or the '(un)skilled *at*' construction) or the **ADJ *for* n** pattern, for which six constructions were proposed above. For the most part, the adjectives occurring with these patterns/constructions are evaluative in meaning, and it was hypothesized that it would be possible to draw generalisations about the mapping of evaluative meaning elements on to the various adjective patterns, leading to a local grammar of evaluation.

In the formulation of a local grammar, a number of meaning elements have been proposed. These are listed in Table 4. The elements in italics (from *Role* onwards) could be said to be finer-grained sub-divisions of the Specifier element. A total of six main analyses have been proposed, though there are 13 actual tables, and one analysis (Analysis 5) could be divided into eight separate tables. This is a manageable number and suggests that the right level of granularity has been achieved. We are confident that the analyses between them account for the vast majority of adjective + pattern combinations recorded in Francis *et al*. (1998) that have an evaluative meaning and that are therefore evaluative constructions, even though space permits the inclusion of a relatively small number of example adjectives in our tables.

TABLE 4 ABOUT HERE

We have stated above that one of the benefits of developing a local grammar is that it acts as a heuristic – a way of paying close attention to all instances of a given set of patterns. It also draws attention to the multiplicity of evaluative constructions that can be proposed based on adjectives and their complementation. Individual cases have been commented on above, but we summarize those comments and extend them here:

Patterns with *it* are highly predictable in the mapping of semantic elements on to formal ones (see Analyses 1, 3a, 3b, 6a-c). Constructions of a more general or more delicate kind can be proposed, with the most general being 'it is evaluation (prepositional phrase) clause/phrase' (Analysis 1, 6a-c), 'THINK it evaluation clause' (Analysis 3a), and 'it STRIKE someone as evaluation that' (Analysis 3b).

Where the adjective expresses Affect, then evaluation is reported rather than performed, with the subject of the clause realizing the Evaluator and the element following the adjective realizing the Target, or in rarer cases the Proxy (see Analysis 2a and 2c). The choice of clause type or preposition

(*happy about, angry at, annoyed that* etc) depends on the adjective and the degree of nominalization. In the discussion above, it has been assumed that each meaning-preposition combination comprises a construction (the 'reactive *about*' construction, the 'reactive *at*' construction and so on). A more general interpretation is that there is a form expressed as 'Person + BE + Affect + Preposition + Entity' or 'Person + BE + Affect + clause' which matches the meaning of 'reaction to target', comprising a single construction. These interpretations are not inconsistent but suggest that constructions exist at various levels of delicacy (Halliday 1985; Wible and Tsao 2017).

Then there are some patterns which realize only a small number of meaning possibilities (see also Su 2015) and therefore comprise a small number of constructions. Examples of these are:

1. The pattern **ADJ to-inf** is sometimes used with Affect adjectives, in which case it conforms to situation discussed in the previous paragraph and appears in Analysis 2a. Where the adjective is not an Affect one, the pattern performs evaluation of an action or situation, as in *We would be foolish to ignore them* ('We ignore them'; 'That action is foolish') or *The party looks certain to win the election* ('The party will win the election'; 'That situation is certain') (see Analysis 4a). Where the subject of the main clause is not the understood subject of the to-infinitive clause, an action or situation is still evaluated, but the paraphrase must capture the difference in Actor, as in *These shows are cheap to make* ('We make shows'; 'Doing so is cheap') or *He was excellent to work with* ('We worked with him'; 'That was an excellent situation') (see Analysis 4b). Here, though, the consistency or reliability of the analysis comes into question. It could be argued that *He was excellent to work with* evaluates 'He' as 'excellent' and that *to work with* is a Specifier (as in Analysis 5). The line between the two interpretations is extremely blurred.

2. The meaning of the pattern **ADJ *about* n** seems to be governed by the meaning of *about* as an indicator of topic. This is true whether the adjective is one of Affect, so that the topic is also the Target, as in *They were enthusiastic about the idea*, or a non-Affect one, so that the subject of the clause is the Target and the prepositional phrase is a Topic (where the assumed action is thinking or speaking, as in *The police were vague about the gunman's demands*) or a Specifier (as in *Janet could not afford to be cavalier about money*). Two constructions can be proposed: one expressed as 'Person + BE + Affect + about entity/situation', paraphrasable as 'Person evaluates entity'; and one expressed as 'Person + BE + Adjective + about entity/situation', paraphrasable as 'Person has/expresses an attitude/behaves towards entity, and I evaluate that attitude/behaviour'.

3. The pattern **ADJ *at* n** contributes to two constructions, again depending on whether the adjective expresses Affect or not. These are illustrated by: *she felt guilty at having been spared* and *she was good at raising money*.

Many patterns, however, are interpretable as a multiple set of constructions, depending on the adjective used with them. They also therefore occur in a range of analyses. The **ADJ *for* n** pattern is

one example, as discussed above. Another is the pattern **ADJ *with* n**, which occurs in Analysis 2a (*I was angry with them*, where *them* is the Target), Analysis 2b (*The tomato has remained popular with gardeners*, where *gardeners* is the Evaluator), Analysis 4a (*She was adept with her hands*, where *she … her hands* arguably construes an action) and in several section of Analysis 5: *The first lady is busy with charity work* (*charity work* is Specifier); *Sales figures were comparable with those at previous exhibitions* (*those at previous exhibitions* is Comparator); *He was very patient with children* (*children* is Affected); *The valleys are ablaze with colour* (*colour* is Cause). It also appears in the intensifying and quantifying patterns in Analyses 7a and 7b: *Her voice was breathless with excitement; Its forests were abundant with wildlife.*

Finally, in some cases, the configuration-pattern mapping, or construction, is consistent only if the pattern is further restricted. For example, as noted above, the patterns **v *it* ADJ that** and **v *it* ADJ to-inf** fit Analysis 3a only when the verb is of the 'think' type, as opposed to the 'make' type.

The Local Grammar we have proposed allows us also to ask whether the meaning distinctions proposed by other approaches to evaluative language are supported by this study. In particular, we can interrogate the Affect – Judgement – Appreciation model of Appraisal (cf Su and Hunston forthcoming). The distinction between Analyses 2a and 5, which depends on the identification of the adjective concerned as 'reaction' or 'opinion' does support the unique position of Affect (see also Bednarek 2008). In most cases, however, neither the target-type nor the parameter of evaluation, both crucial to the Judgement – Appreciation distinction (Su 2015), are identified through pattern/construction alone.

There is potential for the identification of evaluative constructions with adjectives to contribute to resources for language teaching. An ambitious aim would be to contribute to a 'constructicon' (cf Fillmore *et al*. 2012) for learners, listing the combinations of lexis and grammar available in a given language to perform particular functions such as evaluation. For example, the examples shown here as Analysis 2a can be summarised for learners as a series of 'slots': 'person + feels + emotion towards + thing'. The possibilities in each slot can be enumerated: *be, feel, became, seemed* etc in the 'feels' position; and the various adjective + preposition/clause combinations found in the 'emotion towards' position. Such a resource would combine elements of a dictionary, a pattern grammar, and a thesaurus.

Less ambitiously, the pattern grammar resources (Francis *et al*. 1996, 1998) can be used to derive teaching materials aimed at prompting learners to produce the various constructions identified. For example, the following prompts can be used to elicit examples of the **ADJ *about* n** pattern / 'reactive *about*' construction:

1. 'I described my idea' + 'John was enthusiastic'
2. 'I wanted to meet some friends' + 'Ann was not keen'
3. 'There was a terrible mess' + 'Robin was cheerful'

Learners would be asked to produce:

    1a. *John was enthusiastic about my idea*

    2a. *Ann was not keen about meeting friends*

    3a. *Robin was cheerful about the terrible mess*

The levels of complexity involved in different constructions can also be exploited. For example, the prompt:

    4.   'the paintings were sold' + 'Jen was unhappy'

can be rephrased simply using the **ADJ that** pattern / 'reactive that-clause' construction:

    4a. *Jen was unhappy that the paintings were sold*

or using the more complex nominalisation ('were sold' → 'sale') necessitated by the preposition:

    4b. *Jen was unhappy about the sale of the paintings.*

Such activities promote awareness of the potential of adjective complementation and flexibility in using a variety of constructions. Other applications, such as using adjective complementation patterns in the automatic retrieval and parsing of evaluative meaning in naturally-occurring text (Wiebe *et al*. 2005), remain an exciting but unexplored potential.

Conclusion

This paper has argued that patterns, constructions, and local grammars are mutually supportive when deriving a comprehensive description of a set of linguistic resources such as those associated with evaluative meaning. These three approaches to language are all based on the analysis of naturally-occurring language. They share a concern for patterning that supersedes a lexis / grammar divide. They all focus on alignments between form and meaning. The starting point for the paper was language form and comprised the forty adjective complementation patterns identified in Francis *et al*. (1998). A key proposal in the paper is that the groups of adjectives listed for each pattern in that publication can be reinterpreted as constructions, because they represent a matching of form and meaning. The number of constructions linked to each pattern ranges from one (*it* **v-link ADJ that**) or two (**ADJ *at* n**) to six (**ADJ *for* n**) or more (**ADJ *with* n**). The consequence is a very large, even unwieldy, number of constructions altogether. The identification of semantic elements within each construction, mapping meaning on to form, assists in distinguishing constructions and also contributes to the specification of a local grammar of evaluation. As a result, the large number of constructions can nonetheless be analysed using a relative small number of analyses (22, grouped into five main categories).

The language resources of explicit evaluation have been used as a test case for the reinterpretation of pattern grammar in terms of construction grammar and the contribution of both to the derivation of a local grammar. Because we can be confident that all adjective complementation patterns have been considered and analysed, we offer a comprehensive local grammar of the function of evaluation as expressed using such resources, joining other pragmatically-driven local grammars (Su 2017, Su and Wei forthcoming). The resources used to express evaluation, both explicitly and implicitly, are extensive, however (e.g. Martin and White 2005, Hunston 2011), and this local grammar can be only very partial. Perhaps its main contribution, as in the work by Su (2017, Su and Wei forthcoming), is to specify the meaning elements involved in the evaluative act.

There is considerable scope for expanding this work. As noted above, the pattern grammar resources (Francis *et al*. 1996, 1998) include about 200 different patterns, complementing adjectives, nouns, and verbs. If each pattern can be interpreted as five constructions, which based on the work reported here seems a reasonable estimate, then 1,000 constructions of a similar level of specificity would have been identified. It remains the case that this identification is based on observation alone and does not address the question of whether such constructions are represented in the minds of language users. That question would be answerable by empirical work of a kind not undertaken here (but see Ellis *et al*. 2016). Other future research could include the quantification of lexis occurring in each of the proposed constructions, leading to the identification of collostructions and the measurement of collostructional strength (Stefanowitsch and Gries 2003; Gries and Stefanowitsch 2004).

This paper has also discussed briefly the potential pedagogical applications of this local grammar approach. These have focused on the design of teaching materials that aim at developing a flexible language repertoire. In addition a thesaurus-like 'constructicon' has been proposed for use by language learners and teachers.

Endnotes

[1] These books are out of print, but an on-line, searchable version of them is available from 2018 at www.collinsdictionary.com

[2] This approximate number is based on the information in Francis *et al*. (1998) that the book includes 10,000 nouns and adjectives. Assuming that half of these are adjectives, and that some adjectives appear in more than one entry, an estimate of 2,500 is justified.

[3] The analyses have taken account of all 2,500 adjectives listed in Francis *et al*. (1998), though of course not all of these are shown in the analysis tables. The examples shown in the tables are representative of the adjectives studied.

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Table 1: Definition of 'life imprisonment'; adapted from Barnbrook (2002: 173)

Hinge	Co-text1	Co-text2	Definiendum	Match1	Match2	Definiens
When	criminals	are sentenced to	**life imprisonment**	they	are sentenced to	**stay in prison for the rest of their lives or for a very long time**

Table 2: Disclaimer; adapted from Cheng & Ching (2016: 9)

Creator of disclaimer	Hinge		Thing denied	Restriction on denial			Thing denied
Noun group	Verb	Determiner	Noun	To-infinitive clause	Conjunction	Determiner	Noun clause
Neither the Group nor the Directors, employees or agents of the Group	assume	any	obligation	to correct or update the forward-looking statement or opinions contained in this Annual Report	and	any	liability in the event that any of the forward-looking statements or opinion do not materialize or turns out to be incorrect.

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Table 3: Alternative labels for examples reporting Affect

Emoter		Emotion	Trigger
Paul	is	angry	at the way he has been treated
Evaluator		**Evaluation**	**Target**

Table 4: Functional elements for a local grammar of evaluation

Element	Explanation (The element construes…)
Target	the entity that is being evaluated; a human being, thing, situation etc.
	e.g. ***She*** *was evasive about what she wanted help with.*
Evaluator	the source of the evaluation
	e.g. ***Carolyn*** *finds it hard to talk about the future.*
Evaluation	the evaluative meaning expressed.
	e.g. *I was quite **dishonest** about my feelings.*
Evaluative act	the act of making an evaluation
	e.g. *he had often **found** it useful to pretend to be stupid.*
Hinge	the element that (a) links different functional terms, and (b) signals an evaluation is being made.
	e.g. (a) *They**'ve been** very judgemental about me having left my son.* (b) ***it is*** *strange that he had never tried it before.*
Proxy	a person on behalf of whom evaluation is made
	e.g. *She was afraid for **her son**.*
Action	the behaviour/activity carried out by the Target and part of what is being evaluated
	e.g. *We would be foolish **to ignore them**.* e.g. *I became very bad at **math**.*
	the behaviour/activity that affects the Target and is part of what is being evaluated
	e.g. *Watches are attractive **to look at***
Specifier	a restriction on the scope of the evaluation
	e.g. *The event is not suitable for **children under ten***
Topic	a specific domain that someone talks or thinks about
	e.g. *Police were vague about **the gunman's demands***
Role	the role in respect of which something is evaluated
	e.g. *Mercator was important as **a mathematician***
Comparator	part of a statement of similarity or difference
	e.g. *The tutorials are quite distinct from **an audition class***
Affected	someone or something affected by the evaluated action or condition
	e.g. *you should be considerate of **others***
Reason/Cause	the reason for or cause of the evaluation
	e.g. *They were unlucky **that we scored when we did***
Actor/Method	a specification relating to someone performing an action
	e.g. *Success is achievable by **anyone willing to work hard***
Evidence	evidence for the truth of the evaluation
	e.g. *Saturn's low density is apparent from **its outline***

Analysis 1: Evaluation construed as Hinge + Evaluation + Target

Pattern \ Element	Hinge	Evaluation	Target
it v-link ADJ that	it is	possible	some dates may change
	it is becoming	apparent	that men are having trouble coping
	isn't it	marvellous	that these buildings have survived
	it is	awful	that it should end like this
	it was	vital	that everyone should work together
	it's	interesting	that she's never asked what he looks like
	it's	relevant	that he doesn't know me
it v-link ADJ wh-	It's	not clear	what had caused the bus to crash
	it 's	understandable	why they hate the sight of him
	It was	inexplicable	why a teenage girl had careered onto the road
	It is	important	what a mother herself eats
it v-link ADJ *what / how*	It 's	great	what you've already done
	It was	terrible	what was happening in the world
	It is	amazing	what can be achieved
	It's	true	what actors say about …
it v-link ADJ *when/if*	Would it look	rude	if she took out a book
	It's	frustrating	when people are held up with red tape
	It isn't	easy	when you have parents who don't care
	It would be	helpful	if you can tell us …
	It would be	reassuring	if the bishop expressed his support
	It would be	strange	if language remained unaltered
it v-link ADJ to-inf	It is	plausible	to conclude that a drought will occur
	It is	difficult	to get work
	It would be	selfish	to marry
	It was	best	to announce my decision now
	It is	not safe	to carry your baby in your arms
	It is	customary	to bring a gift
	It is	important	to check the success …
	Is it	legal	to marry your cousin
	Was it	funny	to frighten people like that
it v-link ADJ ing	It was	unbearable	living in that apartment …
	It was	brilliant	working with him
	It was	odd	seeing her
	It was	ridiculous	putting him behind bars
	It's	not easy	getting people to change
it v-link ADJ *about* n	It 's	too bad	about the reviews

there **v-link sth / ath / nth ADJ *about* n/ing**	There's	nothing pretty	about this film
	There 's	something sinister	about him
	There is	something depressing	about the shorter days of winter
	There must be	something strange	about the way I was singing
	There is	something Shakespearean	about all this
	There is	nothing sacred	about educational institutions
	There's	nothing easy	about refugee work
there **v-link sth / ath / nth ADJ *in* n / ing**	[if] there is	anything interesting	in my life
	There is	nothing shameful	in not wanting a career
	There was	nothing unusual	in her appearance
there **v-link sth / ath / nth ADJ *with* n / ing**	There is	nothing wrong	with borrowing to buy a house …

Analysis 2(a): Evaluation construed as Evaluator + Hinge + Evaluation + Target

Element Pattern	Evaluator	Hinge	Evaluation	Target
ADJ *about*	Ann's friends	were	less enthusiastic	about the idea
	he	was	happy	about people having to move
	Dave	was	bitter	about the fact that I wanted to leave
	They	*are*	*nonchalant*	*about the dangers*
	[if] you	feel	anxious	about leaving your child …
	The residents	were	furious	about a delay in providing …
	She	did seem	curious	about why the dogs were wet
	We	*were*	*arrogant*	*about our abilities ...*
	I	*tend to be*	*cynical*	*about the oil industry*
	Many	have been	doubtful	about the arguments …
	Gary	*is*	*unashamed*	*about his influences*
	Only two shoppers	*were*	*charitable*	*about the new government.*
ADJ *as to* wh	Scientists	are	not clear	as to what is going on…
	We	were	curious	as to why our father had a darker complexion
	I	was	worried	as to how my death would affect them
ADJ *at*	she	felt	guilty	at having been spared …
	Half the people	were	amused	at this public quarrel …
	Paul	is	angry	at the way he has been treated
ADJ *by*	We	were	worried	by the fact that you had mixed socially with Marxist terrorists
	Montagu	was	impressed	by the splendours of the French court
ADJ *for*	the people	are	impatient	for change
	We	are	grateful	for being alerted to the problem
ADJ *in*	Traders	were	interested	in the development
	I	was	confident	in my ability to play the game
ADJ *of*	I	was	fond	of her
	Everyone	is	afraid	of him
	(do) you	get	tired	of all the questions
	I	*was*	*envious*	*of their anonymity*
	He	is	hopeful	of a settlement
	He	is	aware	of the dangers

ADJ *on*	they	were	keen	on the idea of education
	The government	*was*	*inflexible*	*on the need for reform*
	Warburg	remains	optimistic	on global economic growth
ADJ *over*	Mr Moon	was	furious	over his arrest
	Barlowe	was	despondent	over the rise of right-wing extremism
	Canada	is	worried	over the level of spending …
	An artist (who)	is	enthusiastic	over talent in others
	People	go	mad	over them
ADJ *to*	Officials	have been	cool	to the idea of sharing the cost
ADJ *towards*	I	have felt	affectionate	towards Karen
	He (admitted)	*feeling*	*bitter*	*towards some former colleagues*
	I	was	ambivalent	towards school
ADJ *with*	she	was	happy	with her achievements
	I	was	angry	with them
	The drug barons	are	not content	with dominating the market
ADJ to-inf.	They	were	puzzled	to find the kitchen door locked
	she	was	angry	to find him still with the circus
	You	must be	thankful	to win
	He	is	anxious	to avoid appearing weak
ADJ that	he	was	annoyed	that no meal was available
	I	'm	not surprised	the staff support you
	We	were	worried	that the children were failing …
	I	'm	thankful	that I've got a job
	I	am	positive	that this is what should be done
	The government	is	anxious	that the hostages should be released
ADJ wh	I	'm	not sure	whether that's the same
	They	might not be	aware	how nasty their bite is
	They	are	afraid	what their neighbours will think
ADJ ing	This person	will feel	unhappy	living in unpleasant surroundings

Analysis 2(b): Evaluation construed as Target + Hinge + Evaluation + Evaluator

Element Pattern	Target	Hinge	Evaluation	Evaluator
ADJ *by*	… which	is	fine	by me
ADJ *to*	Boxing	is	fascinating	to outsiders
	The answer	was not	obvious	to him
ADJ *with*	The tomato	has remained	popular	with gardeners

Analysis 2(c): Evaluation construed as Evaluator +Hinge + Evaluation + Proxy

Element Pattern	Evaluator	Hinge	Evaluation	Proxy
ADJ *for*	She	was	afraid	for her son
	I	'm	happy	for him

Analysis 3(a): Evaluation construed as Evaluator + Evaluative act + Hinge + Evaluation + Target

Element \ Pattern	Evaluator	Evaluative act	Hinge	Evaluation	Target
v *it* ADJ that	The trainer	thought	it	best	that I should rest the knee
	I	find	it	sad	that there is so little I can do
	Some people	find	it	incredible	that Schumacher can earn so much money
	He	thought	it	probable	that they were taking less able students …
	We	thought	it	important	that Phil continue to write
v *it as* ADJ that	Dealers	see	it	as unlikely	that Kingfisher can keep its independence
v *it* ADJ to-inf	We	thought	it	worthwhile	to make the journey north
	Fruitarians	believe	it	wrong	to eat the leaves and roots of vegetables
	You	might find	it	interesting	to enquire about how your children get on …
	We	consider	it	hypocritical	to undertake a ceremony …
	I	found	it	difficult	to walk
	(if) an officer	thinks	it	essential	to destroy something …
	I	believe	it	possible	to resolve that conflict …
v *it as* ADJ to-inf	A majority	did not see	it	as worthwhile	to get on the voters' roll
	We	regard	it	as immoral	to judge people on the basis of how they were born
	All players	regard	it	as critical	to seize the imagination of the young
v *it* ADJ *for* n to-inf	Mike	thought	it	silly	for me to wait in the car
	(did) you	think	it	odd	for someone to come on a bike
	He	considered	it	reasonable	for a person to defend their home

Analysis 3(b): Evaluation construed as Hinge + Evaluative act + Evaluator + Evaluation + Target

Pattern \ Element	Hinge	Evaluative act	Evaluator	Evaluation	Target
it v n *as* ADJ *that*	it	struck	her	as unusual	that a man would write such a note

Analysis 4(a): Evaluation construed as Target (Actor) + Hinge + Evaluation + Action

Element Pattern	Target …	Hinge	Evaluation	… Action
ADJ to-inf.	The party	looks	certain	to win the election
	Most adults	are	not competent	to deal with a medical emergency
	I	was	helpless	to stop it
	We	would be	foolish	to ignore them
	He	was	lucky	to escape with his life
ADJ -ing	I	was	daft	going into management
ADJ *at*	She	was	good	at raising money
	Her mother	was	clever	at many things
ADJ *in*	All members	are	proficient	in handling weapons
	Mr Gates	has been	hugely successful	in creating a world-beating business
	His ancestors	were	ruthless	in their exploitation of the workers
	He	was	absorbed	in his private game
	The agency	was	remiss	in protecting the public
	Anglers	are	negligent	in the maintenance of their tackle
	Dave	Is	right	in saying it would be silly …
ADJ *with*	She	was	adept	with her hands

Analysis 4(b): Evaluation construed as Target (Goal) + Hinge + Evaluation + Action

Element Pattern	Target ...	Hinge	Evaluation	... Action
ADJ to-inf.	Watches	have become	more attractive	to look at
	He	was	excellent	to work with
	These shows	are	cheap	to make
	Such matches	are	boring	to watch
ADJ *for*	Cylinder mowers	are	ideal	for use on ornamental lawns

Analysis 4(c): Evaluation construed as Action + Hinge + Evaluation + Target

Element Pattern	Action …	Hinge	Evaluation	… Target
ADJ *of*	That	was	stupid	of me

Analysis 5: Evaluation construed as Target + Hinge + Evaluation + another element

Element / Pattern	Target	Hinge	Evaluation	Specifier
ADJ *about*	They	have been	marvellous	about what happened
	I	wasn't	analytical	about gardens
	Janet (could not afford to)	be	cavalier	about money
ADJ *against*	Cream	is also	helpful	against a dry flaky skin
	The Celts	were	defenceless	against the Anglo-Saxon attack
	The houses	were	proof	against snakes
ADJ *as*	Birmingham	is	famous	as home of the industrial revolution
ADJ *for*	The event	is	not suitable	for children under ten.
	His team	is	ready	for action
	Modern facilities	are	not necessary	for success
	The hotel	Is	convenient	for the airport
ADJ *from*	Many young people	are	alienated	from society
	The moor	is	safe	from oil exploration
ADJ *in*	Celery seed extracts	are	helpful	in the treatment of arthritis
	Some kids	are	deficient	in those skills
	The oil	is	important	in the fight against heart disease
ADJ *to*	That tradition	was	alive	to the need to live …
	Kalamansi	is	unique	to The Philippines
ADJ *with*	The Griffins	were	very generous	with offers of lifts
	The first lady	is	busy	with charity work
	Target	**Hinge**	**Evaluation**	**Topic**
ADJ *about*	Police	were	vague	about the gunman's demands
	She	was	evasive	about what she wanted help with
	I	was	quite dishonest	about my feelings
	Roddy Doyle	is	entertaining	about ordinary things …
ADJ *on*	The BBC	is	not neutral	on this point
	Malcolm	was	weak	on theory
	Target	**Hinge**	**Evaluation**	**Role**
ADJ *as*	The death penalty	has proven	worthless	as a solution to crime
	Mercator	was	important	as a mathematician
	Target	**Hinge**	**Evaluation**	**Comparator**

ADJ *from*	The tutorials	are	quite distinct	from an 'audition' class
ADJ *in*	Mars and Sirius	are	comparable	in brilliance
ADJ *of*	The room	is	reminiscent	of a bank vault
ADJ *over*	some jobs	are	privileged	over others
ADJ *to*	The language	is	similar	to Turkish
ADJ *with*	Sales figures	were	comparable	with those at previous exhibitions

	Target	**Hinge**	**Evaluation**	**Affected**
ADJ *against*	I	've been	successful	against their bowlers
ADJ *for*	Sunshine	is	good	for you
	Chess	is	compulsory	for every student
ADJ *of*	Secrets	are	destructive	of friendship
	You	should be	considerate	of others
ADJ *on*	It	was	not fair	on them
ADJ *over*	Human beings	are	dominant	over nature
ADJ *to* n	Many insects	are	beneficial	to the birds
	smoking	is	detrimental	to health
	Everyone	is	friendly	to each other
	This matter	is	important	to the future of the industry
	The viaduct	is	visible	to rail passengers
ADJ *towards*	He	was	aggressive	towards the other boys
ADJ *with*	He	was	very patient	with children

	Target	**Hinge**	**Evaluation**	**Reason / Cause**
ADJ *that*	They	were	unlucky	that we scored when we did
ADJ *from*	Her muscles	were	sore	from the stillness
	The rocks	are	slippery	from the crude oil
ADJ *on*	His departure	was	conditional	on a guarantee of safety
ADJ *with*	She	felt	drunk	with strange emotions
	The valleys	are	ablaze	with colour

	Target	**Hinge**	**Evaluation**	**Actor/Method**
ADJ *by*	Success	is	achievable	by anyone willing to work hard
	Most tourists	are	not hidebound	by tradition
	Her designs	are	recognisable	by her use of dramatic colours
ADJ *on*	The industry	is	reliant	on the whims of pre-teens

	Target	**Hinge**	**Evaluation**	**Evidence**
ADJ *from*	Saturn's low density	is	apparent	from its outline
ADJ *in*	Her influence	was	apparent	in his moral outlook

Analysis 6(a): Evaluation construed as Hinge + Evaluation + Affected + Target

Element Pattern	Hinge	Evaluation	Affected	Target
it **v-link ADJ** *for* **n that**	It is	vital	for him	that he returns home soon
it **v-link ADJ** *for* **n to-inf.**	It is	fashionable	for the rich	to eat white flour

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Analysis 6(b): Evaluation construed as Hinge + Evaluation + Evaluator + Target

Element Pattern	Hinge	Evaluation	Evaluator	Target
it v-link ADJ *to* n that	It is	important	to him	that certain activities and institutions flourish in society
	It is	inconceivable	to him	that Pitt could die

Analysis 6(c): Evaluation construed as Hinge + Evaluation + Target + Action

Pattern \ Element	Hinge	Evaluation	Target …	… Action
it **v-link ADJ** *of* **n** *that*	It was	characteristic	of Helmut Kohl	that he came straight to the point
it **v-link ADJ** *of* **n** **to-inf.**	It was	courageous	of him	to speak out

Analysis 7(a): Intensifying

Element Pattern	Target …	Hinge	Intensifier	… Target
ADJ *in*	She	is	adamant	in her refusal …
	Both men	are	firm	in their belief…
ADJ *with*	Her voice	was	breathless	with excitement
	I	was	eaten up	with jealousy

Analysis 7(b): Quantifying

Pattern \ Element	Target …	Hinge	Measure	… Target
ADJ *in*	The industry	is	awash	in money
	Success	was	not long	in coming
ADJ *of*	Their sentences	are	devoid	of meaning
	My boots	were	full	of water
ADJ *on*	Dr V	was	not big	on tact
	The article	was	heavy	on rumour
ADJ *with*	Its forests	were	abundant	with wildlife
ADJ to-inf	People	are	slow	to learn