7 Semantic Fields: Cognition and Communication

7.1 Introduction

Chapter 6 explained the process of arranging the constructions that express a given semantic field into two kinds of network: the taxonomic network referred to in this book as the Meaning Network and the network that makes explicit the relevant features in the semantic field, referred to as the Systemic Network. The example used in Chapter 6 was the semantic field of Causation.

This chapter repeats the process of deriving networks in relation to two further semantic fields: Cognition and Communication. As explained in Chapter 5, the focus on these fields is inspired by the process types identified by Halliday (e.g. Halliday and Matthiessen 2014) as Mental and Verbal, though the semantic field includes constructions that would not be classified as belonging to those process types. Cognition might be defined as 'the representation of what someone thinks, feels, or perceives', while Communication is 'the representation of communication through speech, sign, writing, gesture, or expression'. What these fields have in common is that they represent a situation as mediated through a thinker, perceiver, or communicator. Grammatically, the situation may be expressed in a that-clause, occurring with a verb of thought, perception, or communication, as illustrated in the invented examples (1)–(3).

(1) Zak thought that the bus was late.

(2) Zak saw that the bus was late.

(3) Zak told Zinnia that the bus was late.

There are, however, numerous other ways in which cognition and communication may be represented. The alternative lexicogrammatical options for expressing cognition and communication have been extensively researched, in part because there are considered to be significant ideological implications to choosing between ways of representing speech and thought (e.g. Thompson 1994: 150–187). This is often discussed in relation to the choice of reporting verb, such as ADMIT, which implies that the speaker acknowledges a wrongdoing, or CLAIM, which implies that the reporter does not agree

with the speaker (Hunston 1995). Semino and Short (2004: 141) give an interesting example in the context of the presentation of thoughts in news reports. They make the point that when thoughts are reported this must be the consequence of an inference: the journalist cannot possibly know what someone else thinks. They argue that when journalists describe politicians, for example, as 'believing' something, they do so to protect themselves from challenge.

This chapter gives a brief, selective overview of some of the research in this area (7.2), then summarises the approach taken in this study (7.3), before describing the Systemic Network and Meaning Networks for Cognition (7.4) and Communication (7.5). The chapter ends with a conclusion.

7.2 The Semantic Fields of Cognition and Communication: Selected Concepts

This section begins with a brief overview of the account of Mental and Verbal clauses given in Halliday and Matthiessen (2014), because it is these categories of clause-type that has inspired the identification of Cognition and Communication as semantic fields in this study. As noted earlier, however, the different purposes of the two enterprises will inevitably lead to differences in the outcome. The purpose of defining Mental and Verbal clauses in Systemic Function Grammar (SFG) is to enable consistent analysis of texts. The purpose of identifying a semantic field in this study is to model the constructions that comprise that field. Halliday and Matthiessen (2014) treat Mental clauses as one of the three main types of clause, alongside Material and Relational clauses. They differentiate between Material and Mental clauses thus: 'While "material" clauses are concerned with our experience of the material world, "mental" clauses are concerned with our experience of the world of our own consciousness' (Halliday and Matthiessen 2014: 245). They identify four types: perceptive, cognitive, desiderative, and emotive, roughly equating to 'seeing', 'thinking', 'wanting', and 'feeling' (Halliday and Matthiessen 2014: 256).

Mental clauses contain a Senser who is a conscious being or a being endowed with consciousness. This observation might be reversed, in that entities that are the subjects of Mental process clauses are construed as having consciousness and thus being Sensers. This includes examples such as (4).

(4) My computer doesn't want to load a CD (enTenTen21)

They also contain a Phenomenon, which 'may be not only a thing but also an act or a fact' (Halliday and Matthiessen 2014: 251). Halliday and Matthiessen (2014: 251–252) exemplify this with examples repeated here as (5) and (6).

(5) He saw the sand dredger heading for the cruiser. (Phenomenon is an act)

(6) I regret . . . that I was away from home. (Phenomenon is a fact)

Two key grammatical properties distinguish Mental from Material clauses (Halliday and Matthiessen 2014: 249). One is that Mental process verbs permit projection, that is, complementation by a that-clause. The other is that the unmarked form of the verb is simple rather than progressive aspect: 'I like' rather than 'I'm liking'.

Verbal clauses are defined as 'clauses of saying' (Halliday and Matthiessen 2014: 302). They are treated as one of the 'other' process types, along with Behavioural and Existential. This is perhaps because, unlike Mental processes, they do not construe a separate type of experience – Verbal clauses, like Material clauses, are concerned with the material world, albeit one of sounds or symbols. They are also less clearly identified through grammatical features: they '[exhibit] certain characteristics of other process types' (Halliday and Matthiessen 2014: 306). The participants in a Verbal clause are: a Sayer, which is often a person but can be anything conveying a message (Halliday and Matthiessen 2014: 304), a Receiver (or hearer), a Target, and Verbiage, which may be the content of what is said or the 'name of the saying', such as 'She told a story' or 'He asked a question' (Halliday and Matthiessen 2014: 306).

Halliday and Matthiessen prioritise grammatical characteristics, including participant type, in distinguishing clause types, and as a result, they treat Mental and Verbal processes as very different from one another. Other approaches take what might be called a more semantic approach and divide the phenomena very differently. One of the most influential and comprehensive studies of the language of cognition and communication is by Semino and Short (2004). Working within the field of stylistics, they give a quantitative and qualitative account of the presentation of speech, writing, and thought in a corpus of British English comprising prose fiction, news reports, and (auto) biography (Semino and Short 2004: 19). It is significant that they focus on speech, writing, and thought only: they do not seek to distinguish mental and verbal processes from other clause types, as Halliday and Matthiessen do. On the other hand, they are concerned with choice and the social effects of that choice, as SFG is. Semino and Short propose categories of speech, writing, and thought presentation that are distinguished by the degree of 'involvement' or 'control' exercised by the writer (the 'reporter') (Semino and Short 2004: 10). If a direct quote is used, for example, the speaker of the quotation might be said to have control of the words. If a speech act is summarised, as in 'He asked if he might leave', a greater degree of control remains with the reporter. A writer of fiction, news or (auto)biography selects (even if unconsciously) from the options to achieve a particular effect.

An essential point made by Semino and Short is that the phenomenon they are investigating is 'presentation' rather than 'representation' or 'reporting'. This is because in a novel there is no actual communicative act to report – the world and its events are fictional – and even in news reporting or autobiography, where there is an anterior communicative event, there is no guarantee that apparent reports reflect actual prior words used. Furthermore, as they point out, thought is not a communicative act and there is no prior or anterior situation to be reported (Semino and Short 2004: 50). They therefore prefer the term 'presentation', which might be regarded as similar to Halliday's use of 'construal': the language used makes, or construes, or presents, situations in the world, rather than reflecting or reporting them.

The categories of speech, writing, and thought are placed on a scale of authorial control, revised by Semino and Short (2004: 49) from an earlier version proposed by Leech and Short (1981). Each category has a 'speech', 'writing', and 'thought' version. They are:

- Narrative report of voice, writing or internal voice
- Narrative report of speech/writing/thought act
- Indirect speech/writing/thought
- Free indirect speech/writing/thought
- Direct speech/writing/thought

Examples of each of the 'speech' categories, taken from Semino and Short (2004) are given in examples (7)–(11).

(7) She talked on. (Narrator's Report of Voice. There is no indication of speech act or content.)

(8) He . . . told her about his imminent return. (Narrative Report of Speech Act. There is an indication of the speech act of 'telling', and a general topic, but no representation of what was said.)

(9) He . . . told her that he would return the following day. (Indirect Speech. There is a representation of what was said in a that-clause.)

(10) He looked at her. He would come back tomorrow. (Free Indirect Speech. This blends aspects of Indirect and Direct Speech.)

(11) He . . . said 'I'll come back tomorrow'. (Direct Speech. There is a quotation.)

There is a wealth of quantitative information given in Semino and Short's book, based on painstaking annotation of the corpus to allow comparisons of frequency. Overall, the proportions of speech, writing, and thought presentation in the sub-corpora are as might be expected. Presentation of speech is the most frequent of the three overall and is particularly frequent in the news corpus; the biography corpus has the highest proportion of writing presentation; and thought is most frequently presented in the fiction corpus. Within the

speech presentation, Direct Speech is most frequently found in fiction, while Indirect Speech and Narrative Report of Speech Acts occur most frequently in news reports (Semino and Short 2004: 150). There are also interesting examples of qualitative interpretation of specific instances. In a case study of a biography of a medium who claims to be in contact with the spirits of people who have died, for instance, Semino and Short (2004: 206–210) demonstrate that Direct Speech is used when the medium is presenting communication with the people who have died where Narrative Report of Speech Act is used to present communication with their relatives on earth. They argue that this is an act of validation of the medium's claims – the communication with the departed is more immediate and 'real' than that with the living relatives. Thus, the series of choices in a presentation made by the biography authors influence the reader's interpretation of events.

As pointed out by Halliday and Matthiessen (2014: 303), Verbal clauses (and to a lesser extent Mental ones) 'play an important role in academic discourse, making it possible to quote and report from various scholars while at the same time indicating the writer's stance with verbs like *point out, suggest, claim, assert*'. This points to other distinctions that might be made in the semantic space of Cognition and Communication. Martin and White (2005: 134), for example, subsume Verbal processes, and some Mental processes, in a network of choices in the field of Engagement. This makes a primary distinction between 'contracting' the dialogic space (making disagreement less possible) and 'expanding' the space (making disagreement more possible). These are semantic categories and the resources used in each comprise a variety of lexicogrammatical forms. The 'expand the dialogic space' option includes all forms of attribution, including reporting, and this is divided between 'acknowledge [that someone holds an opinion]' ('argues that'; 'believes that; 'states that') and 'distance [oneself from the opinion]' ('claims that').

A whole other set of distinctions within Verbal processes with a projected clause (i.e. a reporting verb followed by a that-clause) is proposed by Charles (2006). She notes that such clauses may be used by a writer to assert their own propositions, as well as to attribute propositions to others. Using a systemic-type network of choices, she makes a primary distinction between clause subjects that are Human, Non-human or *it*. Within each, there is the option that the source of proposition is 'self' or 'other'. Instances of 'self' as source are shown in examples (12)–(14), which instances of 'other' as source are shown in examples (15)–(17) (all examples from Charles 2006).

(12) I argue that . . .

(13) My interpretation of Mazzini will imply that . . .

(14) In Chapter 3 it was stated that . . .

(15) Armstrong notes that . . .

(16) A recent study has found that . . .

(17) It has been shown that . . .

Charles uses these distinctions to compare two corpora, consisting of post-graduate theses: one in the social science field of Politics and one in the physical science field of Materials Science. The two differ considerably in the frequency of the various choices made. Politics makes more use of human subjects while Materials Science makes more use of *it* as subject. However, Materials Science makes more use of the 'self' as source. In Politics, it is more common to have 'other' as source, but the 'others' to whom propositions are attributed are less likely to be other researchers and more likely to be actors in the political field. If the lens is reversed, and the category of 'self-sourced reports' is observed, in the Politics corpus, the self is expressed as human or as *it* in most cases, while in the Materials Science corpus, the self is mostly expressed through *it* and then through non-human subjects. Charles (2006) goes on to show how these differentials in frequency contribute to the community values of the social sciences and physical sciences respectively.

The point of this brief discussion of some different approaches to the broad area covered by the notions of Cognition and Communication is to highlight similarities and differences. All the researchers cited focus on choice between the resources available to express something. In some cases these choices are presented as a network (Martin and White 2005; Charles 2006; Halliday and Matthiessen 2014), in others as a scale (Semino and Short 2004). They demonstrate the consequences of the choices made in ideological or societal impact. The different focuses of the research, however, means that the general meanings of communicating and cognising are divided up very differently to meet the aim of the research. In the following section, the approach taken in this study will be described.

7.3 Cognition and Communication in This Study

This book is concerned with Verb Argument Constructions only, so omits constructions that centre around nouns and that express speech or thought, such as 'the thought/idea/ hope that' or 'the assertion/argument/proposition that'. It also excludes attribution using prepositional phrases, such as 'according to'. Constructions that indicate that someone thinks, feels, or perceives something are included in the Cognition category. Note that this includes perception verbs (SEE, HEAR, etc.) that are not included in Semino and Short's (2004) definition of 'thought' but which are included in Halliday and Matthiessen's (2014) class of Mental processes. It also includes instances

where the verb used is more conventionally a Material process, used metaphorically, as in examples (18) and (19). In these examples, the Senser (underlined) is not the subject of the clause.

(18) He struck her as an interesting person.

(19) A clever thought came to her.

A total of 154 constructions have been identified as expressing the Cognition semantic field.

Constructions that indicate that someone writes, says, or signs something are included in the Communication field, as are constructions that indicate paralinguistic communication such as gestures or facial expressions. As with the Cognition field, this includes metaphoric use of conventionally Material process verbs, as in example (20).

(20) He skated around the topic.

Omitted from the set are intransitive constructions without prepositional complementation, such as 'he spoke' or 'she mused'. These are instances of the pattern **V**, which is excluded from this study. Thus, examples such as (7), from Semino and Short's (2004) category of 'Narrative Report of Voice' are not included. The pattern **V with quote** is also excluded, meaning that Semino and Short's (2004) 'Direct Speech' category, as in example (11) is not included in the study. This is because it was considered that the pattern **V with quote** required no further interpretation in terms of construction. Omitting it does mean, however, that the Communication semantic field is somewhat under-represented in terms of constructions. The category of Free Indirect Speech (example (10)) is not represented in this study because it is not connected with construction choice. A total of 103 constructions have been identified as expressing the Communication semantic field.

As noted in Chapter 2, the pattern **V n** is particularly diverse in the meanings it expresses and the range and number of verbs that are used in it. The constructions that draw on that pattern are listed on the Transitivity-Net website in four different files. Two of these are relevant to this chapter: **V n (Cognition)** and **V n (Communication)**. In some of the figures, these are abbreviated to **V n (Cog)** and **V n (Comm)**.

7.4 From Construction to Network: Cognition

In line with Halliday and Matthiessen's (2014) modelling of mental processes, the constructions expressing cognition are divided into Emotion, Thought, and Perception. No separate Desiderative category is proposed; instead, desiderative meanings are subsumed under Emotion. Each of the three is described separately.

Cognition: Emotion

The term 'Emotion' refers to constructions which describe an emotion that someone experiences. There are 53 constructions that express this meaning, drawing on 27 verb complementation patterns.

The Systemic Network. The Systemic Network is shown in Figure 7.1. It identifies three simultaneous choices: between the elements; between the subject types; and between time references. The first of these relates to the number of elements specified in the construction. All the constructions include a 'Senser' element i.e. the person who feels the emotion. In most cases, they also include a 'Target' element i.e. the thing about which the emotion is felt. Other elements that are less frequent are 'Proxy', 'Reason', and 'Cause'. Examples of each of these elements are shown as examples (1)–(5):

(1) She admired his courage. (Senser)

(2) He worried about the future. (Target)

(3) She feared for her daughter. (Proxy)

(4) She admired him for his courage. (Reason)

(5) Her story shook him out of his apathy. (Cause)

To represent these elements as a series of choices, a distinction is made between 'simple' constructions that express the Senser alone, or the Senser and Target, but no other elements, and 'complex' constructions that include one of the other elements. These choices are shown in bold at the top of Figure 7.1.

The next choice is between which element is realised in the Subject of the clause. In the most congruent constructions, the Subject is the Senser. In other constructions, it is the Target of the emotion, the Emotion itself or the Cause of the emotion. Examples of each of these are shown as examples (6)–(9):

(6) She admired his courage. (Subject is Senser)

(7) The prospect appealed to him. (Subject is Target)

(8) Jealousy gnawed at him. (Subject is Emotion)

(9) Her story shook him out of his apathy. (Subject is Cause)

These choices are shown in italics in the middle of Figure 7.1.

Finally, there is a choice in the time that is referenced by the verb. Time reference is usually unspecified lexically, but in some cases there is a specific

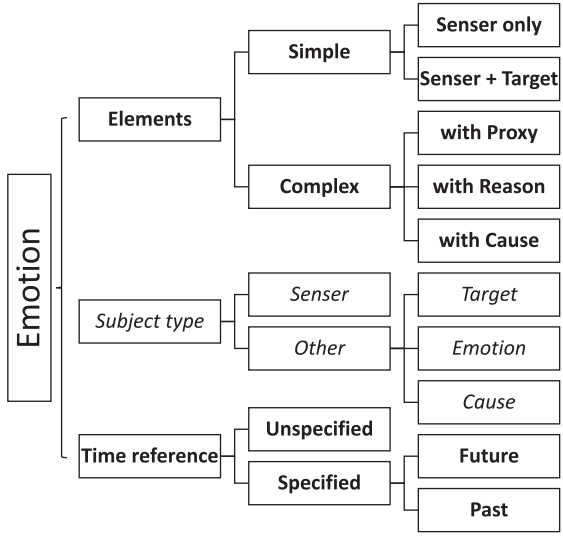

Figure 7.1 Cognition Emotion Systemic Network

indication of future time (e.g. 'anticipate') or of past time (e.g. 'remember'). Examples are shown in examples (10)–(12).

(10) She likes swimming. (unspecified time reference)

(11) She wants to go swimming. (future time reference)

(12) She remembers going swimming. (past time reference)

These choices are shown in bold at the bottom of Figure 7.1.

The Meaning Network. The Meaning Network for Cognition: Emotion draws on all the distinctions described earlier. It is shown in Figure 7.2, but the figure is broken into parts for legibility. The primary distinction made is between constructions with a target and the few that express no target. Where there is a target, it may be a situation or an entity. These first distinctions are shown in Figure 7.2, which also shows the 'no target' set of patterns and constructions. Note that in Figure 7.2d it becomes clear that what is referred to as 'target' in Figure 7.2 is more accurately 'another entity, which may be a target or proxy'.

Figure 7.2b shows more detail where the target is a situation. Here the distinction between 'general' (or unspecified), 'future', and 'past' time references is made. The patterns and constructions in each condition are shown.

Figure 7.2c focuses on constructions where the target is an entity. It distinguishes between four types of Subject: Senser, Target, Emotion, and Causer.

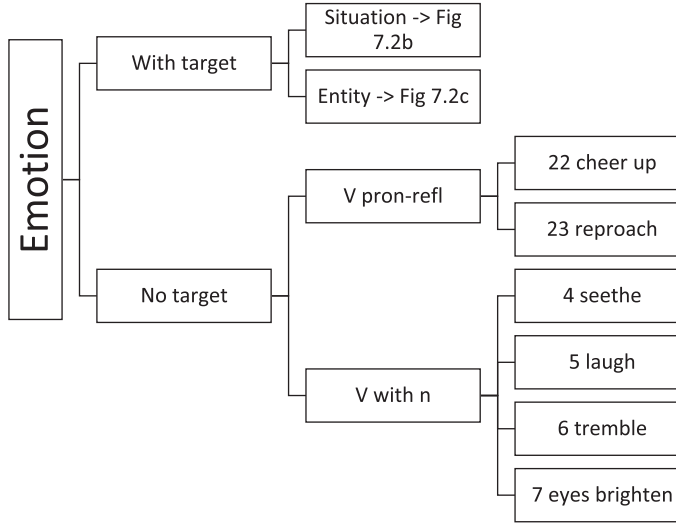

Figure 7.2a Cognition Emotion Meaning Network

The Senser as Subject is treated in greater detail in Figure 7.2d, while the other Subject types are detailed in Figure 7.2e.

Figure 7.2d shows the network for constructions where the target is an entity and the Subject is the Senser. The first distinction made is between constructions which specify a reason for the emotion and those that do not. Within the 'without reason' choice, the distinction between time references again becomes relevant, and there is also a distinction made between constructions that specify a Target and the few that specify a Proxy.

Figure 7.2e shows the network for the other types of Subject, again where the Target is an entity. There are no further distinctions except for the patterns and constructions.

Here is a prose version of all these meaning and form distinctions, with examples invented to maximise simplicity and clarity.

The primary distinction is between constructions that specify a target and those that do not.

- With target. The target may be a situation or an entity.
  - Target is a situation (Figure 7.2b). The time reference may be general, future, or past.
    - General (non-specific) time reference
      - V that Cx13 e.g. 'I hate that he ignores me'. [Note: predominantly US usage.]

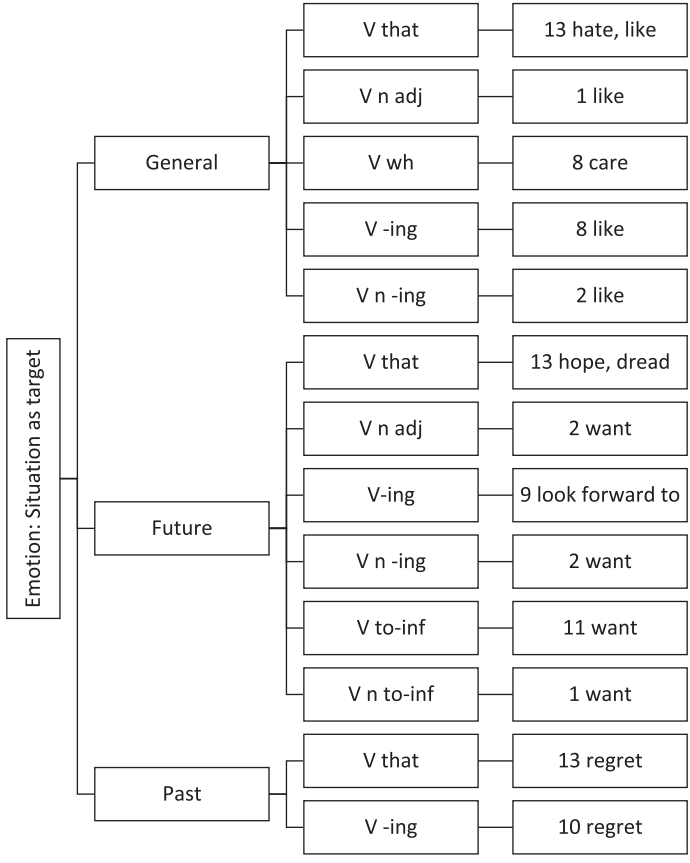

Figure 7.2b Cognition Emotion: the situation as target network

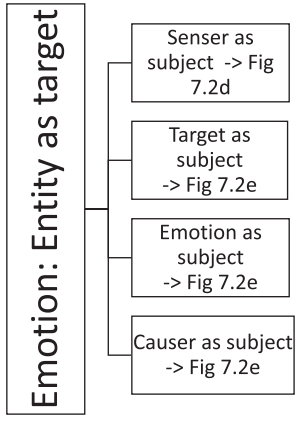

Figure 7.2c Cognition Emotion: the entity as target network

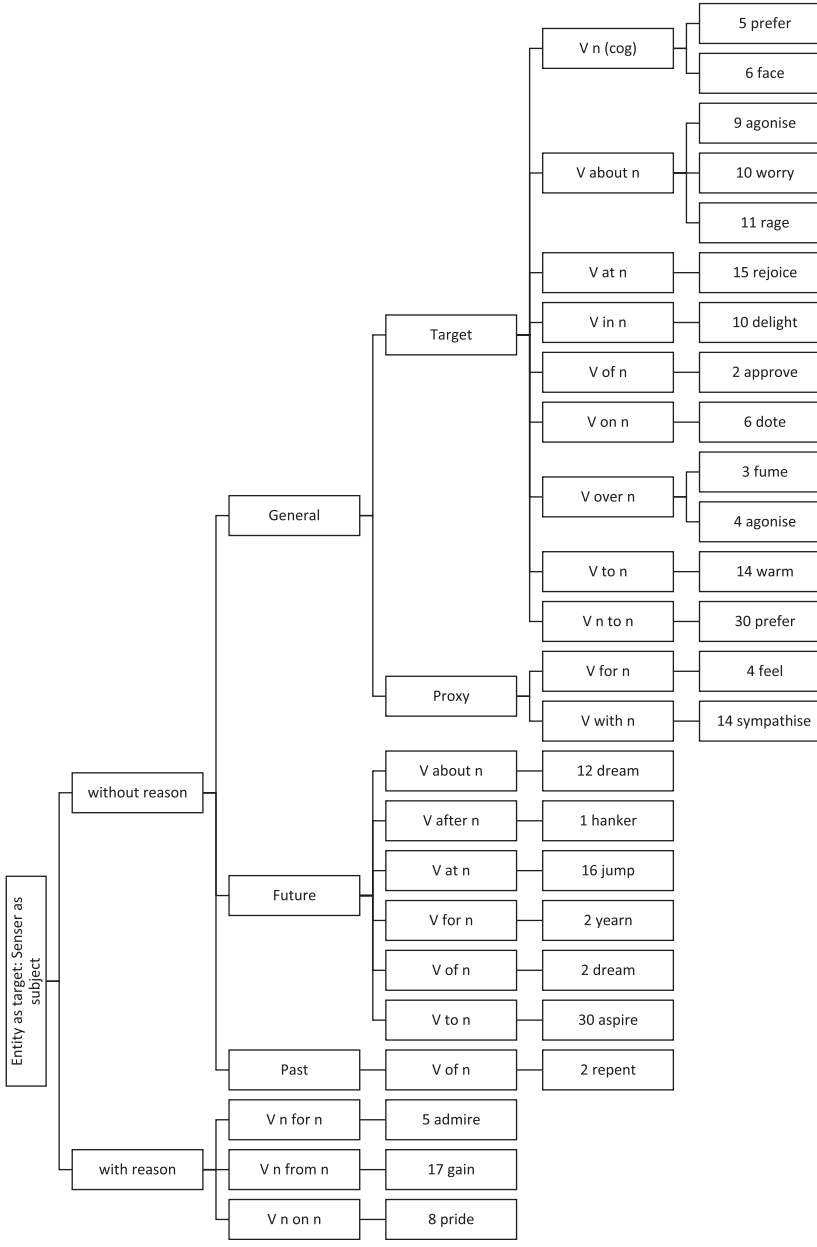

Figure 7.2d Cognition Emotion: the entity as target network, showing senser as subject choices

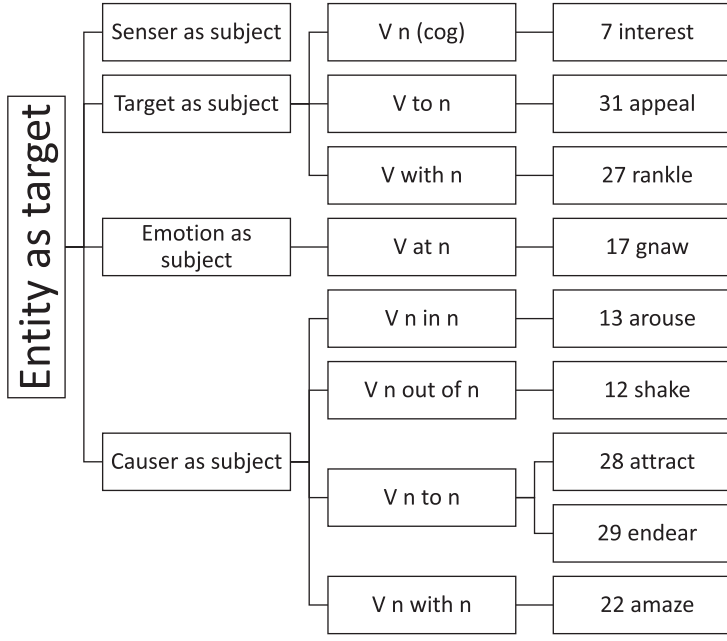

Figure 7.2e Cognition Emotion: the entity as target network, showing target and causer as subject choices

- V n adj Cx1 e.g. 'Emma likes her tea sweet'.
- V wh Cx8 e.g. 'Joe doesn't care who washes the clothes'.
- V -ing Cx8 e.g. 'Emma likes planting bulbs'.
- V n -ing Cx2 e.g. 'Emma hates Joe ignoring her'.

▪ Future time reference
- V that Cx13 e.g. 'Cathy hopes the parcel will arrive in time'.
- V n adj Cx2 e.g. 'Cathy wants her coffee hot'.
- V -ing Cx9 e.g. 'Emma is looking forward to visiting the Christmas market'.
- V n -ing Cx2 e.g. 'Emma wants the car working properly'.
- V to-inf Cx11 e.g. 'Cathy wants to celebrate with her family'.
- V n to-inf Cx1 e.g. 'Joe wants Michael to wash the clothes'.

▪ Past time reference
- V that Cx13 e.g. 'Joe regrets that he was not kinder'.
- V -ing Cx10 e.g. 'Joe regrets not being kinder'.

◦ Target is an entity (Figure 7.2c). The subject of the clause may be the Senser, the Target, an Emotion, or a Cause.

- Senser as subject of the clause (Figure 7.2d). A reason may be unspecified or specified.
  - No reason specified. The time reference may be general, future, or past.
    - General (non-specific) time reference. Either a Target or a Proxy may be specified.
      - with a Target
        - V n (Cognition) Cx5 e.g. 'Cathy prefers tea.' and Cx6 e.g. 'Emma couldn't face coffee'.
        - V about n
          - Cx9 e.g. 'Joe agonised about his decision'.
          - Cx10 e.g. Joe worried about the future'.
          - Cx11 e.g. 'Joe raged about the delay'.
        - V at n Cx15 e.g. 'Emma rejoiced at the result'.
        - V in n Cx10 e.g. 'Emma delighted at Cathy's success'.
        - V of n Cx3 e.g. 'Joe approved of the decorations'.
        - V on n Cx6 e.g. 'Cathy doted on the kitten'.
        - V over n Cx3 e.g. 'Joe fumed over the delay.' and Cx4 e.g. 'Joe agonised over the decision'.
        - V to n Cx14 e.g. 'Cathy warmed to the idea'.
        - V n to n Cx30 e.g. 'Emma preferred the kitten to the puppy'.
      - with a Proxy
        - V for n Cx4 e.g. 'Joe felt for the victims'.
        - V with n Cx14 e.g. 'Joe sympathised with the victims'.
    - Future time reference
      - V about n Cx12 e.g. 'Emma dreamt about a career as a vet'.
      - V after n Cx1 e.g. 'Emma hankered after a career as a vet'.
      - V at n Cx16 e.g. 'Emma would jump at a career as a vet'.
      - V for n Cx2 e.g. 'Emma yearned for a career as a vet'.
      - V to n Cx30 e.g. 'Joe aspired to success as a dancer'.
    - Past time reference
      - V of n Cx2 e.g. 'Joe repented of his criminal past'.
  - Reason specified
    - V n for n Cx5 e.g. 'Emma admired Cathy for her poise'.
    - V n from n Cx17 e.g. 'Emma gained courage from Cathy's attitude'.
    - V n on n Cx8 e.g. 'Emma prided herself on her courage'.
- Target as Subject of the clause (Figure 7.2e)
  - V n (Cognition) Cx7 e.g. 'The book interested Joe'.
  - V to n Cx31 e.g. 'The book appealed to Joe'.
  - V with n Cx27 e.g. 'Cathy's remarks rankled with Joe'.
- Emotion as Subject of the clause (Figure 7.2e)
  - V at n Cx17 e.g. 'Remorse gnawed at Cathy'.

        - Causer as Subject of the clause (Figure 7.2e)
            - V n in n Cx13 e.g. 'The book aroused fear in Joe'.
            - V n out of n Cx12 e.g. 'The book shook Joe out of his complacency'.
            - V n to n Cx28 e.g. 'Emma's courage attracted Joe to her.' and Cx29 e.g. 'Emma's courage endeared her to Joe'.
            - V n with n Cx22 e.g. 'Emma amazed Joe with her courage'.
- No target (Figure 7.2a)
    - V pron-refl Cx22 e.g. 'Cathy cheered herself up.' and Cx23 e.g. 'Joe reproached himself'.
    - V with n
        - Cx4 e.g. 'Joe seethed with anger'.
        - Cx5 e.g. 'Cathy laughed with glee'.
        - Cx6 e.g. 'Emma trembled with fear'.
        - Cx7 e.g. 'Cathy's eyes brightened with joy'.

Cognition: Perception

The term 'Cognition: Perception' refers to constructions that indicate how someone perceives something, using senses such as sight or hearing. There are nine constructions with this meaning, drawing on eight verb complementation patterns.

The Systemic Network. The Systemic Network, shown in Figure 7.3, identifies three independent choices: the type of clause Subject, the type of target of the perception, and the sense type. The Subject of the clause is usually the Senser, but in a few cases it is a body part, such as the eyes. Included here is one construction (e.g. 'The third day saw the storms increase') which personifies time as something that 'sees'. Although this is not strictly speaking perception, as there is no animate Senser, the metaphoric use of 'see' warrants its inclusion. The target type is either an entity or a situation. Although it is shown here as an independent choice, in practice 'situation' is an option only when the Subject of the clause is a Senser. The choice of sense type plays no role in the Meaning Network, because constructions indicating perception are mostly used with all senses. However, when the Subject is an indicator of time, the sense must be sight.

The Meaning Network. The Meaning Network is shown in Figure 7.4. It prioritises the type of Subject as the primary distinction. Where the Subject is the Senser, there is a further distinction between constructions where the target is an entity and those where it is a situation. All other distinctions are between patterns and constructions.

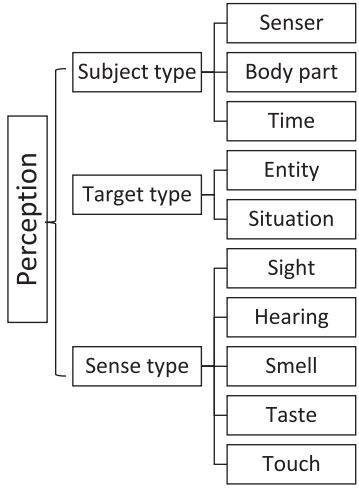

Figure 7.3 Cognition Perception Systemic Network

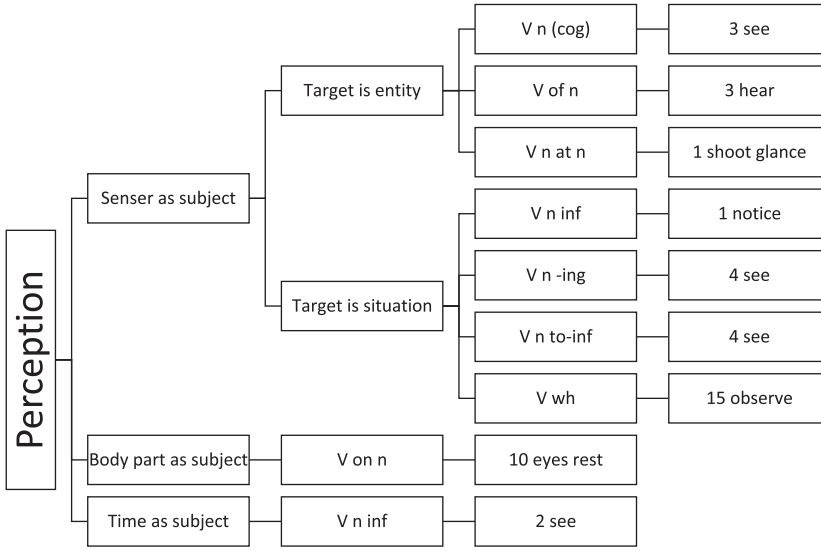

Figure 7.4 Cognition Perception Meaning Network

Here is a prose version of all these meaning and form distinctions, with examples invented to maximise simplicity and clarity.

The primary distinction involves the subject of the clause, whether it is the Senser, a body part, or time.

- Senser as Subject. The target of perception may be an entity or a situation.
  - The target of perception is an entity
    - V n (Cognitive) Cx3 e.g. 'Alan saw the picture'.
    - V of n Cx3 e.g. 'Ella was hearing of disturbances'.
    - V n at n Cx1 e.g. 'Alan shot a glance at his accomplice'.
  - The target of perception is a situation
    - V n inf Cx1 e.g. 'Ella notice Alan cross the road'.
    - V n -ing Cx4 e.g. 'Ella saw Alan crossing the road'.
    - V n to-inf Cx4 (passive only) e.g. 'Alan was seen to have crossed the road'.
    - V wh Cx15 e.g. 'Ella observed what Alan did'.
- Body part as Subject
  - V on n Cx10 e.g. 'Ella's eyes rested on the picture'.
- Time as Subject
  - V n inf Cx2 e.g. 'The second day saw them arrive at the shrine'.

Cognition: Thought

The term 'Thought' refers to constructions which describe the process of thinking. There are 92 constructions that express this meaning, drawing on 31 verb complementation patterns.

The Systemic Network. The Systemic Network for Thought, shown in Figure 7.5, identifies three distinctions between constructions: the Subject type, the Object type, and the process type. Although the figure shows these as simultaneous choices, the process type is an issue only when the Subject is the Senser, and the Object type is an issue only when the Subject is a Causer.

The Subject type choices are shown in bold at the top of Figure 7.5. The most congruent Subject type is the Senser (a person thinks something), as in example (1). Other possible Subject types are an Entity and a Causer of thought. These express the process of thought more obliquely. Three kinds of Entity Subjects are identified: evidence for an idea, the Target of the thought, or a noun indicating an idea. These are illustrated in examples (2)–(4). A Causer of thought is very similar to evidence, but a construction with Causer includes a verb that implies causation. An example is given in example (5).

(1) He thought it was Monday. (Sense as Subject)

(2) The photo suggested that it had been raining. (Evidence as Subject)

(3) The picture claimed his attention. (Target as Subject)

(4) The thought hit him that it might have been raining. (Idea as Subject)

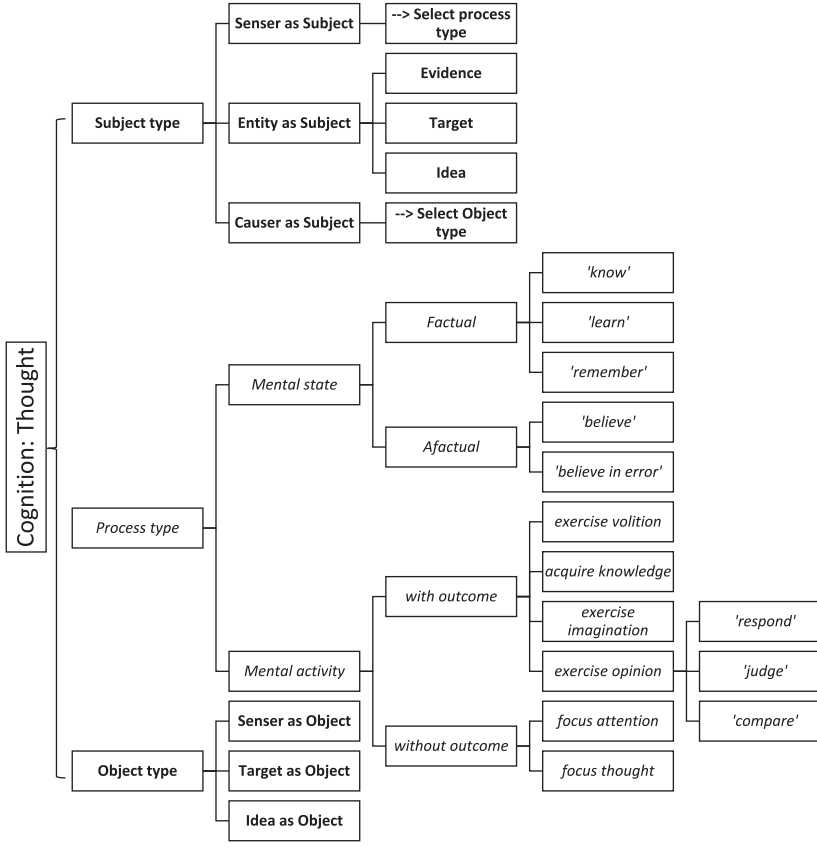

Figure 7.5 Cognition Thought Systemic Network

(5) These events convinced her that she should act. (Causer as Subject)

The process type choices are shown in italics in the middle of Figure 7.5. All the process types identified assume the Senser as Subject, and all are what might broadly be described as mental processes. Taking that for granted, the Process type network makes a primary distinction between verbs indicating a mental state, where there is no process of change or of mental exertion, and those indicating mental activity, which implies mental exertion of some kind. There are five mental state categories, divided into 'factual', implying that what is known or remembered is factually true, and 'afactual', which implies that the target of thought is either uncertain or incorrect. There are six mental activity categories, divided into those

'with an outcome', where the process of thought has a result, and those 'without an outcome', where the thought occurs without a result being specified. Note that in this network, a distinction is made between 'learn', where the action of learning requires no effort and belongs to mental state, and 'acquire knowledge', which does imply exertion and belongs to mental activity. This is the difference between learning something because one is told it, for example, and making an effort to learn historical dates. The category 'exercise opinion' is further divided into responding to another's opinion, making a judgement, and making a comparison between two things. All these options are illustrated in examples (6)–(18).

(6) He knew how much it cost. (Mental state, factual)

(7) He learned how much it cost. (Mental state, factual)

(8) He remembered how much it cost. (Mental state, factual)

(9) She believed him to be her son. (Mental state, afactual)

(10) She mistook the stranger for her son. (Mental state, afactual)

(11) She intended to help them. (Mental activity, with outcome, exercise volition)

(12) She found out how best to help them. (Mental activity, with outcome, acquire knowledge)

(13) She imagined herself helping them. (Mental activity, with outcome, exercise imagination)

(14) He agreed with those comments. (Mental activity, with outcome, exercise opinion)

(15) He judged himself worthy of a prize. (Mental activity, with outcome, exercise opinion)

(16) He compared her to a summer's day. (Mental activity, with outcome, exercise opinion)

(17) She concentrated on her work. (Mental activity, without outcome)

(18) She thought about her work. (Mental activity, without outcome)

Finally, in those cases where the Subject of the clause is a Causer, the Object of the clause may be the Senser, the Target of thought, or a noun indicating an idea. These choices are shown in bold at the bottom of Figure 7.5. They are exemplified in examples (19)–(21).

(19) The results decided him on a course of action. (Senser as Object)

(20) The shape determined the picture's value. (Target as Object)

(21) The book casts doubt on the theory. (Idea as Object)

The Meaning Network. The Meaning Network is shown in Figure 7.6. Because so many patterns and constructions are involved it is shown in segments to make it more legible. The Meaning Network largely follows the Systemic Network in prioritising the Subject type, as shown in Figure 7.6.

Here is a prose version of all these meaning and form distinctions, with examples invented to maximise simplicity and clarity.

The primary distinction involves the nature of the subject of clause, which may be the Senser, and entity, or the Causer.

- The Subject of the clause is a Senser. The basic network is shown in Figure 7.6b. The verb may indicate a mental state or a mental activity.
  - Verb describes a mental state. This is shown in Figure 7.6c. The verb may be factual or afactual.
    - Factual. The factual verbs are of three types: 'know', 'learn' and 'remember'.
      - 'know' type

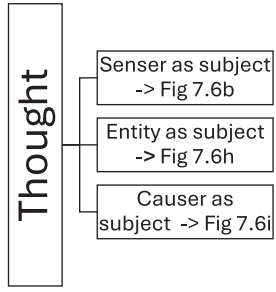

Figure 7.6a Cognition Thought Meaning Network

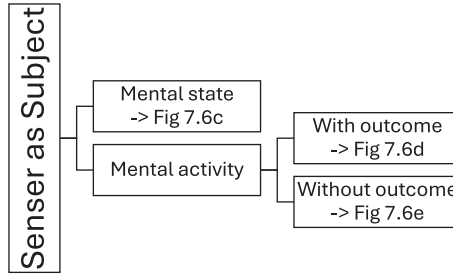

Figure 7.6b Cognition Thought: the senser as subject network

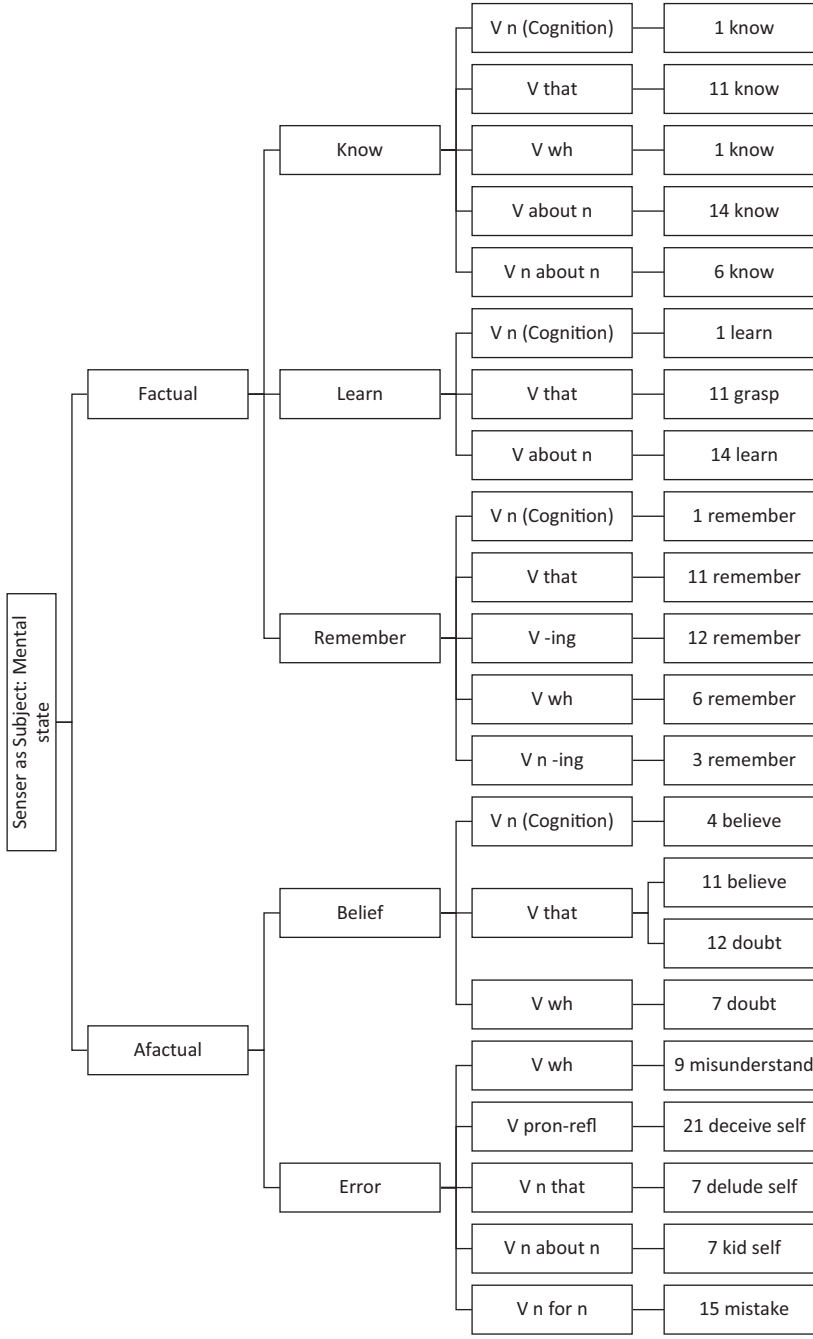

Figure 7.6c Cognition Thought: the senser as subject network, showing mental state choices

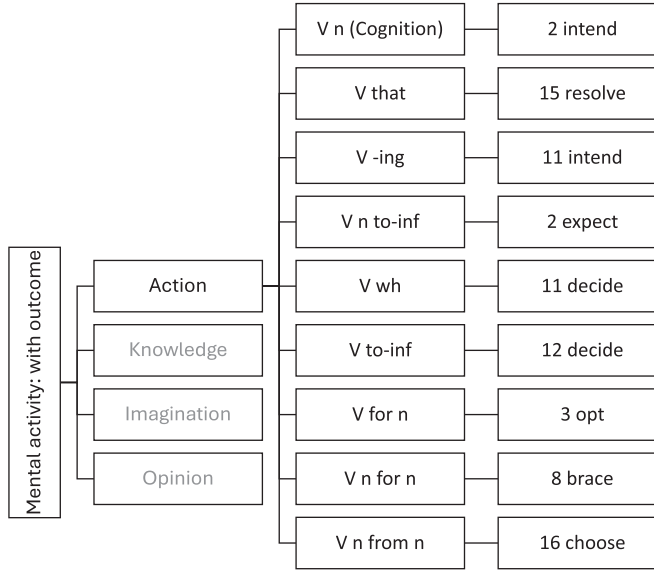

Figure 7.6d Cognition Thought: the senser as subject, mental activity network, showing with outcome, action choices

- V n (Cognitive) Cx1 e.g. ‘Alice knew the facts of the case’.
- V that Cx11 e.g. ‘Alice knew that Jim had stolen the money’.
- V wh Cx1 e.g. ‘Alice knew who had stolen the money’.
- V about n Cx14 e.g. ‘Alice knew about the stolen money’.

• ‘learn’ type
- V n (Cognitive) Cx1 e.g. ‘Alice learned the facts of the case’.
- V that Cx11 e.g. ‘Alice grasped that Jim stole the money’.
- V about n Cx14 e.g. ‘Alice learned about the theft’.

• ‘remember’ type
- V n (Cognition) Cx1 e.g. ‘Alice remembered the theft’.
- V that Cx11 e.g. ‘Alice remembered that the money was stolen’.
- V -ing Cx12 e.g. ‘Jim remembered stealing the money’.
- V wh Cx6 e.g. ‘Alice remembered who stole the money’.
- V n -ing Cx3 e.g. ‘Alice remembered Jim stealing the money’.

▪ Afactual. The afactual verbs are of two types: ‘believe’ and ‘error’.

• ‘believe’ type
- V n (Cognition) Cx4 e.g. ‘Alice believed the story’.
- V that Cx11 e.g. ‘Alice believed that Jim was innocent.’ and Cx12 e.g. ‘Alice doubted that Jim was guilty’.
- Vwh Cx7 e.g. ‘Alice doubted whether Jim was guilty’.

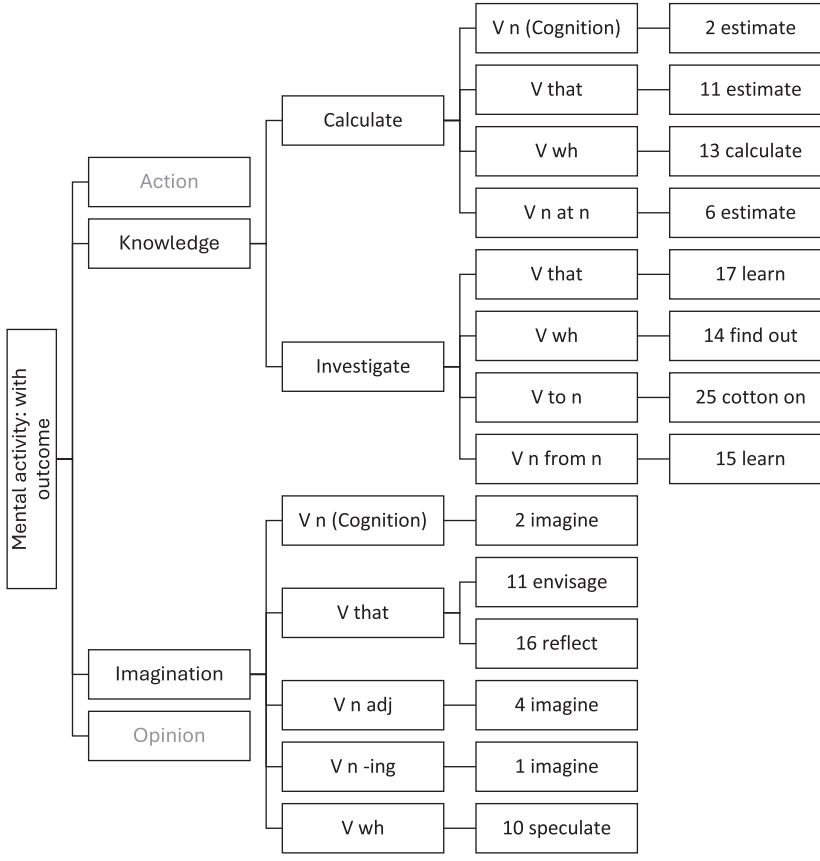

Figure 7.6e Cognition Thought: the senser as subject, mental activity network showing with outcome, knowledge and imagination choices

- ‘believe in error’ type
  - V wh Cx9 e.g. ‘Alice misunderstood what had happened’.
  - V pron-refl Cx21 e.g. ‘Alice was deceiving herself’.
  - V n that Cx7 e.g. ‘Alice deluded herself that it was true’.
  - V n about n Cx7 e.g. ‘Alice kidded herself about the theft’.
  - V n for n Cx15 e.g. ‘Alice mistook Jim for the thief’.

◦ Verb describes a mental activity. The construction may specify the outcome of the activity or not.

▪ Activity has an outcome. This is shown in Figures 7.6d–f. Four kinds of activity are specified: a mental action, acquiring knowledge, using the imagination, and having an opinion.

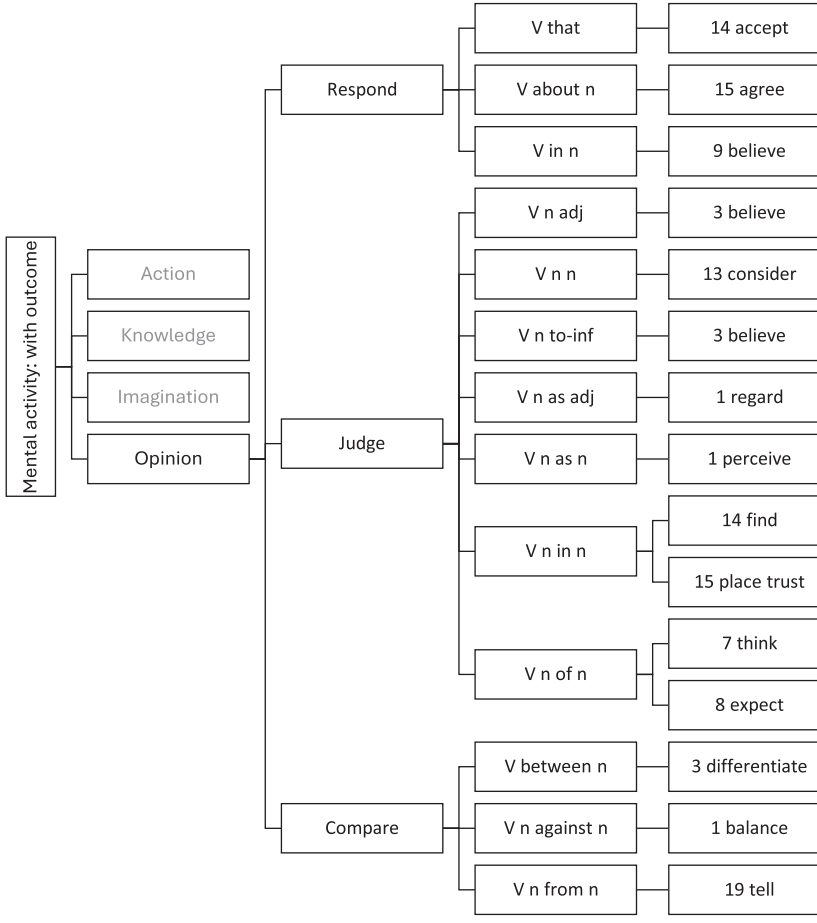

Figure 7.6f Cognition Thought: the senser as subject, mental activity network, showing with outcome, opinion choices

- Mental action (Figure 7.6d)
  - V n (Cognitive) Cx2 e.g. 'Jim intended no harm'.
  - V that Cx15 e.g. 'Jim resolved that he would do no harm'.
  - V -ing Cx11 e.g. 'Jim intended doing no harm'.
  - V n to-inf Cx2 e.g. 'Alice expected Jim to return'.
  - V wh Cx11 e.g. 'Jim decided what he would do'.
  - V to-inf Cx12 e.g. 'Jim decided to steal the money'.
  - V for n Cx3 e.g. 'Alice opted for a red dress'.
  - V n for n Cx8 e.g. 'Alice braced herself for criticism'.

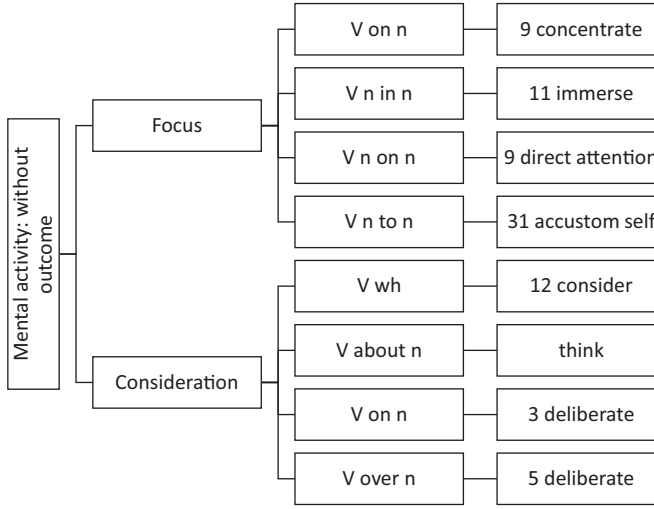

Figure 7.6g Cognition Thought: the senser as subject, mental activity network, showing without outcome choices

- V n from n Cx16 e.g. 'Alice chose a puppy from the litter'.

- Acquire knowledge (Figure 7.6e). The knowledge may be acquired through calculation or through investigation.
  - Acquire knowledge through calculation
    - V n (Cognitive) Cx2 e.g. 'Alice estimated the value'.
    - V that Cx11 e.g. 'Jim estimated that the train would arrive at 2pm'.
    - V wh Cx13 e.g. 'Alice estimated what the result would be'.
    - V n at n Cx6 e.g. 'Jim estimated that vase at £20'.
  - Acquire knowledge through investigation
    - V that Cx17 e.g. 'Alice learned that the train was late'.
    - V wh Cx14 e.g. 'Alice found out when the train would arrive'.
    - V to n Cx25 e.g. 'Alice cottoned on to the truth'.
    - V n from n Cx15 e.g. 'Jim learned the facts from Alice'.
- Use imagination (Figure 7.6e)
  - V n (Cognitive) Cx2 e.g. 'Pat could imagine the scene'.
  - V that Cx11 e.g. 'Pat envisaged that a problem would arise.' and Cx16 e.g. 'Pat reflected that this would be a problem'.
  - V n adj Cx4 e.g. 'Alice imagined the tree bare of leaves'.
  - V n -ing Cx1 e.g. 'Pat imagined the tree falling'.
  - V wh Cx10 e.g. 'Alice speculated what Jim would do'.
- Have opinion (Figure 7.6f). A distinction is made between responding to another's opinion, making a judgement, and making a comparison.

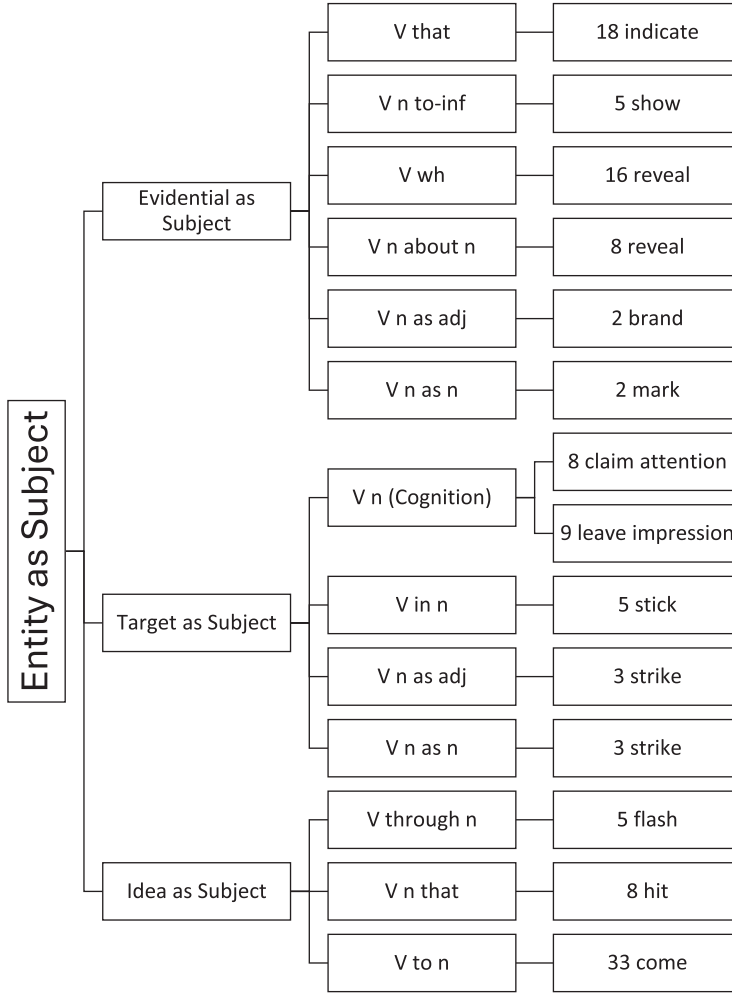

Figure 7.6h Cognition Thought: the entity as subject network

- Respond to another
  - V that Cx14 e.g. 'Pat accepted that Jim had stolen the money'.
  - V about n Cx15 e.g. 'Pat agreed about the circumstances of the theft'.
  - V in n Cx9 e.g. 'Pat believed in Jim's guilt'.
- Make a judgement

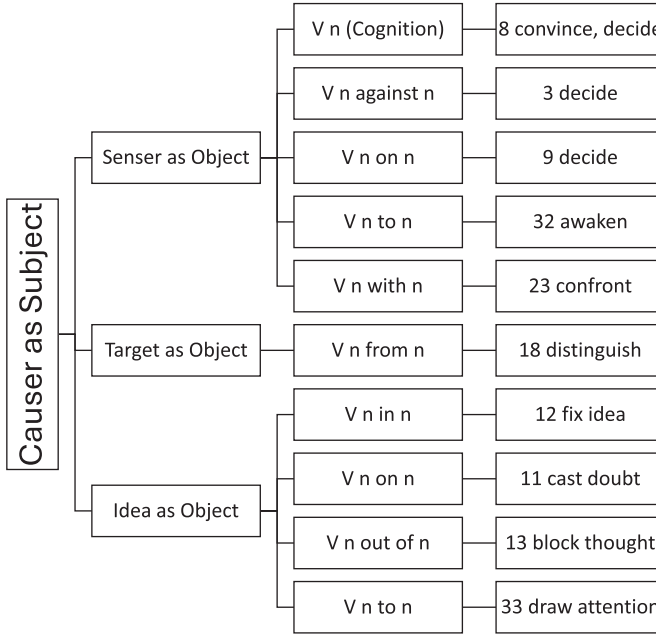

Figure 7.6i Cognition Thought: the causer as subject network

- V n adj Cx3 e.g. 'Pat believed him guilty'.
- V n n Cx13 e.g. 'Alice considered Jim a thief'.
- V n to-inf Cx3 e.g. 'Alice believed Jim to be a thief'.
- V n as adj Cx1 e.g. 'Pat regarded Jim as guilty'.
- V n as n Cx1 e.g. 'Pat regarded Jim as a thief'.
- V n in n Cx14 e.g. 'Alice found comfort in Pat's friendship.' and Cx15 e.g. 'Alice placed trust in Pat's friendship'.
- V n of n Cx7 e.g. 'Alice thought a lot of Jim.' and Cx8 e.g. 'Alice expected a lot of Jim'.

◦ Make a comparison

- V between n Cx3 e.g. 'Jim differentiated between his friends'.
- V n against n Cx1 e.g. 'Jim balanced the chance of success against the possibility of failure'.
- V n from n Cx19 e.g. 'Alice could not tell lies from the truth'.

- Activity has no outcome. This is shown in Figure 7.6g. The construction may indicate that someone focuses the mind or that they give consideration to something.
  - A person focuses the mind

- V on n Cx9 e.g. ‘Pat concentrated on the test’.
- V n in n Cx11 e.g. ‘Pat immersed himself in the test’.
- V n on n Cx9 e.g. ‘Jim directed his attention on the test’.
- V n to n Cx31 e.g. ‘Jim accustomed himself to exam conditions’.

- A person gives consideration to something
  - V wh Cx12 e.g. ‘Alice considered what the answer should be’.
  - V about n Cx? e.g. ‘Alice thought about the answer’.
  - V on n Cx3 e.g. ‘Alice deliberated on the answer’.
  - V over n Cx5 e.g. ‘Alice deliberated over the answer’.

- The subject of the clause is an Entity. This is shown in Figure 7.6h. The subject may be evidence for a conclusion, the target of thought, or a thought or idea.
  - Subject is evidence for the conclusion
    - V that Cx18 e.g. ‘Fingerprints indicate that Jim was the thief’.
    - V n to-inf Cx5 e.g. ‘The fingerprints showed Jim to be the thief’.
    - V wh Cx16 e.g. ‘The fingerprints revealed who the thief was’.
    - V n about n Cx8 e.g. ‘The evidence revealed a lot about the crime’.
    - V n as adj Cx2 e.g. ‘Pat’s clothes branded him as vain’.
    - V n as n Cx2 e.g. ‘Pat’s clothes marked him as a detective’.
  - Subject is the target of thought
    - V n (Cognitive) Cx8 e.g. ‘The picture claimed their attention.’ and Cx9 e.g. ‘The picture left a deep impression’.
    - V in n Cx5 e.g. ‘The picture stuck in their minds’.
    - V n as adj Cx3 e.g. ‘The picture struck her as odd’.
    - V n as n Cx3 e.g. ‘The picture struck her as something unusual’.
  - Subject is a thought or idea
    - V through n Cx5 e.g. ‘A clever thought flashed through her mind’.
    - V n that Cx8 e.g. ‘The idea hit Pat that Jim might have stolen the money’.
    - V to n Cx33 e.g. ‘A clever thought came to Alice’.
- The subject of the clause is a Causer. This is shown in Figure 7.6i. Distinctions are made between the types of object: a Senser, a target of thought, or a thought or idea.
  - The object of the clause is a Senser
    - V n (Cognitive) Cx8 e.g. ‘The new evidence convinced Alice’.
    - V n against n Cx3 e.g. ‘The new evidence decided Alice against Jim’s guilt’.
    - V n on n Cx9 e.g. ‘The new evidence decided Alice on a course of action’.
    - V n to n Cx32 e.g. ‘The new evidence awakened Alice to another possibility’.
    - V n with n Cx23 e.g. ‘The new evidence confronted Alice with another possibility’.

- The object of the clause is a target of thought
  - V n from n Cx18 e.g. 'The size of the ears distinguishes the African elephant from the Indian elephant'.
- The object of the clause is a thought or idea
  - V n in n Cx12 e.g. 'The book fixed a new idea in Alice's mind'.
  - V n on n Cx11 e.g. 'The book cast doubt on the culprit's identity'.
  - V n out of n Cx13 e.g. 'The football match blocked all thoughts of love from Pat's mind'.
  - V n to n Cx33 e.g. 'The match drew attention to Pat's failings'.

This concludes the proposed networks for the Cognition semantic field. Section 7.5 focuses on Communication.

7.5 From Construction to Network: Communication

Communication Overview

The field of communication covers all forms of language, whether spoken, written, or signed. For simplicity's sake, in this description, language is treated as spoken, but in most cases it could include other media. Communication also includes paralanguage. Other than the distinction between language and paralanguage, the primary distinction that is made in this study is between 'giving and asking for information' and 'asking someone to do something or committing oneself to doing something'. This reflects Halliday's distinction between 'information' and 'goods and services' (Halliday and Matthiessen 2014: 135). For ease of presentation, following this overview, the field is divided into 'Communication: Information' and 'Communication: Action'.

The Systemic Network. The systemic network, shown in Figure 7.7, makes the primary distinction mentioned earlier between 'language' and 'paralanguage'. The term 'paralanguage' is used here only for a few constructions where there is non-verbal communication without content see example (1) in the following. Other instances, where a gesture, for example, is used to communication content, as in example (2), are treated as instances of language.

(1) Joe smiled at Annie. (Paralanguage)

(2) Joe gestured to Annie to open the door. (Language)

Within the option of 'language' there are two areas of choice: the type of content communicated; and the direction of the exchange. The type of content can be information or goods and services: see examples (3) and (4).

(3) Joe told Annie the story of his life. (Information)

(4) Joe asked Annie to write his biography. (Goods and services: Action)

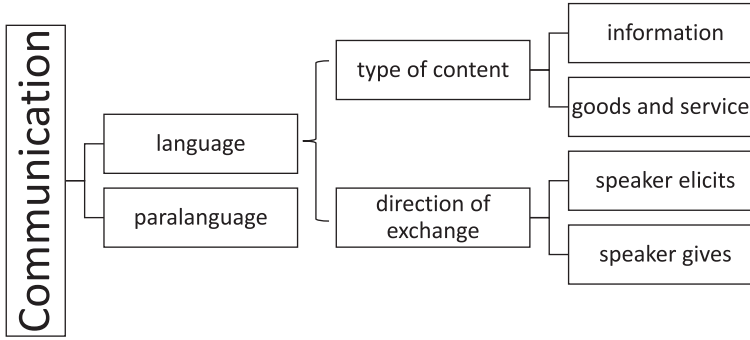

Figure 7.7 Communication Systemic Network

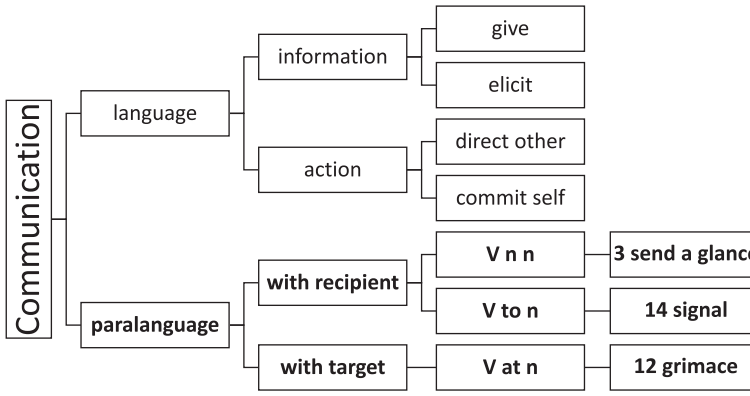

Figure 7.8 Communication Meaning Network

The direction of exchange is either from speaker to hearer – the speaker gives information or commits themselves to an action – or from hearer to speaker – the speaker requests information or requests an action. This distinguishes between examples (5) and (6).

(5) Joe asked Annie to write the book. (Requesting Action)

(6) Joe promised Annie that he would write the book. (Promising Action)

The Meaning Network. The Communication Meaning Network in Figure 7.8 reworks the Systemic Network, showing the 'information' and 'action' options within 'Language'. It also adds the pattern and construction detail to the 'Paralanguage' option, shown in bold on the figure.

Here is a prose version of the Meaning Network.
The primary distinction is between language and paralanguage.

- Language. The construction may related to the exchange of information or action.
  - Information is exchanged.
    - The speaker gives information.
    - The speaker elicits information.
  - Action is promised or requested.
    - The speaker tells/asks the hearer to do something.
    - The speaker commits to doing something.
- Paralanguage. The construction may specify a recipient or a target.
  - The construction specifies a recipient of the communication.
    - V n n Cx3 e.g. 'Annie sent Brenda a withering glance'.
    - V to n Cx14 e.g. 'Annie signalled to Brenda'.
  - The construction specifies a target of the communication.
    - V at n Cx12 e.g. 'Annie grimaced at Brenda'.

The remainder of this chapter is divided between 'Communication: Action' and 'Communication: Information'.

Communication: Action

The term 'Communication: Action' refers to constructions that construe a communicative act that relates to a future action. There are 21 verb argument constructions that express this semantic field, drawing on 14 verb complementation patterns.

The Systemic Network. The Systemic Network, shown in Figure 7.9, specifies three distinctions: who the Actor is in the future action; the nature of the future action; and whether the recipient of the communicative act is indicated in the construction or not.

Taking the first of these, the Actor may be another person or the speaker themselves. This distinguishes between examples (1) and (2).

(1) Anne promised to leave. (Actor is the speaker)

(2) Anne asked John to leave. (Actor is another person)

In terms of the future action itself, there are three independent choices: degree of specification, speech act type, and polarity. The action is usually specified, as in example (3).

(3) Eric told Bert to bring a cup of tea. (Action is specified)

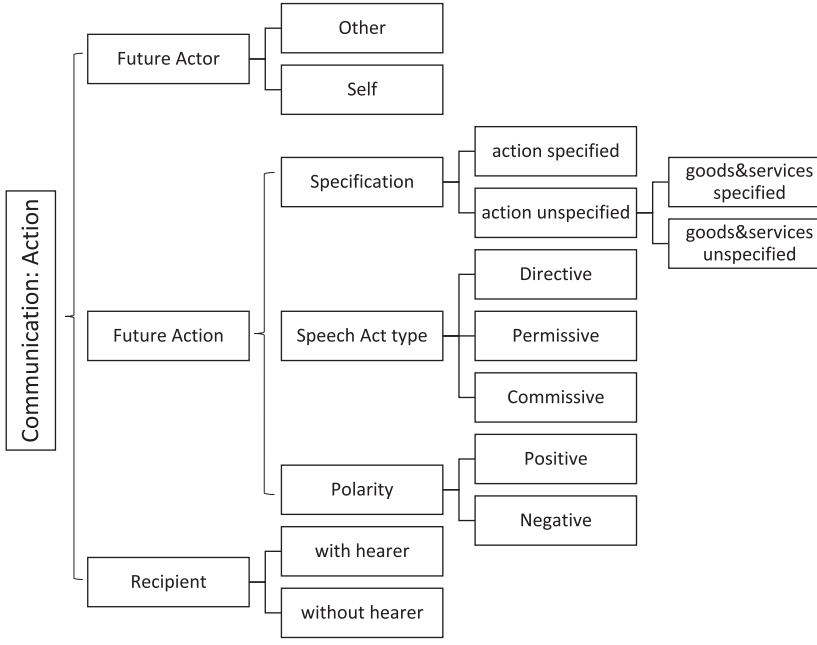

Figure 7.9 Communication: Action Systemic Network

There are ways of being less specific, however. Goods and services might be specified, implying an action (example (4)), or the action may be totally unspecified, as in example (5).

(4) Eric asked for tea. (Action implied)

(5) Eric pleaded with Bert. (Action unspecified)

The speech act may be Directive (issuing an order), Permissive (asking for permission), or Commissive (issuing a promise). Examples (6)–(8) illustrate these distinctions.

(6) Eric told Bert to bring tea. (Directive)

(7) Eric asked to have tea. (Permissive)

(8) Bert promised to bring tea. (Commissive)

In terms of polarity, this may be positive or negative, that is, ordering or forbidding an action. Examples (9) and (10) illustrate this.

(9) Eric told Bert to bring tea. (Positive polarity)

(10) Eric forbad Bert to bring tea. (Negative polarity)

Finally, the construction may or may not include an element that indicates the recipient of the communicative act. This choice is illustrated in examples (11) and (12).

(11) Eric asked Bert to bring tea. (Hearer is indicated)

(12) Eric asked that tea be brought. (Hearer is not indicated)

The Meaning Network. The Meaning Network for Communication: Action shows which of the systemic choices co-occur in practice. The network is shown in Figure 7.10 and is described in prose, with examples that as before are invented for simplicity and clarity. Figure 7.10 gives the overall outline of the network.

- Other as Actor. This is shown in Figure 7.10b
  - The action is specified in the construction.
    - The hearer is indicated in the construction.
      - The directive is positive.
        - V n to-inf
          - Cx9 e.g. 'Eric asked Bert to open the envelope'.
          - Cx10 e.g. 'Eric commanded Bert to open the envelope'.
          - Cx11 e.g. 'Eric dared Bert to open the envelope'.
        - V n into n. Cx7 e.g. 'Eric talked Bert into treason'.
        - V n to n. Cx26 e.g. 'Eric suggested treason to Bert.' and Cx25 e.g. 'Eric challenged Bert to a duel'.

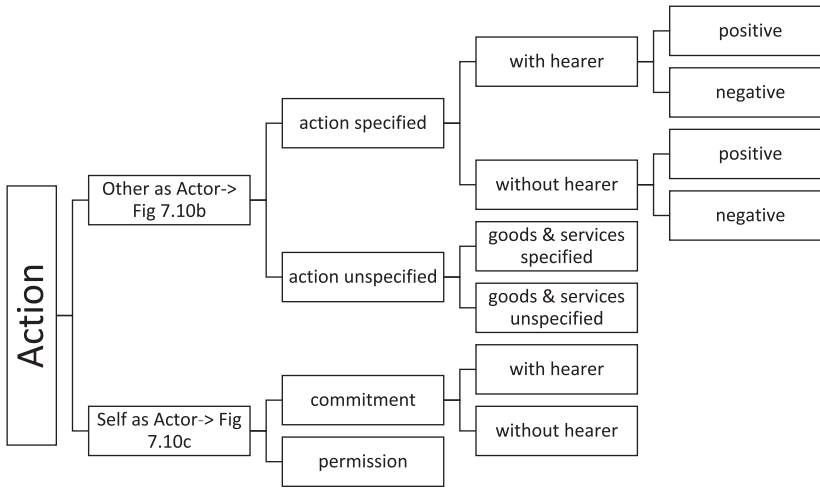

Figure 7.10a Communication: Action Meaning Network

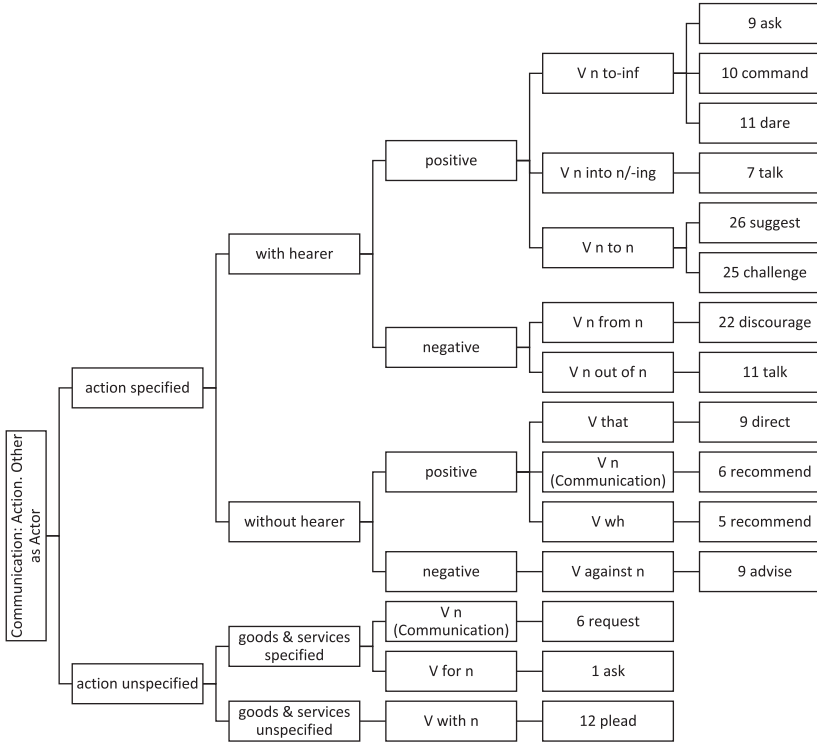

Figure 7.10b Communication: Action, the other as actor network

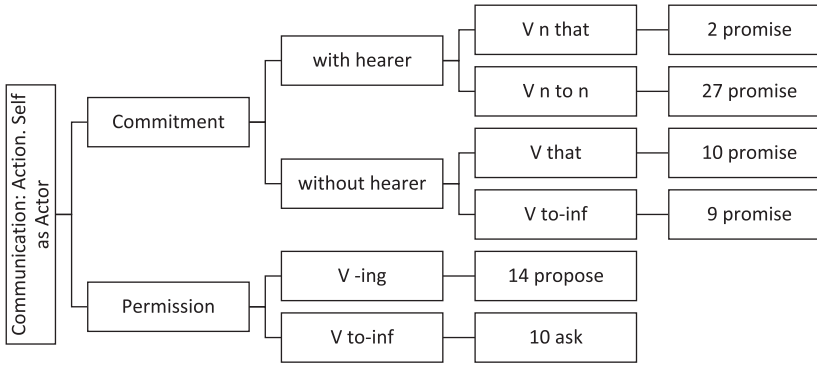

Figure 7.10c Communication: Action, the self as actor network

- The directive is negative.
  - V n from n. Cx22 e.g. ‘Bert discouraged Eric from drinking tea’.
  - V n out of n. Cx11 e.g. ‘Bert talked Eric out of opening the envelope’.
- The hearer is not indicated in the construction.
  - The directive is positive.
    - V that. Cx9 e.g. ‘Eric directed that tea be brought’.
    - V n (Communication). Cx6 e.g. ‘Eric recommended a tea break’.
    - V wh Cx5 e.g. ‘Eric recommended what they should drink’.
  - The directive is negative.
    - V against n. Cx9 e.g. ‘Eric advised against drinking the tea’.

◦ The action is not specified in the construction.
- Goods and services are specified in the construction.
  - V n (Communication). Cx6 e.g. ‘Eric requested tea’.
  - V for n. Cx1 e.g. ‘Eric asked for tea’.
- Goods and services are not specified in the construction.
  - V with n. Cx12 e.g. ‘Eric pleaded with Bert’.

• Self as Actor. This is shown in Figure 7.10c.

◦ The speech act is one of commitment to a future action.
- The hearer is specified in the construction.
  - V n that. Cx2. ‘Bert promised Eric that he would walk the dog’.
  - V n to n. Cx27. ‘Bert promised assistance to Eric’.
- The hearer is not specified in the construction.
  - V that. Cx10. ‘Bert promised that he would walk the dog’.
  - V to-inf. Cx9. ‘Bert promised to walk the dog’.

◦ The speech act is one of asking permission or agreement to perform a future action.
- V -ing. Cx14 e.g. ‘Bert proposed visiting the coast’.
- V to-inf. Cx10 e.g. ‘Bert asked to see the picture’.

Communication: Information

The term ‘Communication: Information’ refers to those constructions that construe an act of communication in which information is exchanged. There are 82 constructions belonging to this semantic field, drawing on 26 verb complementation patterns.

The Systemic Network. The Systemic Network is shown in Figure 7.11. It represents four independent choices, relating to: the **direction** of the communication; the **participants** in the communication; the presence or absence of **content**; and other **circumstances** that may be expressed by the constructions. Whereas some of the choices are between the type of entity

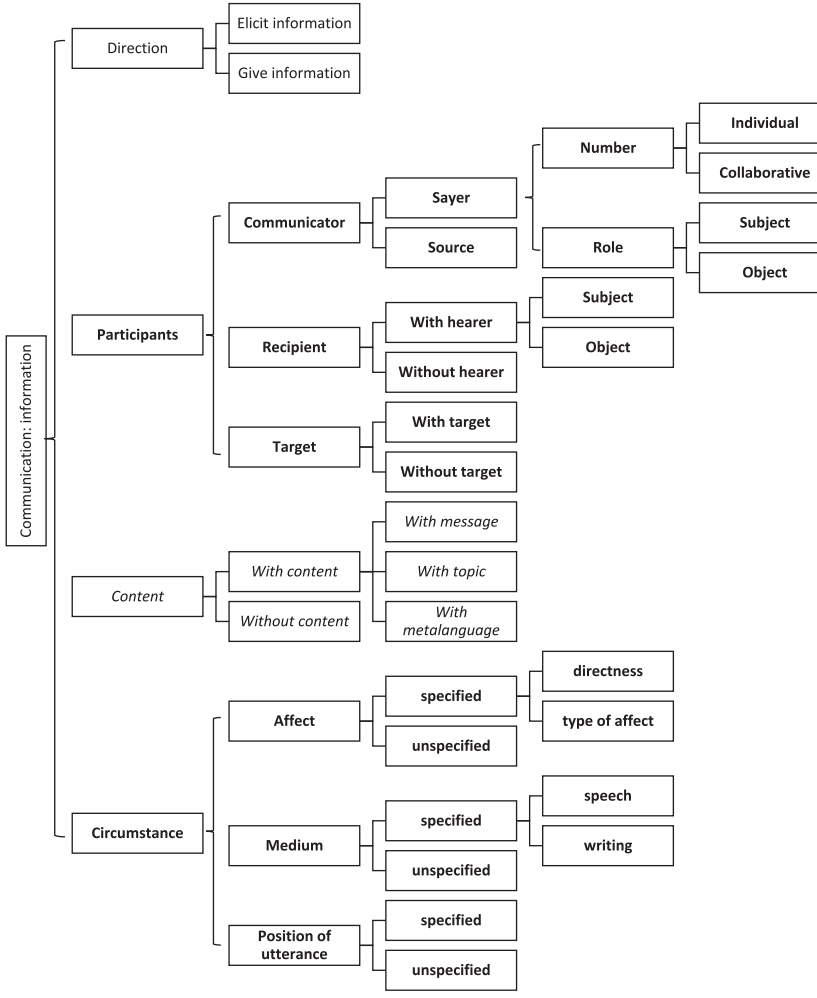

Figure 7.11 Communication: Information Systemic Network

expressed – for example, whether the communicator is a Sayer or a Source – in many cases, the choice is between 'presence' and 'absence'; for example, there may or may not be a Recipient or a Target. In many cases also the choices are strongly skewed in terms of the number of constructions that express each choice. For example, very few constructions have a Source as the communicator.

The communication **direction** choice is shown in plain text at the top of Figure 7.11. This is a choice between eliciting and giving information, illustrated in examples (1) and (2).

(1) Ann asked the customer her name. (Eliciting information)

(2) The customer told Ann her name. (Giving information)

The choice network related to **participants** is shown in bold towards the top of Figure 7.11. There are three relevant participants: the communicator, the recipient of the communication, and the target of the communication.

In relation to the communicator, there is a choice of communicator type: Sayer and Source (examples (3) and (4)). Where there is a Sayer, there are then choices relating to number and to grammatical role. Most constructions do not specify how many people are speaking, but a few specify that the communication is collaborative or reciprocal. This is shown in Figure 7.11 as a choice between 'individual' and 'collaborative', though of course, the 'individual' Sayer constructions may involve several people talking (see examples (5) and (6)). In terms of grammatical role, most constructions construe the communicator as Subject, when the construction is in active voice, but in a few constructions it is the Object (see examples (7) and (8)).

(3) Tim suggested the bones belonged to a dinosaur. (The communicator is a Sayer.)

(4) Analysis of the bones suggested they belonged to a dinosaur. (The communicator is a Source.)

(5) One man was shouting slogans. OR The crowd were shouting slogans. (The communicator may be individual.)

(6) The politicians bandied words with each other. (The communication must be collaborative.)

(7) Ann talked to Jim. (The communicator is the Subject.)

(8) Ann listened to Jim. (The communicator is the Object.)

The second participant in communication is the recipient or hearer. This participant may be present or absent in the construction (see examples (9) and (10)). Where there is a recipient, there are choices in the grammatical role. In most constructions, the recipient is the Object, but it may be the Subject (examples (11) and (12)).

(9) Ann told the children a story. (Recipient is present: With hearer.)

(10) Ann told a story. (Recipient is not present: Without hearer.)

(11) Ann talked to Jim. (Recipient is Object)

(12) Ann listened to Jim. (Recipient is Subject)

The third possible participant in the communication is a Target, which may be present or not: see examples (13) and (14).

(13) The teacher shouted at the children. (With target)

(14) The teacher shouted orders. (Without target)

In terms of **content**, there is a choice between expressing or not expressing the content of the communication. This is shown in italics in the middle of Figure 7.11. Most constructions indicate specific content as an independent element, but a few do not. In example (15), for instance, the content is indicated by the verb, not by a separate element. If content is indicated as an element of the construction, it may be a message, a topic, or metalanguage: see examples (16)–(18).

(15) Amy thanked Tim. (Without content)

(16) Tim said that he was leaving at six. (With content: Message)

(17) Tim talked about his departure. (With content: Topic)

(18) Tim made a prediction. (With content: Metalanguage)

In most cases, constructions are not distinguished by aspects of **circumstance**. In some cases, however, constructions are distinguished by Affect, Medium, or the position of the utterance in relation to others. The Affect may specify the level of directness or whether the Affect is positive or negative. These choices are illustrated in examples (19)–(22).

(19) Amy hinted that Jim was at fault. (Affect specified: directness)

(20) Amy criticised Jim. (Affect specified: negative Affect)

(21) Jim wrote a speech. (Medium specified: writing)

(22) Amy added a few comments. (Position of utterance specified)

These choices are shown in bold at the bottom of Figure 7.11.

The Meaning Network. The Meaning Network is shown in Figure 7.12, which is divided into sections for legibility. This network combines several aspects of the Systemic Network, specifying distinctions where these are relevant in context.

Here is a prose version of Figure 7.12, with invented examples to illustrate the constructions. The first part of the network (Figure 7.12) shows the distinction between eliciting and giving information.

- Information is elicited. This is shown in Figure 7.12b.
  - The construction specifies a Hearer.
    - The construction also specifies a message.

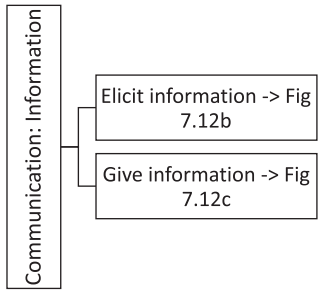

Figure 7.12a Communication: Information Meaning Network

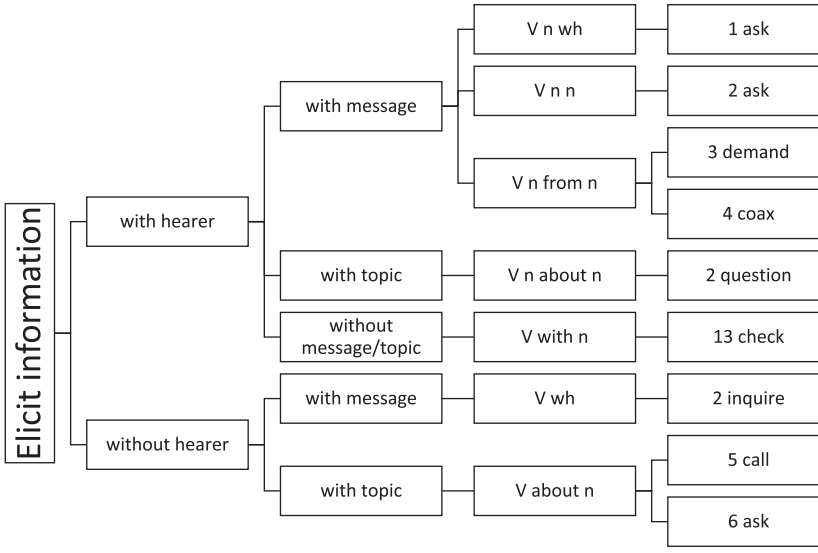

Figure 7.12b Communication: Information, the elicit information network

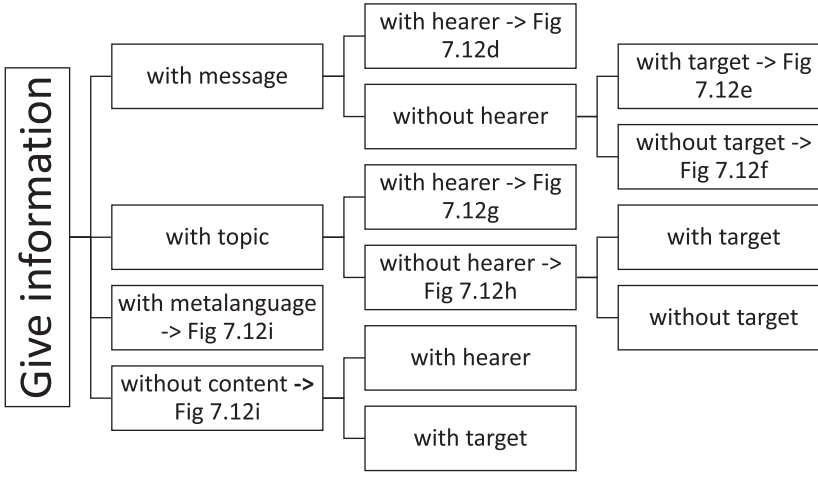

Figure 7.12c Communication: Information, the give information network

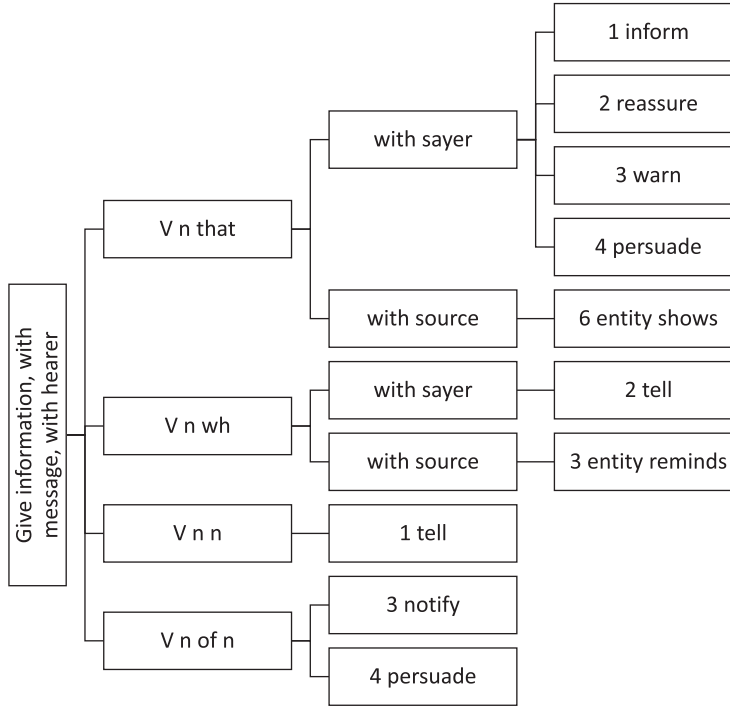

Figure 7.12d Communication: Information, the give information network, showing with message and hearer choices

- V n wh. Cx1 e.g. 'Cindy asked Jake what he wanted to eat'.
- V n n. Cx2 e.g. 'Cindy asked Jake his name'.
- V n from n. Cx3 e.g. 'Cindy demanded information from Jake.' and Cx4 e.g. 'Cindy coaxed information from Jake'.

▪ The construction also specifies a topic.
- V n about n. Cx2 e.g. 'Cindy questioned Jake about his preferences'.

▪ The construction does not specify any other element.
- V with n. Cx13 e.g. 'Cindy checked with Jake'.

◦ The construction does not specify a Hearer.
▪ The construction specifies a message.
- V wh. Cx2 e.g. 'Cindy inquired what Jake wanted to eat'.

▪ The construction specifies a topic.
- V about n. Cx5 e.g. 'Cindy called about their dinner plans.' and Cx6 e.g. 'Cindy asked about their dinner plans'.

• Information is given. This is shown in Figure 7.12c and subsequent figures.

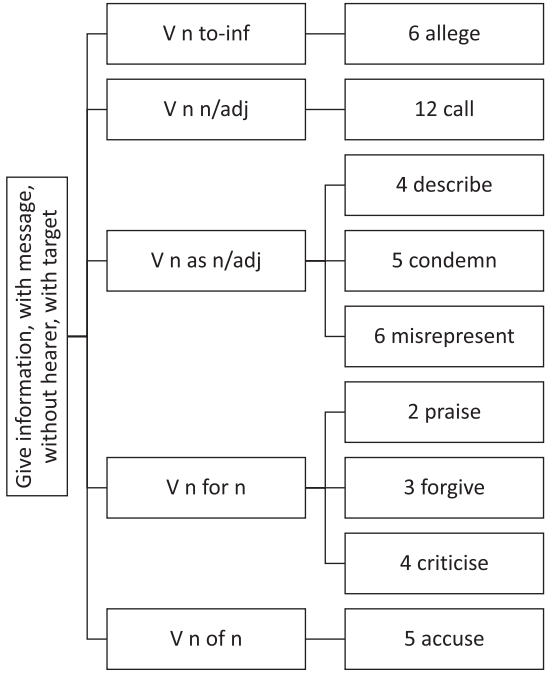

Figure 7.12e Communication: Information, the give information network, showing with message, without hearer, with target choices

- The construction specifies a message.
  - The construction indicates the hearer. This is shown in Figure 7.12d.
    - V n that
      - The communicator is a Sayer.
        - Cx1 e.g. ‘Selma informed Dilip that she wanted chips’.
        - Cx2 e.g. ‘Dilip reassured Selma that chips were available’.
        - Cx3 e.g. ‘Selma warned Dilip that the food was hot’.
        - Cx4 e.g. ‘Dilip persuaded Selma that salad was a better option’.
      - The communicator is a Source.
        - Cx6 e.g. ‘The tests showed Dilip that he should eat less salt’.
    - V n wh
      - The communicator is a Sayer.
        - Cx2 e.g. ‘Selma told Dilip what he should eat’.
      - The communicator is a Source.
        - Cx3 e.g. ‘The tests reminded Dilip what he should eat’.
    - V n n. Cx1 e.g. ‘Dilip told Selma the outcome of the experiment’.

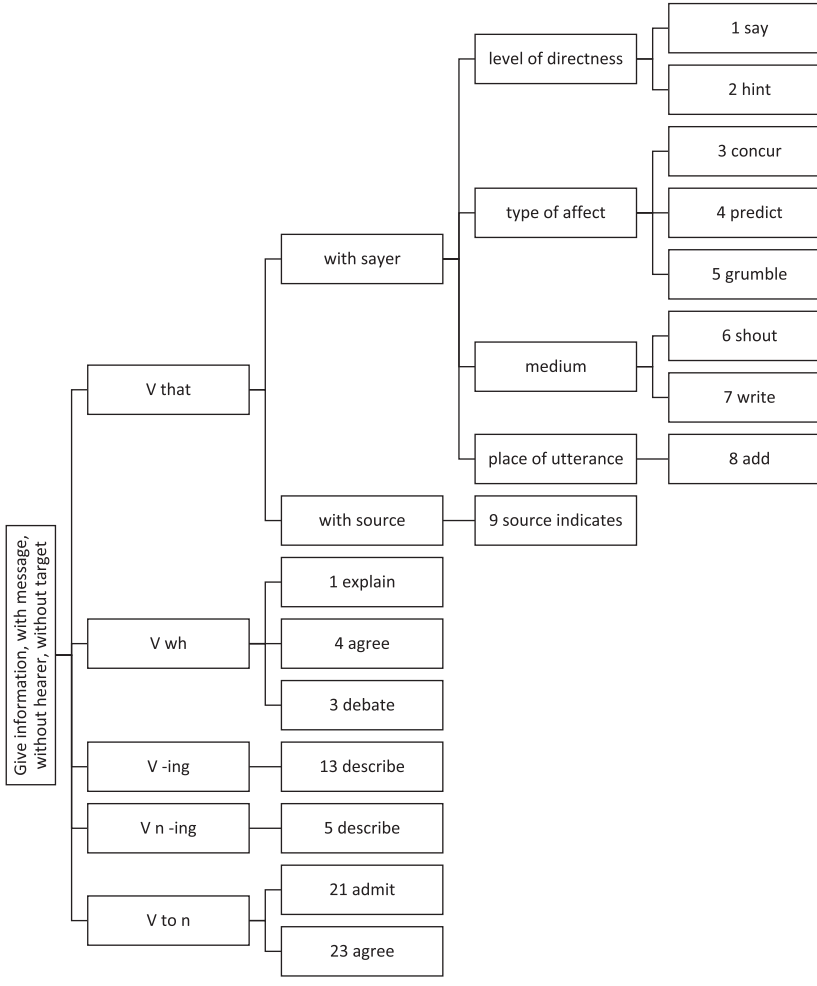

Figure 7.12f Communication: Information, the give information network, showing with message only choices

- V n of n. Cx3 e.g. 'Dilip notified Selma of the results.' and Cx4 e.g. 'Dilip persuaded Selma of the need to exercise more'.

▪ The construction does not indicate the hearer.
- The construction indicates a target. This is shown in Figure 7.12e.
  - V n to-inf. Cx6 e.g. 'Phil alleged the dog to be the source of the outbreak'.
  - V n n/adj. Cx12 e.g. 'Phil called his friend an idiot'.

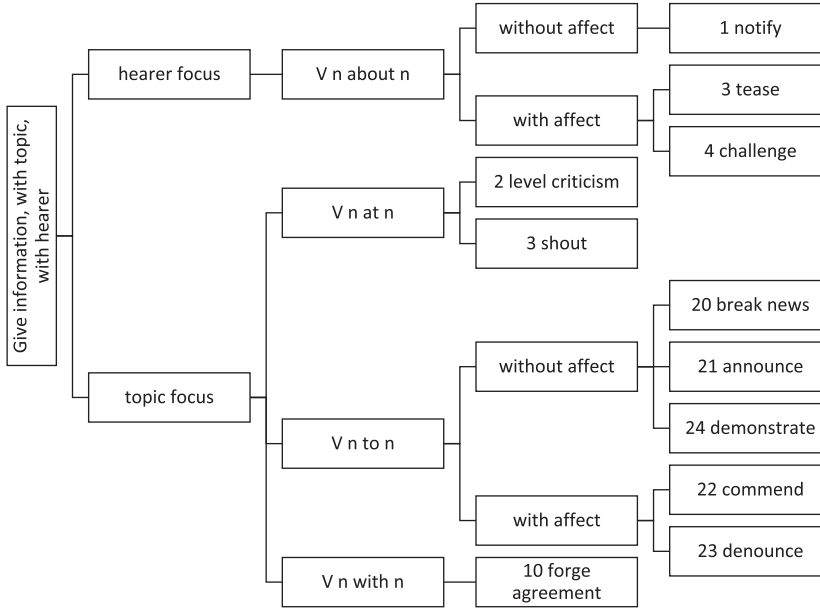

Figure 7.12g Communication: Information, the give information network, showing with topic and hearer choices

- V n as n/adj.
  - Cx4 e.g. 'Phil described his friend as an idiot'.
  - Cx5 e.g. 'Phil condemned his friend as an idiot'.
  - Cx6 e.g. 'Phil misrepresented his friend as an idiot'.
- V n for n
  - Cx2 e.g. 'Amy praised the driver for her courage'.
  - Cx3 e.g. 'Amy forgave the driver for her mistake'.
  - Cx4 e.g. 'Amy criticised the driver for her mistake'.
- V n of n. Cx5 e.g. 'Phil accused his friend of stupidity'.

- The construction does not indicate a target. This is shown in Figure 7.12f.
  - V that
    - The communicator is a Sayer.
      - The level of directness is specified. Cx1 e.g. 'Amy said that the driver was brave.' and Cx2 e.g. 'Amy hinted that the driver caused the accident'.
      - The type of affect is specified.
        - Cx3 e.g. 'Amy concurred that she was to blame'.
        - Cx4 e.g. 'Amy predicted that the cost would be high'.
        - Cx5 e.g. 'Amy grumbled that the cost would be high'.

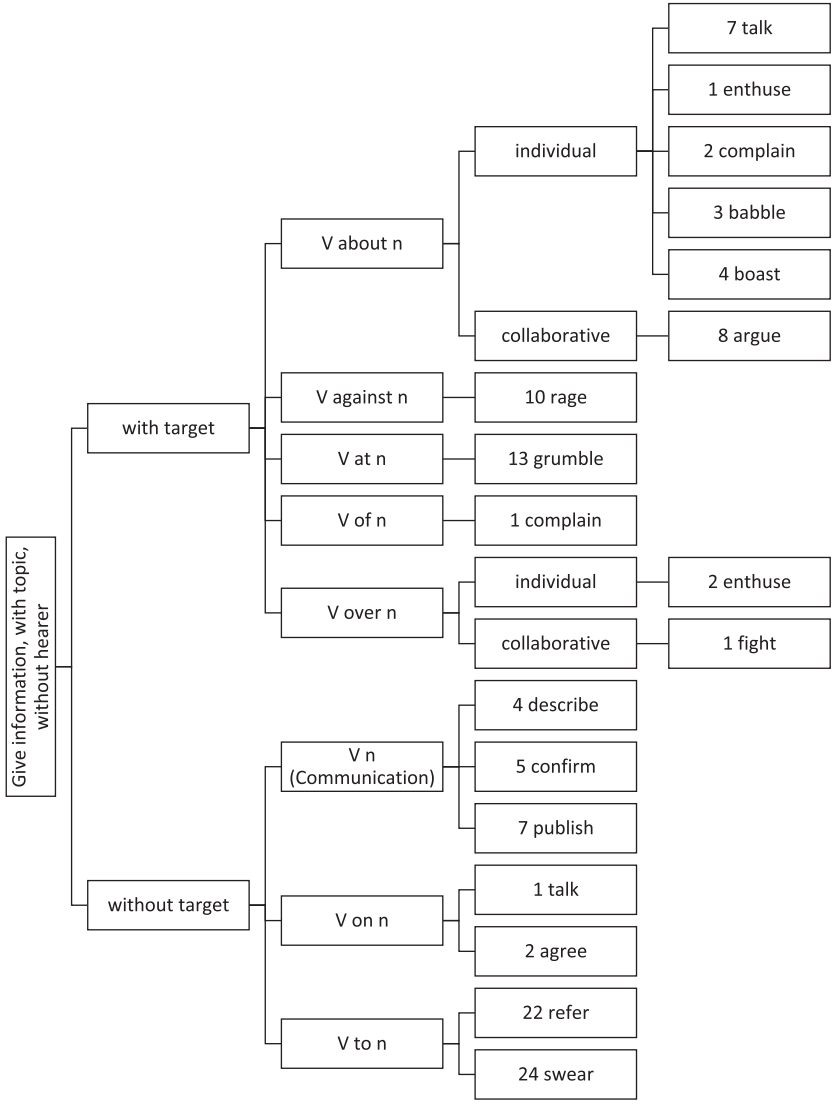

Figure 7.12h Communication: Information, the give information network, showing with topic, without hearer choices

- The medium is specified. Cx6 e.g. 'Phil shouted that the cost was too high.' and Cx7 e.g. 'Phil wrote that the cost was too high'.

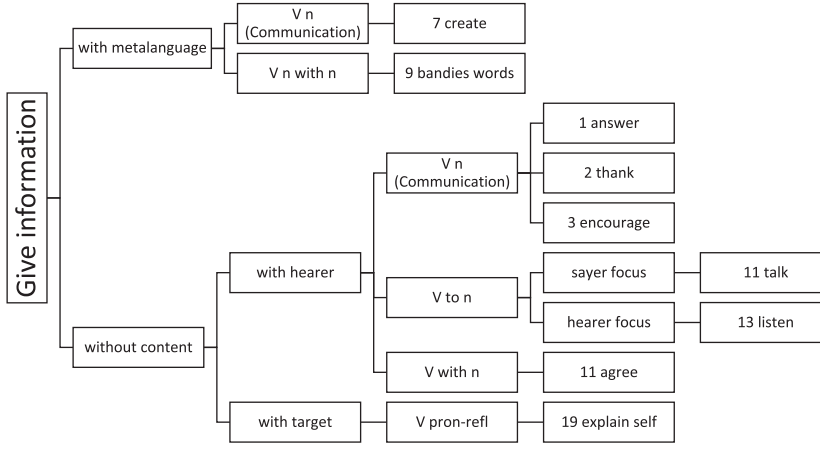

Figure 7.12i Communication: Information, the give information network, showing with metalanguage choices and without content choices

- The position of the utterance is specified. Cx8 e.g. 'Amy added that the cost was too high'.

▪ The communicator is a Source. Cx9 e.g. 'The findings indicated that it had been an accident'.

◦ V wh
- Cx1 e.g. 'Sara explained what they should do'.
- Cx4 e.g. 'They all agreed what they should do'.
- Cx3 e.g. 'They debated what they should do'.

◦ V -ing. Cx13 e.g. 'Sara described seeing the accident'.
◦ V n -ing. Cx5 e.g. 'Sara described the car disappearing'.
◦ V to n. Cx21 e.g. 'Phil admitted to the crime.' and Cx23 e.g. 'Phil agreed to a fine'.

◦ The construction specifies a topic.
▪ The construction also indicates the hearer. This is shown in Figure 7.12g.
- Hearer focus: the noun following the verb indicates the hearer.
  ◦ V n about n
    - Affect is not specified. Cx1 e.g. 'Sara notified Phil about the fine'.
    - Affect is specified. Cx3 e.g. 'Sara teased Phil about the fine.' and Cx4 e.g. 'Sara challenged Phil about the fine'.
- Topic focus: the noun following the verb indicates the topic.
  ◦ V n at n. Cx2 e.g. 'Jake levelled criticism at Mo.' and Cx3 e.g. 'Jake shouted insults at Mo'.
  ◦ V n to n

- Affect is not specified.
  - Cx20 e.g. ‘Mo broke the news to Jake’.
  - Cx21 e.g. ‘Mo announced his promotion to the group’.
  - Cx24 e.g. ‘Mo demonstrated his commitment to his employers’.
- Affect is specified. Cx22 e.g. ‘Mo commended Jake to his employers.’ and Cx23 e.g. ‘Mo denounced Jake to his employers’.
  - V n with n. Cx10 e.g. ‘Mo forged an agreement with Jake’.

- The construction does not indicate the hearer. This is shown in Figure 7.12h.
  - The construction indicates a target.
    - V about n.
      - Individual communication
        - Cx7 e.g. ‘Jake talked about his enemies’.
        - Cx1 e.g. ‘Jake enthused about his new job’.
        - Cx2 e.g. ‘Jake complained about his new job’.
        - Cx3 e.g. ‘Jake babbled about his enemies’.
        - Cx4 e.g. ‘Jake boasted about his new job’.
      - Collaborative communication. Cx8 e.g. ‘They argued about the accident’.
    - V against n. Cx10 e.g. ‘Jake raged against his enemies’.
    - V at n. Cx13 e.g. ‘Jake grumbled at his duties’.
    - V of n. Cx1 e.g. ‘Jake complained of his duties’.
    - V over n.
      - Individual communication. Cx2 e.g. ‘Jake enthused over his new job’.
      - Collaborative communication. Cx1 e.g. ‘Jake and Mo fought over the cause of the accident’.
  - The construction does not indicate a target.
    - V n (Communication)
      - Cx4 e.g. ‘Mo described the picture’.
      - Cx5 e.g. ‘Mo confirmed the decision’.
      - Cx7 e.g. ‘Mo published a book of poetry’.
    - V on n. Cx1 e.g. ‘Sara talked on a new topic.’ and Cx2 e.g. ‘Sara and Jake agreed on the best way forward’.
    - V to n. Cx22 e.g. ‘Sara referred to Mo’s book.’ and Cx24 e.g. ‘Sara swore to the truth of her statement’.

- The construction specifies metalanguage. This is shown in Figure 7.12i.
  - V n (Communication). Cx7 e.g. ‘Mo created a poem’.
  - V n with n. Cx9 e.g. ‘Mo bandied words with Jake’.
- The construction does not specify content. This is also shown in Figure 7.12i.

- The construction indicates the hearer.
  - V n (Communication)
    - Cx1 e.g. ‘Sara answered Dilip’.
    - Cx2 e.g. ‘Sara thanked Dilip’.
    - Cx3 e.g. ‘Sara encouraged Dilip’.
  - V to n
    - The Sayer is the Subject. Cx11 e.g. ‘Dilip talked to Sara’.
    - The Hearer is the Subject. Cx13 e.g. ‘Sara listened to Dilip’.
  - V with n. Cx11 e.g. ‘Dilip agreed with Sara’.
- The construction indicates a target.
  - V pron-refl. Cx19 e.g. ‘Jake explained himself’.

7.6 Conclusion

This chapter has proposed networks that show the relationship between constructions expressing two major semantic fields: Cognition and Communication. It has demonstrated the usefulness of concepts drawn from SFG in deriving such networks that might be termed a partial constructicon. The most significant contribution is the use of systemic networks that work separately from but alongside the more familiar taxonomic networks. The Meaning Networks themselves are very busy, accounting as they do for dozens of constructions. The Systemic Networks offer a more abstract version of the same information that identify which language features are important in the semantic field and the main oppositions that contribute to the taxonomic network.

Interestingly, identifying the constructions within the target fields, and locating them in the networks, becomes most difficult when there is a degree of metaphor involved. One example is ‘skate around a topic’, where the image of an ice-skate moving around but not touching a central point is transferred to a speaker failing to address a topic of importance. In other cases, the subject of the clause is an element other than the speaker, thinker, or hearer. Examples would include ‘a novel thought struck him’ or ‘the results told us that . . . ’. These examples impose an interpretation of animacy on ‘a thought’ and ‘the results’ as the subjects of STRIKE and TELL respectively. Halliday’s concept of grammatical metaphor is useful in interpreting these as ‘he thought that . . . ’ and ‘we concluded that . . . ’.

In this chapter, the semantic fields associated with the process types of Mental and Verbal have been discussed. In Chapter 8, semantic fields associated with Material and Relational processes are outlined in a similar way.