3   From Pattern to Constructions

Chapter 2 argued that grammar (or valency) patterns, as identified through a lexicography project, could be a useful resource for identifying verb argument constructions, noting that other researchers such as Ellis et al. (2016), Herbst and Uhrig (2019), and Perek and Pattern (2019) have reached the same conclusion. This chapter describes the process used to derive candidate constructions from the Pattern Grammar resource and proposes that taxonomy networks can be used to depict the relationship between those constructions. It further argues that the 'size' of a construction is not fixed, but that more general and more specific constructions, as indicated by the taxonomy networks, can be proposed.

3.1   Background

A precursor to the argument in this book can be found in Hunston and Su (2019), though that paper dealt with the patterning of adjectives while this book takes verbs as its starting point. Working specifically with the semantic area of evaluation (Martin and White 2005; Hunston 2011), Hunston and Su hypothesise an alignment between pattern and construction, arguing that 'each of the meaning-pattern combinations identified in Francis et al. (1996, 1998) can be regarded as a construction' (Hunston and Su 2019: 567). They use the adjective meaning groups in Francis et al. (1998) as a basis for identifying constructions, though in practice they depart from the groups themselves quite substantially.

For example, there are a large number of adjectives that are complemented by a that-clause (the pattern **ADJ that**) and that indicate an emotive reaction to a target. In Francis et al. (1998) these are divided into several meaning groups ('surprised', 'angry', 'horrified', 'glad', and 'anxious'), whereas Hunston and Su (2019: 575) suggest there is one construction: 'person is reaction that-situation'. In contrast, the pattern **ADJ *for* n** (*grateful for, fearful for*, *good for*, *convenient for*, etc.) is interpreted as six constructions, based on the function of the preposition; the adjectives recorded for this pattern are listed under 13 meaning groups that do not align with the proposed

constructions. In some cases, the mapping of construction to meaning groups is straightforward: the 'proxy *for*' construction, for instance, unites adjectives meaning 'afraid' (*afraid*, *concerned*, *fearful*, and *worried*) and those meaning either 'happy' or 'sad' (e.g. *delighted*, *glad*, and *happy*; *sad* and *sorry*), which Francis et al. (1998) split into two groups. In other cases, the picture is more complex: the 'specifying *for*' construction (e.g. *suitable for children*, *ready for action*, *necessary for success*, and *convenient for the airport*) brings together adjectives from four different meaning groups. This is because the proposed constructions focus on the function of the preposition whereas the original meaning groups prioritised the meaning of the adjectives.

Hunston and Su (2019) proceed to group the constructions under seven 'analyses', each labelled with functional roles, such as 'Target' and 'Evaluator'. For example, the second analysis comprises constructions with the elements Evaluator-Hinge-Evaluation-Target. Eight constructions are listed, each based on a different pattern: Person is *happy about* a situation; Person feels *guilty at* a situation; Person is *interested in* something; Person is *dismissive of* something; Person is *keen on* something; Person is *happy with* a situation; Person is *happy to* do something; Person is *annoyed that* a situation existed. As in this book, the constructions are named after one of the adjectives used with it. Hunston and Su (2019: 581) go on to argue that a taxonomy of evaluation constructions could be proposed, based on the notion of delicacy (Halliday 1985; Wible and Tsao 2020). The eight constructions above, for example, are all more specific versions of either a 'Person + BE + Affect + Preposition + Entity' construction or a 'Person + BE + Affect + Clause' construction.

The research reported in this chapter applies the same principles to verb complementation patterns, but here there is no focus on a single area of meaning, so there is a much wider area of expression to consider. A total of 54 verb patterns have been reinterpreted. These exclude the intransitive pattern **V**, patterns with *it* and *there*, and a few patterns that are used with very few verbs, such as **V n *towards* n**. Table 3.1 lists the patterns and shows the number of constructions identified for each. Three columns of patterns are shown in Table 3.1. The first column lists patterns composed of phrases and clauses but not prepositional phrases. The second column lists patterns consisting of the verb and a prepositional phrase. The third column lists patterns with a verb, a noun phrase, and a prepositional phrase. The full set of constructions can be found on the Transitivity-Net website: transitivity-net.bham.ac.uk. The process of identifying constructions, and the issues that arise in that process, are the subject of this chapter. The chapter also develops the notion of taxonomy and system. The question of element annotation is reserved for Chapter 4.

Table 3.1 *List of patterns and the number of constructions identified in each*

Patterns	No. of constructions	Patterns	No. of constructions	Patterns	No. of constructions
V n (Cognition)	9	V about n	16	V way prep/adv	23
V n (Communication)	10	V after n	4	V n about n	8
V n (Material)	41	V against n	12	V n against n	8
V n (Relational)	19	V around n	7	V n as adj	6
V adj	12	V as adj	2	V n as n	10
V -ing	16	V as n	8	V n at n	8
V to-inf	25	V at n	17	V n by n	6
V that	21	V between pl-n	4	V n for n	21
V wh	20	V by amount	3	V n from n	26
V n n	20	V by -ing	3	V n in n	24
V n adj	17	V for n	21	V n into n	18
V n -ing	11	V from n	16	V n into -ing	6
V n to-inf	27	V in n	19	V n of n	8
V n that	8	V into n	18	V n on n	20
V n wh	8	V of n	12	V n out of n	13
		V off n	2	V n to n	37
		V on n	30	V n with n	29
		V onto n	4		
		V out of n	7		
		V over n	15		
		V through n	7		
		V to n	42		
		V towards n	5		
		V with n	36		

3.2 Meaning Groups and Constructions: The Example of 'V *into* n'

To recap: Francis et al. (1996) group all the verbs recorded as occurring with a given complementation pattern into 'meaning groups'. The general purpose of this is to demonstrate that form is linked to meaning, and that the verbs that share complementation patterns tend also to share aspects of meaning (Hunston and Francis 2000: 83). The more specific purpose is to identify the range of meanings made by each pattern and to organise the long list of verbs found to occur with that pattern into something that makes sense and is usable in language learning and teaching. As noted in Chapter 2 and Section 3.1, the resource has been used by constructions researchers as a starting point for identifying constructions (Ellis et al. 2016; Hunston and Su 2019; Perek and Patten 2019), though there is clearly no one-to-one correspondence between construction and meaning group. Rather, the pattern-based meaning groups are a useful resource, a preliminary organisation of a mass of data, available for further use.

In this section, the question of meaning group and construction will be discussed in relation to the pattern **V *into* n** (verb + *into* + noun phrase). It is obvious that this pattern participates in at least two constructions with radically different meanings, exemplified by 'He turned into a frog' [= became a frog] and 'She bumped into a tree' [= made physical contact with a tree]. The difference in form between the two is the verb: TURN and BUMP. There is, therefore, a 'turn into' construction that is markedly different from, on the one hand, a 'turn left/right' construction with the same verb and on the other hand, from a 'physical contact' construction with the same preposition. If, however, the form is 'grow into', as in 'He grew into a handsome man', to what extent is this the same construction as 'turn into' and to what extent is it different? Both mean a process of becoming, at the end of which the Subject 'he' is identifiable as the object of the preposition: 'a frog' or 'a handsome man'. In one case the process implies supernatural involvement, while in the other case it implies gaining maturity.

Arguably, then, it is the case that each verb+ *into* form is an individual construction, but that some level of generality has to be imposed if the constructions are to do more than replicate a dictionary. The position taken in this book is that there are two superordinate constructions – the 'change/turn/grow into something' construction and the 'bump/barge/crash into something' construction. There are also more specific constructions, including 'turn into', 'grow into', and 'bump into'.

To demonstrate more comprehensively how issues such as this play into deriving constructions from the pattern, 3 of the 13 meaning groups from Francis et al.'s (1996) account of the pattern **V *into* n** are discussed further here. (This example was suggested by Peter Uhrig, personal communication). The groups are: the 'CRASH' group; the 'INFILTRATE' group; the 'TURN' group. Table 3.2 gives the relevant information from each meaning group: its mnemonic name, the rubric for the group, and the verbs listed in the group. The three groups have been selected as examples because they illustrate different decisions made in reinterpreting meaning groups as constructions. It should be recalled that in this book, non-technical names for constructions are used, based on a selected verb from the construction, such as the 'turn into' construction or the 'crash into' construction. This does not imply that the construction is used with the one verb only. It is proposed that the 'turn into' construction, for instance, is used with 34 verbs, or is the superordinate for 34 more specific constructions, while the 'crash into' construction is used with 9 verbs, or is the superordinate for 9 more specific constructions. It should also be recalled that a verb may appear in more than one construction, used in slightly different senses or with different collocates. For example, 'He barged into the railings' means physical contact has taken place whereas 'He barged into the room' does not.

Table 3.2 *Three meaning groups from the pattern* **V into *n***

Name of group	Description of group	Verbs in the group
THE 'CRASH' GROUP (Francis et al. 1996: 205)	These verbs are concerned with collisions. The prepositional phrase indicates the thing or person that someone or something hits.	*bang*, *barge*, *bump*, *cannon*, *crash*, *plough*, *run*, *slam*, and *smash*
THE 'INFILTRATE' GROUP (Francis et al. 1996: 207−208)	These verbs indicate that someone or something enters a place, group, or thing, physically or metaphorically.	*ascend*, *assimilate*, *barge*, *bleed*, *book*, *break*, *check*, *cram*, *creep*, *cross*, *crowd*, *crumble*, *dive*, *empty*, *fall*, *filter*, *fit*, *flash*, *get*, *go*, *hack*, *infiltrate*, *integrate*, *jam*, *marry*, *move*, *pack*, *pile*, *plug*, *push*, *put*, *roll*, *slot*, *splash*, *throng*, *tumble*, and *withdraw*
THE 'TURN' GROUP (Francis et al. 1996: 204)	These verbs are concerned with becoming. The prepositional phrase indicates what something becomes. We include here *segue* and *shade*, which indicate either that something becomes something else or that it is next to or followed by something else.	*amalgamate*, *ball*, *blook*, *blossom*, *broaden*, *build*, *change*, *coalesce*, *condense*, *convert*, *curl*, *decompose*, *degenerate*, *develop*, *erupt*, *escalate*, *evolve*, *fizzle*, *form*, *gel*, *germinate*, *grow*, *merge*, *metamorphose*, *mushroom*, *mutate*, *ossify*, *segue*, *shade*, *transmute*, *turn*, *blow up*, *curl up*, and *shape up*

We return now to the meaning groups shown in Table 3.2.

THE 'CRASH' GROUP is treated in this book, and on the Transitivity-Net website, as a single construction, named the 'crash into' construction, with the description: 'An entity collides with another entity' ('entity' here meaning a person or a thing). On the Transitivity-Net website it is construction six in the pattern **V *into* n**. The verbs listed for the construction are identical with the list of verbs in the meaning group shown in Table 3.2. The verbs BANG, BARGE, CRASH, SLAM, and SMASH are close synonyms. The verbs CANNON, PLOUGH, and RUN are more problematic: in other contexts they are not associated with this meaning, but 'cannon into something', 'plough into something', and 'run into something' do mean that a collision has taken place. It could be argued that 'bump into something' implies a less catastrophic collision, but physical contact still takes place, and the difference is one of degree.

The description of THE 'INFILTRATE' GROUP itself includes a list of subgroups (entering a place, group, or thing, which might be a physical location or figurative), suggesting a more eclectic mix of verbs and the possibility of more

than one construction mapped on to this meaning group. In response, it is interpreted as seven distinct constructions, as follows (the numbers such as Cx1 refer to number given to this construction on the Transitivity-Net website):

- Cx1 the 'crowd into' construction. Many people move into a space so that the space is full. Verbs: *cram*, *crowd*, *jam*, *pack*, *pile*, and *throng*. Note that the Subject of the verb is plural.
- Cx2 the 'barge into' construction. A person moves into a space. Verbs: *barge*, *break*, *cross*, *dive*, *push*, and *withdraw*.
- Cx3 the 'filter into' construction. A substance moves into a space. Verbs: *bleed*, *empty*, and *filter*.
- Cx15 the 'integrate into' construction. A person joins a community. Verbs: *assimilate*, *infiltrate*, *integrate*, and *intrude*.
- Cx16 the 'get into' construction. A person joins a social or physical entity. Verbs: *book*, *check*, *get*, *hack*, *marry*, and *tumble*.
- Cx17 the 'fit into' construction. An entity is consistent with a category. Verbs: *fall* and *fit*.
- Cx18 the 'creep into' construction. An entity starts to exist somewhere. Verbs: *creep* and *flash*.

Even with these seven proposed constructions, the question of how general or specific a construction should be remains. Of the above, construction 16 is probably the most diverse and least satisfactory. It takes a broad, abstract view of the meaning (joining an entity), but risks overstating the similarities between the more specific constructions: 'book/check into a hotel'; 'hack into a computer'; 'get/tumble into a situation'; 'marry into a family'.

THE 'TURN' GROUP is, arguably, equally diverse, but in this book and the Transitivity-Net website it is treated as a single construction (Cx7). The construction is described as 'An entity changes to become something else' and the example given is *Though the tenants didn't like living there*, they grew into a community *in the course of their campaigns.* A total of 34 verbs are listed in the construction. In each case, there is a meaning of 'become something different', although, as previously illustrated, more precisely focused constructions could be proposed. These could be:

- General change, with no specifics added: *change into*, *convert into*, *mutate into*, and *turn into*.
- Become a larger entity: *broaden into*, *build into*, *escalate into*, *grow into*, *mushroom into*, and *blow up into*.
- Change into a more advanced or mature entity: *bloom into*, *blossom into*, *develop into*, *evolve into*, *germinate into*, *grow into*, and *shape up into*.
- Conversely, change into something less advanced or mature: *degenerate into*, *fizzle into*, and *ossify into*.

- Change to a different structure: *condense into*, *decompose into*, *metamorphose into*, *mutate into*, and *transmute into*.
- Several things combine to form one thing: *amalgamate into*, *coalesce into*, *form into*, *gel into*, and *merge into*.
- Change shape: *ball into a fist*, *curl into a ball*, *curl up into a ball*.
- Gradually change: *segue into* and *shade into*.
- Suddenly change: *erupt into*.

The main difficulty here is that each verb+preposition instance has a quite specific meaning, and the list as a whole could be divided up in different ways. For example, the 'become a larger entity' construction (second bullet point above), could be divided into sequences implying a negative affect (*build into*, *escalate into*, *mushroom into*, and *blow up into*), and those suggesting a positive change (*broaden into* and *grow into*). An alternative would be to pick out *mushroom into* and match it with *balloon into* in a construction that in abstract terms is something like '[entity] + [verb from noun indicating something that increases in size quickly] + *into* + [ensuing larger entity]'. The solution adopted here is to take a compromise position and to propose a fairly general superordinate construction. This issue of taxonomy will be returned to in Section 3.4.

3.3   The Most Difficult Pattern: 'V n'

Before moving on to the representation of construction networks, it is as well to say something about the most difficult pattern dealt with in this study: the **V n** pattern (verb + noun phrase). This pattern encompasses all transitive verbs (Verb + Object), and it includes also the Verb + Complement sentence pattern. The difficulty of this pattern arises simply because of the sheer volume of verbs that occur in it, the vast range of meanings expressed, and the variety of relations between the verb and the noun phrase that follows it. Halliday (1994), for example, identifies several kinds of relation between Subject and Object, as shown in examples (1)–(7):

(1)   The lion caught the tourist. Actor-Process-Goal (Halliday 1994: 109);
(2)   I believe you. Senser-Process-Phenomenon (Halliday 1994: 118);
(3)   John made a statement. Sayer-Process-Verbiage (Halliday 1994: 141);
(4)   You haven't signed your name. Actor-Process-Scope (Halliday 1994: 149);
(5)   Your story sounds complete nonsense. Carrier-Process-Attribute (Halliday 1994: 120);
(6)   The deadliest spiders are the funnelwebs. Identified-Process-Identifier (Halliday 1994: 122);
(7)   Peter has a piano. Possessor-Process-Possessed (Halliday 1994: 133).

Halliday and Matthiessen (2014) propose distinctions between process types. The primary distinctions are between 'material', 'relational', 'mental', and 'verbal' processes (see Chapter 5), but there are also subcategories. Their examples mainly come from verbs that are used intransitively (the pattern **V**), and those that are used transitively (the pattern **V n**). For example, they distinguish 'types of doing-&-happening' (Halliday and Matthiessen 2014: 228ff.), noting that these can be 'creative' or 'transformative', with cross-cutting distinctions between physical and abstract. Creative processes are divided into 'general' and 'specific'. Transformative processes are divided into 'elaborating', 'extending', and 'enhancing'. The elaborating processes are further divided into 15 types, of which these are examples: change a state (e.g. burn/freeze/harden something); change the make-up of something (e.g. blow up/prune/smash something); change a surface (e.g. polish/wipe/sweep something); change the size of something (e.g. compress/grow/stretch something); change a shape (e.g. coil/deform/flatten something). For each category, example verbs are given, divided into those that are used intransitively, transitively, or both. This potentially provides the basis for identifying constructions, though a relatively small number of verbs are considered.

There is, then, a vast amount of material to be considered in this pattern. To help with the issue of volume, in this book, the pattern **V n** has been subdivided into four, based on Halliday's primary process types, i.e.: **V n (Relational)**; **V n (Material)**; **V n (Cognition)**; **V n (Communication)**. This reduces the number of constructions in each category and, as we shall see, the complexity of the pattern networks.

Another difficulty is that Francis et al. (1996) break with their practice of listing all verbs identified as occurring with a pattern, and in the case of **V n** (and the intransitive **V**), list only the most frequent verbs. This was necessary because of space constraints. In this book, the coverage is even less comprehensive, and some verbs have been discarded because they could not be accounted for by a construction. The result of both these decisions is that some of the constructions give the impression of being quite incomplete in terms of the verbs that could be said to belong to them. For example, construction 1 in the **V n (material)** pattern is the 'build something' construction, described as 'A person or entity brings a physical entity into being'. The construction lists only seven verbs: *blow bubbles*; *build a building*; *lay a trap*; *leave a mark*; *make a meal*; *rule a line*; *start a fire*. This admittedly feels quite random, with *build* and *make* having a very general use but the others having a very restricted collocation. There are, surely, many more verbs in English that mean 'bring into being'. Many of these, however, did not make the cut in Francis et al. (1996), while others that are frequent enough to have been included, such as *start*, may be so frequent because they have a range of

other uses (*start running*, *start to think*, *the day started*, etc.) rather than because their 'create' use is frequent.

The commentary on the 'build something' construction above illustrates another noticeable aspect of the **V n** pattern: it is often necessary to specify collocates in order to make sense of the verbs in a construction. Here are a few examples:

- **V n (relational)** Cx8: the 'develop a fault' construction. A person or entity gains a quality. Verbs: *adopt an attitude*; *affect an interest*; *assume a manner*; *develop a fault*; *develop an illness*; *gain weight*; *gain speed*; *gather speed*; *lose weight; lose speed*; *recover consciousness*.
- **V n (relational)** Cx11: the 'follow a route' construction. A person or entity moves relative to a place or entity. Verbs: *clear an object*; *cover a distance*; *cross a line*; *describe a circle*; *follow a route*; *jump a fence*; *run a distance; travel a distance*; *travel a place*; *walk a distance*; *walk a route*.
- **V n (communication)** Cx9: the 'make a suggestion' construction. A person produces an utterance. The verb and the noun phrase following indicate the type of utterance. Verbs: *add a remark*; *ask a question*; *call a name*; *draw a comparison*; *make a suggestion*; *offer advice*; *pass a comment*; *put a question*; *withdraw a remark*.

The pattern **V n (material)** is particularly problematic in terms of the range of things it covers, and it could well be argued that constructions have been 'merged' inappropriately, just to reduce the complexity. Here are two examples:

- **V n (material)** Cx4: the 'repair something' construction. The description is: 'A person or entity changes the state of a physical thing'. The verbs listed in this construction on the Transitivity-Net website are arranged in five groups, each of which refers to a different kind of physical change. The first group consists of verbs indicating destruction: *break*, *destroy*, *fight*, *hurt*, *shoot*, and *strike*. The second group consists of verbs with the opposite meaning: *fix*, *mend*, and *repair*. The third group consists of verbs indicating making a change in appearance: *mark*, *paint*, and *decorate*. The fourth group consists of: *change*, *close* and *open*. The fifth group is a random collection: *cook food*, *prepare food*, *sign a document*, and *work metal*.
- **V n (material)** Cx26: the 'start work' construction. The description is: 'A person starts, stops, or continues an activity'. Again, the listed verbs are divided into groups. The first set of verbs indicates 'stop': *abandon a process*; *drop an activity*; *finish an activity*; *stop an activity*. The second set indicates 'start': *begin talks*; *attempt a task*; *open a meeting*; *start work*. The third set indicates 'continue': *continue an activity*; *maintain a process*; *repeat an action*. The final two verbs indicate that an activity does not take place are: *avoid an activity* and *prevent an event*.

It is probably then the case that specifying constructions from the **V n** pattern brings into the sharpest focus the question of 'what a construction is'. It may indeed be the case that each construction should consist of a small number of verbs and quite specific argument collocates. There is certainly scope for splitting the constructions shown on the Transitivity-Net website.

3.4   From Constructions to Construction Network

The first task in this project, then, was to derive a set of Verb Argument Constructions from each verb complementation pattern. The decisions about demarcating one construction from another (what constitutes 'the same' form and meaning) make it clear that a simple list is not adequate for recording constructions. Some constructions are more like each other than others are. There is, for example, a more significant difference between 'turn into a frog' and 'bump into a tree' than between 'crowd into a space' and 'cross into a space'. This is hardly a novel observation. As noted in Chapter 2, researchers who build constructicons aim not only to identify sets of constructions but also to show how they relate to one another (Lyngfelt et al. 2018; Herbst and Uhrig 2019). This chapter has the more modest aim of showing how the constructions derived from a single pattern relate to one another. To do this, the concept of the network is adopted from Systemic Functional Grammar (Matthiessen 2023). The aim is to represent all the constructions proposed from a given verb complementation pattern as a network. Identifying the nodes of the network gives information about how the constructions are the same as or different from one another. That is, the nodes express the parameters of difference found within a single pattern. The process of moving from pattern to construction to network will now be illustrated in three examples: **V n adj**; **V n *to* n**; **V *after* n**.

A Simple Example: V n adj

The first example is the pattern **V n adj** (verb + noun phrase + adjective). It has been chosen for its relative simplicity. In Francis et al. (1996: 280–285), the pattern is described, as all the verb patterns are, in terms of traditional structural categories, with meaning groups then identified within each structure. For the pattern **V n adj**, the structures and meaning groups are shown in Table 3.3. It will be noted that one group (group 2.2) is divided into several subgroups, and that where the verb-adjective collocation is restricted, the relevant adjective is shown in the list of verbs. Meaning groups 2.2 (vii) and 2.5 list 'other' verbs, that is, verbs that occur with the pattern but which do not fit into any other group. Additional information given by Francis et al. (1996), and not repeated here, is the sense number of each verb as given in the Collins COBUILD English

Table 3.3 *Structures, meaning groups, and verbs in the pattern **V n adj** (adapted from Francis et al. 1996: 280–285)*

Structure	Meaning group	Verbs
I Subject-Verb-Object e.g. *He wished both of them dead*.	1.1 'like'	5 verbs: *like*, *need*, *prefer*, *want*, and *wish*
	1.2 'imagine'	2 verbs: *imagine* and *picture*
II Subject-Verb-Object-Object Complement e.g. *The doctor caught her asleep*.	2.1 'consider' and 'call'	24 verbs: *account, believe, brand, call, certify, confess, consider, count, declare, deem, diagnose, find, hold, judge, label, pass, presume, profess, pronounce, prove, rate, report, rule,* and *think*
	2.2 'make'	
	2.2 (i) 'pull open'	26 verbs: *blast (open), blow (open), clamp (shut), close, ease, force, jam, kick, lever, nail (shut), open (wide), prize (open), pry, pull, push, shove, shut (tight), slam (shut), slide, spread (wide), tape (shut), tear (open), tug, wedge, wrench (open),* and *yank*
	2.2 (ii) 'squash flat'	20 verbs: *batter (flat), blot (dry), cram (full), draw (close), jerk (loose), leave (dead), pat (dry), plane (flat), pull (free), scrub (clean), set (free), shake (loose), shoot (dead), squash (flat), squeeze (dry), stuff (full), sweep (clean), towel (dry), wipe (clean),* and *wrench (loose)*
	2.2 (iii) 'hold steady'	4 verbs: *have, hold, keep,* and *leave*
	2.2 (iv) 'drive mad'	8 verbs: *batter (unconscious), beat (unconscious), drive (mad), jolt (awake), knock (unconscious), scare (stiff), send (mad),* and *strike (blind)*
	2.2 (v) 'turn down low'	4 verbs: *pitch, crank up, turn down,* and *turn up*
	2.2 (vi) 'paint yellow'	4 verbs: *colour, paint, spray,* and *turn*
	2.2. (vii) other verbs	4 verbs: *get, make, render,* and *slice*
	2.3 'find'	3 verbs: *capture, catch,* and *find*
	2.4 'bury alive'	3 verbs: *burn, bury,* and *skin*
	2.5 other verbs	3 verbs: *be born, picture,* and *serve*
III Subject-Verb-Object-Complement e.g. *Shares ended the day slightly higher*.	3.1 'begin'	4 verbs: *begin, end, finish,* and *start*

Dictionary (Sinclair. 1995). Francis et al. (1996) also give examples for several of the verbs in each meaning group, which are not repeated here.

Altogether, Table 3.3 shows 110 verbs divided into 14 meaning groups. In some cases, reinterpreting these as constructions is relatively straightforward. For example, meaning group 1.2, with the two verbs IMAGINE and PICTURE, can easily be considered a construction. In other cases, decisions have to be made, as they were when the original meaning groups were described. For example, meaning group 2.2 (i) contains:

- A set of verbs indicating 'a person [cause] something open': BLAST, BLOW, EASE, FORCE, KICK, LEVER, PRIZE, PRY, PULL, PUSH, SHOVE, SLIDE, TEAR, TUG, WRENCH, and YANK. (In each case the adjective is *open*.)
- A partially overlapping set of verbs indicating 'a person [cause] something closed': CLAMP, EASE, FORCE, KICK, NAIL, PULL, PUSH, SHOVE, SLAM, SLIDE, and TAPE. (In each case the adjective is *closed* or *shut*.)
- A set of verbs indicating 'a person [close/open] something [to a degree]': OPEN, SHUT, and SPREAD. (The adjective is *wide* or *tight*.)
- A set of verbs indicating 'a person [forcibly maintain] something [open/ closed]': JAM, NAIL, TAPE, and WEDGE. (The adjective is *open*, *closed* or *shut*.)

It is a matter of judgement as to whether these are treated as one construction or as four 'smaller' constructions. In this instance, the constructions follow the meaning group, and one 'larger' construction is proposed, though of course these could be divided up.

For the pattern **V n adj**, a total of 17 constructions are proposed, that is, slightly more than the number of meaning groups. Table 3.4 shows these constructions, giving the construction name, its description, a sample list of verbs and an example taken from the British National Corpus. The construction name and description allow restrictions on form and/or meaning to be recorded. For example, construction 6 has a reflexive pronoun in the place of the noun phrase. Construction 13 specifies that the affected entity is food. In the case of all the constructions, the description specifies whether the Subject in the construction is a person, an entity, or possibly either. Construction 14, for example, specifies 'a financial entity'. (See Chapter 4 for further discussion of this point.)

It is immediately apparent from Table 3.4 that while the 17 proposed constructions can be represented as a simple list, they could also be sensibly divided into groups. One clear group is the set of constructions that indicate causation. Constructions 7–13 all mean that one person or entity causes another entity to exist in a particular state or to have a particular quality. Constructions 15–17 could be added to these, though in those cases the caused state is

Table 3.4 *Proposed constructions from the pattern V n adj*

Cx number	1	2	3	4
Cx name	the like something quality construction	the want something quality construction	the believe something quality construction	the imagine something quality construction
Cx description	A person likes something to have a particular quality.	A person wants something to have a particular quality.	A person thinks that something has a particular quality.	A person imagines a possible entity to have a particular quality.
Sample verbs	like, prefer	need, want, wish	believe, consider, find, presume, think	imagine, picture
Example	*He likes his coffee strong.*	*She wants her garden wild.*	*. . . many considered them too weak . . .*	*She imagined him haggard and afraid.*

Cx number	5	6	7	8
Cx name	the call something quality construction	the profess oneself quality construction	the make something quality construction	the push something open construction
Cx description	A person says that something has a particular quality.	A person says of themselves that they have a particular quality.	A person or entity changes something so that it has a particular quality.	A person or entity moves something so that it is open or closed.
Sample verbs	brand, call, declare, label, pronounce, report	confess, find, profess, pronounce, prove	get, make, render	blast, close, force, kick, jam, open, pull, push, tug, yank
Example	*Other people pronounced them wanton . . .*	*She professed herself reluctant to remain indoors.*	*The pain of the spasms had made him impervious to . . .*	*The wind had . . . slammed the door shut.*

Table 3.4 (*cont.*)

Cx number	**9**	**10**	**11**	**12**
Cx name	the wipe something clean construction	the keep something safe construction	the crank the volume up higher construction	the colour something red construction
Cx description	A person or entity changes something so that it has a particular quality.	A person or entity maintains something in a particular state.	A person changes the volume of something.	A person or entity changes the colour of something.
Sample verbs	squash (flat), towel (dry), cram (full), pull (loose), wipe (clean)	have, hold, keep, leave	crank up, pitch, turn down, turn up	colour, paint, spray, turn
Example	*She wiped the surface clean.*	*You have to keep the powder dry.*	*She cranked the volume up higher.*	*Children learn to colour the sky blue.*

Cx number	**13**	**14**	**15**	**16**
Cx name	the serve food cold construction	the begin the day higher construction	the leave someone alive construction	the capture someone alive construction
Cx description	A person serves a meal either hot or cold.	A financial entity begins or ends a period of time at a particular level.	A person does or does not kill someone.	A person finds a person in a particular state.
Sample verbs	Serve	begin, end, finish, start	leave (alive), shoot (dead)	capture, catch, find
Example	*It can be served hot or cold.*	*Shares ended the day lower.*	*He shot him dead.*	*. . . most of the soldiers had been captured alive.*

Cx number	**17**			
Cx name	the bury someone alive construction			
Cx description	A person causes harm to someone while they are alive.			
Sample verbs	burn, bury, skin			
Example	*They were buried alive.*			

represented by the verb rather than by the adjective, and the acted upon participant is a person. Another group is the set of constructions that indicate construal, that is they mean that a person 'brings a situation into being' through thought or speech. These are constructions 1–6. This act of construal could be said to be a kind of figurative causation – a situation is brought about figuratively, by saying or thinking something, rather than literally, by doing something. This leaves construction 14, which remains something of an outlier. These observations are summarised in Table 3.5. In this table, the constructions are identified simply by a number and a verb, rather than by the full construction name. The full name and description can be found in Table 3.4.

As previously explained, the connections between these constructions can be shown as a network, see Figure 3.1. In this figure, construction 14 is subsumed under 'causation', just to neaten the figure. The layout is in a sense arbitrary, moving as it does from left to right rather than from top to bottom, but it follows the convention used in Systemic Functional Grammar. Importantly, although the most specific, rightmost points of the network consist of the named constructions, each node in the network can also be described as a construction – a 'larger', or more general, construction. These constructions might be described as:

Table 3.5 *Groups of constructions derived from the pattern V **n adj***

| Group	Subgroup	Constructions	Note
Construal	Cognition	Cx1 'like' Cx2 'want' Cx3 'believe' Cx4 'imagine'	A person brings a situation into being, metaphorically, through thought.
	Communication	Cx5 'call' Cx6 'profess self'	A person brings a situation into being, metaphorically, by saying something.
Causation	Acted upon participant is entity	Cx7 'make' Cx8 'push open/ shut' Cx9 'wipe clean' Cx10 'keep' Cx11 'crank up' Cx12 'colour' Cx13 'serve'	The action brings about a situation represented by the adjective.
	Acted upon participant is person	Cx15 'leave' Cs16 'capture' Cx17 'bury'	The action brings about a situation, with the adjective indicating a related circumstance.
Time		Cx14 'begin'	
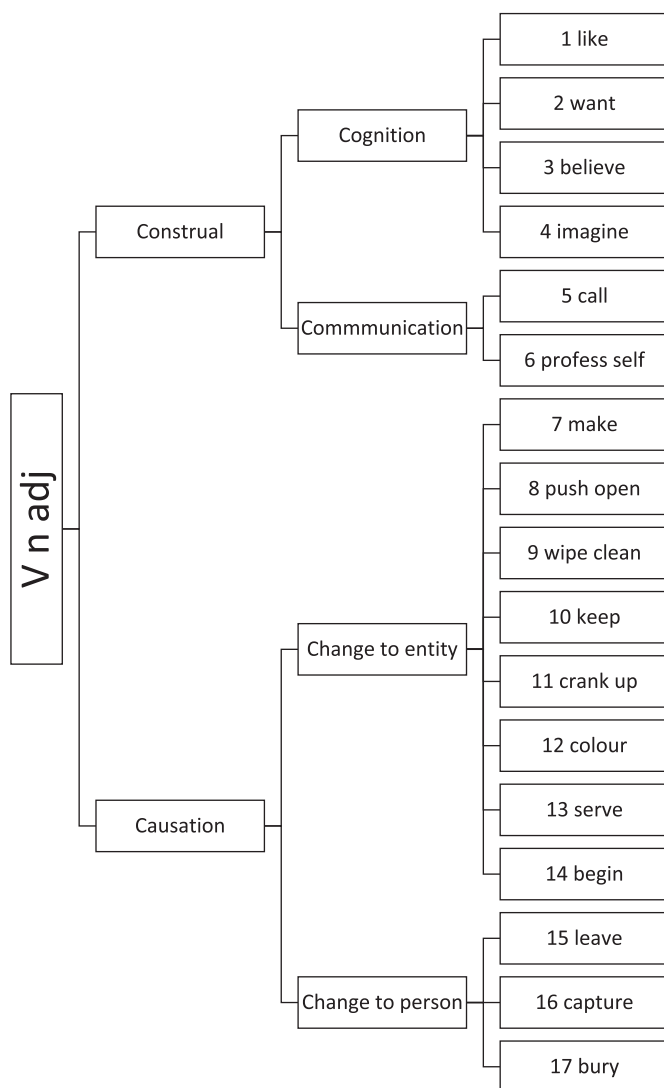
Figure 3.1 A network for the constructions derived from the pattern **V n adj**

- V n adj = the 'make/construe entity quality' construction
  - The 'construe entity quality' construction
    - The 'cognise entity quality' construction
    - The 'communication entity quality' construction

◦ The 'cause entity quality/state' construction
- ▪ The 'cause entity quality/state' construction
- ▪ The 'act_on person quality/state' construction

It is thus the case that from the pattern a construction network is proposed comprising levels of generality. From left to right in Figure 3.1, we move from more general constructions to more specific ones.

Figure 3.1 replicates the network that appears on the Transitivity-Net website. It is worth noting, though, that a further stage could identify still more specific constructions that lie between some of the rightmost constructions proposed here and the individual verb constructions. As an example, consider the 'call something quality' construction (Cx5). A total of 11 verbs are listed as occurring in this construction: BRAND, CALL, CERTIFY, DECLARE, DIAGNOSE, LABEL, PASS, PRONOUNCE, PROVE, REPORT, and RULE. There are, then, 11 distinct constructions that are here grouped together. It would be possible to take the network further to the right to show how they relate to one another. A 'prose' version of the network might look like this:

- The entry point to the network is the **V n adj** pattern, where **V** represents an act of communication. They can be divided into: illocutionary (where the words bring a change in the world) and non-illocutionary (where the words reflect a situation in the world).
    ◦ Illocutionary: CERTIFY, DECLARE, PASS, PRONOUNCE, and RULE. These can be divided into actions that are conventionally written and those that are conventionally spoken.
       ▪ Conventionally written: CERTIFY and PASS
       ▪ Conventionally spoken: DECLARE, PRONOUNCE, and RULE

    ◦ Non-illocutionary: BRAND, CALL, DIAGNOSE, LABEL, PROVE, and REPORT. These can be divided into actions calling on expertise and those not calling on expertise.
       ▪ With expertise: DIAGNOSE and PROVE
       ▪ Without expertise: BRAND, CALL, LABEL, and REPORT. These can be divided into communications that indicate attitude and those that do not.
          • Attitudinal: BRAND, LABEL, and CALL. These form a cline from negative to more neutral
          • Non-attitudinal: REPORT

Figure 3.2 shows this diagrammatically.
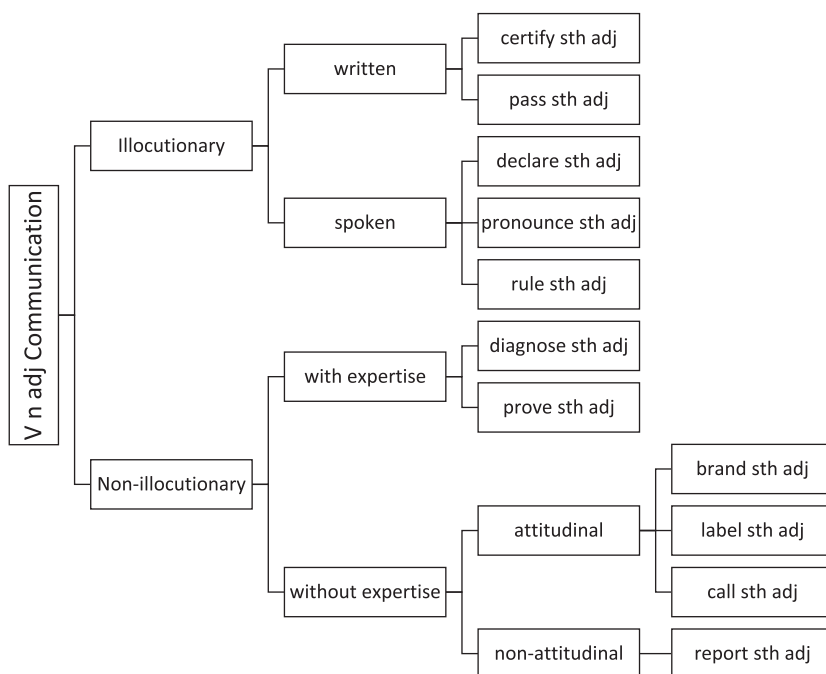
Figure 3.2 Further degrees of delicacy in the network for the constructions derived from **V n adj**

A More Complex Example: V n to n

The second example to be given here is the pattern **V n *to* n** (verb + noun phrase + *to* + noun phrase). This is an example of a pattern comprising an Object noun phrase and a prepositional phrase; patterns of this kind were an important innovation in Francis's original work (Francis 1993). This pattern is described in Francis et al. (1996) as having three structures:

- Structure I: Subject-Verb-(Direct) Object-(Indirect) Object. Example: *We explained the situation to him.*
- Structure II: Subject-Verb-Object-Object Complement. Example: *She changed her name to Caroline.*
- Structure III: Subject-Verb-Object-Adjunct. Example: *She banished him to the upstairs room.*

  There are a few points that need to be made about these structures. Firstly, the notation in Francis et al. (1996) is slightly different from that given above. In

that book the distinction between 'Direct Object' and 'Indirect Object' is not made, but novel terms 'Prepositional Object' and 'Prepositional Complement' are used. In the examples given above, 'to him' (Structure I) is labelled as a Prepositional Object and 'to Caroline' (Structure II) is labelled as a 'Prepositional Object Complement'. These terms might be glossed as 'like an ordinary Object (etc.) but a prepositional phrase'. Secondly, integral to Francis's work is that the optional Adjunct element (see Structure III) is not excluded from the description of verb complementation if the form of the Adjunct (in this case, a prepositional phrase beginning with *to*) is dependent on the verb.

Francis et al. (1996: 418–433) identify 10 meaning groups with Structure I, one group with Structure II, and 19 groups with Structure III, giving a total of 30 meaning groups. For this book, these groups have been reinterpreted as 37 constructions and these are organised, as in the case of **V n adj**, as a network. At the most general, or leftwards extreme of the network is a distinction based on the type of process indicated by the construction. Inspired by the process types proposed by Halliday (Halliday and Matthiessen 2014), but changing the terminology somewhat, these processes are: Action, Communication, Cognition, and Relation. Because the networks can become too dense to see clearly, the practice adopted here is to show detail in separate figures. Figure 3.3 shows the constructions subsumed by Communication, Cognition, and Relation only. In the case of Communication, a further distinction is made between communicating about information (e.g. 'break the news to someone') and communicating about action: telling someone to do something (e.g. 'challenge someone to a duel') or promising to do something (e.g. 'promise help to someone'). In the case of Cognition, a distinction is made between constructions where the Cognizer is the Subject (e.g. 'person prefers tea to coffee' Cx30) and those where some other entity is the Subject (e.g. 'person drew my attention to the problem' Cx33).

For clarity, the constructions shown in Figure 3.3 are expressed more fully than those in Figure 3.1. It should be remembered that in each case several verbs can be assigned to a construction. For example, construction 34 (a person compares one thing to another) occurs with verbs such as *anchor*, *connect*, *correlate*, *index*, *liken*, *link*, *match (up)*, *relate*, and *tie*, as well as with *compare*. As previously noted, more specific constructions could be proposed from this list.

Construction 34 illustrates a further point: although networks are a convenient way to express relationships between constructions, they do tend to stress, or even exaggerate, the differences between alternatives. It could well be argued that construction 34 indicates an act of Cognition (someone thinks that two things are similar) as well as a process of Relation (one thing is similar to another). The same could be said of construction 35. The
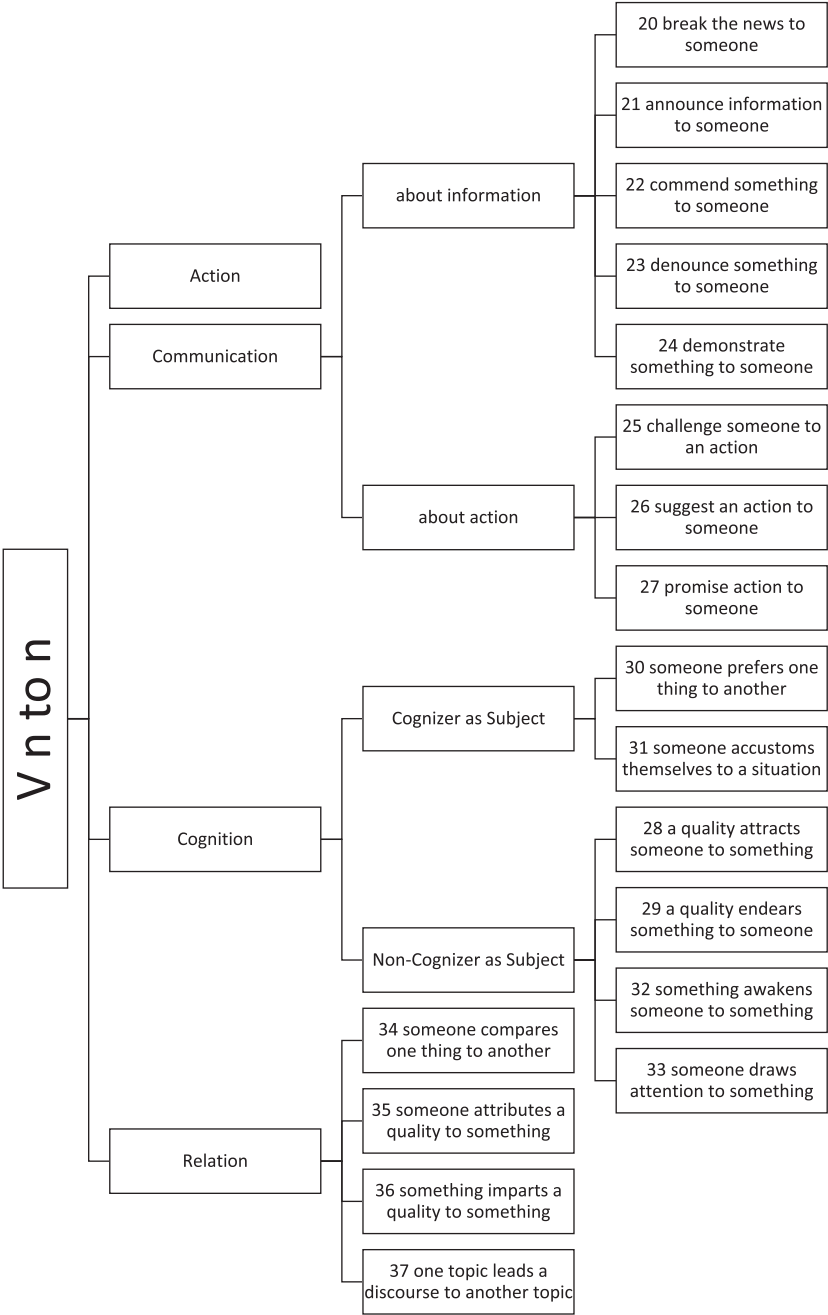
Figure 3.3 Communication, Cognition, and Relation process-based constructions from the pattern **V n** *to* **n**

network representation does not allow for a construction to be 'partly this and partly that'. However, overlaps of this kind are considered further in Chapter 4.

The 'Action' processes that occur with the pattern **V n** *to* **n** are rather more complex and interesting. They are shown in Figure 3.4. First, a distinction can be drawn between the actions of 'transfer', 'change', and 'cause' (Figure 3.4a). An example of transfer is 'give something to someone' (Cx1), an example of change is 'change one thing to another' (Cx9), and an example of cause is 'incite someone to an action' (Cx17). A second relevant distinction appears to be between literal and figurative actions. In the case of 'transfer' (Figure 3.4b) and 'cause' (Figure 3.4d), the constructions reflect this distinction. Literal transfer is exemplified by 'give something to someone' (Cx1), while figurative transfer is exemplified by 'grant respect to someone' (Cx5). There is one literal cause construction – 'deport someone to a place' (Cx12) – while the other constructions express figurative rather than literal movement, such as 'promote someone to a role' (Cx15). Again, the network configuration requires that fuzzy boundaries be treated as clear. For example, constructions such as Cx17 ('incite someone to action') and Cx18 ('condemn someone to an ordeal') are treated as figurative, though the results may be physical enough, because the acts of inciting and condemning are generalised accounts of complex situations and not as literal as the act of deportation. In the case of 'change' constructions (Figure 3.4c), the figure may raise questions, because the same numbered constructions are shown as both literal and figurative. This is because this distinction is not made in respect of these constructions on the Transitivity-Net website. However, it makes sense to distinguish between, for example, 'choke someone to death' (Cx11), where the
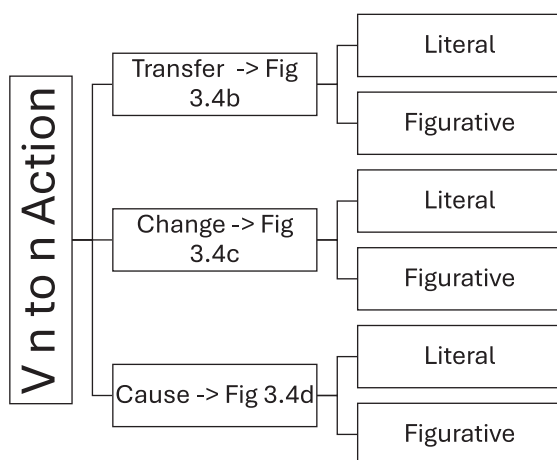
Figure 3.4a Action process-based constructions from the pattern **V n** *to* **n**

Transfer

Literal
- 1 give something to someone
- 2 mail something to someone

Figurative
- 3 allocate resources to something
- 4 bequeath assets to someone
- 5 grant respect to someone
- 6 concede argument to someone
- 7 introduce someone to someone
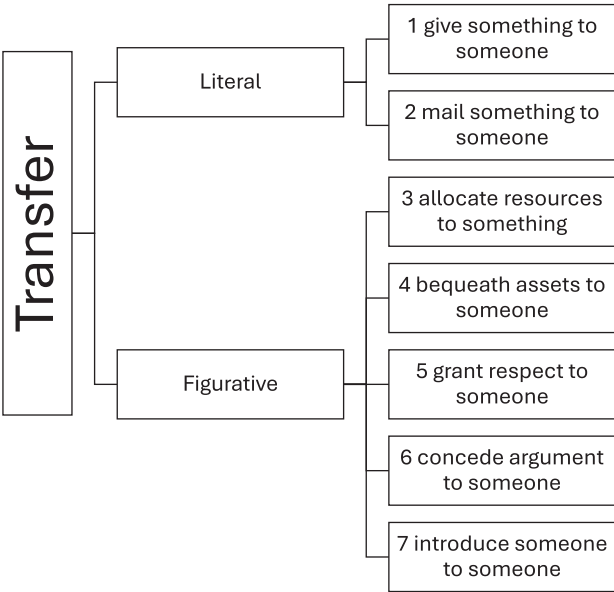
Figure 3.4b Action process-based constructions, the transfer network

Change

Literal
- 8 increase sound to a level
- 9 change something to something
- 10 attach one thing to another
- 11 batter someone to death

Figurative
- 8 increase tension to a level
- 9 change abstraction to abstraction
- 10 add a comment to an argument
- 11 bore someone to death
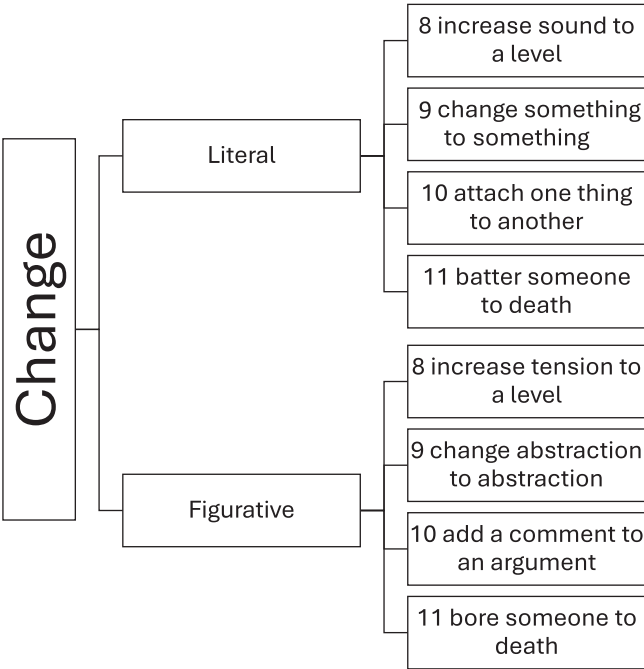
Figure 3.4c Action process-based constructions, the change network

```
                ┌─────────────┐      ┌──────────────────────┐
        ┌───────┤   Literal   ├──────┤ 12 deport someone to │
        │       └─────────────┘      │       a place        │
        │                            └──────────────────────┘
        │                                    ┌──────────────────────┐
 C      │                            ┌───────┤ 13 connect one       │
 a      │                            │       │ abstraction to another│
 u      │              ┌───────────┐ │       └──────────────────────┘
 s      │      ┌───────┤ act on    ├─┤       ┌──────────────────────┐
 e      │      │       │ entity    │ └───────┤ 14 broaden a scope to│
        │      │       └───────────┘         │     a wider one      │
        │      │                             └──────────────────────┘
        │      │                                   ┌──────────────────────┐
        │      │                           ┌───────┤ 15 promote someone   │
        └──────┤                           │       │     to a role        │
      ┌────────┴──┐                         │       └──────────────────────┘
      │ Figurative│                         │       ┌──────────────────────┐
      └───────────┘                 ┌───────┤       │ 16 delegate activity to│
                                    │       │       │     a person         │
                    ┌───────────┐   │       │       └──────────────────────┘
                    │ act on    ├───┤       │       ┌──────────────────────┐
                    │ person    │   │       ┼───────┤ 17 incite someone to │
                    └───────────┘   │       │       │     an action        │
                                    │       │       └──────────────────────┘
                                    │       │       ┌──────────────────────┐
                                    │       └───────┤ 18 condemn someone   │
                                    │               │     to a situation   │
                                    │               └──────────────────────┘
                                    │               ┌──────────────────────┐
                                    └───────────────┤ 19 apply oneself to an│
                                                    │     action           │
                                                    └──────────────────────┘
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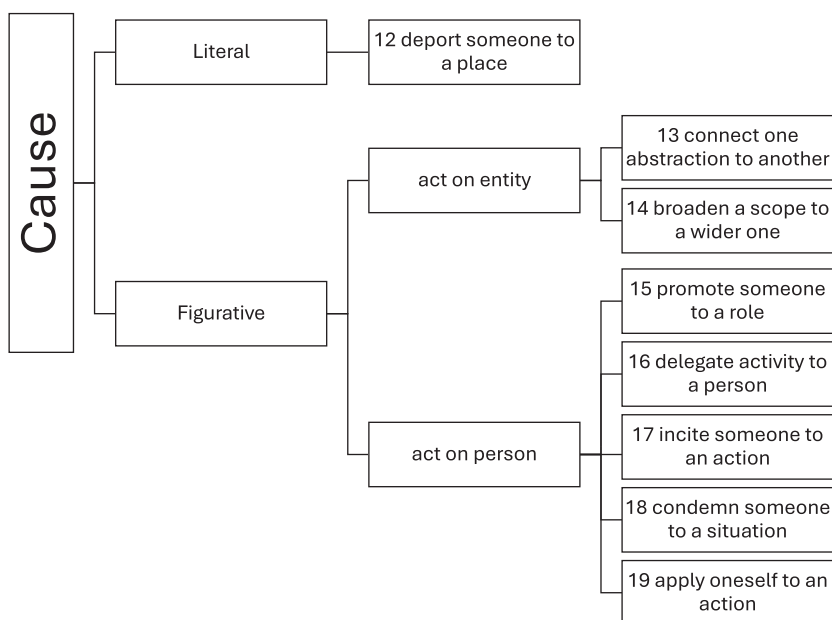
Figure 3.4d Action process-based constructions, the cause network

victim actually dies, and 'bore someone to death' (also Cx11), where the most usual interpretation is that the victim remains alive. Within figurative cause actions another distinction is made: between acting on an abstract entity and acting on a person. Constructions 17 and 18 exemplify acting on a person, while constructions 13 and 14 (e.g. 'attach a condition to a ruling' and 'broaden the scope of the enquiry to the whole organisation') exemplify acting on an entity.

As with the pattern **V n adj**, the constructions that are identified can be expressed as more general than the 37 listed, and indeed as more specific. It has already been noted that constructions 8–11 can be (and probably should be) divided into two more specific constructions each. Going up the hierarchy, or leftwards in the network, the more general constructions might be expressed as:

• The 'person transfers_possession to person' construction.
• The 'person/entity changes entity to a state' construction.
• The 'person/entity causes person/entity to new situation' construction.
• The 'person communicates something to someone' construction.
• The 'person cognizes one thing to another thing' construction.
• The 'entity causes person to mental state' construction.
• The 'person forms_relation one thing to another thing' construction.

The Indeterminacy of Networks: V after *n*

The discussions of the previous two patterns have made the point that the proposed networks are to an extent arbitrary, in the sense that in many cases alternative versions might be proposed. This point is made more strongly in respect to the final example, the pattern **V *after* n**. Four constructions only are proposed for this pattern:

- Cx1 the 'yearn after something' construction. Description: A person wants something very much. Verbs: HANKER, HUNGER, LUST, THIRST, and YEARN. Example: *He's never hankered after the travelling life*. (BNC)
- Cx2 the 'follow after someone' construction. Description: A person follows another person, probably with negative intentions. Verbs: CHASE and FOLLOW. Example: *I've been threatened*, *spat on*, *chased after* … (BNC)
- Cx3 the 'chase after something' construction. Description: A person tries to get a physical or abstract entity that is difficult to get. Verbs: CHASE, GO, and RUN. Example: *All these years you've spent chasing after something you can't have*. (BNC)
- Cx4 the 'clean up after someone' construction. Description: A person helps someone, especially by correcting their mistakes and/or doing something they should have done. Verbs: CLEAN UP, CLEAR UP, RUN AROUND, and TIDY UP. Example: *He always expected other people to clean up after him*. (BNC)

The network shown on the Transitivity-Net website prioritises the distinction between processes: cognition ('yearn after') as opposed to action (the other constructions). Then a distinction is made between literal actions ('follow after someone') and figurative ones ('chase after' and 'clean up after'). This is shown in Figure 3.5. An alternate network would begin with what might be called the two meanings or functions of *after*: indicating an aim or desire ('yearn after' and 'chase after a desired thing'); indicating space or time ('follow after someone' and 'clean up after someone'). Figure 3.5b shows this alternative. The point is that neither of these is transparently 'correct' but that both model one perspective on the relationship between the constructions.
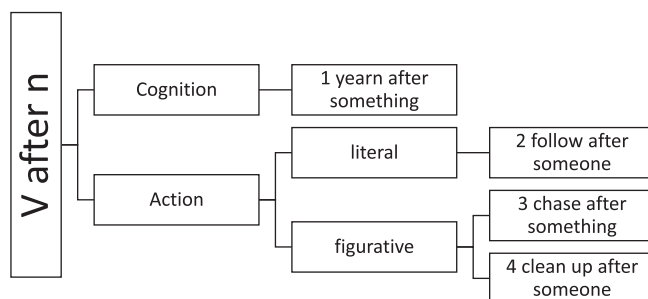

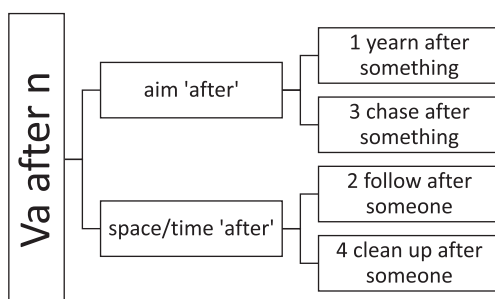Figure 3.5a Alternative networks for constructions derived from **V *after* n**

Figure 3.5b Alternative networks for constructions derived from **V *after* n**

3.5 The Construction Networks as Heuristic: Identifying Distinctions

In this study, then, the constructions drawing on each pattern are modelled in a network. As well as the 'end-point' constructions, the nodes of the network can be interpreted as 'more general' constructions. The networks are a way of organising the constructions neatly, but they also act as a heuristic to discover what language resources are relevant to each set of constructions. The distinctions that are made in deriving the networks give an insight into how constructions with the same complementation form might differ because of the configuration of the other elements in the construction.

To give a sense of the range of distinctions that have been proposed, two verb complementation patterns will be given as examples.

Example: V n that

The first example is the pattern **V n that** (verb + noun phrase + that-clause). Eight constructions are identified from this pattern. They are:

- Cx1: speaker informs/notifies/teaches/tells someone that ...
- Cx2: speaker reassures/guarantees/promises someone that ...
- Cx3: speaker warns/cautions someone that ...
- Cx4: speaker persuades/convinces someone that ...
- Cx5: speaker bets/wagers someone that ...
- Cx6: evidence shows/decides/tells someone that ...
- Cx7: cognizer deludes/flatters/kids themselves that ...
- Cx8: thought hits/strikes someone that ...

The network accounting for these is shown in Figure 3.6. In forming the network, the following distinctions are made:

- A distinction in the process: communication (Cx1–Cx6) or cognition (Cx7 and Cx8) (Figure 3.6). Note that construction 6 is ambiguous in this respect. On the one hand, the evidence acts like a speaker, 'telling' or 'showing' someone that something is the case. This is, however, a metaphoric representation of what is 'really' happening: a person is forming a thought based on the available evidence. Thus the evidence communicates to a cognizer that something is the case. Because of the network format, the construction has to be classed as communication or cognition: for the purposes here, the surface form of 'telling' takes precedence. Chapter 4 discusses instances such as this further and shows examples of dual coding.
- A distinction in the source of the communication/cognition (Figures 3.6b and 3.6c). This may be a person (Cx1–Cx5, where the source is a speaker, also Cx7, where the source is the cognizer), or an entity (Cx6), or a thought/idea (Cx8).
- A distinction in whether the communication leads to a change or not (Figure 3.6b). In most cases, the giving of information does not necessarily lead to change: someone can be told something or warned of something without changing thoughts or actions. In the case of the verbs PERSUADE and CONVINCE (Cx4), however, there is a perlocutionary effect of the hearer changing their perception, and in the case of BET and WAGER (Cx5) there is a change in the situation of speaker and hearer – they have formed a contract.
- Finally, Cx1–Cx3 are distinguished by the presence or absence of affect (Figure 3.6b). Cx1 (INFORM) does not necessarily imply affect. Cx2 (REASSURE) implies positive affect and Cx3 (WARN) implies negative affect.

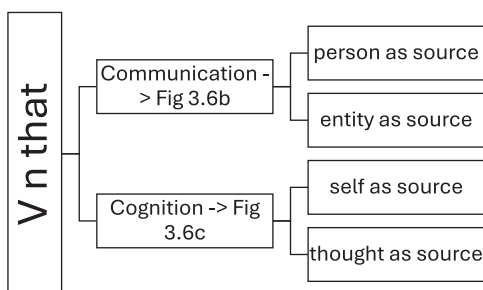Figure 3.6a shows the network of constructions derived from the pattern **V n that**.

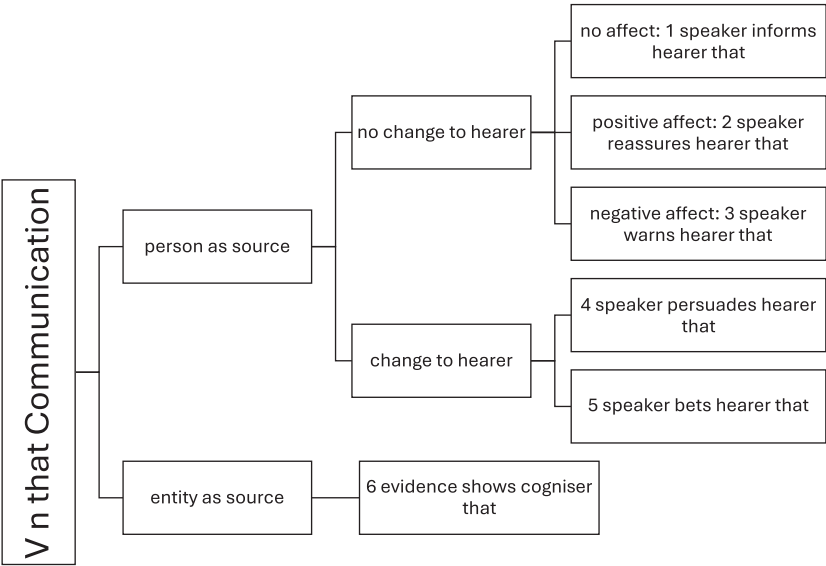Figure 3.6a The network of constructions from the pattern **V n that**

V n that Communication

person as source	**no change to hearer**	no affect: 1 speaker informs hearer that
		positive affect: 2 speaker reassures hearer that
		negative affect: 3 speaker warns hearer that
	change to hearer	4 speaker persuades hearer that
		5 speaker bets hearer that
entity as source	6 evidence shows cogniser that	

Figure 3.6b **V n that**: Communication constructions

V n that Cognition

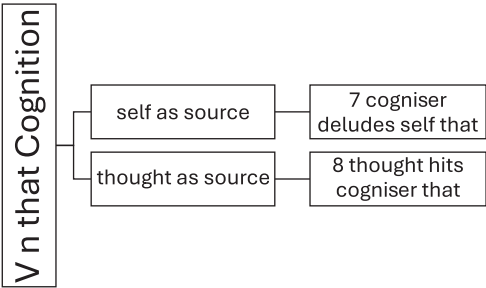|	
self as source	7 cogniser deludes self that
thought as source	8 thought hits cogniser that

Figure 3.6c **V n that**: Cognition constructions

If this network were continued to the right, that is, making distinctions of greater delicacy, more parameters of difference could be identified. In construction 1, for example, there are seven verbs: INFORM, INSTRUCT, NOTIFY, REMIND, SHOW, TEACH, and TELL. These could be divided into groups:

• The 'give information' constructions: the 'inform someone that' construction; the 'notify someone that' construction; the 'tell someone that' construction.

- The 'give instruction' constructions: the 'instruct someone that' construction; the 'teach someone that' construction.
- The 'renew information' construction: the 'remind someone that' construction.
- The 'non-specific modality' construction: the 'show someone that' construction.

These distinctions use concepts such as 'general vs specific modality' (talking versus showing), the nature of the speech act involved (telling versus teaching), and the new/old status of the content (telling versus reminding).

Example: V n with n

The second example discussed here is the pattern **V n *with* n** (verb + noun phrase + *with* + noun phrase). A total of 29 constructions are proposed for this pattern. The network is shown in Figure 3.7. This network draws on the following distinctions.

- The first distinction made is based on the apparent meaning of the preposition *with* that arises out of the meaning of the construction. Three meanings are proposed: 'conjunction', 'transfer', and 'manner' (Figure 3.7a). 'Conjunction' means that *with* indicates two entities in relation to each other; for example, 'contrast one thing with another' (Cx1), or 'link one thing with another' (Cx6), or 'exchange blows with someone' (Cx5) (Figure 3.7b). 'Transfer' means that *with* indicates that something gains possession of something or that one thing is placed in proximity to another. Examples include 'furnish someone with something' (Cx11), 'sweeten a dish
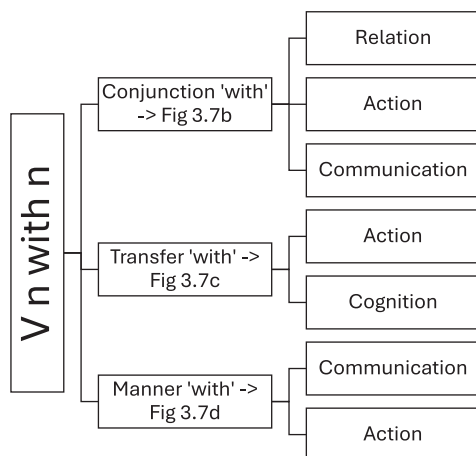

Figure 3.7a The network of constructions from the pattern **V n *with* n**
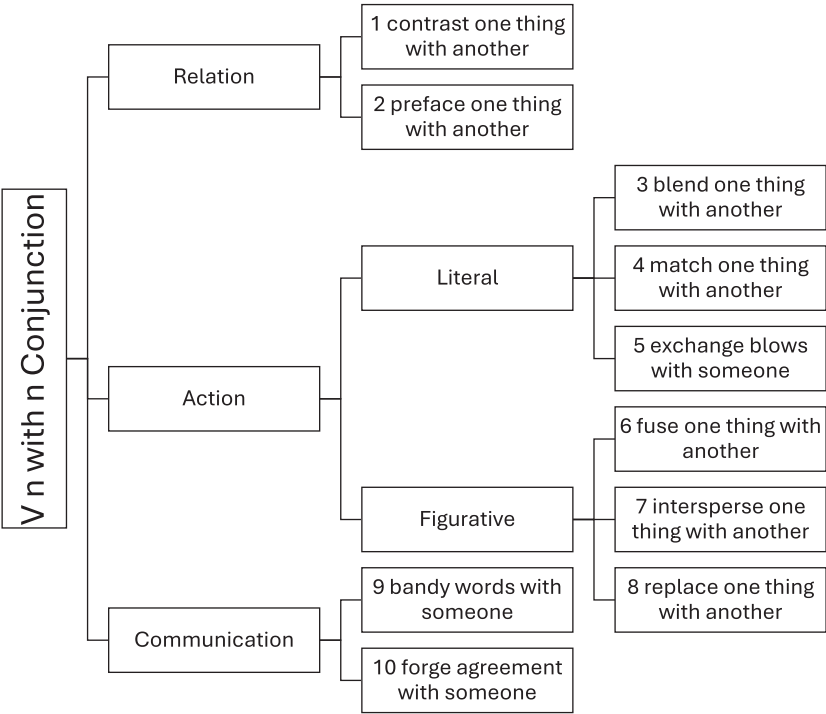
V n with n Conjunction

- **Relation**
  - 1 contrast one thing with another
  - 2 preface one thing with another
- **Action**
  - **Literal**
    - 3 blend one thing with another
    - 4 match one thing with another
    - 5 exchange blows with someone
  - **Figurative**
    - 6 fuse one thing with another
    - 7 intersperse one thing with another
    - 8 replace one thing with another
- **Communication**
  - 9 bandy words with someone
  - 10 forge agreement with someone

Figure 3.7b **V n *with* n**: Conjunction *with* constructions

V n with n Transfer

- **Action**
  - **Literal**
    - **Possession**
      - 11 furnish someone with something
      - 12 saddle someone with something
    - **Location**
      - 13 decorate something with something
      - 14 coat something with something
      - 15 flood something with something
      - 16 sweeten something with something
      - 17 pepper something with something
      - 18 stock an area with something
  - **Figurative**
    - 19 imbue a situation with quality
    - 20 beset someone with problems
    - 21 temper something with something
- **Cognition**
  - 22 amaze someone with something
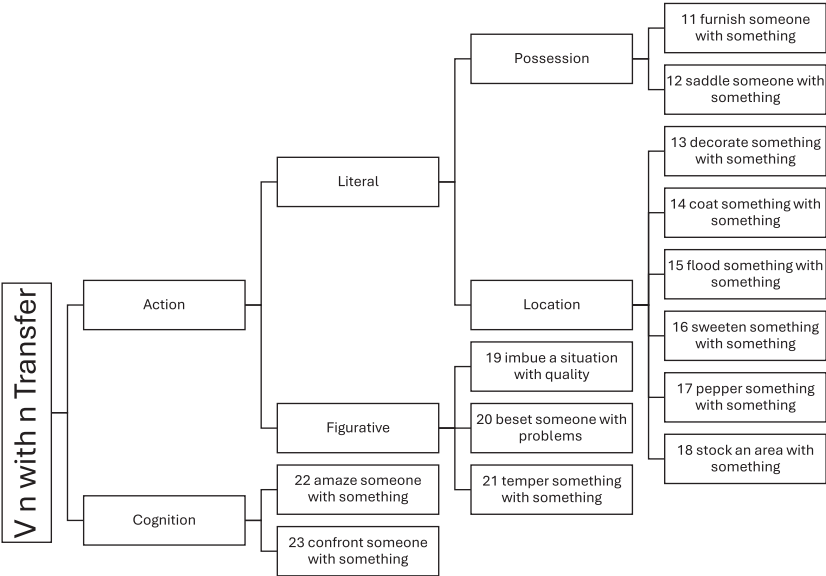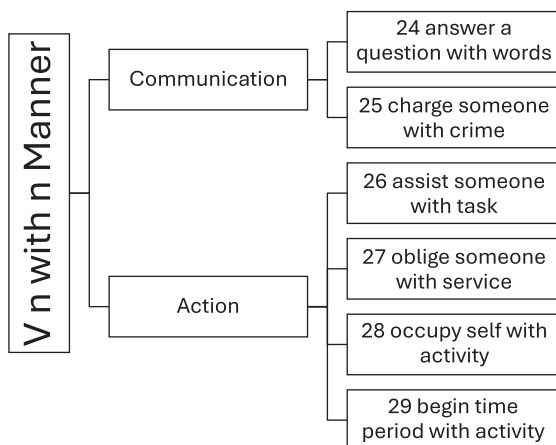 - 23 confront someone with something

Figure 3.7c **V n *with* n**: Transfer *with* constructions

Figure 3.7d **V n *with* n**: Manner *with* constructions

with something' (Cx16), or 'imbue a situation with a quality' (Cx19) (Figure 3.7c). 'Manner' means that *with* indicates how something is done; for example, 'answer a question with a comment' (Cx24), or 'oblige someone with a service' (Cx27) (Figure 3.7d). All the constructions with this pattern are assigned to one or other meaning of *with*.

• The second distinction is made based on the nature of the process expressed by the construction. The process types are based on but not identical to those used by Halliday (Halliday and Matthiessen 2014). They are: 'relation'; 'action'; 'communication'; 'cognition'. An example of 'relation' is 'preface one thing with another' (Cx2). An example of 'action' is 'exchange blows with someone' (Cx5). An example of 'communication' is 'bandy words with someone' (Cx9). An example of 'cognition' is 'amaze someone with something' (Cx22). Each of the preposition meaning types has constructions with more than one process type. All the constructions with this pattern are assigned to one or other process type.

• The third distinction is between 'literal' and 'figurative' meaning constructions. Although all the constructions are either literal or figurative, the distinction is made only when there are constructions that differ along this dimension. In practice, this means that it is used only with a subset of the 'action' constructions. Literal actions include examples such as 'blend one thing with another' (Cx3), 'furnish someone with something' (Cx11), and 'stock an area with something' (Cx18). Figurative actions include examples such as 'fuse one thing with another', glossed as 'A person establishes

a connection between two abstract entities' (Cx6), 'imbue a situation with
a quality' (Cx19), and 'beset someone with problems' (Cx20).
- The eight constructions that share the features of 'transfer', 'action' and
'literal' are further distinguished by whether the construction relates to
'possession' or to 'location'. The 'possession' constructions are: 'furnish
someone with something' (Cx11) and 'saddle someone with something'
(Cx12). The 'location' constructions are: 'decorate something with some-
thing' (Cx13); 'coat something with something' (Cx14); 'flood something
with something' (Cx15); 'sweeten something with something' (Cx16); 'pep-
per something with something' (Cx17); 'stock an area with something'
(Cx18).

3.6   Conclusion

This chapter has illustrated two processes: reinterpreting each of 54 verb
complementation patterns as constructions and representing those construc-
tions as a taxonomy or network. Both processes are, admittedly, subjective and
open to challenge or revision, but they make use of concepts found elsewhere in
the field, such as the distinction between process types, or between literal and
figurative meaning. Examples of verb argument constructions and networks are
given in this chapter. Constructions and networks for each of the 52 grammar
patterns considered in this study can be found on the Transitivity-Net website.

As a conclusion to the chapter, it is worth considering again what is meant by
'construction' in this book, and to illustrate what kinds of form and meaning
slots occur in those constructions, bearing in mind Haspelmath's (2023)
account of a construction having 'at least one open slot'. Consider example (8):

(8)   She struck me as a very bossy, short-tempered teacher. (BNC)

This is an instance of the grammar pattern **V n *as* n**, and it is an instance of
the 'strike someone as' construction. There is one other verb in the same
construction – *impress* – and this is one of 10 constructions proposed with
the same pattern.

Example (8) consists of five elements, shown in Table 3.6. Row 1 shows the
example. Row 2 shows the form of the construction: noun + verb + noun + *as* +
noun. Row 5 explains the meaning of the construction as a whole. Row 3
describes the range of form and meaning available in each slot. NP1 construes
any person or thing. NP2 construes only a person (something capable of an
opinion). NP3 construes only a characteristic or identity, such as 'a very bossy,
short-tempered teacher'. The verb may be only *strike* or *impress*. The prepos-
ition may only be *as*. Row 4 classifies the slots into four types: the preposition is
a <u>fixed</u> item; the verb is a slot that is <u>variable</u> within a small range; NP1 is an

Table 3.6 *Slots in verb argument constructions*

Row	Noun (NP1)	Verb	Noun (NP2)	*as*	Noun (NP3)
1	she	struck	me	*as*	a very bossy short-tempered teacher
2	Noun phrase construing any person or thing.	One of a limited set of verbs: STRIKE, IMPRESS	Noun phrase construing a person only	*as*	Noun phrase construing a characteristic or identity only
3	Open slot	Variable slot	Restricted slot	Fixed item	Restricted slot

Example (1) consists of five elements, shown in Table 3.6. Row 1 shows the example. The header row shows the form of the construction: noun (NP1) + verb + noun (NP2) + as + noun (NP3). Row 2 describes the range of form and meaning available in each slot. NP1 construes any person or thing. NP2 construes only a person (something capable of an opinion). NP3 construes only a characteristic or identity, such as 'a very bossy, short-tempered teacher'. The verb may be only STRIKE or IMPRESS. The preposition may only be *as*. Row 3 classifies the slots into four types: the preposition is a fixed item; the verb is a slot that is variable within a small range; NP1 is an open slot; NP2 and NP3 are 'restricted' slots – they do not contain items that are listable like the verbs, but their meaning is more restricted than NP1. With these constructions, then, there is not a simple distinction between 'closed' and 'open' slots, but degrees of variation and fixedness. This would seem to be a characteristic, maybe even a distinguishing characteristic, of verb argument constructions. In summary, the meaning of the construction as a whole is: NP2 has an opinion about NP1, ascribing to NP1 the characteristic of NP3, based on NP1's appearance, speech or actions.

open slot; NP2 and NP3 are 'restricted' slots – they do not contain items that are listable like the verbs, but their meaning is more restricted than NP1. With these constructions, then, there is not a simple distinction between 'closed' and 'open' slots, but degrees of variation and fixedness. This would seem to be a characteristic, maybe even a distinguishing characteristic, of verb argument constructions.

Table 3.6 illustrates the presentation of constructions as a sequence of elements. In many traditions, those elements are labelled with their semantic roles. Chapter 4 discusses this issue and explains the process of semantic role labelling in this study.