9 Discussion and Conclusion

9.1 Summary of the Study

This book started with Pattern Grammar, an approach to lexis that is based on the observation of word behaviour in concordance lines and that, inter alia, makes generalisations about the complementation of verbs by clauses and phrases, including prepositional phrases. The Pattern Grammar resources (Francis et al. 1996; http://grammar.collinsdictionary.com/grammar-pattern) list all verb complementation patterns in English, and list all the (or in two cases the most frequent) verbs from the 1995 Cobuild dictionary (Sinclair 1995) that occur with each pattern. Those verbs are divided into 'meaning groups' that demonstrate the connection between form and meaning.

The next stage in this book was to reconcile Pattern Grammar with Construction Grammar. It is apparent that many of the observations that arise from Pattern Grammar can be interpreted in terms of constructions. For example, it may be said that the verb PRAISE occurs in the pattern **V n *for* n** (e.g. *Dr Madok praised the staff for their cooperation*), or it may be said that *praise* occurs in the 'verb someone for an action' construction, where the verb is a spoken response to the action. This observation of the similarity between 'pattern' and 'construction' led to the next phase of the study: the reinterpretation of 50 verb complementation patterns as over 800 proposed constructions. The constructions were obtained through a simple and subjective reworking of the Pattern Grammar meaning groups; as such they are open to refinement or challenge. The constructions form a taxonomy rather than a simple list and the concept of network has been used to show the relationship between constructions at greater and lesser levels of generality. For example, the 'verb someone for an action' construction (meaning 'respond to someone's action in a positive or negative way') may be refined to 'speech-verb someone for an action' (e.g. PRAISE) and 'action-verb someone for an action' (e.g. REWARD). A further level of specificity takes us down to the level of individual verbs: the 'praise someone for an action' construction. This process has been discussed in Chapter 3.

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The next stage of the study started with meaning rather than form. It selected nine semantic fields, inspired by the process types identified in Systemic Functional Grammar (e.g. Halliday and Matthiessen 2014), found all the constructions that belong to that field, and labelled the elements of the construction with participant role names, again inspired by SFG. This process has been described in Chapter 4.

The final stage of this study began with the sets of constructions belonging to each of the nine semantic fields and arranged them in networks that showed the choices involved in making the meaning. In each case, two kinds of network are proposed: a taxonomy showing how the constructions in that field relate to one another; and a systemic network that prioritises the features of form and meaning that contribute to construction of the taxonomy (terminology from Matthiessen 2023). In addition, prose descriptions of the taxonomy networks make explicit the choices in meaning and in form that lead to each construction. The networks show routes from the most general meaning to the specific meaning-form matchings of the constructions. They might be said to represent the path from 'grammar' to 'lexis', where 'grammar' is interpreted to be a general process type or semantic field and 'lexis' is a construction. This part of the study has been presented in Chapters 6–8. All the constructions and networks can be seen on transitivity-net.bham.ac.uk. Figure 9.1 summarises the stages of this study.

It should be noted that this book does not claim to present a new theory of lexicogrammar. Instead it attempts to come to an accommodation between different views. The point was made in Chapter 1 that each of the approaches
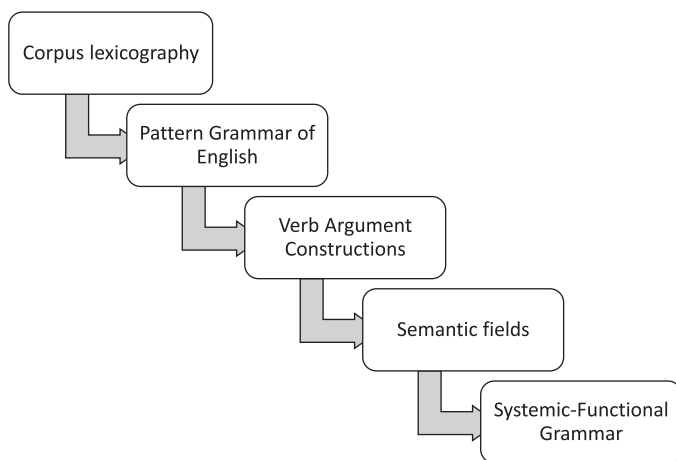

Figure 9.1 The stages of the study

covered in this study comes from a different area of Linguistics, that is, they prioritise different aspects of language. Pattern Grammar is based on an observational approach and seeks to account for language as output. In this book, it is treated as providing the input to two theories of lexis and grammar: SFG and Construction Grammar. Systemic Functional Grammar is based on a concept of language as social semiotic and seeks to account for language as a community resource. Construction Grammar is based on Cognitive Linguistics and seeks to model language in the mind. With these differing views of 'what language is' and 'how language should be studied', it is not surprising that such different models have been developed. On the other hand, given that the same object is being described, it is equally unsurprising that what emerges from the investigations under one approach can be explained in terms of another. Language can be considered as both a social phenomenon and a cognitive phenomenon, the evidence for both coming from observation of output. For some purposes, envisaging language as a mass of constructions is most useful; for others, seeing it as a series of networks is more informative. What this book does do is consider how each approach to language might assist the others. It therefore finds connections and synergies without seeking to replace any one of the approaches with another.

The remainder of this chapter considers the contribution that this study makes to each of the approaches involved and considers possible future developments of the field.

9.2   Contribution to Construction Grammar and Its Applications

Probably the main contribution of this study to Construction Grammar is the demonstration of a systematic approach to identifying constructions of a particular kind in a language. Most accounts of verb arguments in Construction Grammar are confined to familiar instances such as the transitive (**V n**), the ditransitive (**V n n**), those involving causation, such as **V n inf** (e.g. 'make someone move'), or those involving finite clauses, such as **V n to-inf** (e.g. 'tell him to go'). Some constructions with prepositions are investigated, such as the 'causative *into*' construction (**V n *into* -ing**) and the 'oblique predicative' constructions exemplified by 'take her for a friend' (**V n *for* n**) or 'regard him as a genius' (**V n *as* n**) (Stefanowitsch and Gries 2003; Hiltunen 2010; Aarts 2023). Only a small number of such constructions appear in the literature, however. This is because the starting point for Construction Grammar is the identification of form-meaning pairs, with an emphasis on the non-compositional.

The starting point for Pattern Grammar, by contrast, is corpus lexicography, involving a word-by-word study of the thousands of verbs that appear in the Collins COBUILD English Dictionary (Sinclair 1995) and

subsequent editions. The purpose of that description was to itemise the grammatical behaviour of each verb in terms of its complementation patterns, irrespective of whether each pattern uniquely identified a meaning. This means that the dictionary contains a description of every pattern and every verb sense, not just those that are striking or noticeable. For example, the **V n *for* n** pattern, as described in Francis et al. (1996: 366–373) includes rather banal examples such as 'schedule an event for a time' and 'search a place for an item' as well as the more idiomatic 'take someone for a fool'. Although the Pattern Grammar resource lacks a great deal of detail (as acknowledged in Chapter 2), it is more comprehensive in its coverage – that is, it accounts for more words – than either the Pattern Dictionary of English Verbs (pdev.org) or FrameNet (https://berkeleyfn.framenetbr.ufjf.br). This comprehensiveness means that more candidate constructions can be identified using Pattern Grammar as a starting point than by using other resources (Perek and Patten 2019).

There are two further caveats to be made concerning the comprehensiveness of the study. One is that for the most part the constructions identified in this book are compositional rather than non-compositional. The meaning of examples such as 'schedule an event for a time' and 'search a place for an item' can be deduced from the meanings of SCHEDULE and SEARCH and an understanding of the kind of entity that might be described as 'an event', 'a place', 'a time', and 'an item'. Only in the case of 'take person for characteristic' (e.g. *took him for a fool*) could the complementation be said to coerce the meaning of TAKE. The argument for the constructions discussed in this book (and those appearing on the Transitivity-Net website) is their frequency rather than what they consist of.

The second caveat is that, of course, only a small proportion of all constructions in English can be derived from the Pattern Grammar resource. The constructions discussed in this book are of one type only and have been referred to in the book as Verb Argument Constructions. There are many other kinds of construction, in English as in other languages. A future development of the work reported in this book would be to extend the study to noun and adjective complementation, using the patterns identified in Francis et al. (1998). For instance, the 'nice of you' construction discussed by Goldberg and Herbst (2021) is an example of an 'Adjective Argument Construction', based on the ***it* v-link ADJ *of* n to-inf** ('*it* + link verb + adjective + *of* noun + to-infinitive clause) pattern (Francis et al. 1998: 501–502). Francis et al.'s description of this pattern notes that the adjective in each case evaluates the action indicated by the to-infinitive clause. The 53 adjectives listed in this pattern are divided into three groups:

• The 'kind' group, comprising general positive adjectives such as *good, kind, lovely, nice*, and *sweet*, together with adjectives with more specific meanings

such as *brave, clever, generous, prudent, smart*, and *thoughtful*. The group includes *big*, which means 'good' only when it is used in this pattern.
- The 'stupid' group, comprising negative adjectives with a wide range of specific meanings such as *absurd, childish, cruel, improper, negligent, rude, silly, unprofessional,* and *wrong*.
- The 'typical' group, comprising three adjectives indicating the degree of typicality: *characteristic, typical*, and *uncharacteristic*.

The implication of Goldberg and Herbst's (2021) work is that these would comprise a single construction, with the specific meaning in context determined by the choice of adjective.

An example of a 'Noun Argument Construction' might be the 'commit to do something' construction, where the pattern is **N to-inf** (noun + to-infinitive clause) and where the noun is one of: *commitment, pledge, promise, threat, undertaking*, and *vow* (Francis et al. 1998: 114). This is one of 12 meaning groups in this pattern identified by Francis et al. (1998), each of which might be the basis for a construction.

If VACs/NACs/AACs are identified as a 'type' of construction, an implication might be that there is a tripartite division of constructions. The most general (or 'grammar-y') constructions are those that are non-specific in terms of lexis, such as the 'past tense' construction or the 'interrogative' construction. The most specific (or 'lexis-y') are those that relate to the idiomatic use of small numbers of lexical items, such as the 'accident waiting to happen' construction, or the 'have your cake and eat it' construction. Midway between the two are the VACs, NACs, and AACs. Researchers in Construction Grammar understandably resist the suggestion that some constructions are core to a language while others lie on the periphery. However, there is a case to be made for specifying construction types, of which the constructions discussed in this book would be one, without assigning priority to any one type.

Another way of looking at this issue of categorisation is to ask a question raised by Herbst (2024): is it possible to identify a cline of generality between 'grammar-like' constructions and 'lexis-like' constructions, or is the 'centre ground' between grammar and lexis more like a cloud, that is, an unordered mass of constructions? The answer suggested by this book is that it is possible to specify clines moving from the most general to the most specific (e.g. from the **V n *for* n** pattern to the 'praise someone for an action or quality' construction). In other words, there is a cloud through which individual pathways might be identified.

This brings us to a key question in Construction Grammar, which is how a constructicon should be modelled (Diessel 2023). A constructicon is an inventory of constructions in a language, arranged to show the relationships between them. It is agreed that a constructicon will be a network, such as the

'hub and spoke' network shown in Perek and Patten (2019). A similar approach is taken in this book, except that a layout based on SFG is used to show relations between more and less general constructions. However, it is argued in this book that one kind of network is insufficient to represent relationships between constructions. As well as the 'form to meaning' networks shown in Chapter 3, there are 'meaning to form' networks, as introduced in Chapter 6. Arguably, it is insufficient to use only one form of network to model the constructions in a language. Instead, a complete constructicon would need to be multidimensional.

Looking to the future, the constructions introduced in this book, and the 800 constructions on the website, have the potential to be the starting point for other studies. The constructions themselves might be refined or reinterpreted. An important extension would be to add a quantitative dimension that is currently lacking, such as the identification of collostructions (Stefanowitsch and Gries 2003), or establishing the relative frequency of constructions in a given semantic field or in a given register (similar to work done by Matthiessen 2006 in the context of SFG). Whereas the study in this book is entirely synchronic, the constructions are available also for diachronic study (suggested by Hans Boas, personal communication). Extensions to other languages are already underway (Song et al. 2024).

Another possibility for future work is that some of the developments in Pattern Grammar studies reported in Hunston and Francis (2000) and in subsequent publications such as Hunston (2008, 2024) can be reinterpreted in terms of constructions, opening up new lines of enquiry. These developments include concepts such as 'semantic sequences' and 'pattern flow', both dealing with how patterns combine to form sentences in running text. The concept of 'semantic sequence' (Hunston 2008) suggests that certain patterns tend to co-occur disproportionately with other elements of meaning. To put this in terms of constructions, a 'node' construction may be found to co-occur disproportionately with a limited range of other constructions. This could be described as a collocation between constructions. For example, what might be called the 'come to terms with [difficult issue]' construction is found to be typically preceded by expressions of difficulty, failure, or obligation, such as 'didn't find it easy to', 'never managed to', or 'had to' (Hunston 2024). If each of those expressions is interpreted as a construction, then there is a found sequence comprising: a construction expressing difficulty, failure, or obligation + the 'come to terms with' construction. This is shown in Table 9.1, with 'come to terms with' shown as the node construction, and the other shown as the collocating constructions. Sequences of constructions of this kind contribute to how texts are made up and to the ideologies that such texts draw on (Hunston 2024).

The concept of 'pattern flow' suggests that sentences or utterances can be analysed as being comprised of a number of catenative patterns (Hunston and

Table 9.1 *Node and collocating constructions: 'come to terms with'*

Collocating construction:	Node construction:
'find it hard to do something' 'fail to' 'have to'	'come to terms with [difficult issue]'

Francis 2000: 207–215). Example (1), taken from the BAWE corpus, illustrates this (see Table 9.2).

(1)   Greenhalgh's study of [such] family systems supports the hypothesis that the roots of women's subordination lie in the family system. [BAWE corpus]

Table 9.2 is a diagrammatic representation of the following points:

- Two verbs and three nouns appear in the sentence with complementation patterns: *support* is used in the pattern **V n** (verb + noun phrase); *lie* is used in the pattern **V *in* n** (verb + prepositional phrase with *in*); *study* and *roots* are used in the pattern **N *of* n** (noun + prepositional phrase with *of*); and *hypothesis* is used in the pattern **N that** (noun + that-clause). These verbs and nouns are underlined in the table.
- The two verb patterns follow sequentially after noun patterns. This is another way of saying there is a subject followed by a predicate.
- However, three of the patterns overlap. The noun *hypothesis* forms the second part of the **V n** pattern and itself is the node word of the **N that** pattern. The noun *roots* occurs in the that-clause and is the node word of the **N *of* n** pattern.
- This progression, or 'flow', is an alternative view to the more usual hierarchical representation of the clause as Subject + Verb + Object, where the Object consists of a noun phrase (*the hypothesis that the roots of women's subordination lied in the family system*) with a clause as post-modification.

This progression of elements can equally well be represented as a flow from one construction to another. The lower part of Table 9.2 suggests the constructions involved.

9.3   Contribution to Systemic Functional Grammar

The study in this book has borrowed extensively from SFG. Most obviously, it has used the concept of 'network' in three different ways. Taxonomic networks have been used to demonstrate the relationships between constructions derived

Table 9.2 *'Pattern flow' reinterpreted as catenative constructions*

Greenhalgh's study of Taiwan family systems supports the hypothesis that the roots of women's subordination lie in the family system.

PATTERNS

The <u>study</u> of systems...
    N *of* n

    ...<u>supports</u> the hypothesis
    V n

    ...the <u>hypothesis</u> that the roots
    N that

    ...the <u>roots</u> of subordination
    N *of* n

    ...<u>lie</u> in the system.
    V *in* n

CONSTRUCTIONS

The study of systems...
    'process *of* entity'

    ...supports the hypothesis
    'evaluate research entity'

    ...the hypothesis that the roots
    'idea that'

    ...the roots of subordination
    'part *of* entity'

    ...lie in the system.
    'exist in entity'

from the same verb complementation pattern. The same kinds of networks have been used to model the constructions contributing to each of the semantic fields studied. Systemic networks, itemising the features contributing to the taxonomy, have been used as a complementary modelling of the constructions in each field. Other borrowed concepts have also been used to distinguish between sets of constructions, such as the distinction between process types (mental, material, relational, etc.) or between congruent and metaphoric modes of expression. However, this book does not 'do SFG'; rather, it takes an outsider view. As well as borrowing concepts, this study has maintained positions that are at odds with SFG. Most notably, it maintains the descriptive view associated with Pattern Grammar rather than the analytic one adopted by Halliday and Matthiessen (2014). One consequence is that that-clauses, following verbs such as SAY or THINK, are simply recorded as constituting a complementation pattern, rather than being analysed in terms of the grammatical concept of Projection. Even more saliently, prepositional phrases are treated as integral to the behaviour of verbs, and are annotated as Participants, whereas in SFG they are for the most part analysed as Circumstances rather than as Participants. Exceptions include the prepositional phrase with *about* following verbal process verbs (e.g. *they don't talk about your nephews and nieces*), which is coded as Verbiage, though the comment is that 'this type of Verbiage is close in meaning to a circumstance of Matter' (Halliday and Matthiessen 2014: 306). Another distinctive feature of this book is the multiple coding of constructions as exemplifying more than one semantic field simultaneously. For example, 'She thought him a fool' is coded both as an instance of Cognition (what she thought) and as an instance of Equivalence (he is construed as a fool). This is because as well as asking 'what is the best analysis of this instance of text?' this study asks 'what are the various ways that a semantic field can be expressed?'

The main suggested contribution of this study to SFG is to suggest what a version of the lexicogrammar would look like if the end point of the grammar-lexis continuum was considered to be the construction rather than the word. This is at odds with the approach of Hasan (1996/1987) and Matthiessen (2014); the implications of this divergence are worth exploring. Hasan (1996/1987), for example, identifies features that distinguish between near-synonyms such as COLLECT, GATHER, and ACCUMULATE. One system of features is associated with the nature of the action itself, such as the distinction between 'vast (quantity)' and 'unmarked (quantity)': ACCUMULATE is unique in that it only collocates with nouns indicating 'vast' entities, such as 'a lot of money', whereas the other two verbs are unmarked in this respect – they collocate with nouns indicating large or small quantities. Another system distinguishes between allowing a pattern

that includes a benefactor, or not. In pattern or construction terms, this might be expressed as follows:

- The pattern **V n** or the 'acquire something' construction: all three verbs are used with this pattern.
- The pattern **V n** *for* **n** or the 'acquire something for someone' construction: all three verbs are used with this pattern.
- The pattern **V n n** or the 'acquire someone something' construction: only COLLECT and GATHER are used with this pattern/construction.

In other words, whereas Hasan argues that the features distinguish between verbs, and that verbs that share features are classed together, this approach argues that features distinguish between constructions, and that verbs may occur with several constructions.

The difference in approach can be illustrated in more detail using the semantic field of Creation, described in Chapter 8. The study of this field was inspired by the category of 'creative' material processes in Halliday and Matthiessen (2014: 234), and it is the one that most closely fits a single process type. In Halliday and Matthiessen's account, verbs are divided into Intransitive and Transitive and into General (i.e. less fixed collocations between verb and object) and Specific (i.e. more fixed collocations between verb and object). In the terms used in this study, the transitive/intransitive distinction is one of form, while the general/specific distinction is one of meaning. The intransitive verbs are only general in range of meaning, and include examples such as APPEAR, EMERGE, and OCCUR. Other general verbs are both transitive and intransitive and include FORM and GROW. General verbs that are only transitive are exemplified by CREATE, MAKE, and PREPARE. The specific transitive verbs are grouped according to their meaning; the examples given are:

- ASSEMBLE, BUILD, and CONSTRUCT i.e. make a physical structure;
- COMPOSE, DESIGN, DRAFT, DRAW, FORGE, PAINT, SKETCH, and WRITE i.e. make a creative artefact on paper or other medium;
- BAKE, BREW, and COOK i.e. make food or drink;
- KNIT, SEW, and WEAVE i.e. make fabric or something from it;
- DIG and DRILL i.e. make a hole;
- FOUND and ESTABLISH i.e. make an institution;
- OPEN and SET UP i.e. make an organisation or company.

These look very much like the basis for constructions. However, this is a categorisation of verbs, not constructions. Arguably, in construction terms, a 'make a cake' construction would have the specific meaning of 'create something edible from raw ingredients' and the verb might be a general one, such as MAKE, or a specific one, such as BAKE. In other words, the distinction between 'General' and 'Specific' verbs would be disregarded; instead, it would

be argued that a general verb such as MAKE takes on the more specific meaning when it is used with a given collocate such as *cake*.

Halliday and Matthiessen (2014) include only transitive and intransitive uses in their table. Most of the verbs they list could be used ditransitively, if only infrequently. A few verbs occur in a dependency relation with prepositional phrases, that is, they occur with the patterns **V n** *in/on* **n** or **V n** *from/out of* **n**. From the SFG perspective, this means that the clause includes an additional participant. A further innovation of this study is that, unlike Halliday and Matthiessen (2014), it makes a distinction between physical and abstract created entities.

Attempting to merge the insights from Halliday and Matthiessen 2014 with the insights from this study yields the following prose description of constructions that extend the specificity of the material: creative process type.

The [material:creative] process type enters into two systems: the number of participants and the nature of the created entity. The number of participants may be one, two, or three. If the number of participants is one, it is the created entity; if it is two, they are the creator and the created; if it is three, two of them are the creator and the created, and the other is either beneficiary, location, or constituents. The created entity may be physical or abstract. An abstract entity may be an event, an organisation or institution, or a situation. Merging these two systems leads to the following taxonomy:

- **One-participant constructions** may be divided into those that relate to a physical entity and those that relate to an abstract entity:
  - One-participant constructions that relate to a physical entity are:
    - The 'physical entity appears' construction, using verbs such as APPEAR and EMERGE. E.g. 'A new theatre appeared on the bank of the Thames'.
    - The 'physical entity grows' construction, using verbs such as DEVELOP, FORM, and GROW. E.g. 'The forest grew slowly'.
  - One-participant constructions that relate to an abstract entity are:
    - The 'abstract entity appears' construction, using verbs such as APPEAR and EMERGE. E.g. 'A new problem emerged'.
    - The 'abstract entity grows' construction, using verbs such as DEVELOP, FORM, and GROW. E.g. 'Several problems developed'.
    - The 'event occurs' construction, using verbs such as HAPPEN, OCCUR, and TAKE PLACE. E.g. 'Three birthday parties took place there'.

- **Two-participant constructions** may be divided according to their specific meaning. Some constructions relate to physical entities, some relate to entities such as organisations, and another relates to abstract entities.

- Examples of two-participant constructions which indicate that a physical entity has been created are:

  - The 'make a physical structure' construction, using verbs such as CREATE, MAKE, ASSEMBLE, BUILD, and CONSTRUCT. E.g. 'They built a castle'.
  - The 'create a creative artefact' construction, using verbs such as CREATE, MAKE, COMPOSE, DESIGN, DRAFT, DRAW, FORGE, PAINT, PUBLISH, SKETCH, and WRITE. E.g. 'She painted a picture'.
  - The 'cook food' construction, using verbs such as MAKE, PREPARE, BAKE, BREW, and COOK. E.g. 'He baked three loaves of bread'.
  - The 'make a garment' construction, using verbs such as CREATE, MAKE, KNIT, SEW, and WEAVE. E.g. 'She knitted a scarf'.
  - The 'drill a hole' construction, using verbs such as MAKE, DIG, and DRILL. E.g. 'They drilled a hole'.

- An example of a two-part construction which indicates that an entity such as an organisation has been created is:
  - The 'found an organisation' construction, using verbs such as CREATE, FOUND, ESTABLISH, OPEN, and SET UP. E.g. 'He founded the greatest university in the world'.

- An example of a two-part construction which indicates that an abstract entity has been created is:

  - The 'make an abstract entity' construction, using verbs such as CREATE and MAKE. E.g. 'Her actions created several problems'.

- **Three-participant constructions** include a beneficiary, a location, or constituents.
  - Three-participant constructions with a beneficiary are:

    - The 'make someone something' construction, using any of the verbs found in the two-participant constructions. E.g. 'Annie made Jerry a cake'.
    - The 'make something for someone' construction, using any of the verbs found in the two-participant constructions. E.g. 'Jerry made a cake for Annie'.

  - Three-participant constructions with a location are:

    - The 'make something in somewhere' construction, using verbs such as CARVE, ENGRAVE, ETCH, and IMPRINT. E.g. 'He carved a message in the tree-trunk'.
    - The 'make a hole in something' construction, using verbs such as BORE, DRILL, MAKE, and PUNCH. E.g. 'She drilled a hole in the board'.

- The 'write words on something' construction, using verbs such as CARVE, ENGRAVE, INSCRIBE, PRINT, and WRITE. E.g. 'He wrote a message on the whiteboard'.

▪ Three-participant constructions with constituents are:

- The 'make something from constituents' construction, using verbs such as MAKE, CONSTRUCT, and MANUFACTURE. E.g. 'They manufacture the biscuits from organic ingredients'.
- The 'make something out of constituents' construction, using verbs such as MAKE, CONSTRUCT, and MANUFACTURE. E.g. 'They manufacture the biscuits out of organic ingredients'.

Although the constructions are differentiated primarily by the verbs that occur in them, each one has a meaning that is more than the combination of the constituents, that is, in a sense they are non-compositional. For example, the 'cook food' construction means 'make something that can be eaten or drunk, combining ingredients and/or applying specific preparation and/or cooking techniques'. The 'create an artefact' construction means 'use a medium such as ink or paint on paper or canvas to bring into being an artefact such as a book or painting'. The 'make an abstract entity' construction means 'bring situation into being through words or actions'.

The Meaning Network and Systemic Network that together summarise this description of the [material:creative] process type are shown in Figures 9.2 and 9.3.

This discussion demonstrates that an accommodation can be made between the study in this book and the work of Hasan and of Halliday and Matthiessen, replacing the focus on lexis with a focus on constructions. For the most part, however, the semantic fields outlined in Chapters 6–8 do not match the process types identified by Halliday and Matthiessen (2014). The semantic area encompassed by each set of networks derives from semantics rather than from the lexicogrammar and shows the system of lexicogrammatical resources that realise that semantic field. The Communication field, as discussed in Chapter 7, for example, includes the Verbal process patterns of **V that, V n that**, and **V n**, but includes many other patterns, and the constructions associated with them, besides. In focusing on the semantic field, this work has affinities with work in Systemic Functional Linguistics (SFL) that takes meaning rather than the lexicogrammar as its starting point, such as the Appraisal framework (Martin and White 2005). The systems associated with Attitude, for example, can be discussed in terms of constructions based on the complementation patterns of adjectives (Hunston and Su 2019). It might be argued that taking the semantic field rather than the process type as entry point for these
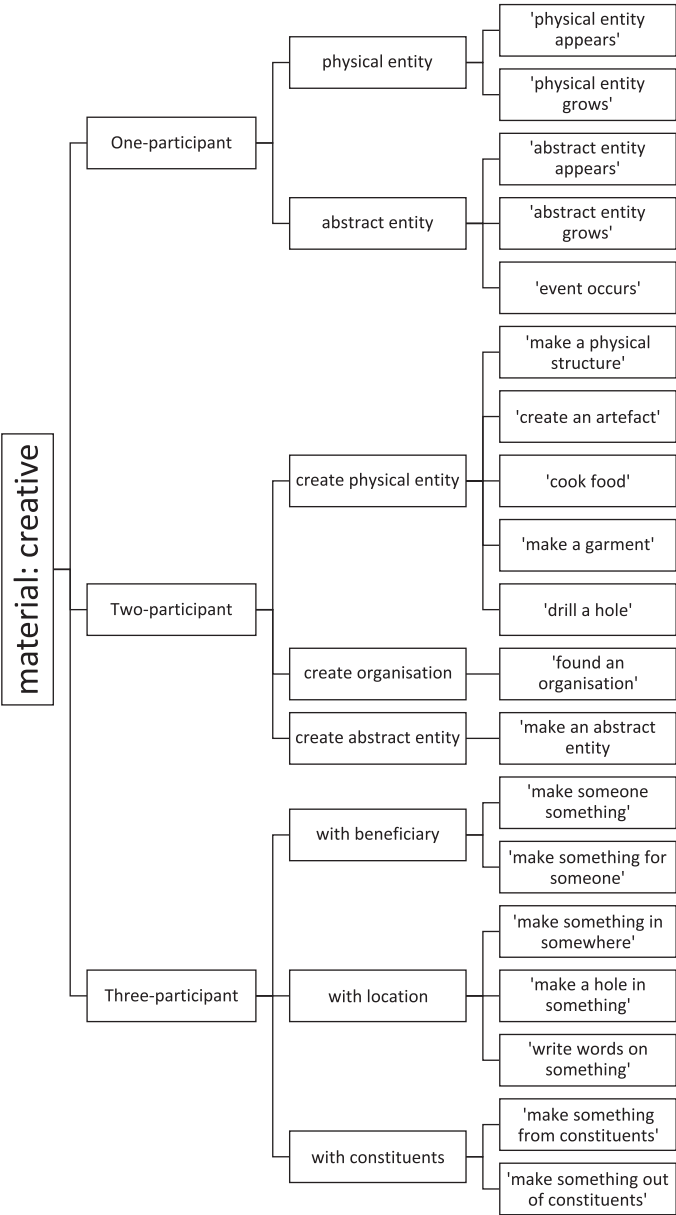
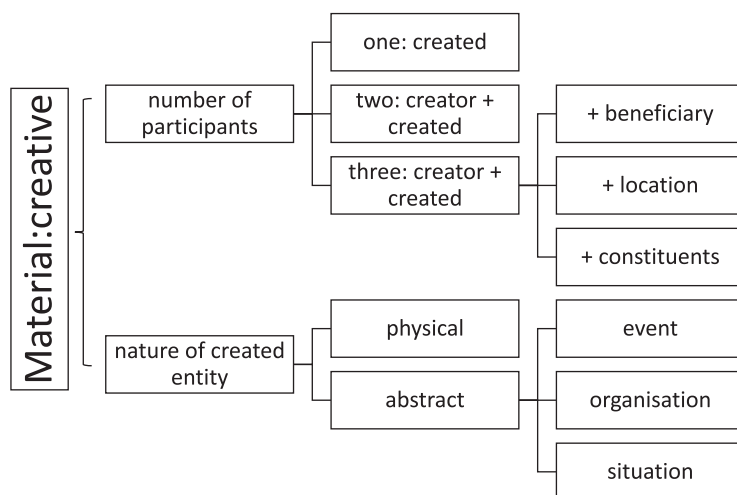Figure 9.2 Creative process constructions: Meaning Network

Figure 9.3 Creative process: Systemic Network

systems leads to a more extensive survey of the language resources available. At the very least it offers a complementary perspective.

The final question to be considered here is the 'why does it matter?' question. Systemic Functional Linguistics is an internally consistent account of how language works. Equally importantly, however, it offers significant insights into language as a social construct and demonstrates how choices within the language system contribute to a community's view of the social and physical world. It is therefore the case that many insights from SFL are useful even to researchers who do not draw on the model in its entirety. Their argument might be summarised as 'Given a situation in the social or physical world, what sets of language resources might be used to construe that situation, and how do choices between those resources affect responses to the situation?' Choices in transitivity, for example, have been demonstrated many times to contribute to a view of the world. Thompson (2014: 133–139) shows the difference between two reports of novel medical treatments, one from a newspaper and one from a medical journal. The newspaper uses more material and verbal processes, such as example (2). The journal uses more relational and cognitive processes, such as example (3). Both examples are taken from Thompson (2014).

(2)   Dentists have invented a device … (material process; newspaper article)

(3)   … in most cases, symptomatic treatment will be adequate … (relational process; journal article)

To simplify somewhat, the newspaper article is about people, their feelings and their actions, whereas in the journal article, people are secondary to abstract nominalisations such as 'treatment'. Nominalisation allows the agent of the process (the person who is responsible for the action) to be deleted and is a key topic in Critical Discourse Analysis (Billig 2008; van Dijk 2008; Martin 2008). Similarly, Fairclough (1989: 50–51) notes that in an example such as (4), the human beings responsible for the unsafe lorry loads do not appear in the text and are therefore not held accountable for causing stones to fall from lorries.

(4)   Unsheeted lorries from Middlebarrow Quarry were still causing problems by shedding stones . . .

Semantically based studies such as Appraisal (Martin and White 2005) also exemplify the social significance of choice. An early paper by Martin (1999), for example, shows how two characters in a play are distinguished by their use of Appraisal resources; the more spontaneous, emotionally aware character uses Affect to evaluate entities, while the more repressed character uses Appreciation and Judgement.

Examples such as these challenge the study in this book: can the choices represented in Chapter 6–8 be shown to 'matter', in a social sense? Can they be argued to make a difference to how the world is perceived? To some extent, this argument can be made. It will be illustrated here using the example of the semantic field Causation (see Chapter 6) and specifically the subfield of 'causing (a change in) thought or emotion'. The key distinction made in that figure is the presence or absence or the position of the Cogniser/Emoter. In most constructions, the Cogniser/Emoter is present, as the object of the verb, as in examples (5) and (6) (Cogniser/Emoter underlined).

(5)   [The engineer] was able to persuade <u>his masters</u> that the modern Feltham cars might be a good buy. (BNC)
(6)   The novel had interested <u>him</u> . . . (BNC)

In a small number of constructions, the Cogniser/Emoter appears obliquely, in a prepositional phrase (example (7), Emoter underlined), or does not appear at all (example (8)).

(7)   . . . the abstraction which arouses incomprehension in <u>the ordinary spectator</u>. (BNC)

(8)   Results of experiments . . . seem to cast doubt on the usefulness of the categorization . . . (BNC)

This might be interpreted in terms of whether the evaluative meaning is averred or attributed (Hunston 2011) and how open to challenge the evaluation is. In examples (6) and (8) the situation is straightforward: evaluation of the

novel in example (6) is attributed to 'him', achieved via Affect, and is open to challenge; evaluation of the categorisation in example (8) is averred, achieved via Appreciation, and less open to challenge. In example (5) evaluation of the cars is attributed to the masters, but the fact that this evaluation is the result of persuasion opens it to challenge. In example (7), evaluation of the abstraction as incomprehensible is both attributed and averred (the spectators do not understand it, and the speaker assesses it as incomprehensible to them). Thus, the degree of challenge is dependent on the construction used.

It is, then, possible to make the case that showing the network relations between constructions highlights the textually significant choices that the language user makes and so contributes to the use of SFG to support ideological interpretations of a text.

9.4   Conclusion

This book began with an approach to lexis and grammar that is purely descriptive. Pattern Grammar adopts only the most general of theories: language is highly patterned, and that patterning suggests that there is no divide between lexis and grammar (Sinclair 1991; Hunston and Francis 2000). It is based on the detailed observation and coding of the thousands of words that comprise the COBUILD dictionary (Sinclair 1995). That coding allows for the most comprehensive account available of the complementation of verbs, nouns, and adjectives in English. It has been argued in this book that this detailed account can be used to inform more theoretically driven accounts of English. Specifically, constructicons of English can be made more complete by taking into account the Verb Argument Construction inventory exemplified in this book and found on the Transitivity-Net website. In turn, constructions can be shown to be an alternative to lemmas as the end-point of transitivity systems in SFG.

It is hoped that the study reported in this book will be followed by others using or adapting the same techniques. One priority area would be to extend the same approach to the complementation patterns of nouns and adjectives (Francis et al. 1998; grammar.collinsdictionary.com/grammar-pattern). This could expand the potential constructicon of English by an estimated further 400 constructions, accounting between them for thousands of nouns and adjectives. A second priority is to undertake quantitative work on the constructions that have been identified. Although such work is more complex than a simple judgement of 'this is what is significantly frequent' (Gries 2019), it offers enormous potential for specifying more exactly what the meaning potential of a given construction is. The quantitative information, together perhaps with empirical studies of language users, could either corroborate or challenge the status of the potential constructions shown in this book and on the Transitivity-Net website.

It is hoped too that the possibility of incorporating constructions into descriptions based on SFG will be of benefit to that model of Linguistics. At the very least, it offers the opportunity of designing networks that bridge the gap between grammatical and lexical perspectives. If quantitative information can be added to the taxonomies of constructions, it will provide the information needed to specify what is marked or unmarked in the expression of a given semantic field and thereby add to our knowledge of what is distinctive in a given register. This suggests that the work reported in this book could be of value to discourse studies. For this to be undertaken fully, the semantic fields exemplified in this book would need to be added to, extending the coverage. While semantic fields are not discrete, identifying a more systematic way of enumerating such fields would make them more useful to discourse studies.

This book began with the observation that three traditions of language description share a perspective on language but rarely attempt to accommodate one another. The book has shown that, taking Corpus Linguistics as a starting point, the three perspectives can be unified, arguably to the benefit of each.