

6 Constructions in Meaning Networks: Causation

6.1 Introduction

[Chapter 3](#) described how Verb Argument Constructions were derived from the verb complementation patterns recorded in Francis et al. (1996). The concept of network was used to model the relationship between constructions. [Chapter 4](#) showed how further information was added to some of those constructions, based on the notion of semantic fields and their associated participant roles. In those sections, the main concern was to reconcile Pattern Grammar and Construction Grammar and to demonstrate how the outcome from large-scale corpus research can be used to inform a cognitively based linguistic theory.

This chapter turns attention to the intersection between constructions and Systemic Functional Grammar – SFG (introduced in [Chapter 5](#)). It seeks to model the language resources available for making meaning in a given semantic field using systemic networks. The aim is to explore how a corpus-informed taxonomy of Verb Argument Constructions might be useful in populating networks in SFG. A complementary aim is to demonstrate how the concept of network, as used in SFG, might contribute to construction building.

The method followed to derive networks is first to identify the constructions belonging to a given semantic field, then to arrange those constructions in Meaning Networks, and finally to propose the Systemic Networks. To explain how these networks are presented in this book, I use here an imaginary and very trivial example: the choices involved in making a hypothetical journey from Birmingham to London.

Example: Birmingham to London

As a potential traveller, there are a number of ways I could organise my journey, such as travel by train in the afternoon on a return ticket; travel in the morning on a single ticket, either on the bus or the train; take the bus in the morning on

a return ticket; and buy a ticket for a single bus journey and use it in the evening. These options can be organised in a bullet-point list or taxonomy, as follows:

- I can choose to travel by train or by bus.
 - If I travel by train, I can go in the morning or in the afternoon.
 - If I go in the morning, I can purchase:
 - A single ticket: the ‘TMS’ option (‘train, morning, single’)
 - A return ticket: the ‘TMR’ option
 - If I go in the afternoon, I can purchase:
 - A single ticket: the ‘TAS’ option
 - A return ticket: the ‘TAR’ option
 - If I travel by bus, I can go in the morning or the evening.
 - If I go in the morning, I can purchase:
 - A single ticket: the ‘BMS’ option
 - A return ticket: the ‘BMR’ option
 - If I go in the evening, I can purchase:
 - A single ticket: the ‘BES’ option
 - A return ticket: the ‘BER’ option

This gives a total of eight options. This ‘prose’ version of the taxonomy can be translated into a network that is the equivalent of the Meaning Networks used in this book. [Figure 6.1](#) shows this network.

It is obvious that although [Figure 6.1](#) shows how the options (‘TMS’, ‘BER’, etc.) relate to one another, it is somewhat repetitious. The travel ‘features’ that go into the make-up of each option can be extrapolated. There are three key features:

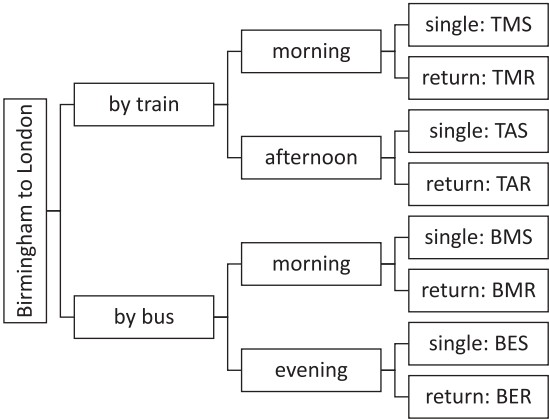


Figure 6.1 The imaginary Birmingham to London journey: taxonomy of options

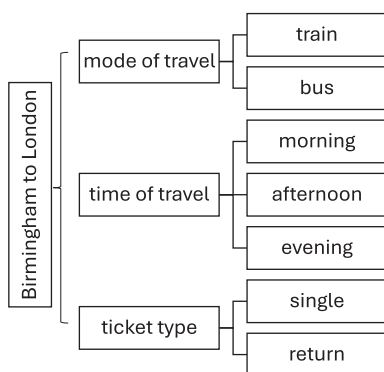


Figure 6.2 Systemic Network of travel options

mode of travel, time of travel, and type of ticket. These can be expressed as a Systemic Network, as shown in Figure 6.2. Each of the options is a combination of choices from each of the features. Taken together, Figures 6.1 and 6.2 show what features the traveller takes into account in deciding how to travel, and what options are the consequence of what choices. They are the equivalent of the Meaning Networks (the taxonomies, showing how the constructions relate to one another, like Figure 6.1) and the Systemic Networks (showing what language features contribute to the constructions, like Figure 6.2).

The remainder of this chapter repeats this exercise, but with a genuine semantic field: Causation.

6.2 Causation

The concept of causation is a contested one in Philosophy (see, e.g. Mumford and Anjum 2013). In linguistic studies, causation is considered to be expressed (a) using specific lexical verbs such as KILL (= ‘cause to be dead’), BREAK (= ‘cause to be broken’), or DROP (= ‘cause to fall’) (Katamba 1993: 213); (b) analytically or periphrastically, with verbs such as CAUSE, HAVE, MAKE, and GET in constructions such as ‘make someone do something’ (Gilquin 2010); and (c) adverbially, with clauses beginning with *because*, etc. or noun phrases beginning *due to*, etc. (Khachatryan 2009). Specific verbs expressing causation are exemplified by Biber et al.’s (1999: 363) list of single-word verbs of facilitation or causation: ALLOW, CAUSE, ENABLE, FORCE, HELP, LET, REQUIRE, and PERMIT.

Gilquin (2010) provides an extensive, corpus-based, and quantitative account of periphrastic causative constructions, in which she refers to three

models taken from the literature (Gilquin 2010: 153). These are: the Iconic Sequencing model, the Billiard-ball model, and the Direct manipulation model (Gilquin 2010: 154). Examples (1)–(3), taken from Gilquin (2010: 151–155) illustrate these.

- (1) **I** make them clean theirs thoroughly. (BNC) [Iconic Sequencing]
- (2) **The tree** falling on it made the lorry lose its loading. [Billiard-ball]
- (3) **I** got John to repaint the wall. [Direct manipulation]

In each, there is a Causer (shown in bold) and a Causee (underlined). In example (2) there is also a Patient ('its loading'), which is affected by the action, and in example (3) there is also an Effect ('repainting the wall') brought about by the action.

The meaning of causation tends to become fuzzy around the edges, with no sharp demarcation between what is caused and what is not. It might be argued that this occurs when the causation is expressed lexically, and where one or more of the participants is assumed to be present in the situation without being expressed in the clause. Gilquin (2010: 67), for example, talks about '... the controversial question of the relation between periphrastic causatives and lexical causatives'. It is generally accepted that the verb KILL can be paraphrased as 'cause to die'; it is less apparent that TEACH necessarily means 'cause to learn'. Even more controversial is a verb such as BREAK. In an example such as (4), a reasonable interpretation is that the assistant caused the bottle to break, meaning that *broke* is a lexical causative. In an example such as (5), however, no Causer is present in the clause and it must be taken on trust that 'middle' clauses of this type entail a causative action by an unnamed force.

- (4) ... after an assistant had broken a bottle of salad cream ... (BNC)
- (5) ... but most unfortunately the bottle broke in the post ... (BNC)

As well as causative constructions, the literature contains discussions of resultative constructions (Goldberg and Jackendoff 2004). Some resultatives, such as example (6), imply but do not express a cause, while others, such as example (7), include a cause element. Examples (6) and (7) are taken from Goldberg and Jackendoff (2004).

- (6) The pond froze solid.
- (7) Bill rolled the ball down the hill.

In this book, the term 'Causation' refers to those constructions that indicate that some person or entity brings about a state, thought, or action. The constructions that are subsumed under this meaning can be divided into three main types, as follows:

Periphrastic Causatives

These are the classic causative constructions, such as those investigated by Gilquin (2010). In their canonical form, they include an element that is a non-finite clause that indicates the caused action. Examples (8)–(12) are (invented) examples of these.

- (8) Rose made Max cross the road.
- (9) Rose forced Max to cross the road.
- (10) Rose sent the stone spinning across the lake.
- (11) The barrier prevented Rose from entering.
- (12) Rose talked Max into/out of leaving.

An extension of this type is when the process in the non-finite clause is nominalisation, that is, expressed as a noun. Examples (13) and (14) illustrate this (again the examples are invented):

- (13) Rose incited Max to violence.
- (14) Rose pressured Max into crime.

Lexical Causatives

Most of the lexical causatives included here involve causing a change to someone's mind or emotions. Examples (15) and (16), which are invented, illustrate this.

- (15) The argument convinced Sam.
- (16) This argument decided Sam on /against leaving.

There is no doubt that this study under-represents lexical causation, for a number of reasons. One is that other semantic fields, such as Change or Location_transfer, could be included under the heading of 'causation'. Another is that many instances of lexical causation utilise the **V n** pattern which, as noted in Chapter 3, is not dealt with fully in Francis et al. (1996). A final reason is that many lexical causatives can also be classified under 'resultatives', which is the next category.

Resultatives

In resultatives, a cause performs an action that leads to a state. The action and state may be expressed explicitly or implicitly. In most cases the constructions are transitive, with the cause being expressed by the subject of the active clause

and the affected entity by the object. Examples (17) and (18) illustrate this. In other cases, the construction is not transitive, though the arrangement of cause and affected entity are the same (example (19)). In some constructions, the affected entity is the subject and the cause is expressed by a prepositional phrase (examples (20) and (21)).

- (17) Sam pushed the door open.
- (18) They elected Sam president of the association.
- (19) The publicity led to Sam's failure.
- (20) Sam died of a broken heart.
- (21) Sam benefitted from the publicity.

Congruent versus Metaphoric Constructions

Chapter 5 introduced the notion of grammatical metaphor (Halliday and Matthiessen 2014; Thompson 2014). The concept is borrowed here to describe constructions where either cause or effect must be deduced from the construction rather than being expressed explicitly. These are considered to be non-congruent, or metaphoric, expressions of the semantic field. In each case, at least one element of the cause-effect chain is left implicit. In examples (22)–(25), the outcome of the Causer's actions is expressed indirectly. In (22), we must assume that Sam is now in a state of having no insecurities. In (23), Sam is now in a state of suffering harm. In (24), the concert is in a state of being more lively than it was before. In (25), the tree is presumably now in a state of have ribbons on it.

- (22) Rose rid Sam of his insecurities.
- (23) The publicity caused Sam harm.
- (24) The comedian's appearance breathed new life into the concert.
- (25) Rose decorated the trees with ribbons

Example (26) is a little different, in that Rose's actions are the indirect cause of the car leaving. Presumably, Rose did something that caused someone else to cause the car to leave. A potential paraphrase – 'Rose caused the car to leave at 10am' – changes the example from metaphoric to congruent, but also changes the meaning. Example (27) is different again, in that the action of the car is expressed in a noun phrase rather than as a verb.

- (26) Rose arranged that the car should leave at 10am.
- (27) Rose's actions ensured the car's prompt departure.

6.3 The Causation Meaning Network

In this study, a total of 105 Verb Argument Constructions have been identified that express the semantic field of Causation, drawing on 26 verb complementation patterns. It should be remembered that each construction is used with several verbs, not just the one that appears in the construction name. These Verb Argument Constructions are the starting point for identifying features of difference in the expression of causation. Inevitably this means that the view of causation is somewhat different from more theoretical studies. For example, the primary distinction identified involves the nature of what is caused: an action, a state, or a thought or emotion. Examples (28)–(30), illustrate each of these:

- (28) Rose made Max cross the road. (action)
- (29) Sam pushed the door open. (state)
- (30) The argument convinced Sam against leaving. (thought)

The task in building the Causation Meaning Network, then, is to arrange the 105 identified constructions in a way that makes sense, using the SFG concept of choice between language features. Because it is impractical to show the whole network in a single legible diagram, parts of the network are shown separately. Figure 6.3 shows the left-most, most general set of distinctions, with ‘Causation’ as the entry point to the network. All the constructions are then organised into three sets: causing a state, causing a thought or emotion, and causing an action or event. Each of the options in that network is developed in more detail in further figures. Figure 6.4 has ‘Cause thought/emotion’ as the entry point; Figure 6.5 has ‘Cause action/event’ as the entry point; and Figure 6.6 has ‘Cause state’ as the entry point.

Two versions of Figure 6.4 are given, to illustrate the kind of decision-making that goes into making the networks. Figure 6.4 shows an initial version of the network. It makes a distinction between thought and emotion, and then

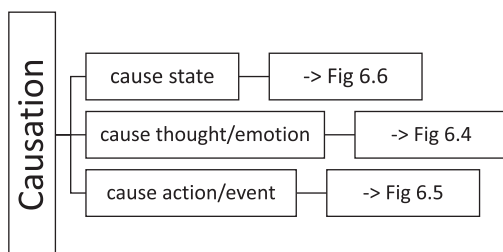


Figure 6.3 Causation Meaning Network

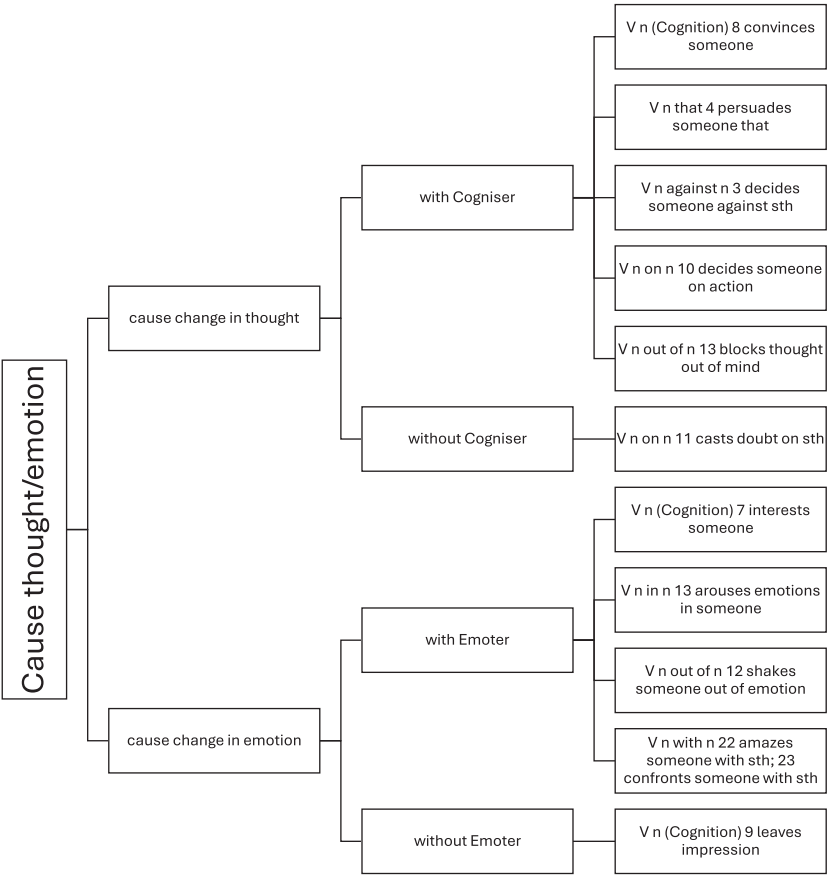


Figure 6.4a Cause thought/emotion Meaning Network: initial version

a distinction between with/without Cogniser/Emoter. The only other distinctions shown are between the patterns. It is apparent, though, that further points of sameness and difference can be identified. Figures 6.4b and 6.4c show the final version of the network. This divides the patterns/constructions into those where the Cogniser/Emoter is the clause object (e.g. ‘persuade Cogniser that’) and those where that role appears in the prepositional phrase (e.g. ‘arouse emotion in Emoter’). Where relevant, it also shows a distinction between constructions that include the content of the change in thought/emotion (e.g. ‘amaze Emoter with Content’) and those that do not (e.g. ‘convince Cogniser’). This illustrates the hypothetical nature of the networks. Each one represents a possible but not definitive modelling of the available resources.

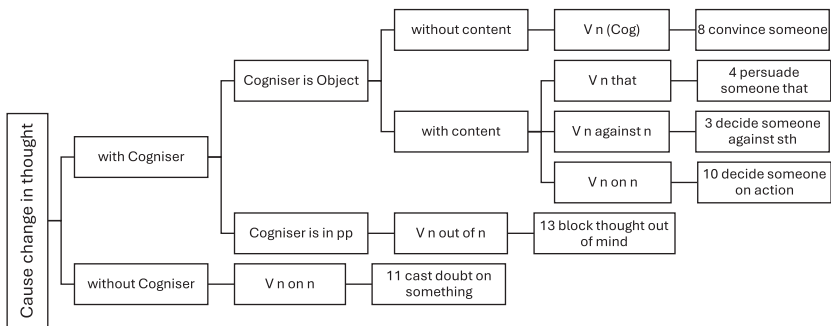


Figure 6.4b Cause change in thought network: final version

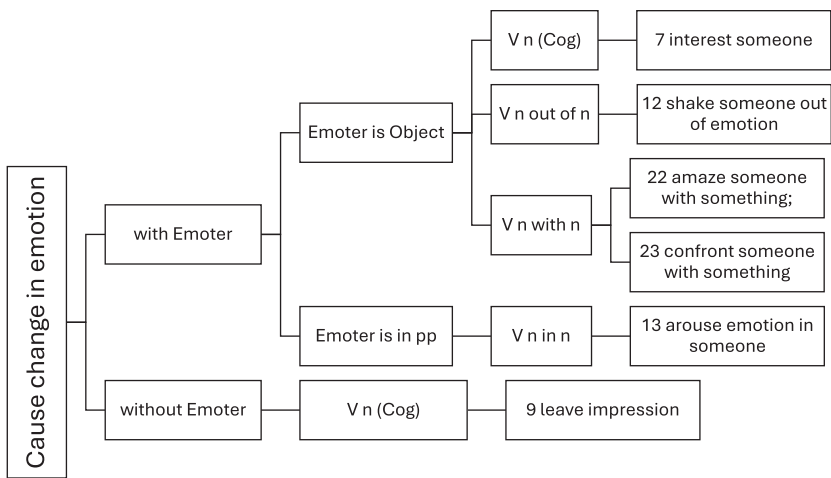


Figure 6.4c Cause change in emotion network: final version

Figure 6.5, showing the ‘Cause action/event’ network, is divided into four figures (6.5a–d) for improved legibility. Starting from Figure 6.5, there is a primary division between ‘congruent’ and ‘metaphoric’ (as previously explained). The ‘metaphoric’ branch of the network is expanded in Figure 6.5d. The ‘congruent’ branch is divided into patterns including a clause element and those including a prepositional phrase. The clausal element branch is expanded in Figure 6.5b and the prepositional phrase branch is expanded in Figure 6.5c. Figure 6.6a–f similarly shows a series of networks comprising a single network with ‘Cause state’ as the entry point.

The next sections show a prose account of each of the networks shown in Figures 6.4–6.6. In each case there is a short introductory paragraph, then

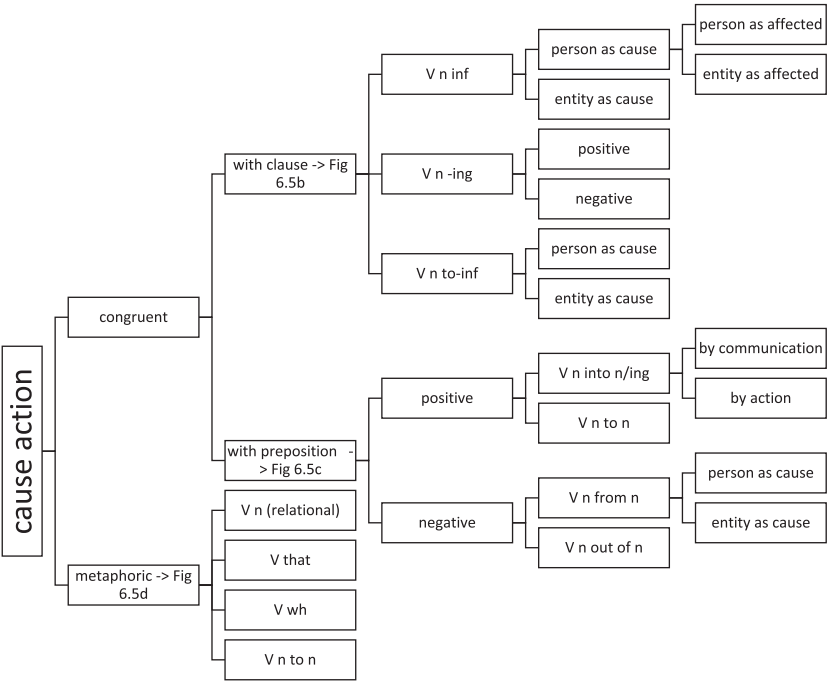


Figure 6.5a Cause action/event Meaning Network

a bullet-pointed list that explains with examples the alternatives that are expressed in the accompanying figure. The list uses the abbreviation ‘cx’ for ‘construction’, and each construction is numbered in line with the Transitivity-Net website. In this discussion as in the explanation mentioned earlier, to ensure short and easily compared examples, all examples are invented.

The ‘Cause Thought/Emotion’ Meaning Network

A simple distinction is made here between causing a change in thought (e.g. ‘The argument convinced Sam’) and causing a change in emotion (e.g. ‘The letter shook Sam out of her apathy’). The next distinction is between constructions that include a Cognizer or Emoter (e.g. ‘Sam persuaded Clint that the sky was green’; ‘The new evidence interested Sam’) and those that do not (e.g. ‘The new evidence cast doubt on the verdict’; ‘Sam’s singing left a deep impression’). Where there is a Cogniser or Emoter, this may be found in the clause object or in the prepositional phrase. This distinguishes between ‘The argument convinced Sam’ and ‘The thought blocked the idea of Sam out of Clint’s mind’.

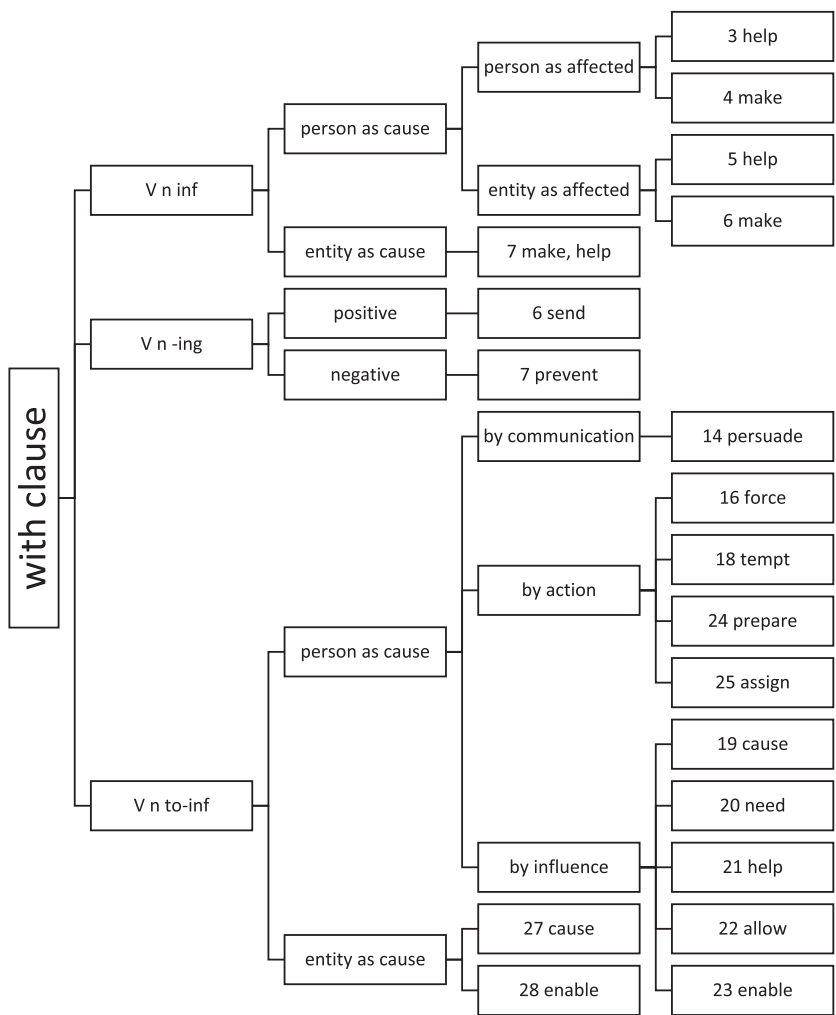


Figure 6.5b Cause action/event: congruent, the with clause network

In cases where the Cogniser is the object, a further distinction is made between the **V n** pattern, where no content is expressed (e.g. ‘The argument convinced Sam’) and the other constructions, where there is a reference to the content (e.g. ‘Sam persuaded Clint that the sky was green’). The remaining distinctions are between patterns. In most cases, only one construction per pattern expresses this meaning. Here is the full account of the choices within this meaning. This

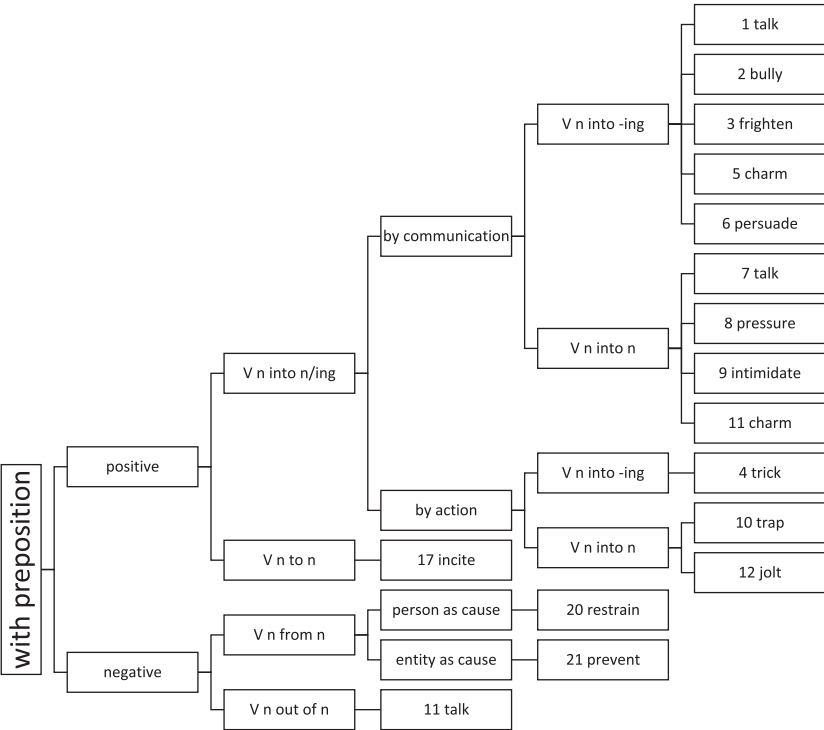


Figure 6.5c Cause action/event: congruent, the with prepositional phrase network

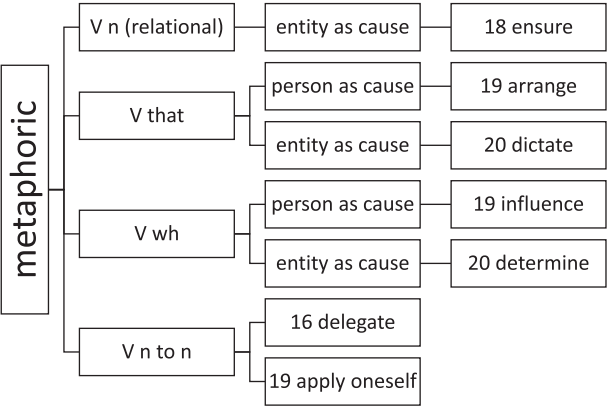


Figure 6.5d Cause action/event: the metaphoric network

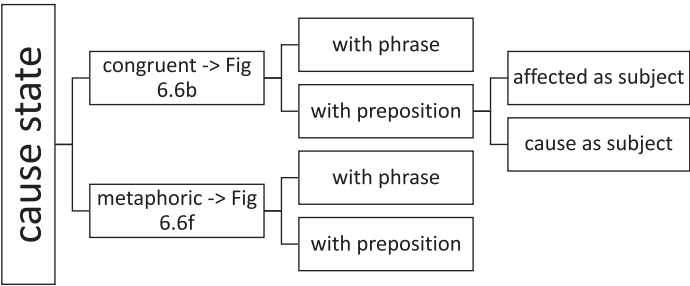


Figure 6.6a Cause state Meaning Network

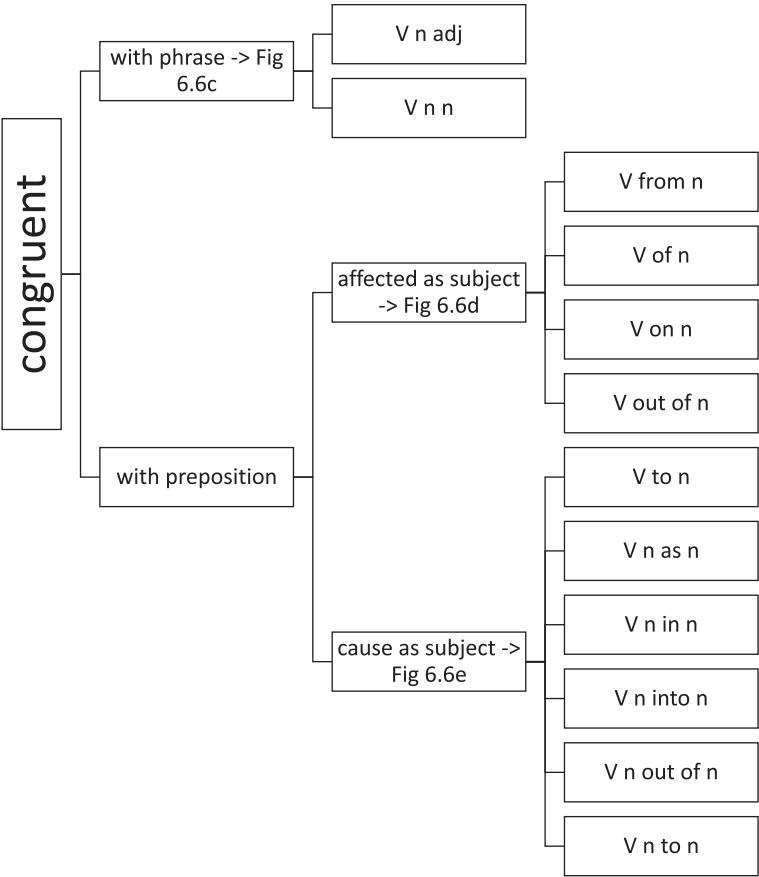


Figure 6.6b Cause state: the congruent network

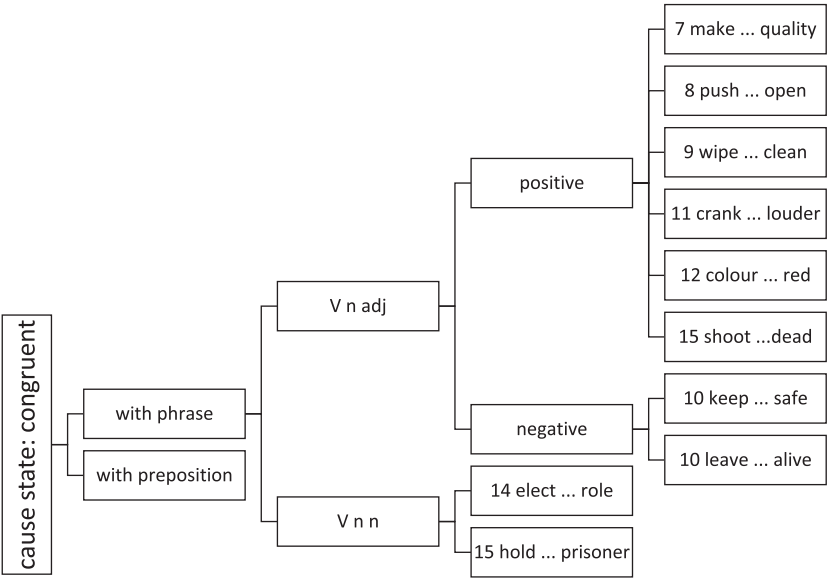


Figure 6.6c Cause state: congruent, the with phrase network

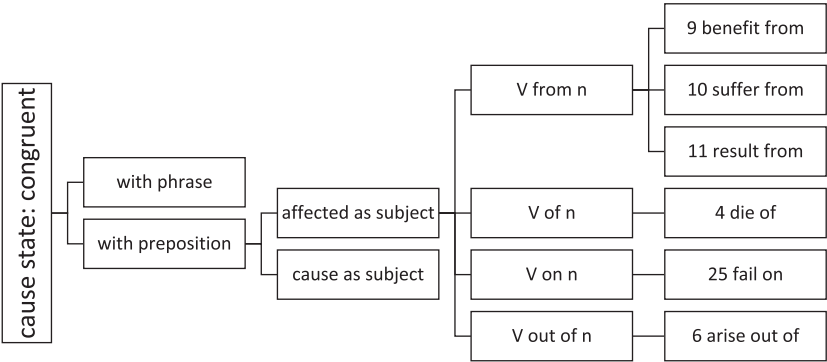


Figure 6.6d Cause state: congruent, the with prepositional phrase network, showing affected as subject choices

account explains the ‘cause thought/emotion’ network that appears in Figure 6.4b.

The ‘Cause Thought/Emotion’ Meaning Network: Choices and Examples

- Cause a change in thought (see Figure 6.4b)
 - Construction includes a Cogniser

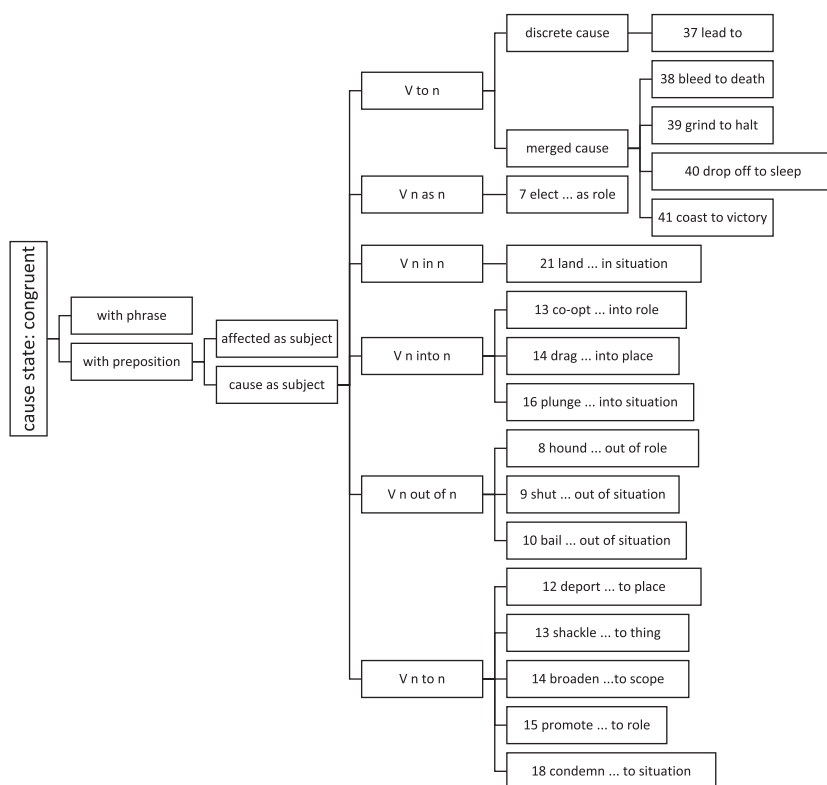


Figure 6.6e Cause state: congruent, the with prepositional phrase network, showing cause as subject choices

- The Cogniser is the clause object
 - There is no expressed thought content
 - V n (Cognition). Cx8 e.g. 'The argument convinced Sam'.
 - The context of the thought is expressed
 - V n that. Cx4 e.g. 'Sam persuaded Clint that the sky was green'.
 - V n against n. Cx3 e.g. 'Sam's argument decided Clint against demonstrating'.
 - V n on n. Cx10 e.g. 'Sam's argument decided Clint on leaving'.
- The Cogniser is the object of the prepositional phrase
 - V n out of n. Cx13 e.g. 'The thought of Mary blocked the idea of Sam out of Clint's mind'.
- Construction does not include a Cogniser
 - V n on n. Cx11 e.g. 'The new evidence cast doubt on the verdict'.

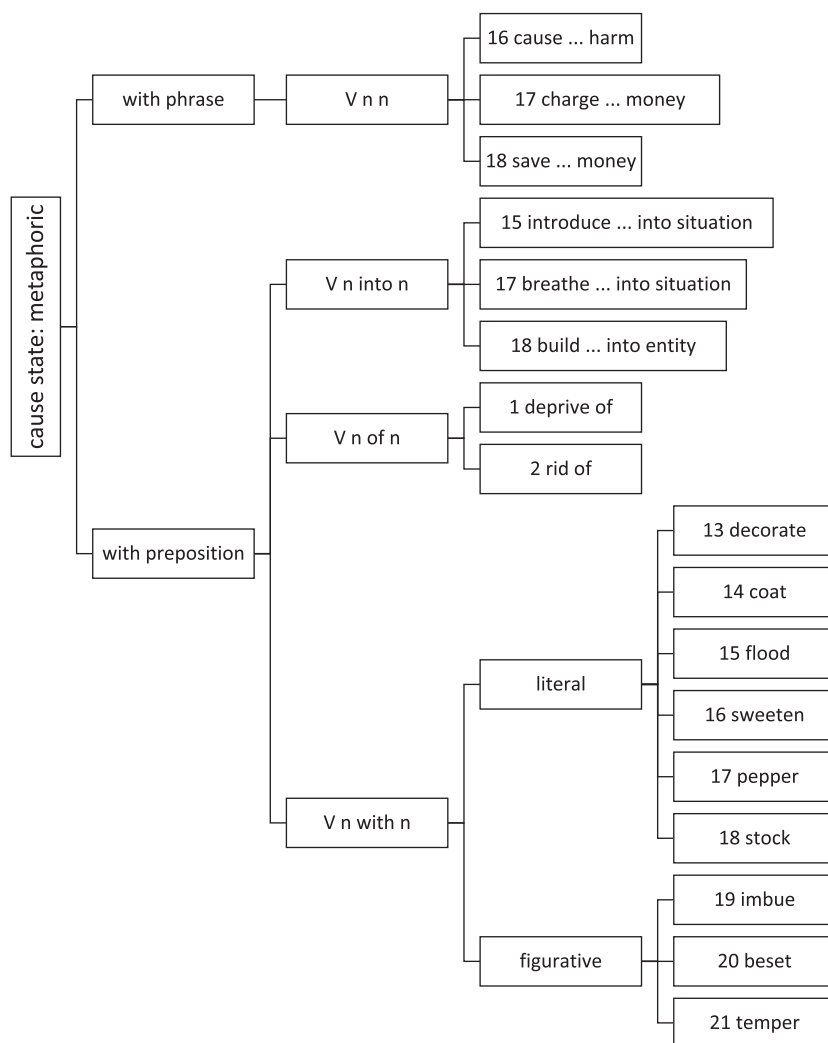


Figure 6.6f Cause state: the metaphoric network

- Cause a change in emotion (See Figure 6.4c)
 - Construction includes an Emoter
 - The Emoter is the clause object
 - V n (Cognition). Cx7 e.g. ‘The new evidence interested Sam.’
 - V n out of n. Cx12 e.g. ‘The letter shook Sam out of her apathy.’

- V n with n. Cx22 e.g. ‘Sam amazed the audience with her singing.’ and Cx23 e.g. ‘Clint confronted Sam with the evidence.’
- The Emoter is the Object of the prepositional phrase
 - V n in n. Cx13 e.g. ‘The film aroused strong feelings in Clint.’
- Construction does not include an Emoter
 - V n (Cognition). Cx9 e.g. ‘Sam’s singing left a deep impression.’

The ‘Cause Action/Event’ Meaning Network.

This network is more complex, involving more patterns and more constructions than are involved in the ‘cause thought/emotion’ network. The patterns themselves can be grouped, based on two distinctions. Firstly, in most patterns, the verb is followed by a noun phrase that indicates the person or thing affected by the act of causing, as in ‘Raj talked Lucy into leaving’ or ‘Max forced Rose to leave’. In a few cases, such as the pattern **V n** and the example ‘Additional investment ensured the continuation of manufacture’, the entity that is affected, presumably a business enterprise, is left implicit. To make sense of this a distinction is proposed between constructions with an explicit affected entity as a separate pattern element, and those without. As noted earlier, Halliday’s (Halliday and Matthiessen 2014) distinction between ‘congruent’ and ‘metaphoric’ representation is borrowed to describe these alternatives. Secondly, some patterns include a preposition, while others are composed of phrases and clauses. For example, **V n into n** (e.g. ‘Raj talked Lucy into leaving’) includes a preposition whereas **V n to-inf** (e.g. ‘Max forced Rose to leave’) includes a clause but no preposition. Within each of the congruent/metaphoric categories, then, a distinction is made between patterns with and without prepositions. Further distinctions are proposed where appropriate. These are: the subject (Causer) is a person or an entity (e.g. ‘Max forced Rose to leave the room’ versus ‘Additional investment ensured continuation of manufacture’); the affected thing is a person or an entity (e.g. ‘Rose made Max cross the road’ versus ‘Max helped the situation calm down’); the act of causing is explicitly communication (e.g. ‘Raj talked Lucy into leaving’) or is not (e.g. ‘Lucy tricked Raj into stealing the money’); and what is caused is action (e.g. ‘Raj talked Lucy into leaving’) or the absence of action (e.g. ‘Raj prevented Lucy from leaving’). The full account of the choices within this meaning is given in the following.

The ‘Cause Action/Event’ Meaning Network: Choices and Examples

- Congruent: the affected entity is explicit
 - Patterns with a clause (See Figure 6.5b)
 - V n inf
 - Cause is a person

- Affected thing is a person. Cx3 e.g. 'Rose helped Max cross the road.' and Cx4 e.g. 'Rose made Max cross the road'.
- Affected thing is an entity. Cx5 e.g. 'Max helped the situation calm down.' and Cx6 e.g. 'Max made the results appear logical'.
 - Cause is an entity. Cx7 e.g. 'The price reductions helped/made customers buy more'.
- V n -ing
 - Positive: an action/event is caused. Cx6 e.g. 'Rose sent the stone spinning across the lake'.
 - Negative: an action/event is prevented. Cx7 e.g. 'Max stopped the rocket leaving the launchpad'.
- V n to-inf
 - Cause is a person
 - Action is caused by communication. Cx14 e.g. 'Rose persuaded Max to leave the room'.
 - Action is caused by a specific action
 - Cx16 e.g. 'Max forced Rose to leave the room'.
 - Cx18 e.g. 'Rose tempted Max to break the rules'.
 - Cx24 e.g. 'Rose prepared Max to run the marathon'.
 - Cx25 e.g. 'Max assigned Rose to run the marathon'.
 - Action is caused by a non-specific action or influence
 - Cx19 e.g. 'Rose caused Max to join the army'.
 - Cx20 e.g. 'Max needed Rose to help him'.
 - Cx21 e.g. 'Rose helped Max to join the army'.
 - Cx22 e.g. 'Max allowed Rose to help him'.
 - Cx23 e.g. 'Max enabled Rose to join the army'.
 - Cause is an entity. Cx27 e.g. 'The rise in prices caused Max to go broke.' and Cx28 e.g. 'The fall in prices enable Rose to save money'.
- Patterns with a preposition (See [Figure 6.5c](#))
 - Positive: an action/event is caused
 - V n into n/-ing
 - Action is caused by communication
 - V n into -ing
 - Cx1 e.g. 'Raj talked Lucy into leaving'.
 - Cx2 e.g. 'Lucy bullied Raj into leaving'.
 - Cx3 e.g. 'Raj frightened Lucy into leaving'.
 - Cx5 e.g. 'Lucy charmed Raj into helping her'.
 - Cx6 e.g. 'Lucy persuaded Raj into helping her'.
 - V n into n
 - Cx7 e.g. 'Raj talked Lucy into crime'.
 - Cx8 e.g. 'Lucy pressured Raj into crime'.
 - Cx9 e.g. 'Raj intimidated Lucy into betrayal'.

- Cx11 e.g. ‘Raj charmed Lucy into an unwise course of action’.
- Action is caused by action
 - V n into -ing. Cx4 e.g. ‘Lucy tricked Raj into stealing the money’.
 - V n into n. Cx10 e.g. ‘Raj trapped Lucy into a life of crime.’ and Cx12 e.g. ‘Lucy’s words jolted Raj into action’.
- V n to n. Cx17 e.g. ‘Debs incited Lucy to violence’.
- Negative: an action/event is prevented
 - V n from n
 - Cause is a person. Cx20 e.g. ‘Lucy restrained Debs from violence’.
 - Cause is an entity. Cx21 e.g. ‘The barrier prevented Lucy from entering’.
 - V n out of n. Cx11 e.g. ‘Lucy talked Debs out of leaving’.
- Metaphoric: the affected entity is implicit (See [Figure 6.5d](#))
 - V n (Relational). Cx18 e.g. ‘Additional investment ensured the continuation of manufacture’.
 - V that
 - Cause is a person. Cx19 e.g. ‘Debs arranged that the band would play at 10’.
 - Cause is an entity. Cx20 e.g. ‘Circumstances dictated that the party end early’.
 - V wh
 - Cause is a person. Cx19 e.g. ‘Raj influenced what happened to the leader’.
 - Cause is an entity. Cx20 e.g. ‘Circumstances determined what happened to the leader’.
 - V n to n. Cx16 e.g. ‘Debs delegated the most difficult task to Raj.’ and Cx19 e.g. ‘Lucy applied herself to finishing the painting’.

The ‘Cause State’ Meaning Network

The largest number of ‘Causation’ constructions express this meaning. As with the ‘cause action/event’ meaning, a distinction is made between explicit and implicit representation, but in this case it is the caused state that may be explicit or implicit rather than the affected entity. For example, in ‘They elected him President’, the resulting state (‘he is President’) is explicit, expressed by the two noun phrases following the verb. The same is true of ‘The changes led to Brian’s success’, where the resulting state (‘Brian is successful’) is expressed by the noun phrase following the preposition. In the case of ‘Joan died of a broken heart’, the resulting state (‘Joan is dead’) is expressed by the verb. The term Congruent is again used to refer to constructions such as these. In other constructions, the caused state is implied but not stated. For example, in ‘The decision saved Brian £200’, the caused state (‘Brian is richer by £200’) must be

inferred. The same is true of ‘The committee built breaks into the timetable’), where the caused state is ‘The timetable included breaks’, and ‘Joan rid Brian of his fear of flying’, where the caused state is ‘Brian is unafraid’. The term *Metaphoric* is used to refer to these constructions.

Within both congruent and metaphoric options there are distinctions of pattern, primarily between patterns with and without prepositions. Patterns with phrases but no prepositions include **V n adj** (e.g. ‘They made the fence stronger’) and **V n n** (‘The publicity caused Brian harm’). Each pattern involved is listed as a separate option within these major divisions. Further choices occur within specific patterns. For example, the **V n adj** pattern is used with constructions that indicate that a change is made, such as ‘Joan pushed the door open’, and those that indicate that a change is not made, such as ‘Joan left her partner alive’. The patterns with a preposition are divided into those with the affected entity as subject (e.g. ‘Brian’s success arose out of the changes’) and those with the cause as subject (e.g. ‘The changes led to Brian’s success’). In the pattern **V n with n** there is a specific distinction between making a change to a physical object, as in ‘Joan coated the cake with icing’ and making a change to an abstract entity, as in ‘Brian imbued the situation with menace’. Special mention needs to be made of the pattern **V to n**, where the cause may be indicated by the subject alone, as in ‘The changes led to Brian’s success’ or by the subject along with the verb, as in ‘Joan dropped off to sleep’, where the caused state is ‘Joan is asleep’ and the cause is ‘Joan dropped off’. The terms ‘Discrete cause’ and ‘Merged cause’ are used to express this distinction. This construction is at the verge of exclusion from the causation semantic field because there is no distinct Cause element.

What follows is the full account of the choices within this meaning. This account explains the ‘cause state’ networks that appear at [Figure 6.6](#).

The ‘Cause State’ Meaning Network: Choices and Examples

- Congruent: the cause and effect are explicit (See [Figure 6.6b](#))
 - Patterns with a phrase (See [Figure 6.6c](#))
 - **V n adj**
 - Positive: a change is made
 - Cx7 e.g. ‘They made the fence stronger’.
 - Cx8 e.g. ‘Joan pushed the door open’.
 - Cx9 e.g. ‘Brian wiped the surface clean’.
 - Cx11 e.g. ‘Joan cranked the volume louder’.
 - Cx12 e.g. ‘Brian coloured the sky blue’.
 - Cx15 e.g. ‘Joan shot her partner dead’.
 - Negative: a change is not made
 - Cx10 e.g. ‘Brian kept his partner safe’.

- Cx10 e.g. 'Joan left her partner alive'.
- V n n. Cx14 e.g. 'They elected him President.' and Cx15 e.g. 'They held him prisoner'.
- Patterns with a preposition
 - Affected as Subject (See [Figure 6.6d](#))
 - V from n
 - Cx9 e.g. 'Brian benefitted from the change'.
 - Cx10 e.g. 'Joan suffered from the change'.
 - Cx11 e.g. 'Brian's success resulted from the change'.
 - V of n. Cx4 e.g. 'Joan died of a broken heart'.
 - V on n. Cx25 e.g. 'The car failed on three counts'.
 - V out of n. Cx6 e.g. 'Brian's success arose out of the changes'.
 - Cause as Subject (See [Figure 6.6e](#))
 - V to n
 - Discrete cause
 - Cx37 e.g. 'The changes led to Brian's success'.
 - Merged cause
 - Cx38 e.g. 'The victim bled to death'.
 - Cx39 e.g. 'The train ground to a halt'.
 - Cx40 e.g. 'Joan dropped off to sleep'.
 - Cx41 e.g. 'Brian coasted to victory'.
 - V n as n. Cx7 e.g. 'The committee elected Joan as chair'.
 - V n in n. Cx21 e.g. 'The publicity landed Brian in trouble'.
 - V n into n
 - Cx13 e.g. 'The committee co-opted Brian into the role'.
 - Cx14 e.g. 'The team dragged the car into place'.
 - Cx16 e.g. 'The publicity plunged Joan into trouble'.
 - V n out of n
 - Cx8 e.g. 'The press hounded Joan out of office'.
 - Cx9 e.g. 'The committee shut Brian out of the discussion'.
 - Cx10 e.g. 'Joan bailed Brian out of jail'.
 - V n to n
 - Cx12 e.g. 'The court deported Brian to Canada'.
 - Cx13 e.g. 'Joan shackled the lock to the door'.
 - Cx14 e.g. 'Brian broadened the discussion to the issue of racism'.
 - Cx15 e.g. 'Brian promoted Joan to vice-president'.
 - Cx18 e.g. 'Joan condemned Brian to a boring job'.
- Metaphoric: the cause and effect are implied (See [Figure 6.6f](#))
 - Patterns with a phrase
 - V n n
 - Cx16 e.g. 'The publicity caused Brian harm'.
 - Cx17 e.g. 'The company charged Joan £200'.

- Cx18 e.g. ‘The decision saved Brian £200’.
- Patterns with a preposition
 - V n into n
 - Cx15 e.g. ‘Brian introduced another factor into the situation’.
 - Cx17 e.g. ‘Joan’s enthusiasm breathed life into the situation’.
 - Cx18 e.g. ‘The committee built breaks into the timetable’.
 - V n of n. Cx1 e.g. ‘Joan deprived Brian of his freedom.’ and Cx2 e.g. ‘Joan rid Brian of his fear of flying’.
 - V n with n
 - Literal: change to a physical object
 - Cx13 e.g. ‘Brian decorated the tree with baubles’.
 - Cx14 e.g. ‘Joan coated the cake with icing’.
 - Cx15 e.g. ‘The children flooded the area with water’.
 - Cx16 e.g. ‘Brian sweetened the punch with honey’.
 - Cx17 e.g. ‘Joan peppered the dish with cloves’.
 - Cx18 e.g. ‘Brian stocked the larder with tins’.
 - Figurative: change to an abstract entity
 - Cx19 e.g. ‘Brian imbued the situation with menace’.
 - Cx20 e.g. ‘The situation beset Brian with problems’.
 - Cx21 e.g. ‘Joan tempered her criticism with humour’.

6.4 The Causation Systemic Network

The Meaning Network for Causation, though extensive, is simple in that at any point in the network a distinction is made between forms or meanings that are relevant at that point. The disadvantages are partly practical, in that the result is a massive network that contains a substantial amount of repetition. For example, the distinction between ‘Cause as subject’ and ‘Affected as subject’ appears more than once, as does the distinction between a ‘positive’ cause, making something happen, and a ‘negative’ cause, preventing something from happening. The disadvantages are also conceptual, in that the broader picture cannot be seen in the mass of detail. To use terms from SFG, it is not clear what language resources are ‘at risk’ in making the meaning of Causation. To fill this gap a complementary network is proposed: the Causation Systemic Network. This network appears as [Figure 6.7](#). It shows mainly independent or simultaneous choices and provides a summary of the distinctions that appear in the Meaning Networks.

At the left-most, most general, side of the network a distinction is made between ‘meaning’ and ‘form’, though the distinction is admittedly a little arbitrary. It indicates that talking about causation entails making choices related to meaning, such as what type of outcome there is, and choices related to form, such as what pattern to use. Within ‘meaning’ the following choices are represented:

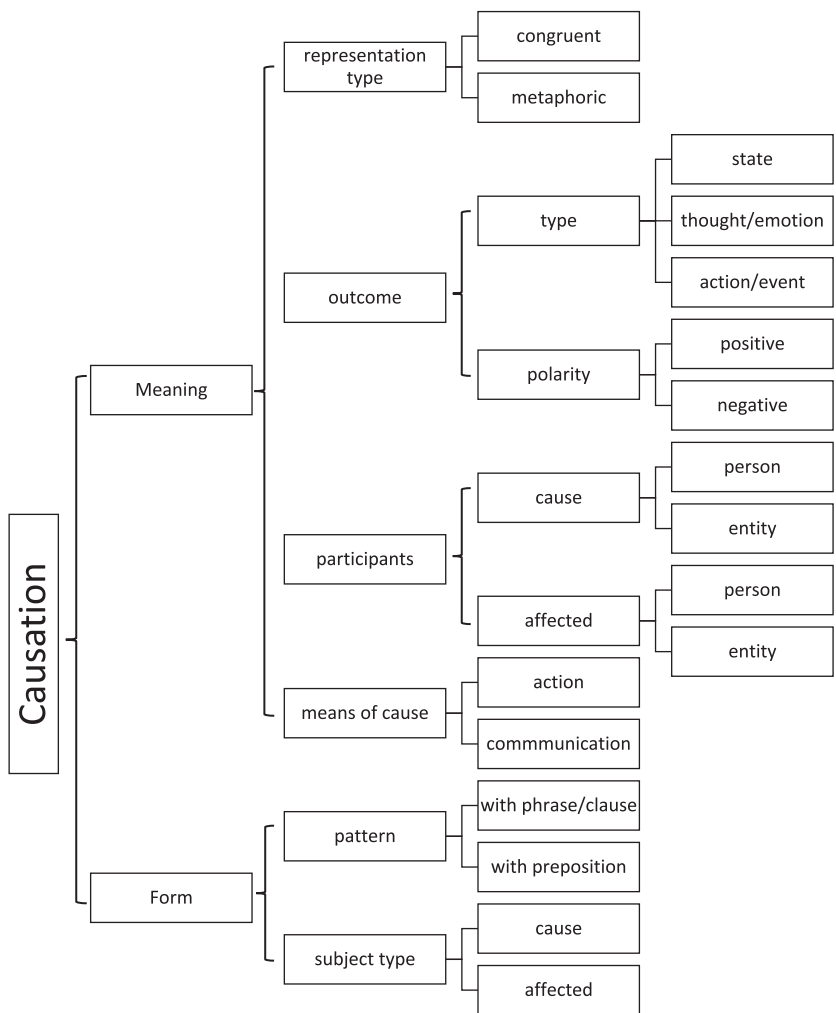


Figure 6.7 Causation Systemic Network

- Representation type: this is congruent or metaphoric, as explained in [Section 6.2](#). Metaphoric representation leaves part of the cause-effect process inexplicit. This accounts for the difference between ‘The meal made Brian ill’ (the effect – ‘Brian is ill’ – is explicit) and ‘The meal caused Brian harm’ (‘Brian is ill’ is implicit).
- The nature of the outcome of the act of causation. A distinction can be made regarding the type of outcome – state, thought or emotion, and action or

event – and regarding what is termed here the ‘polarity’, meaning that something is caused to happen or caused not to happen. The polarity distinguishes between ‘shoot someone dead’ and ‘keep someone safe’.

- The nature of the participants involved. Both the cause participant and the affected participant may be a person or an entity. This distinguishes ‘Journalists hounded him out of office’ from ‘The events aroused jealousy’.
- How the cause is brought about (the ‘means of cause’). This may be construed as an action or as a means of communication. This distinguishes between ‘Journalists hounded him out of office’ and ‘The minister talked him into leaving’.

The following choices of ‘form’ are represented in Figure 6.7:

- The pattern used. This may specify phrases and clauses only or may specify a preposition.
- The arrangement of the participants in the clause. Specifically, the subject may indicate the cause or the affected participant. This accounts for the difference between ‘Gerald co-opted Brian on to the committee’ and ‘Brian’s place on the committee resulted from Gerald’s support’.

No attempt is made here to match up the Systemic Network with the Meaning Network. This would involve specifying which combination of feature choices from the Systemic Network resulted in each construction. Examples of this are easy to produce. For example, the combination of features listed here:

- Representation type: **congruent** + Outcome type: **action/event** + Outcome polarity: **positive** + Participant_cause: **person** + Participant_affected: **person** + Means: communication + Pattern: **with preposition** + Subject type: **cause**

leads to two patterns: **V n into -ing** and **V n into n** (Figure 6.5b). These in turn are divided into nine constructions:

- (a) the ‘talk someone into doing something’ construction;
- (b) the ‘bully someone into doing something’ construction;
- (c) the ‘frighten someone into doing something’ construction;
- (d) the ‘charm someone into doing something’ construction;
- (e) the ‘persuade someone into doing something’ construction;
- (f) the ‘talk someone into an action’ construction;
- (g) the ‘pressure someone into an action’ construction;
- (h) the ‘intimidate someone into an action’ construction; and
- (i) the ‘charm someone into an action’ construction.

This is consistent with Hasan's (1996/1987) modelling of semantic and formal features that have individual verbs as outcomes, though here the construction, both more and less specific than an individual verb, is proposed as the end point.

Although it is straightforward to illustrate in this way how choices from the Systemic Network can lead into constructions on the Meaning Network, showing all the potential choices combinations in a single network would lead to excessive complexity. It is for this reason that the alternative – Meaning Networks and Systemic Networks shown separately – is used in this book.

6.5 Conclusion

This chapter has described how Verb Argument Constructions can be organised as networks. The networks represent the resources available via verbs in English for expressing a given meaning and show those resources as a series of alternatives. Specifically, the resources referred to in this section are Verb Argument Constructions, and such constructions constitute the most delicate, right-most end of the Meaning Networks. The example given in this chapter is the semantic field of Causation. It has been proposed that it is best to employ two kinds of network to show how the constructions are related to one another. The Meaning Network is a vast and repetitive network showing no simultaneous or independent choices and no cross-over lines. Reading from left to right, the network indicates 'A speaker making this kind of meaning can use one of these alternatives'. For example, a speaker representing a situation in which someone or something causes a change in thought can do so using a verb complementation pattern that includes an indication of the Cogniser, or one that does not (Figure 6.4b). Reading from right to left, the same network indicates 'The constructions expressing this semantic field represent these dimensions of similarity and contrast'. For example, the construction 'shake someone out of an emotion' is similar to 'amaze someone with something' (Emoter is the clause Object). It is different from 'arouse an emotion in someone' (Emoter is in the prepositional phrase) and more different still from 'leave an impression' (no Emoter). The Systemic Network summarises the dimensions of choice, or the language features involved in these choices, and provides a summary of 'what matters' when Causation is expressed in English.

This book is about Verb Argument Constructions, that is, one kind of construction only. Language is, of course, about much more than constructions of this kind. The resources modelled in this chapter are not the only ones available for expressing Causation in English. Causation can be expressed using:

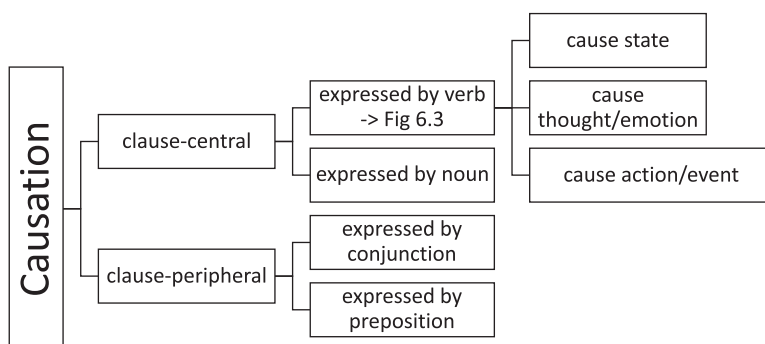


Figure 6.8 Superordinate Causation Network

- A verb e.g. ... *the decline in apprenticeships has led to a reduced demand for part-time craft courses.* (BNC)
- A noun e.g. ... *told me that the dent was the result of an accident with a bicycle.* (BNC)
- A conjunction e.g. *Local authorities had missed residents because they had failed to use up-to-date maps.* (BNC)
- A preposition e.g. ... *a strong post-Carboniferous coalification took place due to a thick cover of ... sediments.* (BNC)

Clearly, Verb Argument Constructions comprise only one of these four alternatives. The examples above, and the constructions they exemplify, can be further grouped into those that involve central elements of a clause (Subject, Verb, Object or Complement) and those that express peripheral elements such as adverbials, including subordinate clauses. This means that to fully account for the semantic field of Causation it is necessary to propose another network, more general than that shown in Figure 6.3, expressing these options. Figure 6.8 illustrates this.

This chapter has explained the process of deriving networks for the semantic field of Causation in some detail. The following chapters will address the other semantic fields in turn.