

the change of perspective with great skill (e.g. *War and Peace*). However, if a telling seems not to work in the judgement of readers, the explanation may lie in an inconsistent perspective, which can be identified readily by means of a matrix.

The implications I have mentioned so far are negative in nature. A more positive implication of matrix analysis for language learning lies in the development of logical and critical thinking. If students are given a matrix with empty cells, they can be invited to consider what type of material/argument might need to be supplied to fill the cells. Alternatively, they might be invited to consider what implications leaving the cells empty might have for the soundness of the writer's argument.

Probably the most important, and perhaps the most obvious, implication for language learning lies in the development of writing skills. Students might be given a matrix with brief notes in each cell and invited to write a complete text. The effect would be not only to test and develop the normal syntactic and lexical skills, but also to give practice in the skill of organising a text. The advantage would be that this skill could be developed without any particular form of organisation being prescribed in advance.

Bibliographical end-notes

The Abe, Bill and Clara matrix is drawn with minor modifications from Pike (1981); the various (re)tellings of the 'happening' (Examples 6.1–6.4) are my own, though Pike supplies similar tellings in his own paper. The news story concerning the murdered market trader (6.5) was brought to my attention by Carmen Caldas-Coulthard and is discussed from the point of view of speech representation in Caldas-Coulthard (1988); my analysis has benefited from discussions with her about the text. As before, the quotation from Borges' *Death and the Compass* (6.7) is taken from the translation by Donald A. Yates, published as part of the volume *Labyrinths* (New Directions Publishing Corporation, 1964), reprinted in Penguin Books, 1981. The DENCLÉN advertisement (6.9) was current in national newspapers in 1999. Example 6.11 is from *Good God: Green Theology and the Value of Creation* by Jonathan Clatworthy, Charlbury: Jon Carpenter Publishing.

The text of this chapter draws heavily upon two conference papers, themselves substantially overlapping, in which matrices are defined and described (Hoey 1991c, 2000). The notion of the matrix applied to narrative is taken from Pike (1981), though it should be noted that I have omitted much that Pike would regard as important from my discussion of his paper. The notion of the matrix applied to non-narrative is taken from Tim Johns (1980) who argues for the existence of a particular kind of non-sequential non-narrative structure that he terms a 'matrix' structure; while I deny that the matrix has structural status, preferring to view it as an analytical device, the second half of this chapter has been greatly influenced by his work. Hoey (1985b, 1997a) discusses the way that matrix may help explain paraphrasing decisions; the later paper relates these also to collocational and colligational choices.

7 Culturally popular patterns of text organisation

Introduction

The defining characteristic of a colony, discussed in Chapter 5, was that its component parts do not derive their meaning from the sequence in which they are placed. Conversely, of course, the defining feature of what I have been loosely labelling 'mainstream text' is that its component parts *do* derive meaning from their place in the overall text. In Chapter 2, we saw that texts may be seen as an interaction between writer and reader in which the writer seeks to answer the questions that *s/he* thinks his or her reader will want answering, and the reader seeks to anticipate the questions that the writer is going to answer. To make the reader's task easier, writers normally adopt one or more of three strategies. First, they may attempt to anticipate accurately the questions that their readers want answered in the order that they want them answered. Second, they may spell out the questions that they are answering as they answer them. Both these strategies were discussed in Chapter 2 and were touched upon in Chapters 3 and 4. The third strategy that a writer can adopt, however, is to answer an agreed sequence of questions, to operate in effect with a template of questions that both writer and reader know about and can refer to. It is these sequences of questions, these text templates, that this and the next chapter are concerned with.

= in what way will the following be relevant; what is the function?
 ↙ sequence of functions

Schemata and scripts

One of the first linguists to consider what these 'templates' might look like was Rumelhart, who with Ortony in 1977, offered the following fragment of (fabricated) text for consideration:

- 71 Mary heard the ice cream man coming. She remembered her pocket money. She rushed into the house. (from Rumelhart and Ortony 1977)

Before reading on, try answering the following questions: What does Mary want to do? How old is she? What country does she live in? What kind of area does she live in? To the first, you will, I trust, have answered that she wants to buy an ice cream. To the second, you are quite likely to have answered 'between 8 and 12' on

the grounds that girls between these ages tend to show enthusiasm for ice cream; girls older than that usually are too sophisticated to show their enthusiasm and girls younger than that are normally not permitted to be out of the house without parental accompaniment. You might have assumed the country to be an English-speaking country (because her name is Mary, not Maria, Marie or Marja) with a tradition of itinerant ice cream vendors with musical chimes, i.e. either the United States or the United Kingdom. You may feel less certainty about the kind of area she lives in, but I would expect some readers at least to speculate that Mary lives in a semi-detached or terraced house in the suburbs, since ice cream vans tend not to operate in the country or in the inner cities, and it is easier to 'rush into' a house with a small garden (or none) rather than one with a long drive.

The point here is that the reader does half the work for the writer. The writer's words activate knowledge in the mind of the reader which the reader brings into play in his or her interpretation of the text (unless there are counter-indications in the text that might prevent him or her from doing so). The seventeen words of Rumelhart and Ortony's mini-text above are therefore read as if they said something like the following:

7.2 *Mary*, probably a young girl because young girls tend to have pocket money and to get excited by the prospect of ice cream, *heard* the chimes of the van driven by *the ice cream man*, which signalled that he was *coming* and that he was willing to sell ice cream. Wanting an ice cream and knowing that she would have to pay for it, she needed a source of money as she had no, or insufficient, money on her. *She remembered* that she still had *her pocket money* which would be sufficient to pay for an ice cream. Because she knew that ice cream vans do not stay long in one place and that she would therefore lose her chance to buy an ice cream if she did not act quickly, *she rushed into the house* where she lived outside which she was standing, in order to get the money so that she could buy an ice cream.

It is important to note, though, that other interpretations of the text are possible; the words do not *have* to have the meaning that reader and writer cooperate in making. Placed into a context where the ice cream man is a heavy-footed bogeyman, famed for his slaughter of young women for trivial sums of money with an ice pick, the passage could be read very differently. Mary could be a young woman who, terrified at hearing the step of the psychopath and realising that her pocket money represents a dangerous temptation for the monster, rushes into the house to secure herself and her money. The point, of course, is that only someone with a warped mind (like me) is likely to read it in such a way.

Another such fragment of text (again fabricated) is supplied by Schank and Abelson (1977):

7.3 John knew his wife's operation would be expensive. There was always Uncle Harry. John reached for the telephone book.

The same points can be made here. We assume the country where the story takes place to be the United States since the names indicate an English-speaking country and operations are not charged for in most other English-speaking countries. This could be mistaken; cosmetic surgery, for example, is not free in the United Kingdom. But in the absence of counter-indications we assume the operation to be of the health-sustaining kind. Furthermore, we assume that Uncle Harry is a rich and probably generous relative and we take it for granted that John's reasons for reaching for the phone book are to get Uncle Harry's number so that he can be asked for a gift or loan of money to pay for the wife's operation. We are likely to assume they both live in the same big city, in that John would not have the phone books for all areas of the United States. We also are likely to assume that they are not close; otherwise John would know Uncle Harry's number already.

Again, other readings are possible. The same warped mind that imagined an ice-pick wielder in Mary's story could interpret the text as meaning that John does not want to pay for his wife's operation and therefore contacts the local Mafia man in order to arrange for her murder. Again, though, such an interpretation is unlikely to occur spontaneously unless the writer has already signalled its feasibility.

Rumelhart and Ortony and Schank and Abelson have similar ways of explaining the phenomenon we have been describing, though their terminology differs. They talk in terms of schemata and scripts in the reader's (and writer's) minds. For the purposes of this chapter, the difference between the terms is unimportant for reasons that will become quickly apparent. Crudely, a schema is a static representation of knowledge, whereas a script is a narrative representation of knowledge. A schema represents the (non-narrative) connections between facts; a script represents the sequence in which likely events will occur.

The view of these authors is that knowledge of the world, our remembered experience of the world, is not randomly distributed in the mind, but is carefully organised in terms of schemata or scripts. Consequently whenever one part of that knowledge is activated, the rest becomes available at the same time and is brought to bear on the task of interpreting the text that provided the activation. The illustration of a restaurant is often used. If we enter a restaurant, we are unsurprised if a stranger in smart clothes approaches our table with a menu in his or her hand. If we sit at a table in a library, on the other hand, we expect no such thing and would immediately suspect that we were the butt of someone's humour (or the victim of some survey of public opinion) were such a figure to approach us. If we read about a meal in a restaurant, the same knowledge is activated as if we were in the restaurant ourselves (so the argument goes) and so the writer does not feel obliged to explain the presence of an unnamed pro-active stranger in the way that s/he would in other contexts.

Culturally popular patterns of organisation

Revealing though concepts such as schema and script are for a general understanding of the writing and reading processes, they are of limited value in text

analysis or in the teaching of reading or writing. This is because there appears to be no practical limit to the number of schemata or scripts we can hold and the exact content and boundaries of each schema or script are open to real question. It is no accident that the restaurant script is so often cited – it happens to be an unusually self-contained and bounded set of knowledge and expectations. Furthermore, even if these problems were solvable in principle, we would still never in practice be able to list, let alone describe, all the schemata/scripts that a reader develops in his or her life or that a writer is capable of making use of. In short schemata and scripts are not practicable analytical tools. What we need is something that allows us to generalise about these schemata/scripts without losing the insight that readers co-operate with writers in making a common meaning.

The answer in part lies in the fact that readers seem to bring two kinds of knowledge to bear on the texts they read – the specific knowledge described by schemata and scripts and a more generalised set of expectations that are shared across a range of texts. If we look again at Schank and Abelson's incomplete mini-text, we can see that the question that the reader is likely to ask on being told that *John knew his wife's operation would be expensive is What did he do about it?* In other words, the reader will recognise the situation described in the first sentence as a problematic one and will expect a response to the problem described. This would have been true even if no specific schema could be activated. Thus the sentence:

7.4 John knew the gill net would be expensive

is extremely unlikely to trigger any schema in your mind, unless you happen to be keen on fishing (a gill net being a net that is suspended in water as a way of trapping fish by their gills). Yet the more generalised expectation would be as strong here as it was when the expensive item was an operation. Just as the word *operation* triggers the schema of hospitals, welfare systems and so on, so the word *expensive* triggers a generalised script of problem followed by attempt at solution.

I have just talked in terms of a 'generalised script' in order to show the relationship of this concept to schemata and scripts. Henceforward, however, I shall talk of 'culturally popular patterns of organisation', not least to make it clear that such patterns are in many respects closer to structures than to schemata and scripts as usually defined. Unpacked, my preferred label is intended to convey the following points. The word 'patterns' is chosen because they have a structuring effect similar to that of the hierarchical organisation described in Chapter 4 and to that of the matching matrices described in Chapter 6. The term 'organisation' is chosen in preference to 'structure' to indicate that, although there are preferred sequences and combinations of elements, there is no impossible sequence or combination (compare my beginning and ending to Chapter 1); John Sinclair, cited in Sinclair and Coulthard (1975), argues that linguistics should only refer to structures when there is at least one impossible sequence or combination of elements. They are referred to as 'culturally popular' in acknowledgement that they do not have a universal status but occur within particular cultures, as again illustrated in Chapter 1. The interactivity of text, the potential for hierarchicality

in text and the availability of colony structures. I claim as universals of text, no such claim is made, on the other hand, for the culturally popular patterns that this and the next two chapters will be describing. Finally, they are 'popular' in acknowledgement of the fact that all kinds of patterns of organisation are possible but some of the patterns will be very rare while others will recur with great frequency. There is no demarcation line between the two types of pattern, so the point at which one stops describing different types of pattern will be determined by utility rather than principle.

The Problem-Solution pattern

Having explained what is involved in the label 'culturally popular patterns of organisation', we can turn our attention back to what is arguably the most common pattern of all (or at least the most thoroughly described), the Problem-Solution pattern. The basic outline of the Problem-Solution pattern posited above can be illustrated in a short fabricated text (the only virtue of which is its skeletal nature). Sentence numbers have been added for convenience of reference:

7.5 (1) I was once a teacher of English Language. (2) One day some students came to me unable to write their names. (3) I taught them text analysis. (4) Now they all write novels.

This vainglorious text contains the minimum elements of the pattern under consideration and can be projected into a dialogue as follows:

7.6 Text: I was once a language teacher.

Questioner: What problem arose for you?

P T: My students came to me unable to write their names.

Q T: What did you do about this?

S L T: I taught them text analysis.

Q T: What was the result?

T: Now they all write novels.

The aim in projecting a text into dialogue in such a way is to ensure that the questions spell out the relationship between the sentences; the dialogue should make sense and there should be no distortion of the meaning of the text (except that necessarily occasioned by the change of emphasis that introducing questions cannot help but bring). In this case, the questions all support the initial identification of the text as organised by a Problem-Solution pattern, with sentence 1 being the Situation, sentence 2 the Problem, sentence 3 the Response and sentence 4 the Positive Result.

The function of the Situation element in our fabricated text, sentence 1, is to provide background information. In some senses the Situation only belongs to the pattern retrospectively. There is nothing about the first sentence that triggers any expectations of a pattern to be followed. Once sentence 2 has appeared,

however, in answer to the second of the questions, answers to questions 3 and 4 are highly likely to appear as well. The length of the answers here is a function of the artificiality of the example, but in authentic text the answers may vary greatly in length, some texts devoting pages to answering the question 'What did x do about it?', others treating this question peremptorily but providing expansive answers to the question 'What problem arose?'. Answers may also be shorter as we shall see in later, authentic, examples. J. R. R. Tolkien's *Lord of the Rings* answers the same four questions as in Example 76 above, but takes well over a thousand pages to do it.

The trigger of the pattern is the word *unable*, which, like *expensive*, *negatively* evaluates a Situation and invites a description of some Response, and the pattern effectively begins at this point, with the identification of some Problem. Problem can be defined as an aspect of the Situation requiring a Response (Hoey 1983) and gives rise to the expectation of a Response. This element of the pattern is often referred to in the literature as a Solution, though strictly the latter label is inappropriate since what is expected is the description of something done to deal with the Problem, not necessarily something that was *successful* in dealing with the Problem – a subtle distinction, but an important one.

Sentence 3 provides the required Response to the Problem, as is indicated by the question it was possible to insert between sentences 2 and 3: *What did you do about this?* This is, of course, not the only question that might be used to connect these two sentences; indeed a number might be used. Some of these would represent alternative formulations of the same request for information. Thus the question *What was your way of dealing with this problem?* represents another way of formulating the question *What did you do about this?* Other questions might be more general, e.g. *What did you do?*, which allows an unplanned reaction such as *I panicked* to serve as an answer as well as the intentional Response that the fuller form of the question demands. Still other questions might focus on different aspects of the organisation. So, for example, the question *What did you teach in the circumstances?* attends to the general-particular relationship that holds between sentences 1 and 3:

7.7 I was once a teacher of English Language

I taught [my students] text analysis.

To understand fully the place of sentence 3 (or any other sentence) in the text as a whole, the analyst needs to tease out all the possible questions that might be asked. However, when investigating a particular pattern, that is not necessary. For the purposes of identifying the Problem-Solution pattern, the question *What did you do about it?* suffices.

A Response does not bring the pattern to a close. If my fabricated text had finished with *I taught them text analysis* you would have felt it to be significantly incomplete. It is only when the Response can be shown to be in truth a solution that the pattern is felt to be complete, and this is done with either a Positive Result or a Positive Evaluation, or quite commonly both. This is, of course, provided by sentence 4.

The signals of a Problem-Solution pattern

We have seen in earlier chapters that writers may signal the questions they are answering or intend to answer. The same is true of the Problem-Solution pattern and the other patterns I shall be describing. So our fabricated text might have occurred thus:

7.8 I was once a teacher of English Language. One day my students came to me unable to write their names. My way of dealing with this problem was to teach them text analysis, with the result that they now all write novels.

The signal *do about* cannot be introduced into this particular text but it occurs quite naturally in all kinds of narratives and other kinds of text. Indeed the phrase *do something about x* is one of the most fundamental and common signals of the pattern and perhaps for this reason often occurs in stories written for very young children.

Here are just two examples, the first from *Mr Nosey* by Roger Hargreaves, the second from *Big Dog... Little Dog: A Bedtime Story* by P. D. Eastman:

7.9 The people of Tiddletown decided that Mr Nosey was becoming much too nose-y, and so they held a meeting to discuss what to do about him.

'We must find some way of stopping him being so nose-y' said old Mr Chips the town carpenter.

'That's right!' said Mrs Washer who ran the Tiddletown laundry, 'He needs to be taught a lesson.'

'If only we could think of a way to stop him poking his nose' said Mr Brush the painter. And then, a small smile spread over his face. 'Listen' he said, now grinning. 'I have a plan!'

7.10 'Did you get any sleep last night, Ted?'

'Not a wink, Fred!'

'My bed is too little!'

'My bed is too big!'

'What can we do about it, Ted?'

'I don't know, Fred.'

'I know what to do!' said the bird. 'Just switch rooms. Ted should sleep upstairs and Fred should sleep downstairs!'

In both cases the phrase is introduced to mark the Problem and to point towards a Response. In both cases also, a suggested Response is shortly offered.

In addition to these specialised lexical items, the prime function of which seems to be to signal relations and patterns, writers (and speakers) have available to them other kinds of signalling vocabulary. Thus negative evaluation items, for example, can be used to signal Problem. Thus, in another version of my fabricated narrative we have:

semantic differential

Qs with synonymous function (replaceable)

In our lives, we keep trying to solve problems. The pattern is relevant for us.

Incompleteness of Eggings - coherent texts

7.11 I was once a teacher of English Language. Unfortunately my students did not know how to write their names. I taught them text analysis. Now they all write novels.

In this version the trigger *unable* has been removed and replaced with the writer's negative evaluation of his student's situation. Sometimes, though, negative evaluations or lexical signals of the kind described above are assigned to a participant within the text. Examples 7.9 and 7.10 contain examples of both. The evaluations (*too nosey, too big, too little*) and the lexical signal *do about* are in both passages assigned to characters rather than directly to the writer.

Strictly speaking, all the signals referred to so far can be seen as evaluative, whether this is their only function like *terrible* or they have a pattern-referring function like *solution*. But there are non-evaluative signals as well; some lexical items such as *poverty, disease, and burglary* refer to real world matters that are almost always regarded as problematic – almost always, because there are occasionally situations, for example, *a vow of poverty*, where these words would not be regarded as markers of Problem. Jim Martin distinguishes two kinds of *evaluation or appraisal* (to use his own terminology): *inscribed and evoked*. Inscribed appraisal is explicitly encoded evaluation. Evoked appraisal refers to lexical choices that evoke in the reader an evaluation. In some cases the evaluation that is evoked is very strong and quite unambiguous (e.g. *thrill-killing, genocide*); for such instances, Peter White, who has followed up Jim Martin's work, has coined the term 'provoked appraisal' (White 1999); the example of *thrill-killing* is his own.

An instance of evoked appraisal serving as a signal of Problem in our fabricated example would be:

7.12 I was a teacher of English Language. One year some of my students were *illiterate*. I taught them text analysis. Now they all write novels.

Illiteracy is strictly a factual description, but it evokes a negative evaluation and therefore a Problem. Indeed it does this so regularly that the word is sometimes banded about as a term of abuse aimed at writing felt to be below standard; in such cases, of course, the evaluation is inscribed, not evoked. The adjectives 'inscribed' and 'evoked' have, however, different implied actors. The writer inscribes the evaluation; on the other hand, it is the word that evokes (or provokes) an evaluation in the reader. For this reason, when referring to lexical signalling of patterns, I shall refer to evoking signals rather than evoked signals.

We can represent the simplest Problem-Solution possibilities diagrammatically as shown in Fig. 7.1. Working down the diagram, we note that Situation is optional and in certain kinds of text, e.g. advertisements, the exception rather than the rule. We note also that a more accurate label for Problem is Aspect of Situation. Requiring a Response and that this label will help us distinguish the Problem-Solution pattern from other types of pattern in the next chapter. Each of the vertical stages represents a question being answered and, as is probably fairly

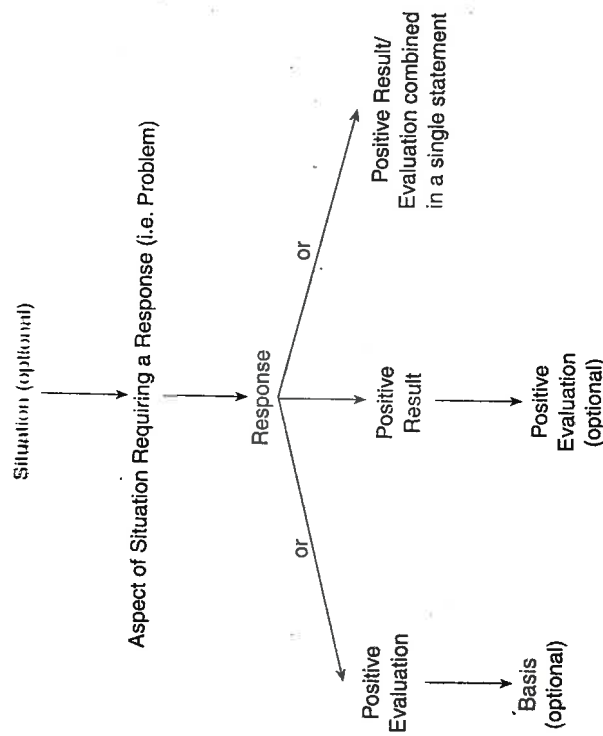


Figure 7.1 The Basic Problem-Solution patterns.
Source: Adapted from Hoey, 1993.

obvious, the three branches represent alternative possible textual realisations. Example 7.5 illustrates the third option.

An intermediate stage between Problem and Response

Only so much can be learnt from fabricated texts, whether those of others or my own. One feature that is missing from my examples but which is visible in authentic Examples 7.9 and 7.10 is the presence of a stage half-way between Problem and Response, which the *Story Grammarians* (Stein and Glenn and others) have termed 'Plan'. The label is not entirely satisfactory as we immediately shall see, though it does account well for some half-way stages. A characteristic of this element of the pattern is that it either defines what might count as an adequate Response or makes a suggestion as to what Response to adopt. Thus in Example 7.9, Mrs Washer goes beyond simply stating that Mr Nosey's nosiness has to be stopped; she specifies that '*He needs to be taught a lesson*,' a particular kind of Response, quite different, for example, from just securing windows and doors or keeping well away from him whenever he is about. Then again Mr Brush signals the imminent shift from Response with the words '*I have a plan*.' The reader is not told what the plan is and has to infer it from subsequent events, but we recognise a *shift of focus* from Problem without having yet reached the point of Response. Quite often a sentence occurs which defines what will count as an appropriate Response without being followed by a statement of Plan.

Instead of a Plan statement, we often encounter a Recommended Response. An example occurs in Example 7.10. The bird announces that s/he has a solution ('I know what to do!') and then recommends a course of action. This Recommended Response is not yet an actual Response, in that it does not answer the question *What did they do about it?*, but it shifts attention from Problem to Response. Recommended Responses account for more interim stages than do true Plans. Advertisements and editorials very frequently substitute Recommended Responses for actual Responses and in these contexts they are not felt to be interim and the actual Responses are likewise not felt to be missing. In narratives and much science writing, however, the need for actual Response is strong and in such contexts Plan/Recommended Response is felt to be a stage on the way.

I shall not represent these intermediate stages in subsequent diagrams since they are optional, but their presence should always be looked for.

Two advertisements displaying Problem-Solution patterning

The following extract from an advertisement for an Internet service, which will also serve to illustrate the main features of the pattern as so far described, allow us to look more closely at the way signalling works:

7.13 TRYING TO WORK WITH THE INTERNET?

IS THE INTERNET TURNING YOU INTO A MONSTER? LET MCIS HELP YOU CONTROL THE BEAST.

MCIS is a Total Internet Solutions Provider and can assist you in the following areas: [A list follows]

The first sentence invites readers to identify the Situation described with their own. (Presumably those who answer 'no' will turn their attention elsewhere.) The second sentence triggers recognition of the Problem-Solution pattern with the word *monster*, a recognition that is confirmed in the following sentence by the use of the near-synonym *beast*. It is important in any analysis to identify the signals that trigger recognition of the pattern and subsequently confirm its existence, since they are a direct linguistic reflection of the pattern. The frequency of the signals that will be found varies somewhat according to genre, with signals being rarer in academic scientific writing than in popular science reporting, for example. The reasons for this are to do with the knowledge a reader may be expected to bring to the text. The greater the knowledge that the reader shares with the writer, the less need there is for the writer to make explicit linguistic reference to the pattern being followed, since the significance of the information being provided will be quite obvious to the reader.

A Problem having been indicated in the advertisement, a Response is sure to follow, and the offer of one comes in the third sentence (in the terms used above, a

Recommended Response); this also contains a Positive Evaluation/Result within it (*help*). This Evaluation/Result is repeated in the final sentence (*can assist you*).

One signal in this extract perhaps deserves a little more attention in that it shows the subtlety and complexity of the lexical signalling system, namely the word *control*. Of 112 examples of the lexical signalling system, namely the National Corpus, 38 (34% of my examples) were used in conjunction with clearly problematic situations, i.e. *to control urinary incontinence, to control weeds, to control insect pests, to control his violent nature, to control fish frying odours, to control air pollution, etc.* Another 62 (55%) were used in conjunction with situations capable of being problematic, i.e. *to control the bladder (cf. urinary incontinence), to control personal behaviour (cf. his violent nature), to control the trade of fish frying (cf. fish frying odours), to control the air we breathe (cf. air pollution), etc.* This combination of meanings exactly matches with the apparent intentions of the advertiser. On the one hand, the text claims to be describing a clearly problematic situation (*the beast*) which needs to be prevented from doing damage to the reader; on the other hand, the reality it encodes is closer to the second use of *control*; the Internet is a situation capable of being problematic, rather than one that is necessarily problematic, so what is being offered is a service that will prevent the Internet becoming a problematic situation. Thus, a single item simultaneously functions to signal Response to Problem and an underlying, implicit situation where the need is to forestall a Problem before it happens. In 1983, I described the latter kind of situation as a special sub-class of Problem-Solution pattern where Problem equalled Situation and Response equalled Means of Avoiding Problem.

The above discussion might lead to a misunderstanding if not immediately corrected. It is not the case that Problem-Solution patterns merely mirror reality. We are not observing patterns in the world that the text merely reflects, though presumably the text does reflect some aspect of the author's perception of reality. As evidence of the complex relationship that holds between what a writer encodes as problem and what a reader is willing to recognise as problem, consider the opening sentences from an advertisement for cold wax treatments that appeared in the 1980s, masquerading as an advice column:

7.14 CAROL FRANCIS TALKS ABOUT UNWANTED HAIR REMOVAL

The other day my teenage daughter asked me about hair removal for the first time. Apparently, her new boyfriend had passed a comment about her legs being hairy, and she wanted to do something about it before a party on Friday night.

Fortunately, she was talking to the right person, because I've tried everything. So I explained all the different methods and told her to make up her own mind. Here's what I told her.

The advertisement triggers recognition of the Problem-Solution pattern with the words *wanted to do something about it*. A Problem is being unambiguously signalled. But what is the Problem? Again, the text is unambiguous: the Problem is *hairy legs*. I have to accept that because the text has linguistically encoded it thus, the

*positing
problems
upon the
reader by
signalling
them*

pronoun *it* referring back to *her legs being hairy* which is what *she wanted to do something about*. But I do *not* accept that the writer's decision to encode *hairy legs* as a Problem reflects everybody's reality; I do not accept that the text is transparently reflecting something that would be universally recognised as a real-world problem. For me, the problem is the boyfriend. But I recognise the pattern that has been signalled by the copywriter, and I interpret the remainder of the text in the light of what the writer has chosen to signal, not in terms of my own real-world perceptions. (Which does not prevent me reflecting critically upon the value systems that the writer has chosen to encode; cf. Fairclough 1989.)

Recycling in Problem-Solution patterns

The pattern so far described will account for some texts but there are many that will prove not to fit despite having many features apparently in common. Consider the following variant of Example 7.5:

- 7.15 (1) I was once a teacher of English Language. (2) One day some students came to me unable to write their names. (3) I taught them text analysis. (4) This however had little effect.

On encountering this, the reader is likely to ask, *So what did you next do about it?* Whereas the earlier versions had a sense of completeness about them, however inadequate they might have been in other ways, this version is likely to feel incomplete. The same questions are being answered as were answered in Example 7.5, but because the answer to the question *What was the result?* is negative, the pattern has to recycle, as shown in Figure 7.2.

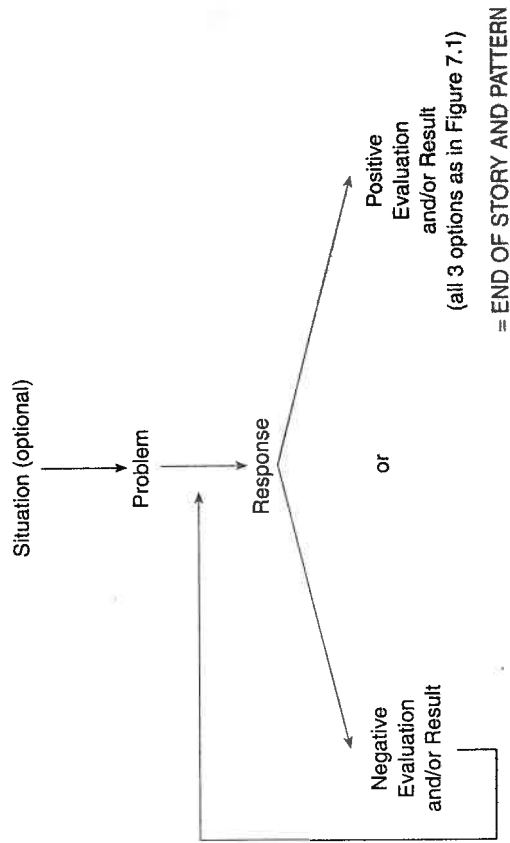


Figure 7.2 The recycling effect of Negative Evaluation in Problem-Solution patterns.

There are actually several types of recycling. One possibility is that each negative evaluation redefines the nature of the Problem. Another is that the Problem remains unaltered but the Response changes. An example of the latter type of recycling can be found in the following story by a seven-year-old girl (my daughter); as previously, sentence numbering has been added for convenience of referencing.

7.16 My Love Story

- (1) One wet day Mary was bored and decided to go up into the attic to see what she could find. (2) After a while she came down looking very excited, she had an idea she couldn't go in the attic, it's too dirty for she had her best dress on. (3) She went to the swimming baths and learnt how to swim. (4) She learnt how to do it very well indeed. (5) She learnt the backstroke and the front stroke. (6) She learnt the doggy paddle, as well but she got bored soon and went to find something else. (7) She found a sports class and she won three races and lost one, but soon she got bored of that too. (8) Then she found a church and she thought, I haven't got a husband and she got married and you know what? (9) They did all those things which she thought she would enjoy with her husband, and she didn't get bored at all. (10) In fact she really really liked it and her husband did really really really much. (11) They even went to the seaside and they enjoyed living together evermore, *however boring it was...*

This story is organised around repeated attempts to solve the same Problem, which is established in the very first clause, *Mary was bored*. The word *bored* is an inscribed Negative Evaluation of an unspecified Situation and therefore triggers an expectation in the reader of a Problem-Solution pattern. In sentence 2 a Plan for Response is mentioned: *she had an idea*. What follows is, however, a series of four Responses to the same Problem, the first three of which are negatively evaluated, in two cases after having been positively evaluated or shown to have had a Positive Result. The final Response is repeatedly positively evaluated both by the writer and by the characters within the story, of which more below. The pattern of the story, then, is shown in Figure 7.3; here and in subsequent diagrams, material in italics represents quotation from the text.

Although this analysis looks complicated, it is in fact extremely simple, consisting as it does of repeated patterns of Problem-Response-Negative Evaluation/Result, where each instance of the last element reinstates the original Problem. Notice that the provision of a Positive Evaluation in such circumstances does not bring the pattern to an immediate close as we would predict on the basis of Figure 7.2; if a Positive Evaluation is followed by a Negative Evaluation, the latter overrides the former.

The structure of this child's rather charming story is very similar to that of the traditional British folk song, 'The Old Woman Who Swallowed a Fly' (see Figure 7.4). The song may be well known but in case it is not, let me quickly note that it is about an old woman who swallows a fly and then swallows a spider to catch it; this

need for excitement

Marriage as a Solution

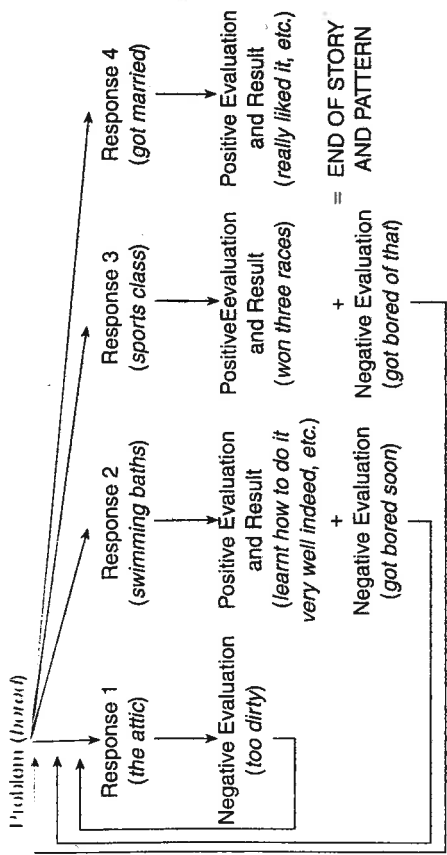


Figure 7.3 Analysis of My Love Story.

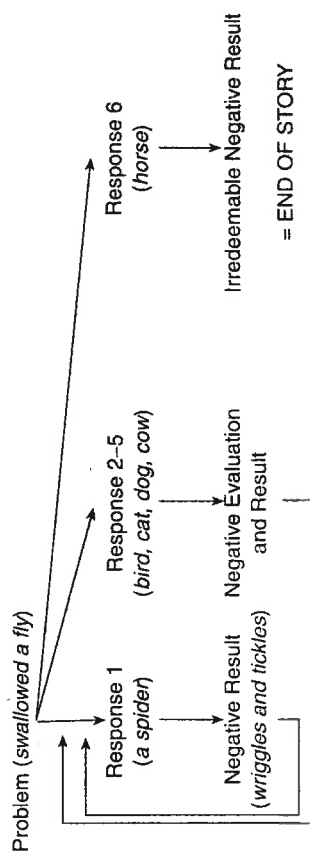


Figure 7.4 Simplified analysis of 'There Was An Old Woman Who Swallowed a Fly'.

only makes the Problem worse, so she then in quick succession swallows a bird to catch the spider ('How absurd to swallow a bird'), a cat to swallow the bird ('Now fancy that, to swallow a cat'), a dog to swallow the cat ('What a hog, to swallow a dog'), and a cow to swallow the dog ('I don't know how she swallowed a cow'), each of which worsens the Problem. Finally she swallows a horse and the song comes to an abrupt end with the words 'She's dead of course'. The pattern is, as already noted, the same as that for *My Love Story*, except that, importantly, it is a Negative Evaluation that brings the story to a close, despite what I was saying earlier about the recycling effects of Negative Evaluation.

As the labelling of the Figure 7.4 reveals, what distinguishes the two kinds of Negative Evaluation/Result is the irretrievability or otherwise of the Result. If the Negative Result is beyond retrieval, it functions exactly like a Positive Evaluation for the purposes of pattern completion. *Scholar* *3 definitive fuck-up*

Evidence for this can be found in the child's joke (Example 4.3), analysed in Chapter 4 in terms of its hierarchical organisation, to be found on p. 57: each of the

** Anyway, this story is still more realistic than the previous one.*

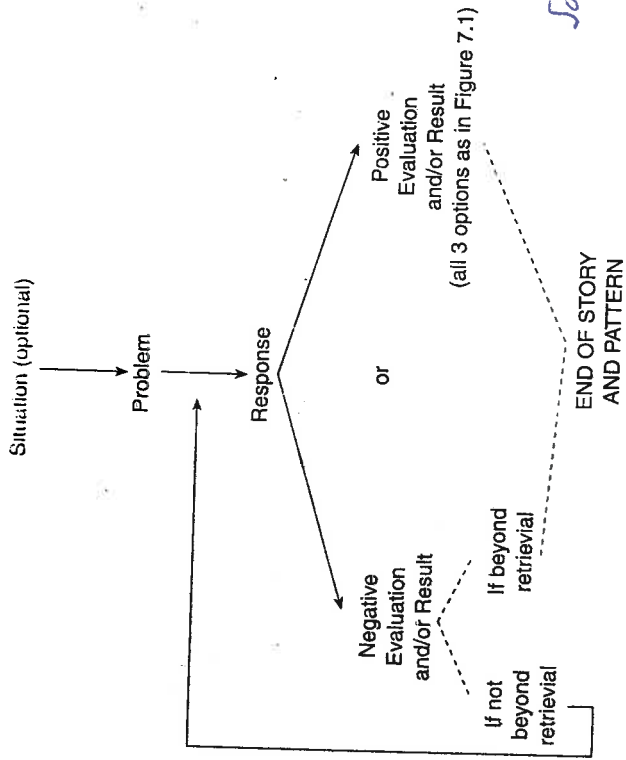


Figure 7.5 Modified representation of range of Problem-Solution patterns available.

episodes in this joke is complete in its own terms, the incompleteness of the first two episodes coming from their lack of a humorous pay-off that would justify their being told in the first place, and not from any need to learn more about the escapades of Fred or Bill. The third episode is likewise complete, the only difference lying in the irretrievably negative result of Joe's Response, which in its contrast with the previous two stories gives the joke its point. The point here is that the reader will not ask, *So what did Joe do about this?* despite the Negative Evaluation. We must therefore modify our earlier diagram to take account of this possibility (see Figure 7.5).

Participant-linking in Problem-Solution patterns

In two respects, *My Love Story* and *The Old Woman Who Swallowed a Fly* represent fairly simply structured texts. In the first place, like most narratives, they tell their stories in strictly linear fashion, with the order of the reportage of events matching exactly the supposed 'events' they purport to report. In the second place, the stories as told only offer one point of view. In *My Love Story* we momentarily hear the husband's position on the marriage - *her husband did [like it] really really really much* - but otherwise all the events are told from Mary's perspective, and the old woman's is the only perspective we consider in the song: we do not hear the complaints of any of the animals, swallowed whole in order to catch some previously unlucky creature. Another way of making the same point is that if we were to apply the matrix analysis discussed in the last chapter to either of the stories, we

would get a matrix with one full column and one virtually empty one and the sequence of the telling would be a straight reading off the matrix with no variations in the order of telling. With this in mind, consider the following very brief *New Scientist* text:

7.17 **No smell garlic**

A Tokyo rice grower, Ioshia Nakagawa, reckons he has won the battle to produce a type of garlic which retains its seasoning qualities without the smell. (2) In the past, chemists have succeeded in removing the smell to reduce antagonism between lovers and non-lovers of the root; critics however have argued that the processing destroys the flavour. (3) Nakagawa started his experiments in 1958, planting heads which appeared to have less smell than others and using different types of fertilisers. (4) Now he claims the breakthrough has been made – the final tests with his new product were with a herd of cows fed with the garlic whose milk showed no odour at all.

The pattern we find in this text is one of the options indicated in Figure 7.5 above, now shown in Figure 7.6. The first difference between this and the previous analysis (of *My Love Story*) is that this diagram represents the pattern not the order of occurrence of the elements. Since patterns are in the last analysis (excuse the pun) a sequence of answers to regularly co-occurring and predictable questions, we would have been able to infer from the discussion of matrices in the last chapter that the Problem-Solution questions might be answered in different orders. In popular science writing and in advertisements, in fact, the sequence often begins with a statement of Response. The relationships among the elements remain the same however.

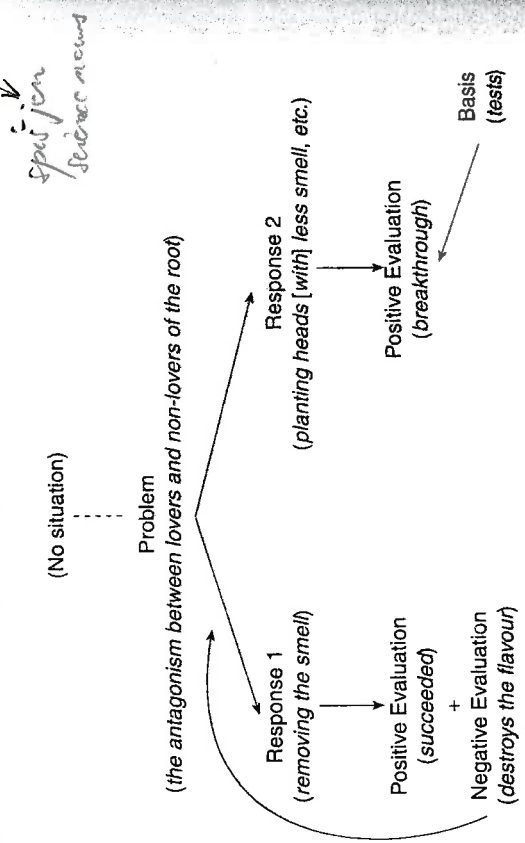


Figure 7.6 Slightly simplified representation of the Problem-Solution pattern in *No smell garlic*.

Sentence 1 encapsulates the pattern. There is a positive Evaluation (om) of a Response (*battle*) to what we have, reading linearly, to identify tentatively as Problem, in the absence of any better categories. (In the next chapter, I will offer a more satisfactory way of accounting for this part of the first sentence.) Sentence 1 having provided a kind of abstract for the story, sentence 2 then begins the pattern in more detail. It confirms the tentative categorisation of Problem in sentence 1; *antagonism between lovers and non-lovers of the root* is clearly signalled as Problem by the word *antagonism*. In the same sentence we are told of a Response to this Problem: *removing the smell to reduce antagonism*, and the Response is initially given a Positive Evaluation and Result (*succeeded*). However, the second half of the sentence offers a parallel Negative Result (*the processing destroys the flavour*) and this signals a return to Problem for the scientists (and explains Nakagawa's battle in sentence 1). Sentence 3 meets the expectation of another Response to the Problem, without implying a positive result; the sentence answers the question *What did Nakagawa do about it?* In sentence 4, Nakagawa's Response is positively evaluated (*breakthrough*) and a basis is given (*tests... showed*) for the Evaluation.

It may seem redundant to talk through the analysis in this way when most of what I have just said duplicates what is available in visual form in Figure 7.6. And so it is – but I have added one important set of details. I have spelt out *whose Problem, whose Response* and (important, this, as we shall see in a moment) *whose Evaluation* it is that the text reports. To do so is not to negate the earlier point I made about the oblique relationship between linguistic representation of Problem-Solution patterns and the non-linguistic patterns we may find in our existence; we require no knowledge other than that supplied by the text in order to specify the participants associated with the components of the pattern. With that in mind, a fuller account of the pattern in Example 7.17 can be provided, as in Figure 7.7. The topology of Figure 7.7 is rather different from that of Figure 7.6 but that is partly a matter of convenience of representation (though the arrows do highlight slightly different aspects of the relationships among the parts). Arrows indicate logical direction, not the order in which information is communicated (as we have already seen).

I mentioned above that it was particularly important to attach Evaluation to the participant from whom it originated. In the case of this text, it will be apparent from Figure 7.7 that the Positive Evaluation comes from the same source as the Response. The text seems complete to us as readers, but it may not seem complete to us as sceptical scientists until we see some independent evaluation or else the detailed results of the tests carried out. The absence of any Evaluation from the writer might give us pause for thought.

What is slightly unusual in popular science writing is the norm in advertising: advertisers always positively evaluate their product or service. Sometimes, though, there may be more than one Evaluation. Consider the following example from the 1930s; as always, sentence numbering has been added.

7.18 (1) 'I've got to have a... minor operation'

[picture omitted of a man in obvious discomfort talking to a sitting man, probably intended to be his boss]

Pachwaht / Si-to!
restriction on evaluator (self-includes)
to be logical (product)
to be logical (part of product)
non-learner

(2) *More serious than most men realize ... the troubles caused by harsh toilet tissue*

- (3) In nearly every business organization a surprisingly large percentage of the employees are suffering from rectal trouble.
- (4) This fact is well known to companies that require physical examinations of their personnel. (5) Yet even these same concerns are frequently negligent in providing equipment that will safeguard the health of their employees.
- (6) Harsh toilet tissue, for instance.
- (7) Any physician will tell you that mucous membrane can be seriously inflamed by the use of harsh or chemically impure toilet tissue.
- (8) Some specialists estimate that 65 per cent of all men and women at middle age suffer from troubles caused or aggravated by inferior toilet tissue.
- (9) Protection from rectal illness is just as important in the home as in business.
- (10) Fortunately, women are more careful in matters of this kind than men.
- (11) Already millions of homes are equipped with ScotTissue or Waldorf – the tissues that doctors and hospitals recommend.
- (12) Extremely soft, cloth-like and absorbent, these safety tissues cannot harm the most sensitive skin. (13) They are chemically pure, contain no harsh irritants.
- (14) Be safe ... at home, at work. (15) Insist on ScotTissue or Waldorf. Scott Paper Company, Chester, Pa. (16) In Canada, Scott Paper Company, Ltd, Toronto, Ontario
- [illustrations of ScotTissue and Waldorf toilet rolls with accompanying descriptive text omitted]

This advertisement, although more than 60 years old, has a number of the characteristic features of Problem-Solution advertisements. Notice, though, that there are two Positive Evaluations, one ascribed to doctors and hospitals, the other emanating from ScotTissue, as can be seen in Figure 7.8.

Figures 7.2 and 7.5 must now be seen as simplifications of the pattern possibilities, in that they do not include **participant attribution**. A more abstract representation of the possibilities is offered in Figure 7.9, though obviously this diagram does not attempt to pick up on the complications of recycling. It follows from Figure 7.9 that there may be more than one Response from different participants, and that there may be a range of Evaluations from participants and writer, as illustrated in the ScotTissue text.

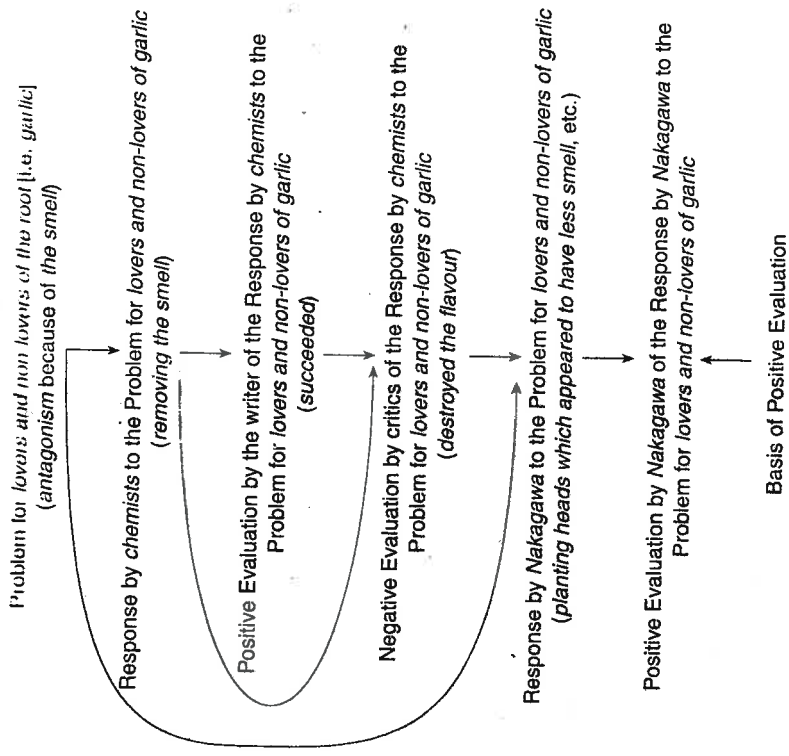


Figure 7.7 Participant attribution in *No smell, garlic.*

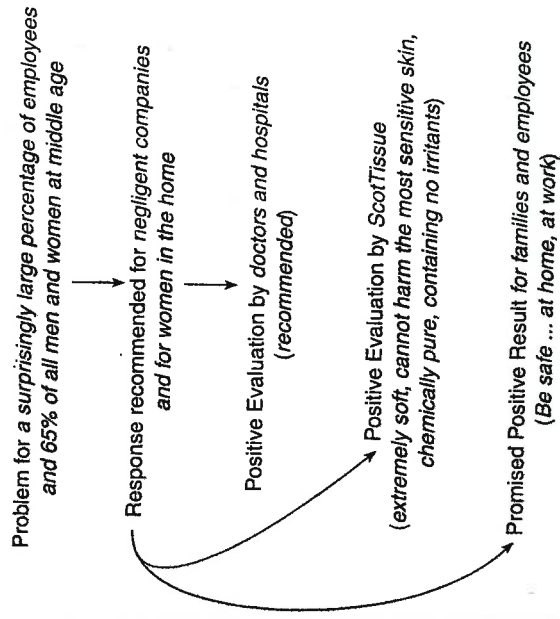


Figure 7.8 Overall Problem-Solution patterning of ScotTissue advertisement.

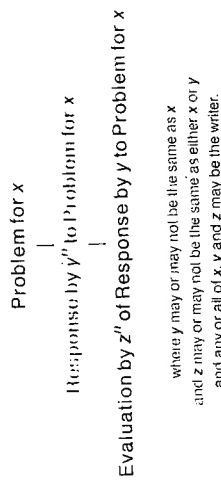


Figure 79 Participant attribution in the Problem-Solution pattern.

Interlocking patterns in narrative

There are a number of implications to this modification to our description but perhaps the most important is that it makes it possible to account for narratives with more than one central participant. Consider the following delightful verse tale by AA Milne:

7.19 *Bad Sir Brian Botany*

Sir Brian had a battleaxe with great big knobs on;
He went about the villagers and blipped them on the head,
On Wednesday and on Saturday, but mostly on the latter day,
He called at all the cottages, and this is what he said:

'I am Sir Brian!' (*aug-ling*)
'I am Sir Brian!' (*rat-lat*)
'I am Sir Brian, as bold as a lion –
Take *that!* and *that!* and *that!*'

Sir Brian had a pair of boots with great big spurs on,

A fighting pair of which he was particularly fond.

On Tuesday and on Friday, just to make the street look tidy,

He'd collect the passing villagers and kick them in the pond.

'I am Sir Brian!' (*spee-lash!*)

'I am Sir Brian!' (*spee-losh!*)

'I am Sir Brian, as bold as a lion –

Is anyone else for a wash?'

It's a problem, but not for him - and he's we accept his point of view

Sir Brian woke one morning, and he couldn't find his battleaxe;

He walked into the village in his second pair of boots.

He had gone a hundred paces, when the street was full of faces,

And the villagers were round him with ironical salutes.

'You are Sir Brian? Indeed!

You are Sir Brian? Dear, dear!

You are Sir Brian, as bold as a lion?

'Delighted to meet you here!'

Sir Brian went a journey, and he found a lot of duckweed:

They pulled him out and dried him, and they blipped him on the head.

'They took him by the breeches, and they hurled him into ditches,

And they pushed him under waterfalls, and this is what they said:

'You are Sir Brian – don't laugh,

You are Sir Brian – don't cry;

You are Sir Brian, as bold as a lion –

Sir Brian, the lion, good-bye!'

Sir Brian struggled home again, and chopped up his battleaxe,

Sir Brian took his fighting boots, and threw them in the fire.

He is quite a different person now he hasn't got his spurs on,

And he goes about the village as B. Botany, Esquire.

'I am Sir Brian? Oh, no!

I am Sir Brian? Who's he?

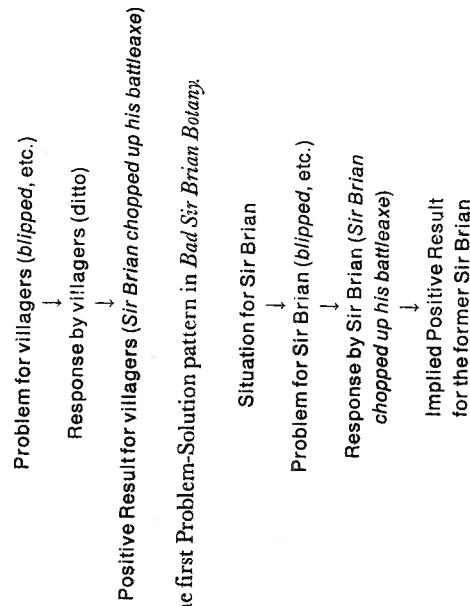
I haven't got any title, I'm Botany –

Plain Mr Botany (B).

This tale of a worker's revolution from my childhood is still, by narrative standards, a simple affair, but, unlike *My Love Story*, it has – in classical terminology – a protagonist and a (group) antagonist, and accordingly participant linking of the pattern elements becomes essential if we are to produce an adequate account of its structure.

The first thing to note is that the villagers have a Problem, evoked by *blipped them on the head*. The pattern for them is shown in Figure 7.10.

But Sir Brian also has a Problem once the villagers attack him, and his pattern looks similar, except that we have an extensive Situation comprising verses 1 and 2 (see Figure 7.11).

Figure 7.10 The first Problem-Solution pattern in *Bad Sir Brian Botany*.Figure 7.11 The second Problem-Solution pattern in *Bad Sir Brian Botany*.

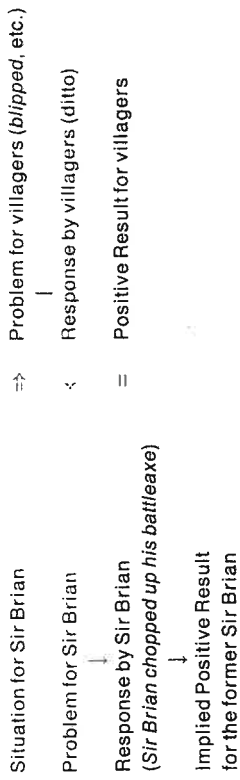


Figure 7.12 The combined Problem-Solution patterns in *Bad Sir Brian Botany*.

Of course the point is that these two patterns interweave, and make a single pattern, shown in Figure 7.12. The combination of arrows and equal signs in the centre column is meant to indicate that Sir Brian's Situation is the same as and leads to the villager's Problem, that the villagers' Response is the same as and leads to Sir Brian's Response, and so on. Once we allow for the interlocking of participant-linked Problem-Solution patterns, we are in the position to consider handling quite complex texts. Or we would be if this were the only pattern. But it is not, and in the next chapter a range of patterns will be described that are similar to the Problem-Solution pattern and share many of its properties.

Summary of the characteristics of Problem-Solution patterns

Before we examine other culturally popular patterns, it may be helpful to list the characteristics of the Problem-Solution pattern as described in this chapter, not least because most of them will also be found to be characteristics of the other patterns:

- The Problem-Solution pattern arises as a result of the writer answering a predictable series of questions. The order in which these questions are answered is, however, not fixed.
- The pattern is characteristically lexically signalled, either by means of inscribed signals (e.g. *solution*) or inscribed evaluations functioning as signals (e.g. *unfortunately*) or by means of evoking signals (e.g. *had no money*). One or more of these signals serves as a trigger for the pattern, in that it makes the pattern visible to the reader.
- The pattern may be preceded by a Situation which is recognised retrospectively as providing a context for the pattern proper.
- In between Problem and Response there may be an intervening stage in which either a Plan or Recommendation or outline of what will count as a Response occurs.
- A Negative Result or a Negative Evaluation of the Response usually prompts a recycling of the pattern, and the pattern continues to recycle until such time as a Positive Result or Evaluation is reached. A Positive Result or Evaluation can always be overridden by an immediately following Negative Result or

Evaluation. The exception is when a Negative Result is felt to be so severe as not to admit further Response.

- The elements of the pattern are attributed to participants in the text, those participants including the writer and reader.
- Participant attribution permits the recognition of the interweaving of several different and co-existing patterns.

Bibliographical end-notes

Example 7.9 is drawn from *Mr Nosey* by Roger Hargreaves; Example 7.10 is drawn from *Big Dog... Little Dog: A Bedtime Story* by P. D. Eastman. The advertisement for MCIS (7.13) was current in national newspapers in the early part of 1998. Example 7.14 was taken from an advertisement for home wax treatments current in the mid-1980s. *My Love Story* (7.16) was written by my daughter when she was seven and printed in the Moor Green Primary School magazine. *No smell garlic* (7.17) appeared in *New Scientist*, 4 May 1978, p. 295. The advertisement (7.18) for ScofTissue was current in the 1930s; the advertising campaign of which it formed a part was a highly successful one. *Bad Sir Brian Botany* (7.19) is one of the poems by A. A. Milne in *When We Were Very Young*, first published in 1927 by Methuen & Co.

A large number of linguists have sought to describe the way knowledge is stored and utilised in the interpretation of text and the world, and they have all, it would sometimes seem, invented a new term to describe the phenomenon, as Widdowson (1984) has complained. The term 'schema' comes from Bartlett (1932) and probably is the most used, but the following terms have had currency also: frames (Goffman 1975), plans and scripts (Schank and Abelson 1977), ideational scaffolding (Adams 1979), global knowledge patterns (de Beaugrande 1980), scenarios (Sainford and Garrod 1981). Langer (1987), in an investigation of reading, concluded that readers activate a combination of genre knowledge, content knowledge and form knowledge when they make sense of text; although the boundaries between these types of knowledge are not clear-cut, this position seems sound.

The pattern here identified has been widely described. Grimes (1975) and Van Dijk (1977) make brief reference to it. Fuller descriptions can be found in Winter (1976, 1977), Hoey (1979, 1983), Jordan (1980, 1984, 1992), and Crombie (1985) all of whom describe it in terms very similar to those adopted here. Mann and Thompson (1986, 1988) and the story grammarians (e.g. Rumelhart 1975, Stein with Glenn 1979, with Policastro 1984, and on her own, 1982) have used related systems of description. Meyer has a similar and fully worked out description of long standing that has been particularly developed in connection with work on memory (e.g. Meyer 1975, 1992, with Rice 1982). Labov (1972, with Waletzky 1967, and Fanshel 1977) has used an influential method of description that has a number of features in common with that provided here.