

Chapter 7: The Analysis of Intersemiotic Complementarity in the Mountains Text

7.0 Introduction

This chapter will attempt to analyse and interpret the *Mountains* text in terms of evidence for intersemiotic complementarity between its verbal and visual modes. The insights gained from an analysis of the *Mountains* text's contextual features will be utilised to inform this analysis. The actual analysis of the *Mountains* text will involve a detailed application and discussion of the analytical framework as derived and outlined in Chapter Five.

This chapter will begin with an outline and overview of the procedures which will be followed in the application of the analytical framework. This will be followed by three main sections, each pertaining to an intersemiotic metafunction. This chapter will constitute an attempt to test the applicability of the concept of intersemiotic complementarity in answering the questions raised earlier about how the visual and verbal modes work together on the page in *The Economist* magazine. It was proposed that intersemiotic complementarity obtains when one or more of the following features occur. The first is when the ideational meanings in both modes are related lexico-semantically through intersemiotic sense relations of repetition, synonymy, antonymy, meronymy, meronymy, and collocation. The second is when the interpersonal meanings in both modes are related through intersemiotic reinforcement of address (MOOD), and through intersemiotic attitudinal congruence and attitudinal dissonance (Modality) relations, and the third is when the compositional meanings are integrated by the compositional relations of information value, salience, visual framing, visual synonymy, and potential reading paths.

7.1 Analytical Procedures

The analysis of the *Mountains* text that is given in this chapter will involve a very detailed examination of the ways that the visual and verbal modes project their respective meanings, as well as to how those meanings relate to each other intersemiotically on the page. The parameters of the analytical framework have already been outlined in detail in Chapter Five, and the actual sequence of steps

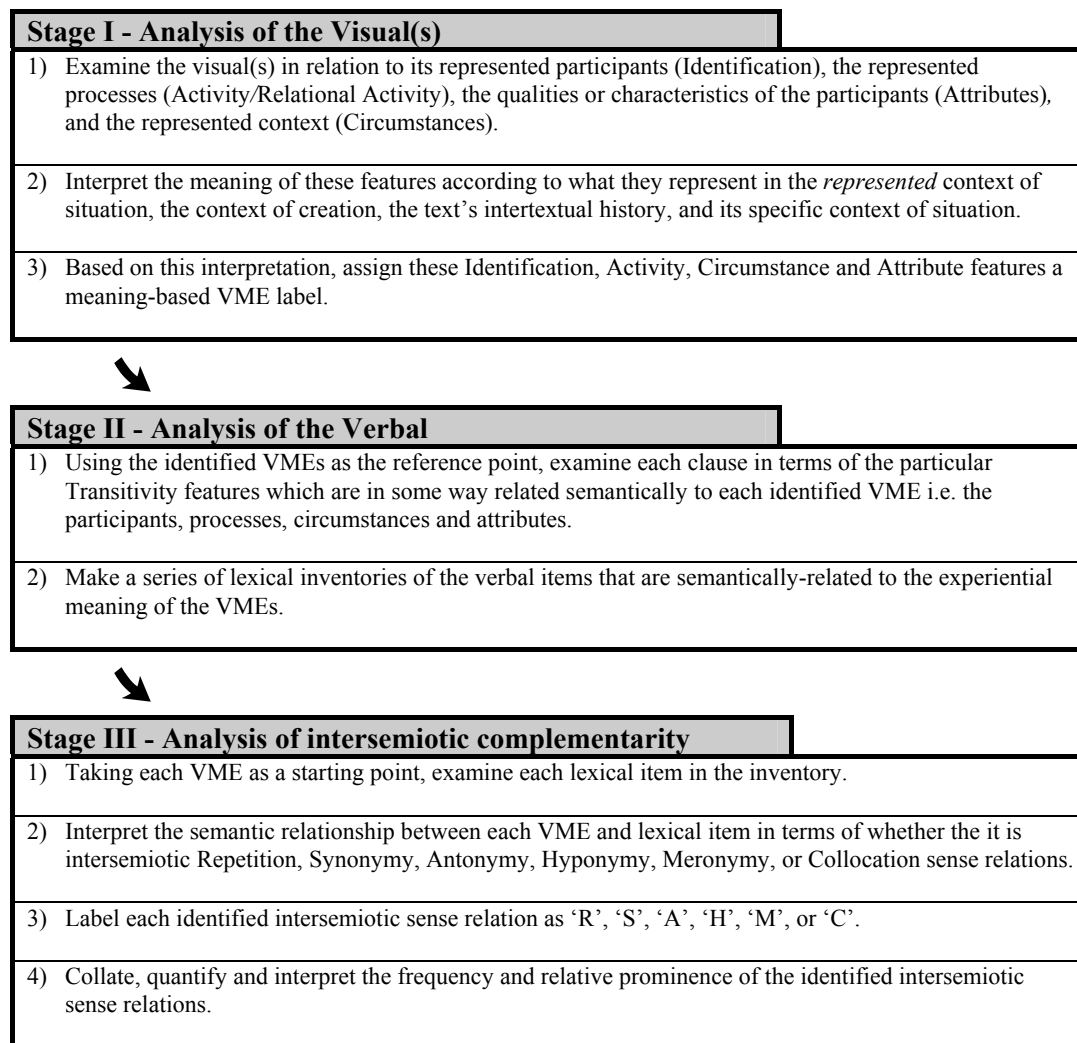


Figure 7.1 Procedural steps in the INTERSEMIOTIC IDEATIONAL analysis

taken in this involved analysis will be outlined in Figures 7.1, 7.4, and 7.5 in this chapter (each gives an overview of the detailed analytical steps actually taken). An important point to note also is that to ensure that the interpretation of the visuals given in this study are reasonable, they have been checked against the interpretations of over one hundred people in informal polls taken at various conference and workshop presentations.

7.2 An Intersemiotic Ideational Analysis of The *Mountains* Text

This section will be concerned with testing the proposition that ideational meanings in both verbal and visual modes in the *Mountains* text are related lexico-semantically through what has been referred to as the intersemiotic sense relations of repetition, synonymy, antonymy, meronymy, meronymy, and collocation. The actual sequence of steps taken in this analysis are outlined in the Figure 7.1.

As outlined in the analytical framework presented in Chapter Five, in order to examine the intersemiotic ideational features of the sketch caricature and the mathematical line graphs in the *Mountains* text and how they interact semantically with the verbal aspect of the text to realise intersemiotic complementarity, one has to firstly analyse them in terms of:

- their represented participants, in terms of their *identification*, or who or what is in the visual frame (animate or inanimate), including both those which perform as actors and those which act as recipients or objects (goals) of the action of the other represented actors (participants).
- the *activity*, or what action is taking place between the actor(s) and the recipient(s) or object(s) of that action.
- the *circumstances*, or the elements which are locative (concerned with the setting), of accompaniment (participants not involved with the action), and of means (participants used by the actors).
- the *attributes*, or any qualities and characteristics of the participants represented.

These visual features carry semantic properties which have already been referred to as the *Visual Message Elements* (VME or VMEs), elements which are realised by a range of possible visual techniques at the disposal of the writers (see Table 5.17 in Chapter Five). The previous discussion on the contextual aspects of this text illustrates very clearly that these *representational* features do not occur in isolation - the messages the visuals attempt to impart to the viewers are influenced

and constrained by what has been written and/or drawn before by *The Economist* magazine writers, as well as other myriad sources of reportage and analysis which the reader/viewers may have experienced in the days and months prior to the publication of the article. Again, the *Mountains* text is therefore very much a time and context-bound text.

7.2.1 Visual Message Elements in The Sketch Caricature

The sketch caricature in the *Mountains* text is a typical example of the kind of naturalistic visual that is commonly utilised in leader articles in the Finance department of *The Economist* magazine. Starting firstly with an analysis of the sketch caricature in terms of the Identification of the represented participants, or by asking the question Who or what is in the visual frame?, and Who or what are they interacting with?, we find that the most salient represented participants are easily identifiable to the viewer via the use of verbal labelling, or through caricatured representations of the faces and features of two well-known public figures, well-known because they have been referred to and pictured in previous articles dealing with Lloyd's problems. Accordingly, this visual displays a very large round object which is easily denoted as a boulder, but which is also intended to be interpreted as representing the Lloyd's insurance market, an interpretation that is verbally realised by the label "Lloyd's". A further connotative interpretation of the boulder is possible, based on a knowledge of the situational setting of the text. The boulder identified as "Lloyd's" can also be interpreted as a visual metaphor for Lloyd's current problems.

There are also the paired bodies and faces of two men, the Chief Executive, David Middleton (foreground), and the Chairman, David Rowland (background), both realised by the use of caricatured facial approximations. Another important represented participant is a section of the mountain-side on which the other participants find themselves, specifically the ledge on the upper slope. This participant is realised by the use of a profile view of a steep, ridged mountain-side and ledge to the right of the two men, and the use variegated black shading giving the profile a granite-like or rock effect. The men are portrayed as *Actors* who are interacting with the boulder and the ledge/upper slope of the mountain, both of

which are represented participants which can be interpreted as acting as *Goal* (that which is acted upon). The aim of the interaction of these represented participants seems to be for the two men to at least solve the immediate problem of the boulder by pushing it up to the ledge, which is acting as an interim resting place (the next slope is the next task). There are therefore four important represented participants, Lloyd's, the boulder, the two men, and the upper ledge/slope of the mountain-side, each of which will be glossed as the VMEs "Lloyd's", "Rowland & Middleton (the two financiers)", "the Boulder (Lloyd's problems), and "Upper ledge/slope (the solution)".

In terms of the Activity, or asking the question What action is taking place?, we can see that the action taking place is the action of the two financiers attempting to deal in some way with the problem posed by a significantly larger, heavy round boulder which is on the side of this steep mountain, and under the influence of gravity. This can be interpreted as them either pushing it up, or trying to hold it back. The size of this boulder in relation to the mountain-side and the two men acting on it makes it a visual feature with visual 'weight', which according to Arnheim (1988:229) is "the dynamic power in an object by virtue of its conspicuousness, size, shape, location etc.". To the viewer, the sight of two men of smaller stature interacting in some way with a much larger, round boulder on the side of a very steep mountain conveys a powerful message of struggle, and suggests that either opposing or restraining the boulder's natural action could perhaps be an impossible task. The viewers' appreciation and sense of this difficulty is also intensified by the caricaturisation of the boulder to the point that it is almost perfectly round (making it easier to roll down or to lose control), that the two men are very close to a ledge, a point where they can perhaps rest (although notice that there is room only for the boulder, not the men), and that they are faced with a steeper, almost vertical mountain-side as the next obstacle (giving the viewers a very clear message about the impossibility of any future tasks, should the two men somehow overcome the present one).

The most probable interpretation here is that the caricatured Middleton and Rowland are in fact attempting to push the Lloyd's boulder up the mountain, an

action that is strongly realised visually by the direction of their eyes, which is upwards and from left to right, looking upwards towards the completion of some kind of a task. The visual technique used here to realise this is known as ‘visual lines on the stage’, where an actor’s glance or look can give spatial direction to the audience’s perception of the action (Arnheim 1974: 28). The positioning and shape of their bodies also produces this sense of direction and goal-oriented behaviour, an effect realised by the vectors which can be drawn as a result of the parallelism produced by their arms, lower legs and again, gaze. The task they are engaged in may be denoted as pushing the boulder up the mountain slope. However, the visual metaphor here is that they are trying to deal in some way with Lloyd’s problems (the boulder), and shows that the men as *Actors* are interacting with the boulder on the upper ledge/slope. In this depiction the boulder is a represented participant acting as *Goal*, which in SFL terms refers to the “one to which the process is extended”, or that which is acted upon in some way (Halliday 1994:110). The upper ledge/slope on the hand is a represented participant acting as *Range*, which in the SFL sense refers to “an entity which exists independently of the process but which indicates the domain over which the process takes place” (op.cit:146). The overall impression conveyed here is one that suggests that success as a result of this action on the mountainside implies a solution to Lloyd’s problems.

There is also the impression of effort and strain created visually for the viewer through their body position and their interaction with the more visually salient interaction between the heavy round boulder and the mountain-side. This sense is further realised and reinforced by the puffs of dust and dislodged rock debris behind the men’s feet, which is suggestive of their stepping forward under great strain, and perhaps potential danger of slippage and loss of control. There is therefore one important action being performed here, that of two men simultaneously attempting to ascend while pushing a boulder up a mountain-side. This action will be glossed as the VME “climbing - pushing up”.

Figure 7.2 A reverse view of the sketch caricature (left - right reading path)

These interpretations are supported by the effect that is produced when the visual is reversed, as seen in Figure 7.2, which shows a reverse view of the sketch caricature image. The action in the original visual gives the viewer the sense that the two men are attempting to *push* the boulder upwards from left to right, while the reversed version conveys the impression that the two men are attempting to restrain the boulder from rolling downwards from left to right. Both involve the sense of effort and strain. The common denominator here in visual terms is the left-right orientation or reading path to which the generally English-speaking and mostly Western readers of *The Economist* magazine are acculturated — an eye movement which typically follows a left-to-right direction when viewing or reading (see the discussion of left to right reading path in Chapter Five). This is an important aspect of visual literacy which is culturally-based and is related to a sense of visual expectancy.

The Circumstances, or the answer to Where, who with and by what means are the activities being carried out?, is also interesting. The two men and the boulder as represented participants in this visual are of course not just placed anywhere; they are placed or located in a physical situation, and that is most obviously on the side of a single-ledge mountain-side. While the whole mountain-side is also a salient represented participant, it is also an aspect of the *setting* which places the other interacting participants in a particular location. This combines with the other features of the visual to give an overall effect of two men struggling with a boulder on a mountain. It is not just simply a mountain however; it is also a visual metaphor of the path that the Lloyd's institution has taken (below the men's feet), where it is now (where the boulder touches the mountain), and what would be its most likely immediate and distant future (the ledge and the steeper slope). The mountain-side thus connotes Lloyd's path, and provides a visual narrative of Lloyd's past, present and future.

Another aspect of this setting is the fact that this kind of naturalistic sketch caricature has a highly idealised setting, in that the backdrop of the scene is completely devoid of any other details which may distract the viewer from the main action taking place (vegetation, other people, houses etc.). This de-

contextualisation of the scene forces the viewers' attention onto the action taking place, onto who is involved, and where it is taking place. There is therefore a circumstance in terms of a setting given which informs the viewer where the action is taking place, and gives a physical context for this action in terms of what has, what is, and what will happen — this Circumstance: locative (setting) will be glossed as the VME “the Mountain (Lloyd’s path - time/place)”.

The Attributes, or the question What are the qualities and characteristics of the participants?, is concerned with any important quality, character, characteristic, or property attributed as belonging to a represented participant. In the sketch caricature the viewers' appreciation of the difficulty, great strain and perhaps inherent danger the two men are experiencing is intensified by the boulder being almost perfectly round (easier to roll down), and the quality of effort and strain that is reinforced visually through the two men's body position, and the puffs of dust and dislodged rock debris behind the men's feet. A further attribute which identifies the two men as belonging to the Finance industry in some capacity is provided by the pin-striped suits they are wearing; this is commonly viewed and represented as the uniform of those involved with “The City”, or the financial heart of London — this is of course where the famous Lloyd's of London headquarters building is located in London (Clarke 1995:1). All these attributes are relatively significant, but supplementary features of the represented participants which work to strengthen the dominant impressions the viewers have of this scene; as such they may be glossed as the supplementary VMEs “effort/strain in action”, and “financiers”.

Given these interpretations, the narrative message or focus of this visual can be summarised as a situation where the two top financial managers of Lloyd's (the two financiers) have a very great problem with the Lloyd's market which is decidedly difficult to control, restrain, or reverse (the boulder). Should the two men manage to overcome this present problem, they can perhaps look forward to a brief but potentially dangerous respite (the narrow ledge), but then they are faced with a further, almost impossible task (the extreme slope of the mountain-side) which they alone have to complete, a representation which is suggestive of the

need for outside intervention or assistance. When the already-discussed features of the situational setting of the text are also taken into account, this interpretation is further supported. For example, the two men are readily identified as Rowland and Middleton because their images have been used in many articles on Lloyd's problems, and the difficult situation portrayed also links with the common knowledge that Lloyd's is having severe problems and has an uncertain future. The whole mountain-side is thus a circumstantial visual metaphor for where Lloyd's has been (the lower slope), where it is now (where the boulder is touching the mountain), and its possible future path and difficulties (the higher slope, ledge and even higher slope). This draws directly on the *Mountains* text's intertextual history and the readers' familiarity with the issues.

This point about the readers' familiarity with the issues relates to the contextual aspects of this text, specifically the authors' conceptions of their audience. As mentioned in Chapter Six, the interview with the Ms. Penny Garret of *The Economist* magazine London office revealed that the magazine assumes their audience ranges from professional economists, business people, to the general reader who has attained a certain level of education and sophistication. This was supported by Luhman's (1998) comments about audience in his *Economist* magazine review. The sketch caricature in the *Mountains* text quite obviously depicts a scene which draws upon this level of assumed background knowledge on the part of the readers — the view of a boulder being pushed up a mountain quite obviously refers to the ancient Greek myth of Sisyphus. As Biedermann (1992:5) points out, this is one of the stories expressing the punishment in Hades for famed evildoers:

[such as] the "Rock of Sisyphus" (Sisyphus, who built the city of Corinth, tried to trick Hades, the God of the underworld, and was punished by having to roll a boulder uphill, only to have it slip from his grasp and roll back down again: the torment of eternal frustration.

Questions Asked	Visual Message Elements	Visual Transitivity Roles	Visual Realisations
Who or what?	<u>Lloyd's</u>	Participant	Verbally indicated labelling of "Lloyd's" boulder.
Who or what?	<u>Rowland & Middleton</u> (the two financiers)	Participant (Actors)	Sketch caricature of two business-suited, middle-aged men identified and differentiated by their caricatured facial features and accessories (striped financial suits, Middleton wears glasses).
Who or what?	<u>Boulder</u> (Lloyd's problems)	Participant (Goal)	Sketch caricature of large boulder, shaded to represent rock but caricatured in that very few boulders are naturally smooth and rounded. Is being acted upon by the two men. This is a visual metaphor for Lloyd's current problems.
Who or what?	<u>Upper ledge/slope</u> (the solution)	Participant (Range)	Sketch caricature of the upper ledge/slope of the mountain, which is acting as the range for the activity of the two men with the boulder. The ledge/slope exists independently of the process but indicates the domain over which the action of the two men takes place. Success in this action on the mountainside implies a solution to Lloyd's problems.
What action is taking place?	<u>Climbing - pushing up</u> (enacting solutions with effort)	Process	Sketch caricature of two men in pushing/climbing stances. They are expending effort and straining which is realised through their body position in relation to a more visually salient (heavy) object. Their limbs form parallel vectors in an upward direction, which matches the vectors from their eyes to the mountain side or top, indicating the direction or goal of their possible action. This is a visual metaphor for the actions being taken to deal with Lloyd's problems, or the solution.
Where, who with, or by what means?	<u>Mountain</u> (Lloyd's path - time/place)	Circumstance: locative (setting)	Sketch caricature of a profile of a mountain-side, shaded to give a granite-like effect, and slightly caricatured to convey differing gradients and a ledge. The slope is a visual metaphor for Lloyd's path: past, present, future.
What are the qualities and characteristics of the participants?	<u>Struggle and effort</u> and <u>Financial/banking executives</u>	Attributes	Sketch caricature of the round boulder and the puffs of dust and debris, all combined to connote struggle, effort and difficulty. Striped financial suits connoting membership in the banking industry.

Table 7.1 The sketch caricature Visual Message Elements (VMEs)

The readers are obviously assumed to be familiar with this myth, and to see the ironic association in the message that the Lloyd's of London institution is perhaps an evildoer which will suffer "the torment of eternal frustration" — the two Lloyd's men represent Sisyphus (which is perhaps a little unfair since they are the rescuers, not the original evildoers) and the boulder represents Lloyd's problems. This sketch caricature is a statement about what is and has been happening; but it is also a projection of what the creators of the visual see about the chances of success for Lloyd's with its problems, issues which will be discussed in the following sections.

This general narrative message can be read in this sketch caricature visual by virtue of the interplay between its VMEs. These, along with their semantic participant categories and realisations are summarised in Table 7.1.

7.2.2 Visual Message Elements in the Line Graphs

An examination of the line graphs in terms of Identification of the represented participants, or by asking the questions What are the participants in the visual frame? and What are they interacting with?, reveals some interesting features. The two line graphs enclosed in the one frame in the *Mountains* text are, like the sketch caricatures, typical of the kind utilised in the leader articles of the Finance department of *The Economist* magazine. In examining the visual ideational features of these line graphs, again, one has to look at what is within the visual frame, the action of the graphic elements, and the kinds of mathematical visual relations utilised to present the visual ideational content of the image (these can be either the derivative [rate of change], the comparative or the proportional mathematical relations).

The line graphs both deal with the same general topic as the verbal aspect of the text, and which have been covered in the articles published in the previous two years. These are the problems that Lloyd's of London is having, and the business plan developed to deal with them in the interim. This is verbally indicated by the sub-headings which refer to active names, and the number of syndicates with open years. There are also two other represented participants which act together

mathematically — these are the (x,y) axes of the two graphs representing a set of independent and dependent variables related to each other in a *derivative* (rate of change) mathematical relationship. The independent (x) variable in both graphic instances is chronological in nature (time in years), and the dependent (y) variable is numerical (numbers of names and syndicates). These two variables, the independent and the dependent, interact with each other in various proportions to produce two line graphs which can themselves also be considered to be represented participants. These however will be treated as processes, or represented actions, because even though they are denoted as two graphic lines on the page, they do in fact connote the representation of a process, which has been characterised as “the rate of change” or derivative mathematical relation, and which suggests variability and differing rates of change. As we shall see below, this has a further general connotation, that of increasing losses for Lloyd’s. Based on this, four important represented participants can be identified in this visual, which will be glossed as the VMEs “Active Names”, “Syndicates with open years”, “0 - 35,000 (number)”, and “1982 - 1993 (time)”. The VME for “0 - 35,000 (number)” is a conflation of the number of names (in thousands), and the number of syndicates with open years (in lots of twenty-five).

With regard to the Relational Activity, or What is the mathematical relation portrayed?, we see that the main message of these two graphs individually and collectively is to suggest that Lloyd’s is experiencing increasing losses. This is realised by showing how the dependent variables, the number of active names and the number of syndicates with open years, have behaved in relation to the independent variable, which is time. The message, as suggested above, is one of variability in terms of the derivative (rate of change) mathematical relation. However, this variability connotes increasing financial loss(es) for Lloyd’s, because the decrease in names in the years 1988-1993 means that the number of people who invest their money in Lloyd’s is falling, and the increase in open year syndicates numbers between the years 1982-1991 means that those who are unable to settle their commitments in Lloyd’s are increasingly liable to continuous loss for which Lloyd’s is liable.

The basic, general message is therefore money increasingly lost. The left hand line graph portrays this relationship over the eleven year period from 1982 to the beginning of 1993 as a steep increase in the number of names investing in the Lloyd's market up until 1988 (where it peaked at approximately 32,500 names), and a steep decline continuing unchanged to the date of the publication of the text (to a little below 20,000 names). Hence the use of the heading "Slumping..." to reinforce the message. The right-hand graph portrays the open years to time relationship only up until 1991, a nine year period. The differing time periods (eleven and nine years) for the dependent variables is related to the fact that the accounts for syndicates are reported three years in arrears (to allow ample time for settlements to be cleared), so the data for early 1993 is not available. Counting back three years from 1993 means that the data for 1990 is the most recent set of figures available (information which is given in many of the previous articles on this issue). The line graph for the period represented shows the number of open year syndicates rising in the early to mid-eighties, falling for a brief period in 1987-88, but then rising steeply from 1989 on. Despite this variability, the relationship portrayed is a steadily mounting increase in the number of syndicates with open years. Hence the use of the heading "... mounting". There are therefore two important processes being depicted here, that of two line graphs with a combined overall graphic focus suggesting increasing losses for Lloyd's, and two verbal headings referring to specific graphic foci, those of increases ("*slumping*") and decreases ("mounting") in dependent variables. These two mathematical processes will be glossed as the VMEs "Graphic focus: increasing loss", and "Slumping ... mounting".

For the Circumstances, or in asking the question Where, what with and by what means are the relations realised?, the verbally indicated footer "Source: Lloyd's of London" works to place the information and the format it is given in firmly within the sphere of the economic or financial world, and also gives the data an official *imprimatur* which indicates the source and certifies its accuracy. There is therefore a circumstance in terms of a 'disciplinary' setting given which informs the viewer that the quantitative data is from Lloyd's of London — this Circumstance: locative

Questions Asked	Visual Message Elements	Visual Transitivity Roles	Visual Realisations
What are the participants?	<u>Active names</u>	Participant	Verbally indicated visual sub-heading identifying the quantitative focus of the left-side line graph. Gives the left-hand visual's "topic focus".
What are the participants?	<u>Syndicates with open years</u>	Participant	Verbally indicated visual sub-heading identifying the quantitative focus of the right-side line graph. Gives the right-hand visual's "topic focus".
What are the participants?	<u>0 - 35,000</u> (number)	Participant	Two vertical 'y' axis' with points marked evenly for firstly the number of names (thousands), and secondly the number (also verbally indicated) of syndicates with open years (in lots of twenty-five).
What are the participants?	<u>1982 - 1993</u> (time)	Participant	Two horizontal 'x' axis', both beginning with 1982 and increasing by two year lots, and both finishing in 1993. Time is also verbally indicated by "January 1 st " in the sub-heading.
What is the mathematical relation portrayed?	<u>Slumping - mounting</u>	Process	Twin verbally indicated visual headings referring to vertical movements, and suggesting that the left Line graph is going down, while the right Line graph is still going up. Gives a "point of view" to each visual.
What is the mathematical relation portrayed?	<u>Graphic focus: increasing loss</u>	Process	Two line graphs displaying graphic action, variations, and the rates of change in the dependent variables (active names and open year syndicates).
Where, what with and by what means are the relations realised?	<u>Source: Lloyd's of London</u>	Circumstance: locative (setting)	Verbally indicated visual footer. Indicates that the data visually represented is from an 'official' source, in this case from Lloyd's of London itself.

Table 7.2 The line graph Visual Message Elements (VMEs)

(setting) will be glossed as the VME “Source: Lloyd’s of London”. A summary of all these VME features for the line graphs may be seen in Table 7.2.

Now that the VMEs in the naturalistic and mathematical visuals in the *Mountains* text have been described and derived, these features will be examined in relation to how they relate in intersemiotic, lexicosemantic terms to the verbal mode. The question again is what evidence is there to support the contention that the visual and verbal aspects of the *Mountains* text are related to each other in terms of ideational intersemiotic complementarity? It follows that if they are in the same compositional page space, and they are both concerned with the same subject matter, then there should be some evidence or support for some kind of intersemiotic lexicosemantic relationship. The following sections will examine these questions by describing how the VMEs are related to each other lexicosemantically.

7.2.3 The *Mountains* Text: An Intersemiotic Ideational (Representational) Analysis

The following discussion examines the *Mountains* text in terms of the intersemiotic cohesive relationship between its VMEs and its lexical features. Starting with the VMEs of both the sketch caricature and line graphs and checking through the verbal aspect of the *Mountains* text for semantically-related lexical items produces several lexical inventories. As explained previously in Chapter Five, the selection of lexical items is based on the existence of some kind of semantic relationship to each VME, and that one of these relationships can be one of the intersemiotic sense relations referred to as Repetition, Synonymy, Antonymy, Hyponymy, Meronymy and Collocation.

The inventory of those lexical items which are deemed to be semantically related in some way to the VMEs derived for the *Mountains* text’s visuals is summarised in Tables 7.3 (a) and (b) and 7.4 (a) and (b). The procedures for the derivation of these tables initially involves the division of the *Mountains* text into consecutive sentences, starting with the department header, and continuing through to the last sentence in the article (a total of 67). This division can be seen in Appendix Two.

The derived VMEs are then ranged against these sentences in a matrix format, and the relevant lexical items are entered into the matrix ‘cells’ in accordance with the appropriate sentence number. As mentioned earlier, this is an adaptation of lexical string analysis used in text cohesion studies — the fundamental difference here being that the relationship analysed is *between* the visual and the verbal modes, rather than between the lexical items in the verbal as it unfolds.

The reader should note that the VMEs in the sketch caricature which have been referred to as Attributes: “effort/strain in action” and Attributes: “financiers”, have each been subsumed under the Process: “Climbing - pushing up (enacting solutions *with effort*)” and the Participant: “Rowland & Middleton (the two financiers)” VMEs respectively. The lexical items relevant to these VMEs have been included and combined in these categories because they are very closely related to them. In a sense they work to add additional or supplementary meaning to either the process portrayed (e.g. the puffs of dust portrayed connoting effort in the process of pushing up), or to provide more clues as to the identification of the represented participants, which in this case are the two men (e.g. a viewer would not only know that they are Middleton and Rowland based on the facial likenesses, but also because of the supportive attribution provided by the uniform of a financier or banker, the pin-striped suit). The reader will see these connotations in the inclusion for example of such lexical items as *climbed/scaled* (for “Climbing - pushing up”) and *push through/exert control* (for “effort/strain in action”) in the one lexical inventory referred to as “Climbing - pushing up (enacting solutions with effort)”.

The inventories given in Tables 7.3 (a) and (b), and 7.4 (a) and (b) also include an identification of the intersemiotic cohesive relations between each VME and each lexical item. These intersemiotic sense relations have been identified according to the following symbols:

- Repetition (R) the repetition of the experiential meaning
- Synonymy (S) a similar experiential meaning.
- Antonymy (A) an opposite experiential meaning.
- Hyponymy (H) classification of a general class of something and its sub-classes.

- Meronymy (M) reference to the whole of something and its constituent parts.
- Collocation (C) words that tend to co-occur in various subject areas.

As explained in Chapter Five, each intersemiotic sense relation describes the nature of the intersemiotic semantic relationship between the VMEs and each identified lexical item, a relationship which is expressed diagrammatically in Figure 7.3:

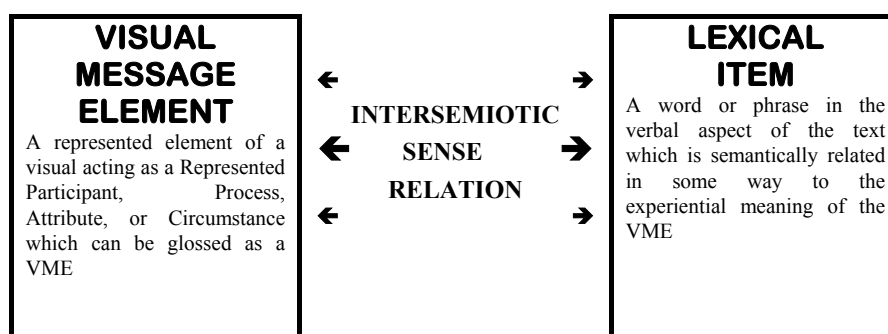


Figure 7.3 Intersemiotic sense relations

As the inventories in Tables 7.3 (a) and (b) and 7.4 (a) and (b) show, there are significant and varying numbers of lexical items which relate semantically to the experiential meaning expressed by the VMEs. The reader would also be aware that a small number of the lexical items identified as particular intersemiotic sense relations would seem to be borderline choices in terms of which label should be assigned to them. This can be seen for example in Table 7.3(a) in the “Climbing-Pushing up (enacting solutions with effort)” lexical inventory, and in Table 7.4(a) in the “Slumping ... Mounting” lexical inventory. In both these inventories the lexical items ‘*scaled*’ (S) and ‘*peak*’ (C) could be conceivably labelled as ‘*scaled*’ (R) and ‘*peak*’ (S or R). The decision about what to label these lexical items in terms of their intersemiotic relationship to each VME is based on the same steps that are taken in lexical chain analysis: ‘*scaled*’ is (S) not (R) because the root form of “scale” does not occur in the wording of the VME “Climbing-Pushing up”. This is also the case and for the same reasons with ‘*peak*’, which is (C) and not (S or R). Of further note is the fact that although an attempt has been made to restrict the selection of lexical items to individual or single lexical items, in accordance with the typical procedures followed in lexical chain analysis, there

are however instances of what may termed lexical phrases, or items which in two-word or more terms could

S's	REPRESENTED PARTICIPANTS				PROCESSES	CIRCUMSTANCES
	Lloyd's	Rowland & Middleton (the two financiers)	Boulder (Lloyd's problems)	Upper ledge/slope (solution)	Climbing - pushing up (enacting solutions with effort)	Mountain (Lloyd's path - time/place)
1	FINANCE (C)					
2					climb (R)	Mountains (R)
3	Lloyd's (R) the market (S)			business plan (S)		
4					scaled (S)	peak (C)
5	Lloyd's (R) London's insurance market (S)					
6	the market (S) Lloyd's (R)		losses (H) lawsuits (H) negligence (H)		boost (C)	last year (M)
7						over (C)
8	insurance cycle (C) market (S)		losses (H)			
9		management team (C) David Rowland (R) chairman (C) Peter Middleton (R) chief executive (C)				
10						now (M)
11	market's (S)		loss (H)			
12	errors and omissions (C) (E&O) (C)		losses (H) lawsuits (H)			chunk (C)
13	market (S)		loss (H)			
14						
15			losses (H) losses (H) losses (H)			
16	market (S)					
17	Lloyd's (R)					
18	market (S)					now (M) under (C) down (C)
19	underwriting (C)					
20	reinsuring (C)		losses (H)		struggled (C)	
21						
22	Lloyd's (R) underwriting (C)					
23	Lloyd's (R)	Rowland (R) Middleton (R)		business plan (S)		background (C)
24	Lloyd's (R) market board (M)			plan (S)		future (M) now (M)
25		Middleton (R)	losses (H)	reforms (H) cost-cutting (H)		
26				sacking ...staff (H)	stepped up (S)	
27	Lloyd's (R) agencies (M)					
28	member's agencies (M) managing agencies (M)	Mr Middleton (R)		reforms (H)	push (R)	
29	agencies (M)				control (S) exert (S) raised (C)	
30	member's agencies (M)			make economies (H) amalgamation (H) centralisation (H) higher underwriting standards (H)		now (M)
31	corporate members (M) market (S) underwriting (C)				spur (C)	
32						
33			open years (H) litigation (H) losses (H)			

Table 7.3 (a) Lexico-semantic intersemiotic complementarity - sketch caricature

S's	REPRESENTED PARTICIPANTS				PROCESSES	CIRCUMSTANCES
	Lloyd's	Rowland & Middleton (the two financiers)	Boulder (Lloyd's problems)	Upper ledge/slope (solution)	Climbing - pushing up (enacting solutions with effort)	Mountain (Lloyd's path - time/place)
34		Rowland (R)				thin air (C)
35			open years (H)	business plan (S)		
36				plan (S)		
37	Centrewrite (M) Lloyd's (R)					
38	Centrewrite (M) market (S) insurers (M)		claims (H)		cope (C) contesting (C)	past (M)
39			losses (H)			
40	Lloyd's (R)			insulate newcomers (H)		future (M) past (M) future (M)
41					ensuring (C) falls (A)	
42		Mr Middleton (R)				
43				present a united front (H)		
44	insurers (M) policy-holders (M) Lloyd's (R)				fighting (C)	
45	Lloyd's (R)		lawsuits (H)	business plan (S)		
46	managing agencies (M)		writs (H) negligence (H)			
47	E&O insurers (M)	Mr Middleton (R)		minimise the sums siphoned off (H)		
48	insurers (M)					
49	E&O insurers (M) reinsurance (C) Lloyd's (R) E&O (C)					
50			litigation (H) bad publicity (H)			
51	Lloyd's (R) policyholders (M)					
52	agencies (M)		bankruptcy (H)			
53	Lloyd's (R)		lawsuits (H)			
54	market (S)					down (C) now (M)
55	E&O insurers (M) Lloyd's (R)			settlement (S)		
56			problem (R) losses (H)	solution (R) business plan (S)		
57	insurance rates (C)				rising (C)	
58	Lloyd's (R)		losses (H)			
59	underwriting (C)	Mr Middleton (R)			help (C)	
60			losses (H)	budget measures (H)	help (C)	past (M)
61	market (S) new capital (C)					future (M)
62		Rowland (R) /Middleton (R)		business plan (S)		
63	policyholders (M)					
64	Lloyd's (R)	two men (S)			willingness (C)	
65						
66	Lloyd's (R)		problem (R) litigation (H) losses (H)	plan (S) solve (R)	head off (C) find a way of meeting (C)	
67						high (C)

Table 7.3 (b) Lexico-semantic intersemiotic complementarity - sketch caricature

S's	REPRESENTED PARTICIPANTS				PROCESSES		CIRCUMSTANCES	
	Active Names	Syndicates with open years	0 - 35,000 (set of numbers)	1982 - 1993 (time period)	Slumping... mounting	Graphic focus -increasing loss	Source: Lloyd's of London	
1	capital providers (S)				Mountains (R) climb (S)		FINANCE (C)	
2							Lloyd's (R) the market (S)	
3								
4								
5							Lloyd's (R) London's insurance market (S)	
6	names (R) individuals who provide Lloyd's capital (S)	syndicates' (R)	2 billion (C) 3.3 billion (C)	Last year (S) 1989 (M)	boost (C)	losses (R)	the market (S) Lloyd's (R)	
7					over (C)			
8					1990 (M) later years (C)		losses (R) profits (A)	insurance cycle (C)
9	names (R)							market (S)
10					now (S) premature (C)			
11			3 billion (C)	1990 (M) June (M) 1989 (M)		loss (R)	market's (S)	
12	names (R)	syndicates (R)	500m-1 billion (C) double-counting (C)	1989 (M)		losses (R)	error and omissions (C) (E&O) (C)	
13	names (R)						loss (R)	market (S)
14								
15	names (R) names (R)			5000 (M) more (C) few (C) cumulative (C)	1989's (M) 1990 (M)		losses (R) losses (R)	
16						losses (R)	market (S)	
17	names (R)						Lloyd's (R)	
18	active names (R)		20,000 (M) 8.7 billion (C) 40% (C)	now (S) 1988 (M)	down (S)		market (S) underwriting (C)	
19	Names (R)			1989's (M) last year (S) 1990's (M)		losses (R)		
20		open years (R) syndicate years (R) successor year (R)				losses (R)	reinsuring (C)	
21	names (R)	open year (R)	84% (C) one (M) figure (C) 100% (C)	June (M)				
22	members (S)	open years (R)					Lloyd's (R) underwriting (C)	
23				late April (M)			Lloyd's (R)	
24				future (C) now (S)			Lloyd's (R) market board (M)	
25			more (C)	last year's (S) since then (C)		losses (R)		
26					stepped up (S)			
27							Lloyd's (R) agencies (M)	
28	names (R)	syndicates (R)					member's agencies (M) managing agencies (M)	
29							agencies (M)	

Table 7.4 (a) Lexico-semantic intersemiotic complementarity - line graphs

S's	REPRESENTED PARTICIPANTS				PROCESSES		CIRCUMSTANCES
	Active Names	Syndicates with open years	0 - 35,000 (set of numbers)	1982 - 1993 (time period)	Slumping... mounting	Graphic focus -increasing loss	Source: Lloyd's of London
30			80 (M)	now (S)	raise (S)		member's agencies (M)
31					higher (C)		corporate members (M)
32	names (R)						market (S)
33		open years (R)	three (M)	1990 (M)		losses (R)	underwriting (C)
34			sums (C)				
35							
36	names' (R)	open years (R)					
37		syndicates (R)		1991 (M)			Centrewrite (M)
38			a lot more (C)	past (C)			Lloyd's (R)
39	names (R)						Centrewrite (M)
40				future (C)		losses (R)	market (S)
41	names (R)		some (C)	past (C)	falls (S)		insurers (M)
42	capital providers (S)			1990 (M)			
43	names (R)			year (C)			
44		old-year (C)		earlier (C)			
45		years...open (R)	some (C)	future (C)	up (S)		Lloyd's (R)
46	Members (S)						
47	names (R)						insurers (M)
48	names (R)						policy-holders (M)
49	names (R)						Lloyd's (R)
50			minimise (C)				Lloyd's (R)
51			sums (C)				managing agencies (M)
52							E&O insurers (M)
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63	Names (R)						
64	investors (S)						
65							
66							
67							

Table 7.4 (b) Lexico-semantic intersemiotic complementarity - line graphs

be viewed as single lexical items. Instances include such lexical groupings such as ‘*London’s insurance market*’, ‘*insurance cycle*’, ‘*errors and omissions*’, ‘*managing agencies*’, ‘*higher underwriting standards*’, ‘*make economies*’, ‘*present a united front*’, ‘*minimise the sums siphoned off*’ etc., all of which could be considered to be single lexical entities, concepts or actions linked intersemiotically to a relevant VME.

A quantitative summary of the identification, frequency and relative prominence of the intersemiotic sense relations identified as a result of the analysis of the VME to lexical items relationship is provided in Table 7.5. It is clear from these results that in intersemiotic ideational terms, there are numbers of lexical items identified in the verbal mode which are semantically related with the experiential meaning expressed by the VMEs (a total of 414 items). There also seem to be significant patterns revealed in the degree of usage of particular intersemiotic sense relations in specific inventories. These results will now be discussed in detail for the sketch caricature and line graphs respectively.

7.2.3.1 The Sketch Caricature

As Tables 7.3 (a) and (b) show, there are four main represented participants in the sketch caricature which generate four inventories. The derivation and analysis of these will be discussed below.

Lloyd’s

As Table 7.5 shows (following page), in terms of the total numbers of lexical items, the greatest number of semantically related lexical items between the verbal and visual features of the *Mountains* text occur in the *Lloyd’s* inventory. This is to be expected in that the text is about the institution of Lloyd’s of London. This subject matter can potentially be concerned with many of the issues covered in previous articles on this topic, such as its background history, its functions, its component parts, its personnel, its problems, its future, and various other features which comprise what it means to be considered as a financial institution. Accordingly, the kinds of lexical items which one would expect to be semantically related to this

Visual Message Element	Ant.(A)	Syn. (S)	Rep. (R)	Hyp. (H)	Mer. (M)	Coll. (C)	TOTAL
Lloyd's		12	19		20	13	64
Rowland & Middleton (the two financiers)		1	12			3	16
Boulder (Lloyd's problems)			2	31	1		34
Upper ledge/slope (solution)		10	2	12			24
Climbing - pushing up (enacting solutions with effort)	1	4	2			14	21
Mountain (Lloyd's path - time/place)			1		14	8	23
Active Names		6	26				32
Syndicates with open years			13			1	14
0 - 35,000 (number)					8	29	37
1982 - 1993 (time)					22	24	46
Slumping ... mounting		9	1			5	15
Graphic Focus - Increasing Loss	5		18			1	24
Source: Lloyd's of London		12	19		20	13	64

Table 7.5 Intersemiotic sense relations in the *Mountains* text

VME would be concerned with these kinds of features, and the inventory generated reflects this. Firstly, the topic and institution-identifying lexical item '*Lloyd's*' is repeated consistently, as are the synonyms for it such as '*market*', '*the market*', and '*London's insurance market*' (Lloyd's is a place where insurance policies are traded, so it is indeed a market). The text-topic is therefore carried and reinforced across the modes by the use of intersemiotic repetition of '*Lloyd's*' and the use of these synonymous terms.

The other intersemiotic sense relations utilised in this inventory support the development of this subject matter, and reinforce the fact that this text is about a particular financial institution. For example, Lloyd's is a highly structured organisation which consists of various people (its '*market board*', '*policyholders*'), insurance companies ('*insurers*', '*E&O insurers*', '*Centrewrite*'), and investor organisations ('*corporate members*', '*managing agencies*', '*member's agencies*') etc. There is thus a high frequency of intersemiotic meronymy, which is concerned with part/whole relations (which in this case are the functioning parts of Lloyd's of London). Intersemiotic collocation is also significant here in that any discussion of a financial institution such as Lloyd's invariably requires a discussion of various financial issues and related areas of concern. The subject area is signalled clearly via the use of '*FINANCE*' as the department heading and the subsequent usage of such terms as '*insurance cycle*', '*errors and omissions*', '*E&O*', '*underwriting*', '*reinsuring*', and '*new capita*', all lexical items which could be reasonably expected to co-occur in a text on a financial topic or a topic about an institution like Lloyd's of London.

The relatively high occurrence of intersemiotic synonymy and repetition shows therefore that both the visuals and the verbal aspects of the *Mountains* text complement each other in maintaining and supporting the central topic, while the significant use of meronymy and collocation work interactively to support a financial discussion which is situated in a much wider, general eco-financial context. There is thus clear evidence of intersemiotic complementarity in terms of both modes dealing with the same topic area and pertinent terminology.

Rowland & Middleton (the two financiers)

One of the main purposes of the sketch caricature is the identification of significant represented participants, the characters involved in the action portrayed, and any salient attributes they may have to assist in this identification. Both Rowland & Middleton are important characters in the discussion of Lloyd's problems and their possible solution - we know that due to their prominence in the intertextual history of the *Mountains* text, and by virtue of the frequent use of intersemiotic repetition of their names, as in 'David Rowland', 'Peter Middleton', 'Mr. Middleton', and 'Middleton', the intersemiotic synonymy of 'two men', and the use of lexical items which intersemiotically collocate with the idea of these two men in control of the represented participant boulder labelled as 'Lloyd's' through 'management team', 'chairman', and 'chief executive' (it could be argued in fact that both 'chairman', and 'chief executive' may be interpreted as intersemiotic synonyms rather than as intersemiotic collocations — that is a reasonable interpretation to make, being perhaps more a matter of the potential reader's background knowledge of just who Rowland and Middleton are and their positions in Lloyd's). A further point of note is that there are no lexical items which semantically link to the represented attributes of the two men (the pinstriped suits connoting financiers); these attributes are acting in a supportive role in visual terms, making sure perhaps that if viewers don't recognise the two men as Rowland and Middleton immediately, they can see that the two men acting with the Lloyd's boulder at least should be there as people concerned with financial issues. The two modes thus intersemiotically complement each other in terms of the main actors involved in the Lloyd's crisis.

Boulder (problems)

The boulder, as already mentioned, is a visual metaphor for Lloyd's problems which the two men have to deal with. These are identified and mentioned throughout the verbal aspect of the text as the decreasing numbers of new names (or less active names), the increasing number of open syndicates, the potential for litigation, and the poor performance of the various investor agencies. All of these have been the subject of presentation and discussion in the previous articles examined in the analysis of the *Mountains* text's intertextual history. Intersemiotic complementarity between the visual representation of these problems via the

boulder and the verbal reference to them is realised via the intersemiotic repetition of *'problem'* (the boulder's connotative meaning), and the extensive use of intersemiotic hyponymy of kinds or types of problems, as realised through the use of *'lawsuits'*, *'writs'*, and *'litigation'* (against investor agencies), *'negligence'* (of investor agencies), *'losses'* and *'bankruptcy'* (of profits), *'open years'* (increasing), *'claims'* (from natural disasters), and *'bad publicity'* (affecting confidence). There is thus a clear intersemiotic linkage between the visually represented and verbally discussed problems.

The Upper Ledge/Slope (the solution)

As mentioned previously, the upper ledge and slope of the mountain, when interpreted in terms of their role in the interaction between the two men and the mountain side, can be seen as a visual metaphor for a solution to Lloyd's problems i.e. the road to solving Lloyd's problems involves (at least in part) success at pushing this boulder up the mountain-side to the ledge and then perhaps further upwards — if they get up to the ledge Lloyd's will survive for the moment, but they still have to "surmount" the remaining problems (the upper slope). The ledge and the upper slope is a visual metaphor for the solution to Lloyd's current problems in that reaching this particular part of the mountain connotes an effective, successful settlement, while slipping back down the mountain connotes failure. The visual representation of Lloyd's attempts to deal with these problems is complemented through the intersemiotic synonymy evident in the use of *'business plan'*, *'plan'* and *'settlement'*, (referring to the rescue package set up to solve Lloyd's problems), the intersemiotic repetition of *'solution'*, and the significant usage of intersemiotic hyponymy in the types of actions proposed as part of this rescue plan, as in *'reforms'* (in the previous report), *'cost-cutting'*, *'sacking ... staff'*, *'make economies'*, *'amalgamation'*, *'centralisation'*, *'higher underwriting standards'*, *'insulate newcomers'* (from the past problems), *'present a united front'* (against claimants), *'minimise the sums siphoned off'*, and *'budget measures'*. These are all types of solutions which have been discussed in previous articles in *The Economist* magazine, and which can be subsumed under the super-ordinate classifier "solution", as visually connoted by the ledge and upper slope of the mountain.

Climbing - pushing up (enacting solutions with effort)

The actions of the two men, that of “Climbing - pushing up”, represents their attempts at enacting solutions, and as mentioned previously there is a sense visually created that their actions involve making an effort or struggling with Lloyd’s problems. The action portrayed is reinforced intersemiotically at the very beginning of the verbal aspect of the text by the intersemiotic repetition of ‘*climb*’, followed by the intersemiotic synonymy of ‘*scaled*’ and ‘*stepped up*’. The supplementary attribute of effort being expended is also reinforced by the intersemiotic collocation of ‘*boost*’, ‘*struggled*’, ‘*control*’, ‘*exert*’, ‘*spur*’, ‘*cope*’, ‘*contesting*’, ‘*ensuring*’, ‘*fighting*’ and ‘*willingness*’, all lexical items which could be reasonably expected to occur to varying degrees in any discussion of a topic involving the expending of commitment, effort, struggle and strain. The metaphorical meanings of these two conflated VMEs is important, in that the lexical items semantically related to the actions portrayed and their manner of being performed describe aspects of Lloyd’s problems (as in: ‘*Names who struggled to pay*’; *insurers are fighting policyholders*’) and the actions being taken to solve them (as in: ‘*cost-cutting ... is being stepped up*’; ‘*the centre may exert some control*’; ‘*spur higher underwriting standards*’; ‘*willingness to listen*’). These intersemiotic lexical items tend to semantically mirror the represented actions provided by the sketch caricature both in type and intensity, and they also refer to subject matter that has been treated in the texts previously published.

Mountain (Lloyd’s path - time/place)

The profile of the mountain denoting a circumstance of setting (where the action takes place) is not only important in terms of the visual meanings projected by the two men’s (or Lloyd’s) situation, what they are doing, and how they are doing it. The visually represented mountain also projects metaphorical meaning as a visual narrative showing the two men’s (or Lloyd’s) past path, present situation and possible future. There is therefore a chronological connotation or metaphor projected, where the side of the mountain and the mountain itself connotes a narrative of the past, present and future. The mountain as denoted setting is announced at the very beginning of the verbal aspect of the text by the

intersemiotic repetition of '*Mountain*', followed by '*peak*' (which forms an intersemiotic collocation with the visually represented mountain), and then '*chunk*' (which forms an intersemiotic collocation with the visually represented boulder). The lexical items '*under*', '*down*', '*thin air*', and '*high*' also form intersemiotic collocations by being related to the positional and descriptive aspects of mountains and their physical settings. These work to supplement the visual setting represented in the sketch caricature. The mountain as a narrative metaphor for Lloyd's history and its future prospects however, is also supported intersemiotically by the time references sprinkled throughout the verbal text. Since Lloyd's 'story' can be considered in terms of a period of time (past-present-future), then the intersemiotic relationship between the visual story and the aspects of the verbal story referred to in the text would seem to be one of intersemiotic meronymy (the whole being the period of time). The inventory bears this out through such repeated use lexical items as '*last year*', '*now*', '*future*', and '*past*', all which could be considered as references to different parts of the whole time period. This is supported by the intersemiotic collocational use of '*background*'.

7.2.3.2 The Line Graphs

As Tables 7.4 (a) and (b) show, there are seven main represented participants in the line graphs which generate seven clear inventories. The derivation and analysis of these will be discussed below.

Active names and Syndicates with open years

The main focus of the line graphs is the behaviour, over time, of the number of "Active names", and the number of "Syndicates with open years". These are important represented participants, an importance reflected by the fact that they have been referred to, discussed and analysed in the two years prior to the publication of the *Mountains* text, and by the degrees to which they are semantically related to the verbal part of the *Mountains* text. Both the participants represented in these line graphs are intricately concerned with the problems that Lloyd's has, is having, and may have in the future. For Active names this is carried and reinforced strongly by using intersemiotic repetition of '*names*', '*active names*', and the supplementary use of intersemiotic synonymy with

'capital providers', 'individuals who provide Lloyd's capital', 'members', 'capital providers', and 'investors'. In the Syndicates with open years intersemiotic repetition is also used via 'syndicates', 'open years', 'syndicate years', 'successor year', 'years ...open', and 'old year'.

1982 - 1993 (time) and 0 - 35,000 (number)

The number and type of intersemiotic sense relations in the inventories generated for the line graphs' independent (time) and dependent (number) variables are also interesting. As mentioned above, the graphs focus on the behaviour, over time, of the number of "Active names", and the number of "Syndicates with open years". With regard to time, the line graphs in the *Mountains* text deal with the period 1983 to 1991/3, which may be considered as a closed set of years. As this text is very much concerned with a discussion of what has happened, what is happening now, and potentially what may happen in the future, any lexical reference to this particular time period is an instance of intersemiotic meronymy because it is a reference to a part of that set of years. The instances of intersemiotic meronymy in the text such as '1989', '1990', 'June', '1988', '1990's', 'late April', '1991', and '1982' are all segments of the time period 1982 to 1993. Discussion centred around the specific set of years is supported by general intersemiotic collocation with lexical items such as 'last year', 'later years', 'now', 'premature', 'future', 'since then', 'past', 'earlier', 'recent', and 'back-dated'.

With regard to the treatment of the dependent variable number, the line graphs in the *Mountains* text deal with the set of numbers ranging from zero to 35,000, which may also be considered as a closed set. The instances of intersemiotic meronymy such as '5000', '20,000', '80', 'one', 'three', and 'two' intersemiotically complement this, as does the significant usage of intersemiotic collocation in '2 billion', 'double-counting', 'more', 'few', 'cumulative', '40%', 'figure', 'sums', 'a lot more', 'some', 'minimise', 'third', 'a lot of' etc. Instances of these kinds of lexical items may be expected to accompany any generalised discussion of money or numerical-related matters. An important issue arises here however. This concerns for example the inclusion of the lexical items 'three' (sentence 33) and 'two' (sentence 64) — as the reader can see, this usage in the

verbal aspect of the text refers to the three problems Lloyd's has to deal with ('*open years, litigation and financing the 1990 losses*') and the two men ('*Rowland*' and '*Middleton*'), not specifically to the set of numbers referred to in the VME. This raises an interesting issue which could be the subject of further more delicate analysis: the selection of lexical items not only from the point of view of their direct intersemiotic semantic relationship to the VMEs, but also in terms of an analysis of the semantic roles they play in the clause, and whether the clausal elements actually relate semantically to the VMEs.

Slumping mounting and Graphic Focus - increasing loss

The portrayed action or processes in the line graphs are indicated by the verbally labelled '*Slumping ... mounting*' graphic headings, both of which reinforce the intertextual history of the whole text and the underlying message focus of the two graphs — that of the increasing losses Lloyd's has been incurring as a result of the decrease in names and the increase in open-year syndicates. Both these processes are expressed in the VMEs "Slumping ... mounting" and "Graphic focus - increasing loss". The general semantic concepts of 'slumping' and 'mounting' are signalled immediately via the use of intersemiotic repetition of '*Mountain*', and continued throughout the text via the intersemiotic synonymy of the set '*climb*', '*scaled*', '*down*', '*stepped up*', '*raise*', '*falls*', '*up*', and '*rising*'. Intersemiotic collocates of 'slumping' and 'mounting' include such lexical items as '*peak*', '*over*', '*higher*', and '*high*'.

The VME "Graphic focus - increasing loss" is, as explained above, the underlying focus of the information presented in the two line graphs, and this focus is consistently reinforced throughout the verbal aspect of the text by the intersemiotic repetition of the lexical items '*losses*', and '*loss*'. This is supported by the strong intersemiotic collocation of '*bankruptcy*', and '*losses*' is contrasted with its logical opposite, the intersemiotic antonymy generated by '*profits*' and '*profitable*'.

Source: Lloyd's of London

This verbal footer giving the source of the data acts as a Circumstance: locative, giving the setting for the graphic action. It is also a VME that is concerned with the main topic area of both the visual and verbal modes in the *Mountains* text — the institution of Lloyd’s of London and its problems. It is first and foremost acting as an identifier of the source of the graphic information displayed; however, in the verbal aspect of the text there is no specific lexical reference to it as that source. As the main subject matter of both the modes however, the lexical items produced in the inventory for this VME mirror those listed in the inventory for the Lloyd’s inventory for the sketch caricature, and thus will not be repeated again here.

Looking at these results in terms of the quantitative data shown in Table 7.5, some interesting comments can be made about the nature of the intersemiotic complementarity between the visual and verbal modes in the *Mountains* text. Firstly, the greatest numbers of instances of intersemiotic complementarity occurred in the two inventories concerned with the general subject matter of the text, that of the institution of Lloyds of London. Both the “Lloyd’s” and “Source: Lloyd’s of London” inventories combined accounted for 31% out of a total of 411 lexical items. This is relatively unsurprising, but it does confirm that both visual and verbal modes do ‘work together’ on the page, at the very least in terms of the general subject matter — this intersemiotic complementarity is realised mainly through a significant usage of intersemiotic repetition and synonymy, intersemiotic sense relations which perform the function of introducing and maintaining the topic and subject matter.

The most significant VMEs next were the dependent and independent variables of the line graphs, the period of time (1982-1993) and the set of numbers (0-35,000). The former accounted for 11% of the lexical items, while the latter accounted for 9% of the lexical items. Both work in concert with the verbal aspect of the text in

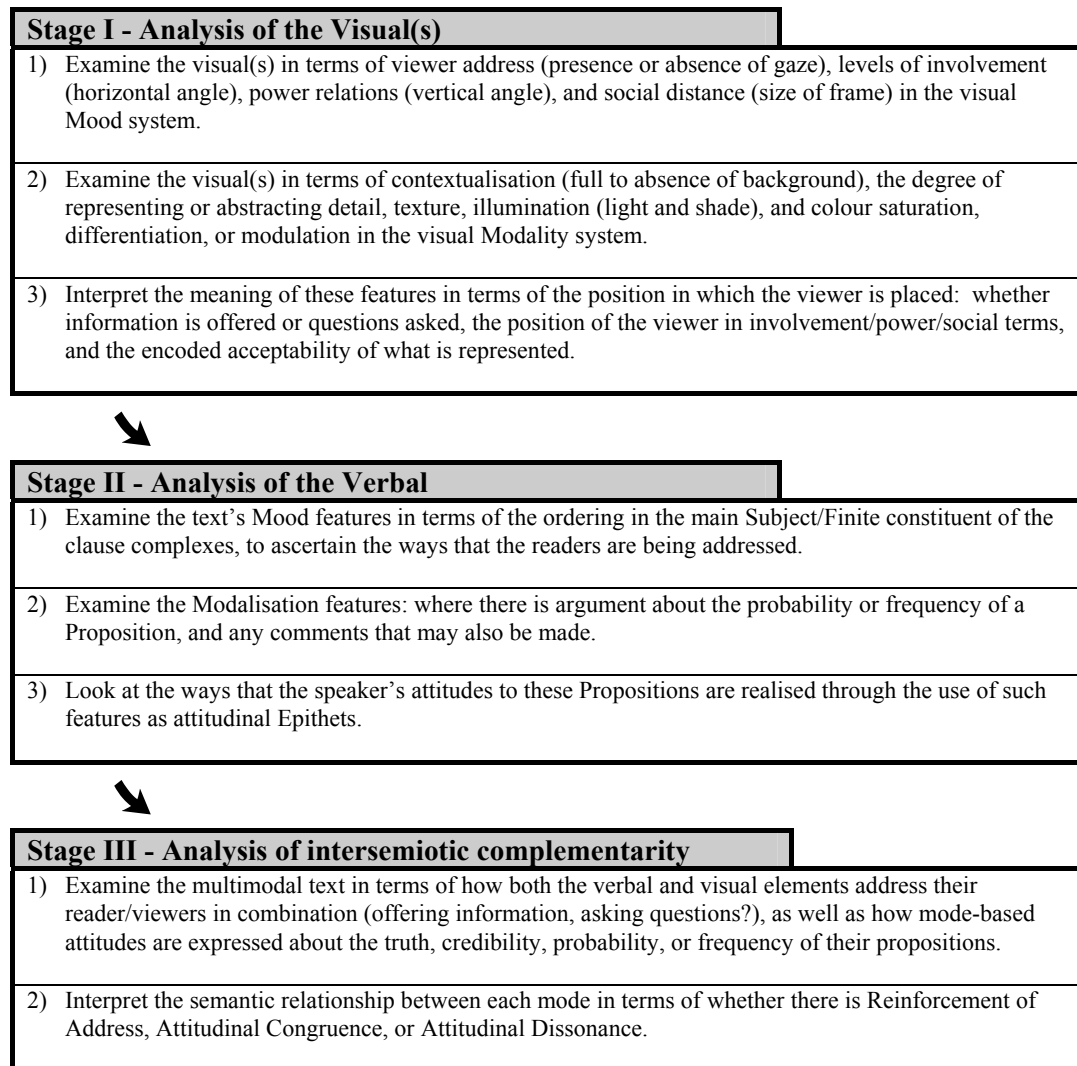


Figure 7.4 Procedural steps in the INTERSEMIOTIC INTERPERSONAL analysis

terms of topic maintenance, or in ideational intersemiotic complementarity with each other in relation to discussing Lloyd's problems in chronological and numerical terms. This topic maintenance is further reinforced when the other VMEs are considered, because they are all concerned with sub-topics of the main subject matter, and as such are further confirmation of ideational intersemiotic complementarity between the visual and verbal modes in dealing with the central topic area, the condition and problems of Lloyd's of London. Finally, much of what the *Mountains* text deals with has been presented and discussed before in previously published articles, so this text is not an isolated textual instance but is one of a progression of texts — it is intertextually connected and has a history which also influences how it may be interpreted intersemiotically.

7.3 An Intersemiotic Interpersonal Analysis of The *Mountains* Text

The examination of the interpersonal features of the sketch caricature and the mathematical line graphs in the *Mountains* text involves, in line with the social view taken in this study, a look at the ways that relations between the visual and the viewer are represented. As explained in the Chapter Five, the ways in which the producer and viewer of a visual are placed socially in relation to each other is important because this can affect the topic of the visual, the ways that it is read, and the ways that it is interpreted. In the socially-determined context of *The Economist* magazine, an examination of the ways that the visuals in the *Mountains* text represent interpersonal features in the differing visual coding orientations will require an analysis of the ways that they address the viewers (in terms of visual MOOD “speech acts”), the degrees of involvement and power relations encoded between them (in terms of visual point of view), the social distance that is produced, and the attitudes that are presented (in terms of visual Modality). The ways that these visual meanings are related intersemiotically to the verbal aspect of the text can then be examined to test the proposition that interpersonal meanings in both modes in the *Mountains* text are related through intersemiotic reinforcement of address (MOOD), and through intersemiotic attitudinal congruence and attitudinal dissonance (Modality) relations. The actual sequence of steps taken in this analysis are outlined in the Figure 7.4.

7.3.1 Visual Address (MOOD): Offers and Demands

As already discussed in Chapter Five, the four primary speech functions proposed by Halliday (1995) can also be used to interpret the interpersonal meanings in visuals in terms of whether these forms of address are offers or demands. Offers and demands were broken down into:

- offering information (a statement that can be agreed with, acknowledged or contradicted).
- demanding information (questions which can be answered or disclaimed).
- offering goods and services (offers which can be accepted or rejected).
- demanding goods and services (commands which can be undertaken or refused).

It was also stated that when considering these forms of address in visual communication, these categories are not so easily applied — visuals often need verbal support to make the nature of the speech function clear, as in what looks like a visual offer of goods and services supported by a verbal contact address in an advertisement, or the verbal reinforcement provided by a printed question to complement a questioning facial expression (Kress and van Leeuwen 1990:30). Halliday's (1985:70-71) distinction between the PROPOSAL in the exchanging of goods and services, and the PROPOSITION in the exchanging of information was also considered, with the point made that while it is an important distinction in spoken language, in page-based text like that produced by *The Economist* magazine it is not goods and services that are exchanged with its readers, but information (if an offer of goods and services seems to be being made, it is usually an advertisement, and in the form of information about the offer - the reader can't physically pick up the offered goods and services during the actual discourse act as in a spoken exchange, but can at a later date if the offer is accepted). Given these points, the analysis of *The Economist* magazine here will consider how intersemiotic complementarity in *The Economist* magazine is realised through the ways that its propositions are addressed to its readers via questions and statements in the exchange of information. This is a concern with forms of Visual Address ("Visual Speech Acts"), or the ways that *The Economist* magazine addresses its readers in order to exchange (or offer) information.

In the *Mountains* text, the sketch caricature and the mathematical line graphs can be interpreted as offering information via the speech function of making

statements. In the sketch caricature the absence of any gaze or facial expressions towards the viewer suggests that it is simply offering information. There are no indications of a question being asked (realised by vector drawn from some point of origin to the viewer's face), nor gestures which command (realised for example by a pointed finger forming a vector to the viewer). There are no vectors which can be drawn from the represented participants directly towards the viewers; all the vectors are concerned with the represented participants within the visual frame, and relate to the ways that they are interacting with each other. The sketch caricature is therefore a portrayal or a scene on which the viewer can look with really no requirement to react other than to agree with it, or to either acknowledge or contradict its existence or veracity as an acceptable scene (some elements of this will be discussed in the section on visual modality). This interpretation is corroborated by the verbal support provided by the label "Lloyd's" which simply labels or identifies the boulder as metaphorically representing the Lloyd's insurance market, and the interplay between the horizontal and vertical angles which affect the level of involvement by the viewers and the power relations encoded between them and the represented participants respectively (discussed more fully in the next section).

In the mathematical line graphs, there really is no question that they are offering information. The represented participants form no other relationship to the viewer(s) than being simply a display of numbers and graphic lines which indicate some inter-related information or data. The viewer is not asked anything about the information, but basically offered information which can be agreed or disagreed with, or acknowledged or contradicted.

7.3.2 Visual Point of View: Involvement

As pointed out in Chapter Five, the level of involvement by a viewer with a visual is realised by horizontal angle, which is concerned with the interrelationship between two frontal planes: the frontal plane of the constructor of the visual and the frontal plane of the represented participants. These planes can be aligned parallel to each other, or diverge by forming an angle of varying degrees with each other. A visual can therefore have either a frontal or oblique point of view, the

oblique point of view being a continuum of obliqueness according to the angle of the divergence. The frontal angle is a statement of inclusion between the constructor and the visual, while an oblique angle encodes degrees of commitment to the subject or represented participants, stating to varying degrees of intensity the level of inclusion. The right-angled or perpendicular oblique angle would be suggestive of viewing a scene with no involvement at all beyond stating that ‘this is a scene’.

The sketch caricature in the *Mountains* text is a naturalistic visual which, in terms of the horizontal angle, has an extreme oblique point of view. The frontal plane of the viewer of this visual (which is the same as that taken by its drawers) is perpendicular to the frontal plane of the most visually salient represented participants, the two men and the boulder. There is thus a clear absence of involvement with the scene on the part of the viewer, not by choice (although that may be the case), but by the lack of involvement coded (or loaded) into the visual by its constructor(s). It is a scene which shows action happening, and because of the extreme obliqueness of the angle puts the viewers in the place of those who are, as it were, watching from the sidelines — it is action played out on a tableaux which requires nothing of the viewer except to observe the scene. This accords with the classification of the sketch caricature as a visual offer of information which can be agreed or disagreed with, acknowledged, or contradicted.

The line graphs in the *Mountains* text are also viewed from an extreme oblique point of view, which is really the only way that they can be viewed, since they are mathematical visuals representing their meanings on a two-dimensional plane. All viewers are forced to view the information portrayed in an abstract graphic form as an offer of information with which they can agree or disagree, acknowledge or contradict. Unlike the naturalistic visuals, into which their constructors can encode various degrees of involvement through degrees of obliqueness, the mathematical visuals are because of their scientific/technological coding orientation restricted to a two-dimensional plane which leaves no other choice for the viewers than to be an uninvolved observer of a statement of information or data. There is really no way that this type of visual can include the viewer. Even if some element is

introduced giving the mathematical visual some resemblance to a three-dimensional form and perhaps an opportunity to lessen the severity of the oblique point of view, as the line graphs do with the use of shadowed boxes giving the impression of a couple of raised pages on a featureless plane, the two-dimensional nature of the graphic plane (pages) is still forcing the viewers to view the information from the most extreme oblique angle. It really makes no sense to look at the visuals from the point of view of the frontal plane of the represented participants (the line graphs), since all that could be seen would be the edge of the page on which they have been drawn.

7.3.3 Visual Point of View: Power Relations

The power relations between the viewers and the represented participants in a visual are encoded in the vertical angle formed between them. This was referred to in Chapter Five as related to aspects of cinematography where the viewers of film are positioned to react to the participants in a particular shot according to whether they are looking down to, up to, or at eye-level with them. This produces three power positions: a high angle, a low angle and an eye-level angle. The high angle forces the viewers to look down on the represented participants, which is suggestive of a superiority to them or of their insignificance, a low angle forces the viewer to look up to them, which is suggestive of an inferior position to them, or of their magnificence, and an eye-level angle is suggestive of a sense of equality between the viewer and the represented participants. Both the sketch caricature and the mathematical line graphs in the *Mountains* text form an eye-level angle between the viewer and the represented participants, and therefore do not place the represented participants in either a superior or inferior position. This is in line with the previously mentioned interpretations of the visuals as offering information, and as offering this information from an oblique point of view, both of which encode a positioning for no involvement.

7.3.4 Visual Point of View: Social Distance

A further aspect which is specific to naturalistic images (not to mathematical visuals) is the degree of social distance encoded between the represented participants and the viewer(s), as realised by the size of frame. As explained in

Chapter Five, in television production the size of frame affects how much of the human body is shown in the visual frame, giving therefore the close up, the medium shot, and the long shot etc. These different kinds of shots have a parallel with the varying distances between people when they talk to each other face to face, where it can be intimate or friendly, or unknown. Contextually-based distances may involve interaction in specific social and public situations, where a well-known, familiar or unknown public figure is delivering a speech to an audience. In the sketch caricature, the degree of social distance between the represented (human) participants can be characterised as a long to very long shot, where their full figures are shown and a significant amount of the physical context in which they are placed is also portrayed. This long to very long shot has the effect of making the figures portrayed seem to be part of a larger scene, and lends weight to previous interpretations which suggest that what the sketch caricature is presenting is a scene which asks the viewer to do very little in terms of involvement with the represented participants, beyond simply observing the portrayal of what is going on. In relation to the mathematical line graphs, we can see that the size of frame differences really do not have any application, since choosing a long shot or close up shot does not have any impact on how much of the graphs is shown — if using a close up shot meant that some part of the graph was missing then the visual would cease to be a valid mathematical representation.

Thus, up to this point we have two visuals which basically address the viewers with visual statements, and make no demands on them to be involved in any way beyond being accorded at the very least a neutral or equal status. The viewer is therefore treated as a peer who is required to either accept or reject the offers of information made. These offers are not simply made in terms of bald facts and ideas however; they are made from certain viewpoints which encode various attitudes.

7.3.5 Visual Modality: Viewer Attitudes

As was shown in Chapter Five, in the visual semiotic code visuals can, like language, also be interpreted in terms of the truth, credibility, and probability of what they represent to the viewer(s), and the information they offer can also be

affirmed or denied according to whether something is or is not, is real or unreal, as well as whether other possibilities exist which can express degrees of certainty or uncertainty (where *perhaps* something could happen), or of usuality, (where something might *sometimes* happen, but not *always*). The viewer attitudes encoded in both forms of visuals in the *Mountains* text will now be considered in turn.

7.3.5.1 The Attitudes in the Sketch Caricature

The interpretation of the degrees to which a visual is considered to be real or unreal, credible or incredible, possible or impossible depends in the first instance on its visual coding orientation. The sketch caricature is one type of visual from a continuum of naturalistic visuals which are considered to be real/unreal or possible/impossible depending on the degree of accuracy of their representation of reality. This continuum was outlined in Chapter Five as a categorisation for describing the various forms of visuals extent in *The Economist* magazine in the naturalistic coding orientation, which consisted of the colour photograph, the black/white photograph, the sketch drawing, the sketch caricature, and the line sketch. This visual coding orientation is concerned with the varying degrees to which naturalistic visuals (and by default their drawers) attempt to portray 'natural' images, visuals which the members of a particular cultural setting would agree to be a recognisable form of a representation of reality, as viewed by the human eye.

The sketch caricature in the *Mountains* text, like many others used in *The Economist* magazine, is an attempt to represent familiar objects, entities, scenes, characters or actions (real or fictional) which are easily recognisable to the viewers, but are abstracted via caricature. As such it is not a totally accurate representation, but a stylistic drawing form in which the main features of the represented participants have been emphasised to present them from particular attitudinal viewpoints, ones which the drawer(s) hold and wish to convey to any potential viewer(s). The sketch caricature in the *Mountains* text gives the viewer(s) more freedom to agree or disagree with the portrayal, to acknowledge it, or to contradict it. It is therefore a 'suggested' or 'loaded' interpretation of reality, and as such carries a lower modality in terms of its representation of 'truth' than

photographs or realistic sketch drawings. What is presented is not a true representation of reality, but a whimsical version of it. The absence of colour and the abstraction away from many physical details in the *sketch caricature* which could have been included, such as additional facial and physical features, and landscape features such as plants, trees etc., also adds to this relatively low modality. The emphasis in the sketch caricature is therefore not on accuracy or realism, but on presenting a subject in such a way that the main features are caricatured, and so drawing attention to the attitudes that the drawers wish to express.

The analysis of the ideational features of the sketch caricature shows that it projects a number of visual messages to its viewer(s), and as discussed above, its presentation in caricatured form accords varying degrees of credibility to the represented participants and therefore the visual messages, as well as bestows on it certain attitudes. These messages of credibility and associated attitudes are basically centred around:

- the two financiers (representing Rowland and Middleton)
- the boulder (representing Lloyd's problems)
- the men's climbing/pushing up actions (representing the two men strenuously enacting the solutions to Lloyd's problems)
- the mountain-side (representing where they have gone, where they are now, and their future path)

The scene presented in the sketch caricature is not a realistic one; one would hardly see in the real world two be-suited financiers trying to push *anything* up a mountain-side, let alone one that is so much larger than them, and on a sharply steepening slope. It is an impossible situation, which allows the focus of the visual to be on the attitudes that the constructor of this visual hope to impart to the viewers. It is an offer of information about a version of *suggested* reality. A closer examination of each of these represented participants reveals some interesting attitudes or dispositions. These are summarised in the following sections.

Middleton & Rowland (the two financiers)

Both Rowland and Middleton are only slightly caricatured in that the pin-stripe suits they are wearing are believable as financial/banking suits, their bodies are in proportion, and they are carrying out actions which they both could realistically

perform in some situations — that of pushing up something, together. They are not made to look silly or comical in their general appearance, although the added detail of the pinstripe pattern of their suits clearly labels them as financial ‘types’, and may relate to the drawer’s own perceptions of the attitudes his or her potential viewing audience may hold about people from that profession. In a sense the attitude to be adopted by the viewer is to be largely neutral in that he or she is being required to have an attitude of recognition. This attitude is reinforced by the relatively larger than usual size of their heads, the addition of such features as glasses, and the sketched facial features which allow them to be more easily recognised and differentiated.

Boulder (Lloyd’s problems)

The boulder, metaphorically representing Lloyd’s problems, is very highly caricatured in the sense that real boulders are very rarely perfectly round, and are very rarely portrayed interacting with much smaller people on the side of a steep mountain. The viewer here is not meant to take this boulder seriously, but is meant to associate it with Lloyd’s and its problems — an attitudinal association realised by the verbal label “Lloyd’s”, a technique used to ensure that the message gets across to the viewer(s). The viewer is meant also to see these problems as having large dimensions, which is an attitude realised by the boulder’s visual salience in relation to the other represented participants. The constructor of this visual is therefore inculcating in the viewer an attitude that Lloyd’s problems (the boulder) are enormous, and that the smaller represented participants it is interacting with have a difficult task ahead to handle or control it.

Climbing-pushing up (with effort)

The actions of the two men in attempting to deal with the enormous, weighty problem of Lloyd’s are believable human actions, and the body postures portrayed are also accurate and believable. However, the situation is not a realistic one in that two financial managers would hardly be engaged in this kind of activity on a mountain-side, dressed in the ‘uniform’ of bankers, the pin-striped suit. The message here is the difficulty of the (ascending) action, which involves effort and

struggle. The attitude portrayed in the visual is therefore one of difficulty, of struggling with the huge, unwieldy problems.

The mountain-side (lower slope, ledge, upper slope)

The mountain-side presents the viewer with a highly caricatured representation. It is not a believable mountain, but it suggests to the viewer a visual metaphor of what the two men may encounter as they attempt to deal with the unwieldiness of the Lloyd's (problems) boulder. The attitude that the viewer is supposed to have in relation to the scene on this mountain-side is that it is difficult and bordering on impossible, a difficulty and impossibility realised by the variations in the degrees of the slope of the mountain. The viewer is asked to understand that although the two men may have managed to survive their troubles so far, they may be faced with a further, steeper slope, suggesting a very uncertain future for both Lloyd's and perhaps the two men. By using the slope of the mountain-side, the creator of this visual has loaded in an attitude regarding Lloyd's and the two men's chances of survival. If the men fail in their task of pushing this boulder up the slope (i.e. to solve Lloyd's current or immediate problems), the boulder will roll over them, and Lloyd's problems will become uncontrollable, running away down the mountain-side (it could kill them, meaning that they would lose their jobs). If they succeed in reaching the next ledge (solve the current problems - enact the solutions) they will then be faced with an even steeper slope which they may attempt to scale, but may even more likely lead to theirs and Lloyd's destruction (insurmountable problems). This is reinforced again if the viewer takes into account that the ledge has just enough room for the boulder, but not for the two men. The attitude projected to the viewer(s) is therefore one of doubt about the future, and not one of optimism, but of pessimism. Even if they solve the current problems, they face almost certain failure soon after.

7.3.5.2 The Attitudes in the Line Graphs

The line graphs, as mathematical visuals, are on the other hand instances which are derived from the scientific/technological visual coding orientation. As discussed in Chapter Five, in this orientation the level of credibility does not rest on the degree to which something is accurately represented, but on how efficiently

it represents data in a quantitative form. What is 'real' in this coding orientation is dependent on how much the visual conforms to the accepted scientific and mathematical norms for presenting data in a visual format in the various contexts in which it may occur. This orientation therefore focuses on how phenomena are counted, weighed and measured, and how these measured features interact with each other in an abstracted, two dimensional plane. What is 'real' can be interpreted in terms of whether it effectively utilises these accepted norms of mathematical interpretation of interacting data. There is also a continuum of scientific/technological acceptability which, depending on the degree of use of certain kinds of scientific/technological visual techniques, places the viewer(s) in various attitudinal positions. These attitudes will vary across different contexts and disciplines, and the means of graphic representation in some of the 'hard' sciences like physics and chemistry will differ to those that are acceptable to a discipline like economics or accounting.

As shown in Chapter Five, the kinds of mathematical visuals used in *The Economist* magazine are largely line graphs, bar graphs, pie charts, and tables. These kinds of visuals vary in the amount of data they show and the ways that are deemed to be appropriate by the members of the discipline for whom they are produced. Since *The Economist* magazine is produced for a wide audience of professional and non-professional readers in the economic and financial sphere who are both initiates and non-initiates with mathematical presentation techniques, mathematical modality in *The Economist* could be interpreted by making reference to the continuum of mathematical modality as suggested in Figure 5.11 in Chapter Five.

The line graphs, according to this modality continuum, could be identified as being of median modality (placed approximately between type 2 and 3) because they combine elements of both these descriptions. For example, there is no colour used within the visual frame, and the visual is decontextualised by the black line bordering. On the other hand the mathematical relationships shown are the relatively straight-forward derivative (rate of change) relation between only two variables (sometimes three or four could be portrayed in the professional

literature), and both line graphs within the visual frame are dominated by the interpretative headline which does not focus on the topic of the graphs, but interprets them for the viewers ('slumping' for the names; 'mounting' for the open year syndicates); thus, the viewers really don't need to look at the behaviour of the graphs closely at all.

The line graphs are therefore hardly the kind of mathematical representations which would be expected to appear in a professional journal on economics. They may possibly be found in a textbook on economics, but this is not very likely because of the accent on the visually salient interpretative headline '*Slumping ... mounting*', and due to the simplicity of the data and relationships shown. It is a mathematical visual which, it could be reasonably suggested, is aimed mainly at an audience which may or may not be familiar with more complex forms of graphic presentation, but certainly do not really want the issues discussed using professional rhetorical and visual methods. This interpretation can be supported by the view of *The Economist* magazine's editorial staff discussed in Chapter Six, where it was stated that one of the primary purposes in the graphic design process was to attract and keep the subscribing reader interested; mathematical visuals were to support the information in the article, but with the proviso that information that is presented in too complex a form will not fulfil the primary aim.

As shown in the analysis of the line graphs visual's ideational features, there are a number of visual messages projected at its viewer(s), and their presentation in mathematical form accords varying degrees of credibility to the represented participants and hence the visual messages, as well as endows them with certain attitudes. These messages of credibility and endowed attitudes are basically centred around:

- graphic focus - the idea of increasing losses for Lloyd's (decreases in names means less capital, increasing open year syndicates means names lose money).
- "Slumping ... mounting": the visual headline which synonymises the increasing losses.
- Active names: the sub-heading identifying the quantitative focus of the left graph.
- Syndicates with open years: the sub-heading identifying the quantitative focus of the right graph.
- Time: the 'x' axes of both graphs.

- Quantity (number): the ‘y’ axes of both graphs.
- Source: Lloyd’s of London: the footer identifying the source of the data.

What the line graphs visual is essentially doing is presenting, in largely neutral terms, information about the behaviour of two important aspects of the Lloyd’s of London insurance market. As an instance of a mathematical visual derived from the scientific/technological coding orientation, its main focus is to present information in a mathematical format to inform the viewer(s) about the interaction between its represented participants and therefore the visual messages. As already mentioned, as a believable instance of this visual, it has basically median modality - it is a credible instance of a mathematical line graph, although not a professional or academically appropriate instance. Besides the neutral identification and presentation of mathematical data, there are however three instances from these VMEs where the visual does address the viewer specifically with a visual message which in a sense forces the viewer to adopt a specific attitude or disposition beyond the acceptance of its straightforward report of quantitative information. These are the use of the interpretative headline “*Slumping mounting*”, the visual footer “*Source: Lloyd’s of London*”, and the section of the right-hand line graph which presents data on the increase in open year syndicates from early 1990 to 1991. A closer examination of each of these represented participants reveals some interesting attitudes or dispositions, which are summarised below.

Slumping mounting

The use of this interpretative headline is quite clearly an attempt to convey, in as direct a manner as possible, the topic focus of the graphic behaviour, which is “increasing losses” (of money), and the direct causal relationship of the names and open year syndicates. What is interesting in interpersonal terms here however is that the choice of these words in the verbal headers to describe these quantitative movements gives the viewers a much stronger message. They are decidedly emotive words which ask the viewers to adopt a certain feeling or disposition to the increasing losses implied in the line graphs. A check of a thesaurus supports this point (Random House Webster’s 1992). The word ‘*slumping*’ is synonymised by making reference to a dying man, personal problems, being tired, and an economic slowdown, while ‘*mounting*’ is explicated by reference to climbing a

ladder, a death toll, riding a camel, and guns on warships. The former is almost totally concerned with negative emotions, while the latter is a little less, though it could be, especially when preceded by such a word as ‘*slumping*’ in a headline. This interpretation can be further confirmed when the question is asked why the graph constructors did not choose more neutral, less emotive words like ‘*Decreasing... increasing*’, or ‘*Falling ... rising*’ for the line graph headings. The viewer is thus being directly addressed with an offer of information which is loaded with an attitude suggesting a sense of foreboding, or deepening concern about the future.

Source: Lloyd’s of London

The function of this verbal footer is clear in that it is telling the viewer(s) that the information is derived from the Lloyds’ of London data bank. It is asking the viewer(s) to adopt an attitude of acceptance of the data as being authentic and accurate. It is giving the information contained within the visual frame (not the individual line graphs themselves) an ‘official’ seal of approval, so it is assigning a higher modality to this content — the viewer(s) should believe what they are told. The viewer(s) are informed that the information portrayed is within the sphere of the economic or financial world (in ideational terms), and in interpersonal terms are also manipulated by the footer giving the data an official *imprimatur* which not only indicates the source of the data, but assures its accuracy.

Line graph data on open year syndicates from early 1990 to 1991

The occurrence of this part of the open year syndicates line graph is interesting in that its content relates directly to the above two attitudes. In brief, this graph is showing data which has not been calculated at the time of the publication of this issue of *The Economist*. This point is directly concerned with the already discussed practice of the Lloyd’s Corporation closing the accounts on syndicates three years after they officially close to allow outstanding claims to be settled — since this text was published in March, 1993, three years back is March 1990, yet this line graph shows data up until early 1991. Also, the sentences 11 to 15 in the verbal aspect of the text refer specifically and discuss the fact that the 1990 figures

will be announced in June 1993. In the light of the official imprimatur given by the *'Source: Lloyd's of London'* footer, and the use of an emotive, interpretative headline, the reader is being asked to accept the data portrayed as being accurate, believable, when in fact a portion of it is a projection of what can be expected. The viewer is asked to agree with this encoded view of the future.

Thus, the line graphs are making visual statements to the viewers by simply reporting the data, and the viewers are asked to adopt an attitude of acceptance of them as believable instances of mathematical reportage. However, the viewers are also asked, through embedded verbal means, to adopt the attitudes inherent in the headlines, that of concern about, and a negative impression of the future. Here the headline in a sense 'anchors' the attitudinal meaning of the mathematical modes, and could be seen as an instance of what Barthes (1977) was referring to in his discussion of 'anchorage' in image-text relations, where the 'terror of uncertain signs' are somehow fixed by the verbal.

7.3.6 The *Mountains* Text: An Interpersonal Intersemiotic Complementarity Analysis

As discussed in the previous sections, the *Mountains* text visuals address their viewers by making visual statements. They also indicate and project to them a range of attitudes about what is represented. This section will be concerned with ascertaining the ways that the verbal mode intersemiotically complements the visual forms of address and visual attitudes presented in an attempt to show the ways that interpersonal intersemiotic complementarity can be realised.

7.3.6.1 The Analysis of Intersemiotic Address in the *Mountains* Text

In Chapter Five the explanation of MOOD in the SFL grammar model pointed out that in language the role in the exchange and the nature of the commodity exchanged can be combined into the four primary speech functions of Offer, Command, Statement and Question, which can be matched by a set of appropriate responses: accepting the offer, carrying out the command, acknowledging a statement, and answering a question (Halliday 1994:68-69). It also discussed how

when information is exchanged in an interaction between a speaker/listener and a writer/reader, as it commonly is in *The Economist* magazine, it is the MOOD element in the clause which carries the components of information that are bandied back and forth in the exchange and which realise the speech function. It was also shown how both the speech role and whatever is to be exchanged are expressed in lexicogrammatical terms through the choices made in the MOOD structure of the clause, in terms of the ordering of the Subject, Finite, Predicators, and various aspects of the Residue.

In the discussion of Visual Address in *The Economist* magazine above, it was seen that the main form of address is the exchange of information between the magazine and its viewer/readers. This exchange of information can be done by visually asking questions or by visually making statements, and it was found that the only form of visual address was the offer of statements of information. In language, the order of the elements for both these forms of address is significant, in that the order Subject before Finite realises the ‘declarative’ (statement), and the order Finite before Subject realises the ‘interrogative’ (question) in the exchange of information. It is proposed in this section that an examination of the verbal aspect of the *Mountains* text in terms of this ordering may confirm the proposition that interpersonal meanings in both modes in the *Mountains* text are related through intersemiotic reinforcement of address.

An analysis of the Subject/Finite relationship in the clauses in the *Mountains* text is presented in the following Tables 7.6 (a) and (b). These tables show that all of the clauses are declarative in MOOD, and that they are realising the unmarked speech

CI's	Subject/Finite/Predicator Positioning	MOOD	ACT	Sketch Caricature - Visual Offer of Information (statement)	Line Graphs - Visual Offer of Information (statement)
				Intersemiotic Complementarity	Intersemiotic Complementarity
1	<i>Mountains still to climb</i>	none	Stat.	Rein. of Add.	Rein. of Add.
2	<i>April's business plan for Lloyd's / does / not satisfy</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
3	<i>the market/ could / die</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
4	<i>ONE peak scaled / often / reveals</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
5	<i>it / is</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
6	<i>Last year / was</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
7	<i>the market / reported</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
8	<i>lawsuits alleging negligence / mushroomed</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
9	<i>names / were / outraged by</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
10	<i>some / said</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
11	<i>Losses for 1990 / would / be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
12	<i>the insurance cycle / turned</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
13	<i>later years / would / bring</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
14	<i>the new management team of David Rowland as chairman and Peter Middleton as chief executive / would / improve</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
15	<i>(elipsed Subject) / placate</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
16	<i>optimism / now / seems</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
17	<i>It / has / become</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
18	<i>the market's loss for 1990, (elipsed Subject) / will / be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
19	<i>(elipsed Subject) / probably / close to</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
20	<i>a chunk of this - possibly £500m-1 billion - / is</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
21	<i>it / represents</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
22	<i>Both of these / involve</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
23	<i>(elipsed Subject) / not</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
24	<i>the money / still has / to be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
25	<i>1989's losses / were / concentrated</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
26	<i>the 1990 losses / will / be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
27	<i>few names / will / avoid</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
28	<i>The cumulative effect of huge losses / is / undermining</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
29	<i>names / resign</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
30	<i>(elipsed Subject) / go bust</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
31	<i>Lloyd's capacity / has / shrunk</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
32	<i>The market now / has</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
33	<i>Names[[who struggled to pay1989's losses last year]] / will / find</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
34	<i>most / are / trapped</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
35	<i>84% of names / have</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
36	<i>that figure / will / be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
37	<i>Members with open years / can / stop</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
38	<i>they / cannot / leave</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
39	<i>It / is</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
40	<i>(elipsed Subject) which / will / be unveiled</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
41	<i>The plan, / [[which / will / set ...]] is / now being discussed</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
42	<i>its proposals / could / be</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
43	<i>the reforms / suggested</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
44	<i>Cost-cutting, for instance, / is / being</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
45	<i>the huge losses revealed since then / have / softened</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
46	<i>Lloyd's / is / sacking</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
47	<i>agencies / are / following</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
48	<i>Mr Middleton / thinks</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
49	<i>the members' agencies [[that look after names]] and the managing agencies [[that run syndicates]] / are</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
50	<i>The centre / may / exert</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
51	<i>the agencies / all / trade</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.
52	<i>He / wants / to raise</i>	Dec.	Stat.	Rein. of Add.	Rein. of Add.

Table 7.6 (a) Addressing the reader/viewer - Interpersonal Intersemiotic MOOD.

CI's	Subject/Finite/Predicator Positioning	MOOD	ACT	Sketch Caricature - Visual Offer of Information (statement)	Line Graphs - Visual Offer of Information (statement)
				Intersemiotic Complementarity	Intersemiotic Complementarity
53	(elipsed Subject) / to / make	Dec.	Stat.	Rein. of Add.	Rein. of Add.
54	He / is	Dec.	Stat.	Rein. of Add.	Rein. of Add.
55	this / will / be welcomed	Dec.	Stat.	Rein. of Add.	Rein. of Add.
56	it / leaves	Dec.	Stat.	Rein. of Add.	Rein. of Add.
57	The main reason [[that these are so tricky]] / is	Dec.	Stat.	Rein. of Add.	Rein. of Add.
58	Mr. Rowland / likes / to say	Dec.	Stat.	Rein. of Add.	Rein. of Add.
59	The business plan / will / certainly discuss	Dec.	Stat.	Rein. of Add.	Rein. of Add.
60	it / has / to	Dec.	Stat.	Rein. of Add.	Rein. of Add.
61	finding an exit route / has / become	Dec.	Stat.	Rein. of Add.	Rein. of Add.
62	The plan / may / suggest	Dec.	Stat.	Rein. of Add.	Rein. of Add.
63	Centrewrite / will / need	Dec.	Stat.	Rein. of Add.	Rein. of Add.
64	names [[who are relatively free of these burdens]] / will / protest	Dec.	Stat.	Rein. of Add.	Rein. of Add.
65	Those with an eye to the future / say	Dec.	Stat.	Rein. of Add.	Rein. of Add.
66	nobody, individual or incorporated / will / join	Dec.	Stat.	Rein. of Add.	Rein. of Add.
67	Some / have / suggested leaving	Dec.	Stat.	Rein. of Add.	Rein. of Add.
68	(elipsed Subject) / ensuring	Dec.	Stat.	Rein. of Add.	Rein. of Add.
69	capital-providers / can / find	Dec.	Stat.	Rein. of Add.	Rein. of Add.
70	such a move / could / deter	Dec.	Stat.	Rein. of Add.	Rein. of Add.
71	Mr Middleton / sees	Dec.	Stat.	Rein. of Add.	Rein. of Add.
72	that / may / not do	Dec.	Stat.	Rein. of Add.	Rein. of Add.
73	insurers / are / fighting	Dec.	Stat.	Rein. of Add.	Rein. of Add.
74	some recent decisions / have / been helpful	Dec.	Stat.	Rein. of Add.	Rein. of Add.
75	The business plan / will / have less to say	Dec.	Stat.	Rein. of Add.	Rein. of Add.
76	Members' and managing agencies / have / been deluged	Dec.	Stat.	Rein. of Add.	Rein. of Add.
77	they / are	Dec.	Stat.	Rein. of Add.	Rein. of Add.
78	Mr Middleton / points / out	Dec.	Stat.	Rein. of Add.	Rein. of Add.
79	prospective litigants / could / settle	Dec.	Stat.	Rein. of Add.	Rein. of Add.
80	it / would / minimise	Dec.	Stat.	Rein. of Add.	Rein. of Add.
81	the insurers / are / not keen to settle	Dec.	Stat.	Rein. of Add.	Rein. of Add.
82	Not all the claims / are	Dec.	Stat.	Rein. of Add.	Rein. of Add.
83	many E&O insurers / have	Dec.	Stat.	Rein. of Add.	Rein. of Add.
84	the E&O pot of about £1 billion / is	Dec.	Stat.	Rein. of Add.	Rein. of Add.
85	Letting the litigation run / is	Dec.	Stat.	Rein. of Add.	Rein. of Add.
86	It / means	Dec.	Stat.	Rein. of Add.	Rein. of Add.
87	(elipsed Subject) which / might / put off	Dec.	Stat.	Rein. of Add.	Rein. of Add.
88	It / could / drive	Dec.	Stat.	Rein. of Add.	Rein. of Add.
89	Some names / reckon	Dec.	Stat.	Rein. of Add.	Rein. of Add.
90	Lloyd's itself / could / be held	Dec.	Stat.	Rein. of Add.	Rein. of Add.
91	it / were / shown	Dec.	Stat.	Rein. of Add.	Rein. of Add.
92	they / are / right	Dec.	Stat.	Rein. of Add.	Rein. of Add.
93	(elipsed Subject) that / could / close down	Dec.	Stat.	Rein. of Add.	Rein. of Add.
94	the angry names / argue	Dec.	Stat.	Rein. of Add.	Rein. of Add.
95	A bond issue / is	Dec.	Stat.	Rein. of Add.	Rein. of Add.
96	Rising insurance rates / should / make	Dec.	Stat.	Rein. of Add.	Rein. of Add.
97	names / cannot / touch	Dec.	Stat.	Rein. of Add.	Rein. of Add.
98	they / must / meet	Dec.	Stat.	Rein. of Add.	Rein. of Add.
99	Mr Middleton / would / like to help	Dec.	Stat.	Rein. of Add.	Rein. of Add.
100	any borrowing to pay for past losses / could / run	Dec.	Stat.	Rein. of Add.	Rein. of Add.
101	some / see	Dec.	Stat.	Rein. of Add.	Rein. of Add.
102	Mortgaging future profits / would / make	Dec.	Stat.	Rein. of Add.	Rein. of Add.
103	profits / may / not, in the event, materialise;	Dec.	Stat.	Rein. of Add.	Rein. of Add.
104	few people / expected	Dec.	Stat.	Rein. of Add.	Rein. of Add.
105	Names, policy-holders and prospective investors / are / pinning	Dec.	Stat.	Rein. of Add.	Rein. of Add.
106	The two men / win	Dec.	Stat.	Rein. of Add.	Rein. of Add.
107	good intentions / are / not	Dec.	Stat.	Rein. of Add.	Rein. of Add.
108	the plan / cannot / solve	Dec.	Stat.	Rein. of Add.	Rein. of Add.
109	(elipsed Subject/Finite) / help / head off	Dec.	Stat.	Rein. of Add.	Rein. of Add.
110	(elipsed Subject/Finite) / find	Dec.	Stat.	Rein. of Add.	Rein. of Add.
111	Lloyd's / may / not	Dec.	Stat.	Rein. of Add.	Rein. of Add.
112	The stakes / are	Dec.	Stat.	Rein. of Add.	Rein. of Add.

Table 7.6 (b) Addressing the reader/viewer - Interpersonal Intersemiotic MOOD.

function of making a statement. There are no clausal examples of interrogative or imperative MOOD, and thus no evidence of questions asked (even rhetorically) or requests made, and no orders given to the readers. Given that both the visuals address the viewers in this way, we therefore have intersemiotic complementarity realised in terms of the ways that both the visual and verbal modes address the viewer/readers. Both the modes make statements which the viewer/readers can agree or disagree with, acknowledge or contradict, and both intersemiotically complement each other via the relation referred to as reinforcement of address.

This interpretation of the *Mountains text* as being a multimodal or composite offer of information consisting of visual and verbal statements is supported when you look at the level of involvement required by the viewer-reader. In the verbal aspect of the text there are no attempts to directly involve the reader as the other interactant in this exchange of information. An examination of the text reveals for example no forms of direct address, such as reference to the reader as '*the reader*', or the use of the second person pronoun '*you*'. Further, there are no instances of the first person plural pronouns of '*we/us/ours*' used in the inclusive sense to draw the reader into the discussion, as in references such as: '*As we saw in*', or even, '*As we can see in the chart*' which could draw the reader into a multimodal exchange of information. All singular and plural personal pronouns are in the third person, as in the use of '*he/it/its*' and '*they*', and they are used throughout the text in referring to the situation, institutions and people discussed.

The visuals intersemiotically complement this verbal level of involvement (and vice versa). As was pointed out in the previous sections, the sketch caricature in the *Mountains text* is a naturalistic visual which, in terms of the horizontal angle, has an extreme oblique point of view. The frontal plane of the viewer of this visual is perpendicular to the frontal plane of the most visually salient represented participants, the two men and the boulder. There is thus a strong absence of involvement with this scene on the part of the viewer, not by choice (although that may be the case), but by the lack of involvement coded (or loaded) into the visual by its constructor(s). It is a scene which shows action happening, and because of the obliqueness of the angle puts the viewers in the place of those who are, as it

were, watching a scene from a movie —the viewer is required to do nothing except to observe the scene and accept or reject the action represented. The sketch caricature is a visual offer of information which can be agreed or disagreed with, acknowledged, or contradicted.

In addition, the line graphs in the *Mountains* text are also viewed from an oblique point of view. All viewers are forced to view the information portrayed in an abstract graphic form as an offer of information with which they can agree or disagree, acknowledge or contradict. Unlike the naturalistic visuals, into which their constructors can encode various degrees of involvement through degrees of obliqueness, the mathematical visuals are because of their mathematical coding orientation restricted to a two-dimensional plane which leaves no other choice for the viewers than to be an uninvolved observer of a presentation of information or data.

Therefore, in the *Mountains* text we have both the verbal and visual modes addressing the viewer/reader in the same way - they both make offers of information by making statements which can be can be agreed or disagreed with, acknowledged, or contradicted. The reader/viewers are not explicitly referred to, and are assumed in many ways to be simply the receivers of these multimodal statements. Therefore, in terms of address, and involvement there is evidence to confirm the proposition that the intersemiotic complementarity between the visual and verbal modes in the *Mountains* text is realised by intersemiotic reinforcement of address.

7.3.6.2 The Analysis of Intersemiotic Attitudinal Congruence and Attitudinal Dissonance in the *Mountains* Text (Visual-Verbal Modality)

In language the truth or credibility of what is represented by a speaker or writer is expressed through the use of modality at the clause level, and the polarity between the affirmation and denial of this offered information is expressed in terms of whether something is or is not, or whether it is real or unreal (via the Finite element expressing polarity). In between these two extremes of certainty there are other possibilities which express degrees of certainty or uncertainty, where

perhaps something could happen, or of usuality, where something might *sometimes* happen, but not *always* (Halliday 1994:88-92)

As pointed out in the analysis of the visuals in the *Mountains* text, the line graphs, while not of ‘technical’ quality in terms of professional publications in the financial realm, are an accurate representation and report of what has actually happened, and as such would be considered as a collection of definite visual statements of what is or what is not in quantitative terms. An examination of the verbal aspect of the *Mountains* text also reveals a number of definite statements about aspects of the information that the line graphs present. These are presented in Table 7.7.

S's	Firm Statement	Visual Message Element
6	Last year was awful: the market reported losses of over £2 billion (\$3.3 billion) for 1989, ...	Graphic Focus - Increasing Losses
12	... a chunk of this [already-mentioned loss] ... is a form of double-counting,	Graphic Focus - Increasing Losses
15	... whereas 1989's losses were concentrated on the 5,000 names	Graphic Focus - Increasing Losses
16	The cumulative effect of huge losses is undermining the market.	Graphic Focus - Increasing Losses
17	As names resign or go bust, Lloyd's capacity has shrunk.	Graphic Focus - Increasing Losses
20	And most [already-mentioned names] are trapped in "open years" ...	Graphic Focus - Increasing Losses
23	It [already-mentioned losses etc.] is an inauspicious background	Graphic Focus - Increasing Losses

Table 7.7 Factual statements in the *Mountains* text

What Table 7.7 shows is that interpersonal intersemiotic complementarity is realised by the attitudinal congruence relation between the definite visual statements of what has happened (in terms of names and open year syndicates), and the specific references to these events in the verbal aspect of the text.. In the verbal mode statements regarding actual events are made initially about the recent past, covering the major problems that have arisen with Lloyd’s losses (sentence 6). This is followed by statements about the nature of the increasing losses incurred (sentences 12, 15, 16, 20). All of these statements are mirrored visually by the two line graphs’ general graphic message of increasing losses, and the effects of the quantitatively represented behaviour over time of decreasing numbers of names and increasing numbers of open-year syndicates.

It follows from this that if the line graphs as definite visual statements are related intersemiotically through the attitudinal congruence relation to the verbal aspect of the text, then it is possible that this may also be the case with the sketch caricature — it is possible that this visual mode and the verbal mode project the same or similar attitudes in terms of the ways that they attempt to temper their statements. It was pointed out earlier that the sketch caricature is basically addressing the viewers in terms of visual statements, but that these were a ‘suggested’ or ‘loaded’ interpretation of reality, and as such carry a lower modality in terms of a representation of ‘truth’ than photographs or realistic sketch drawings. In this visual what is presented is not a true representation of reality, but a whimsical version of it which projects various attitudes in terms of its believability and possibility. It is not stating what is or is not, or true or false as the line graphs generally are, but is projecting to the viewers a range of attitudes about the situation at Lloyd’s which can be placed somewhere in between.

As discussed in Chapter Five, Halliday (1994:88-92) distinguishes three degrees of modality in the SFL model which relate to three degrees of confidence, or lack of confidence about what a speaker feels towards the truth or otherwise of a proposition. These can be summarised as:

- Low modality is concerned with the possibility that something may be true, and may be realised by modal auxiliaries *may*, *might*, and *could*, as well as by *possible* (Adjective), *possibly*, *perhaps* (Adverb) and *possibility* (Noun).
- Median modality is concerned with the probability that something may be true, based on a reasonable inference about what could be reasonably expected to happen, with the implicit assumption that it is possible for the event to not occur. This may be realised by modal auxiliaries *should*, and *ought*, as well as by *probable* and *likely* (Adjective), *probably* and *presumably* (Adverb), and *probability* and *likelihood* (Noun).
- High modality is concerned with the degree of certainty that something may be true; it is not a categorical assertion, but an expression of diminished certainty. This may be realised by modal auxiliaries *will* and *must*, as well as by *certain* (Adjective), *certainly* and *surely* (Adverb), and *certainty* (Noun).

An analysis of the verbal aspect of the *Mountains* text for the usage of these kinds

Rowland & Middleton	
23	It is an inauspicious background for Lloyd's first-ever business plan, which will be unveiled by Messrs Rowland and Middleton in late April.
Boulder (Lloyd's problems)	
11	... the market's loss for 1990, to be announced in June, will be bigger than that for 1989 ...
15	... the 1990 losses will be more widely spread; few names will avoid them.
19	Names who struggled to pay 1989's losses last year will find it even harder to meet 1990's.
21	Already 84% of names have at least one open year; by June that figure will be close to 100%.
39	And names who are relatively free of these burdens will protest against any tacit mutualisation of losses.
40	Those with an eye to the future say that Lloyd's must insulate newcomers from the cost of the past - otherwise nobody, individual or incorporated, will join.
58	But names cannot touch those profits ; meanwhile, they must meet losses for 1990 (and perhaps 1991).
The Mountainside (future)	
10	Such optimism now seems premature.
11	... the market's loss for 1990, ... will be bigger than that for 1989, probably close to £3 billion.
12	Admittedly, a chunk of this [loss] - possibly £500m-1 billion - is a form of double-counting ...
42	By showing that capital-providers can find the exit blocked, however, such a move could deter new names from signing up.
44	But that [concentrating old-year claims and reserves in a single body] may not do much to close years that are open
47	Mr Middleton points out that, if prospective litigants could settle with the E&O insurers, ... it would minimise the sums siphoned off by lawyers.
51	It means at least three years of bad publicity for Lloyd's, which might put off not only new names but also new policyholders.
52	It [litigation] could drive many agencies into bankruptcy.
57	Rising insurance rates should make the early 1990s profitable.
60	But any borrowing to pay for past losses could run foul of the trade department's solvency rules ...
62	And profits may not , in the event, materialise;
66	If the plan cannot solve the open-year problem, Lloyd's may not survive.
Climbing - pushing up (the solution)	
23	It is an inauspicious background for Lloyd's first-ever business plan, which will be unveiled by Messrs Rowland and Middleton in late April.
24	The plan, which will set Lloyd's future course, is now being discussed by its market board.
32	Most of this [solutions] will be welcomed by names.
45	The business plan will have less to say about the lawsuits lodged by Lloyd's own names.
36	The business plan will certainly discuss open years;
37	The plan may suggest a bigger job for Centrewrite, the Lloyd's-owned insurance company ...
25	According to Mr Middleton, its proposals could be more radical than the reforms suggested in last year's taskforce report
56	A bond issue is also talked of as a possible solution for the third problem, financing 1990's losses - which the business plan may not even discuss.
Lloyd's	
38	But Centrewrite will need a lot more capital from the market
40	Those with an eye to the future say that Lloyd's must insulate newcomers from the cost of the past ...
29	The centre may exert some control
3	If April's business plan for Lloyd's does not satisfy both its capital providers and its clients, the market could die.
51	It means at least three years of bad publicity for Lloyd's, which might put off not only new names but also new policyholders.
53	Some names reckon that, Lloyd's itself could be held liable if it were shown to have acted in bad faith.
54	If they are right, that could close down the whole market.

Table 7.8 (a) Modality features of the sketch caricature

of modality features according to the VMEs in the sketch caricature and the line graphs is presented in Tables 7.8 (a) and (b).

Active names	
19	Names who struggled to pay 1989's losses last year will find it even harder to meet 1990's.
21	Already 84% of names have at least one open year; by June that figure will be close to 100%.
32	Most of this [solutions] will be welcomed by names.
39	And names who are relatively free of these burdens will protest against any tacit mutualisation of losses.
40	Those with an eye to the future say that Lloyd's must insulate newcomers from the cost of the past - otherwise nobody, individual or incorporated, will join.
58	But names cannot touch those profits ; meanwhile, they must meet losses for 1990 (and perhaps 1991).
Slumping mounting	
11	... the market's loss for 1990, to be announced in June, will be bigger than that for 1989 ...
21	Already 84% of names have at least one open year; by June that figure will be close to 100%.
Graphic focus - increasing losses	
15	... the 1990 losses will be more widely spread; few names will avoid them.
19	Names who struggled to pay 1989's losses last year will find it even harder to meet 1990's.
11	... the market's loss for 1990, ... will be bigger than that for 1989, probably close to £3 billion.
12	Admittedly, a chunk of this [loss] - possibly £500m-1 billion - is a form of double-counting ...

Table 7.8 (b) Modality features of the line graphs

As pointed out in Section 7.1 on visual modality in the *Mountains* text, both the sketch caricature and line graphs carry visual modality features which work to mitigate the focus of their attitudes — the sketch caricature was interpreted as being an instance of suggested reality by virtue of its caricaturisation, and the line graphs were interpreted as being definite quantitative statements about past happenings, but of median modality in the mathematical continuum because of the degree of detail shown and the use of the interpretive headlines ‘*Slumping ... mounting*’. What these analyses show is that the treatment of the represented VMEs in both the sketch caricature and the line graphs involves varying levels of modality, producing intersemiotic complementarity in terms of attitudinal congruence.

As Tables 7.8 (a) and (b) show, there are some general patterns which suggest varying degrees of attitudinal congruence between the two modes in the *Mountains* text. What is immediately apparent is that the VMEs representing Lloyd’s problems (the Boulder), the business plan (the action of Climbing-pushing up), and the two financiers (Rowland & Middleton) in the sketch caricature, and those representing the names (Active Names), and the idea of increasing losses (Graphic Focus and Slumping ... mounting) in the line graphs, make significant

usage of high modality (the use of *will, must, certain, certainly, surely, and certainty*) to project to the readers high degrees of certainty with their propositions. This accords with the sketch presentation which has as its premise the shared assumptions by the reader/viewers and the drawer that Lloyd's has problems to deal with, and the graphical presentation of factual information to show how the numbers of names are increasing and that this also means increasing losses. The situation and problems portrayed are real ones, and so are accorded a higher modality.

On the other hand, the treatment of the VMEs concerned with discussions about what will happen in the future (The Mountain-side) shows a very significant usage of low modality (the use of *may, might, could, possible, possibly, perhaps and possibility*) to project to the readers the possibility that something may be true, as opposed to the relative certainty attached to the shared-understanding about Lloyd's problems. This is synonymised by the sketch presentation of the upper mountain-side, which is a visual metaphor for Lloyd's future. What can be seen here is that the drawers obviously consider Lloyd's future to be bleak, with further '*Mountains to climb*' — however the fact that the scene that has been drawn is caricatured gives it the sense that it is a *suggested* future, and this is mirrored by the low modality accorded this aspect of the text's treatment of the same issue, as the penultimate sentence (66) makes clear in '*Lloyd's may not survive*'.

Thus, in terms of the degrees of attitudinal congruence realising intersemiotic complementarity between the two modes in the *Mountains* text, we find that there are three general areas. The first is the attitudinal congruence between the definite statements made by the line graphs and the discussion of them in the verbal aspect of the text. The second is the attitudinal congruence between most of the VMEs in the sketch caricature and the line graphs and the high modality displayed in their treatment, and the third is the attitudinal congruence between the VME dealing with Lloyd's future in the sketch caricature and the relatively lower modality in

Sentence	Rowland & Middleton	Boulder (Lloyd's problems)	Climbing up - pushing up (difficulty)	The Mountainside (future not optimistic)	Slumping ... mounting (concern about future)
1-7					
8		(losses) smaller			
9	(Rowland as) chairman (Middleton as) chief executive				
10					
11		(loss) bigger			
12					
13					
14					
15					
16		huge (losses)			
17					
18					
19			harder		
20		(losses) too big	unpredictable		
21					
22					
23	Messrs (Rowland and Middleton)			inauspicious (background)	inauspicious (background)
24					
25	Mr. (Middleton)	huge (losses)			
26					
27					
28	Mr. (Middleton)				
29					
30					
31					
32					
33		big (problems)			
34		huge (sums)			
35	Mr. (Rowland)				
36					
37		bigger (job)			
38					
39					
40					
41					
42					
43	Mr. (Middleton)				
44					
45					
46					
47	Mr. (Middleton)				
48					
49		(E&O pot) too small			
50					
51					
52					
53					
54					
55					
56					
57					
58					
59	Mr. (Middleton)				
60					
61					
62					
63	Rowland/Middleton				
64	The two men				
65-67					

Table 7.9 Attitudinal intersemiotic complementarity in the sketch caricature

evidence in the verbal aspect of the text. A fourth aspect could also be added here, and that is the lack of attitudinal dissonance, where opposite or ironical attitudes are displayed between the two modes. Based on this analysis it is clear that both modes are placed on the page to work in concert, to offer information via both verbal and visual statements, and to ensure that the ways that it is received and dealt with by the viewers and readers are synonymous. This of course accords with the stated aims of the graphic design team at *The Economist* magazine, where it was stated in Chapter Six that images are generally used to attract the reader to the written article, and mathematical visuals are to support the propositions in it. Of course the use of irony across modes is one of the more popular ways used by graphic designers to attract readers to articles in some magazines, but in *The Economist* magazine, at least in terms of its treatment of a financial issue like Lloyd's, propositional and attitudinal congruence is used consistently.

7.3.6.3 The Analysis of Intersemiotic Attitudinal Congruence and Attitudinal Dissonance in the *Mountains* Text (Attitudinal Attributes and Adjectives).

An examination for further evidence of attitudinal intersemiotic complementarity between the visual and verbal modes in the *Mountains* text reveals a number of features which lend further support to these conclusions of attitudinal congruity. The two most significant instances of intersemiotic complementarity in these terms are concerned with the visually represented men, represented as the VMEs "Rowland & Middleton (the two financiers)", and "the Boulder (Lloyd's problems)". The intersemiotic attitudinal features relevant to these represented participants are realised by the use of forms of address and attitudinal adjectives in the verbal aspect of the text which cohere in a synonymous way with the visual attitudinal message elements. An inventory of the intersemiotic attitudinal adjective features revealed by an analysis of the *Mountains* text are summarised in Table 7.9.

The first and most obvious feature here is the nature of the references or forms of address used for Middleton and Rowland in the verbal aspect of the text, and how this is complemented by their represented visual attributes. As noted previously, caricaturisation is often used to portray represented participants in a comical or

whimsical way, and that both these men are portrayed only in such a way as to facilitate recognition by the viewers. As such they are not the main focus of the message of the sketch caricature. They are treated with perhaps a modicum of respect — they are portrayed in pin-striped suits which accord them some kind of ‘official’ status, and even though they are portrayed as having a difficult immediate and future task, they are not portrayed as incompetent or as unable to cope. This portrayal of their attributes is mirrored in the forms of address used for identifying them in the verbal aspect of the text. Both men are introduced initially in terms of their positions in Lloyd’s through ‘*David Rowland as chairman and Peter Middleton as chief executive*’, both of which are positions of power and responsibility (sentence 9). They are then referred to throughout the rest of the text by the respectful titles of ‘*Messrs*’ and ‘*Mr*’ (sentences 23, 25, 28, 35, 43, 47, and 59), thus according them some respectful hedging on the part of the writers (perhaps this may change if the business plan they have produced fails). What is interesting in this respect also is that in the very last section of the article, where the writers are commenting on Lloyd’s prospects and drawing conclusions from the preceding analyses, the respectful titles are dropped, Middleton and Rowland are mentioned by their last names only (sentence 63), and are finally and simply referred to as ‘*The two men*’ (sentence 64).

The other significant instance of intersemiotic complementarity in terms of attitudinal features are the references made to the magnitude of Lloyd’s problems, as represented by the visually salient boulder, and by the use of adjectives referring to Lloyds’ problems in general, the size of its problems with increasing losses, and the need for raising enough sums of money. The losses are initially referred to in straightforward comparative terms as being ‘*smaller*’ and ‘*bigger*’ than what they are compared to - this occurs in the first eleven sentences of the text, the section which is basically concerned with orienting the reader by reporting the background situation (the discourse structure of the *Mountains* text is presented in the next section). However, once the background is reported, and the analysis of Lloyd’s problems starts, the attitudes to the losses change in nature to the use of much stronger adjectives such as losses which are ‘*huge*’ (sentence 16), and ‘*too big*’ (sentence 20). The problems in general that Lloyds is having are

simply *big* (sentence 33), and the sums of money needed to help are '*huge*' (sentence 34), or the sources of funds to help are '*too small*' (sentence 49).

In terms of the attitudes projected by the line graphs and in relationship to the verbal aspect of the text there is also evidence for intersemiotic complementarity in attitudinal terms between the modes. This can be seen for example in the general graphic focus which conveys the sense that Lloyds is experiencing increasing losses. Both graphs portray this loss in numerical form, and the headings provide an interpretation in terms of the fact that these losses are continuing and increasing. As mentioned already in relation to Lloyd's problems, the losses are initially referred to in straightforward comparative terms as being '*smaller*' (sentence 8) and '*bigger*' (sentence 11) than what they are compared to, and they become losses which are *huge* (sentence 16), and then *too big* (sentence 20). So there is a visual-verbal Attitudinal Reinforcement in terms of the sense of experiencing losses and the variation in their magnitude. This interpretation is reinforced when one considers the fact that the graphs are drawn up in such a way as to emphasise this sense of being *huge*, and then *too big*. As already mentioned, the expression of the rate of change of a variable over time is precisely the function of this type of line graph, and the degrees of change (i.e. magnitude) can be varied by manipulating the one or both axial scales. In this case the scales of the graphs are compressed to make the slope of the graphic lines more acute than if they would be if the year scales were more expanded, with the result that the year-on-year rate of change seems to be greater and the sense of the magnitude of the changes accentuated.

The occurrence of these two significant uses of support for the attitudes expressed in the visuals lends weight to the interpretations of the visuals in terms of their main visual message focus — that of the problems that the management of Lloyd's are having and will have with the magnitude of its financial problems. In both the modes the two men are referred to in reasonably respectful terms, and the attitudes projected regarding the magnitude of the problems that Lloyds is having are also attitudinally congruent. Thus we have, in interpersonal terms, further evidence to support the central proposition of this study, that both the verbal and

visual modes in the *Mountains* text intersemiotically complement each other to produce a coherent multimodal text through reinforcement of address and attitudinal congruence.

7.4 An Intersemiotic Compositional Analysis of The *Mountains* Text

An examination of the intersemiotic compositional features of the *Mountains* text involves an examination of those features of layout which work to realise intersemiotic complementarity between the visual and verbal modes. It will be argued that these various elements or features have not been placed on the page(s) randomly, but for various integrative purposes, the most important of which are to convey to the readers a sense of unity, of co-operation, and of consistency in terms of the information presented in the total message. In the *Mountains* text the ways that the sketch caricature and the mathematical line graphs interact with each other and with the verbal aspect of the text requires making observations about these elements of the text's visual-verbal layout, as well as the text's inter-visual features. There are a number of important visual-verbal compositional aspects in the *Mountains* text which show that both the modes work together to produce this coherent and unified visual-verbal message to the readers. These are concerned with where the visual and verbal elements are spatially organised on the page in terms of their horizontal/vertical, left/right, or central placement, the size of the visual and verbal elements relative to each other, and how the visuals and the type interact with each other in taking up page space. The compositional features of the *Mountains* text will be examined according to the following compositional relations, which were outlined in Chapter Five:

- Information valuation on the page
- Salience on the page
- Degrees of framing of elements on the page
- Inter-visual synonymy
- The importance of potential reading paths

Each of these relations are concerned with some of the major compositional principles already discussed in Chapters Four and Five, such as visual salience and perspective, the use of balance or balancing centres and relative placement on the page, the directionality produced by vectors, reading paths and possible attendant

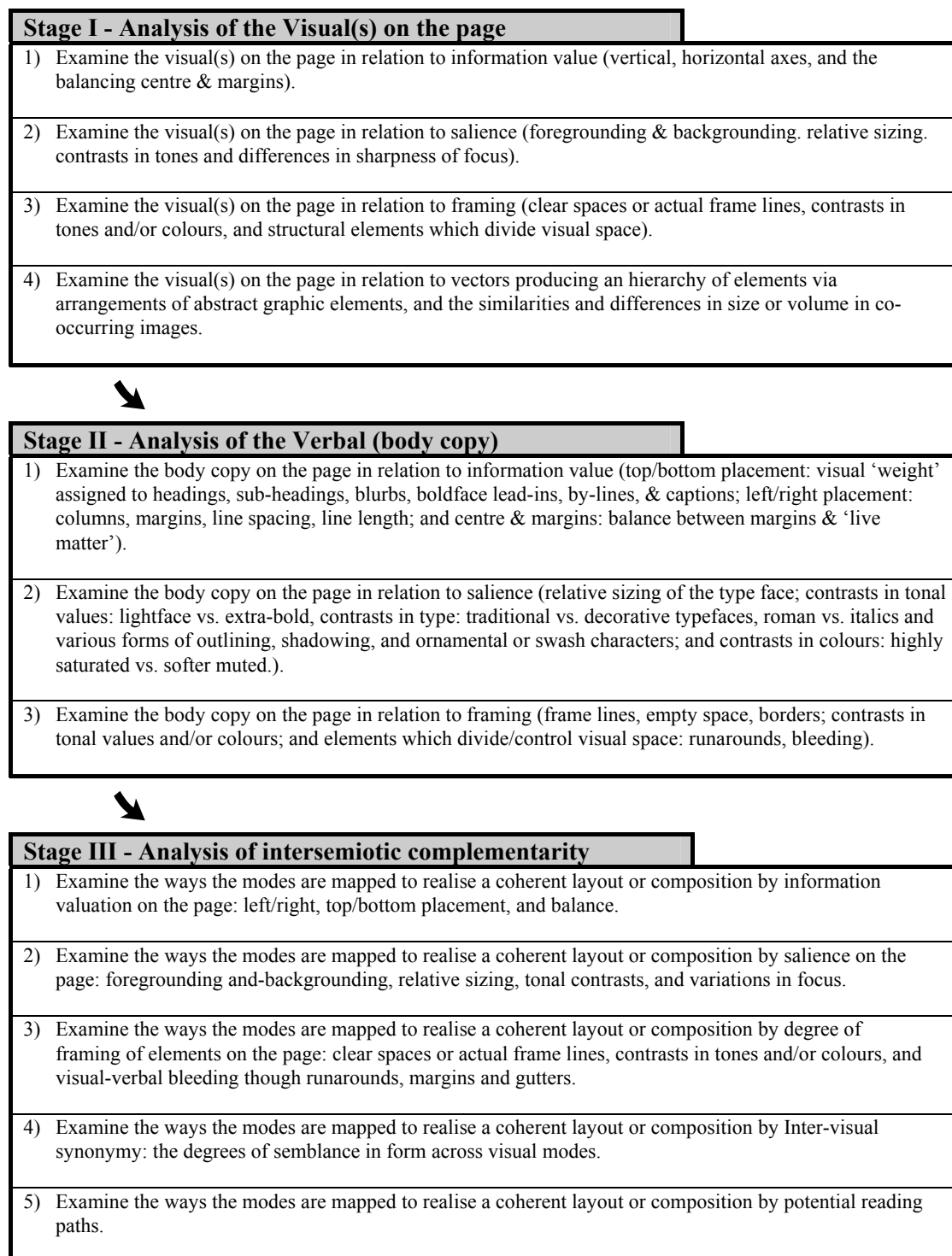


Figure 7.5 Procedural steps in the INTERSEMIOTIC COMPOSITIONAL analysis

narrativisation, and the sense of division produced by visual framing, dividing lines, runarounds and other graphological conventions. These compositional intersemiotic relations can also be examined in terms of the *Mountains* text's discourse structure by investigating how both modes utilise given-new relations and the ways this relates to the chronological development of the issues covered in the article. Before dealing with these features however, they should be prefaced by an examination of the interaction between intertextuality features and compositional aspects of the *Mountains* text's placement in the layout of the whole magazine — this relates to the placement of the Finance department in relation to the whole magazine, and each of the Finance articles in relation to the Finance department itself. The actual sequence of steps taken in this analysis are outlined in the Figure 7.5.

7.4.1 Intertextuality and Composition in the *Mountains* Text

As mentioned previously in the contextual description in Chapter Six, the *Mountains* text has not been produced in isolation, but carries with it the compositional influences of the preceding texts which deal with this specific as well as other more general issues in *The Economist* magazine. Not only has the *Mountains* text's intertextual history left its mark in terms of ideational and interpersonal meanings, but also in terms of various 'coded' layout conventions or sequences that are the result of the layout and design practices that *The Economist* magazine graphic design staff typically follow. This is not only in relation to the ways they have organised the two modes in the *Mountains* text itself, but also in relation to the text's position relative to the other texts in the Finance department, the Finance department to other departments in the magazine, and the compositional features of the whole magazine itself.

The contextual description given in Chapter Six showed that the compositional choices which the graphic design team make in producing an issue of *The Economist* magazine are in large part also influenced by those features of the context of culture which relate specifically to various journalistic, publishing, economic, political, artistic and graphic design, and general western cultural mores (Garrett 1994). This description also demonstrated that *The Economist*

magazine typically consists of a number of departments or sections, one of which is the Finance department, and that these departments share a consistent format in terms of typology and layout. For example, the start of these departments in every issue is always instantiated compositionally by the use of a large bolded and capitalised heading — the Finance department in this case starts with the heading “FINANCE”. This same word, in smaller, bold type, is also placed on the top corner of each subsequent page (on the left of the left-hand page, on the right of the right-hand page) to signal that each of the pages on which it is placed is part of the same department. The ending of this department is signalled by the large bolded heading of the subsequent department, using the same typographical form as that used to signal the beginning of a department. Each of the articles within the Finance department are different in size and length, whether they include visuals or not, but each has a visually salient bolded heading, and an ending signalled by a column-wide dark line with a small black square. In the *Mountains* text, as already seen, the text begins with the large bolded heading ‘*Mountains still to climb*’, and ends with the black line and square. In the particular issue in which the *Mountains* text occurs, this division of the articles by bolded heading and column-wide line is further accentuated by the following article being framed or boxed with double-borders, thus making a clear distinction compositionally between the leading article and the following shorter articles.

7.4.2 Intersemiotic Compositional Features in the *Mountains* text

There are a number of important intersemiotic compositional aspects in the *Mountains* text which demonstrate that both the modes work together to project a coherent visual-verbal bundle of meaning to the readers. As mentioned above, these are concerned with information valuation on the page, salience on the page, degrees of framing of elements on the page, inter-visual synonymy, and the importance of potential reading paths. Each of these will be discussed in the following sections.

A consideration of *Information valuation on the page* is interesting in that the vertical or top/bottom placement of the visuals on the page in the *Mountains* text shows that the sketch caricature is placed in the lower status half of the page, but

this loss of vertical prominence is compensated by its placement in a primary position in relation to the spine, and the fact of its visual salience in terms of size and colour saturation (a casual reader flipping through the magazine will more easily see the sketch caricature first and may be attracted to the article because of the nature of the sketch or the inherent humour of the situation portrayed; this accords with the ‘attract’ function of sketch caricatures, which is to grab the reader’s attention).

On the other hand, the line graph visual is placed in the centre of the top-half of the page, a primary position in terms of visual weight, and as a divider or balancing centre between the two halves of the type. Despite the fact that one of the functions of composition is to be engaged in a “striving for unity” (Arnheim 1988:133), the line graph seems to divide the verbal aspect of the text, to force it to go around the visual frame. This “invasion” of the page space is accentuated by the dividing lines of the graphic borders and the use of the runaround. However, one of the functions of a central placement is that perceptually, for the viewer, central placement also acts as a “stabiliser of weight”, where visual elements “located in the central area or on a centrally located axis gained in power” and helps the objects outside the centre zone to be “united and stabilised when they are grouped around the balancing centre” (133). Thus, the “invasion” of the verbal page space is stabilised by the central placement of the visual, and the sense of compositional unity and inter-modal coherence is maintained.

The relative sizes of the visuals (their visual salience) compared to the verbal aspect of the text in relation to the space taken up by each on the page, referred to as *Saliency on the page*, also illustrates how important the elements are to the compositional makeup of the text. As mentioned in Chapter Five, White (1982:127) has asserted that in compositional terms size is an indicator of visual importance, so a graphic designer should “Signal the Big Idea of the story in the Big Picture - and make that big picture as big and as dominant as possible”. In the *Mountains* text the size of the sketch caricature in relation to the amount of space taken up by the type shows that it is a very significant part of the page and has an important part to play in the multimodal transmission of the thesis of the text. This

signification is accentuated by the fact that the bottom right-hand corner of the page is dominated by the colour saturation of the thick blackness of the mountain, and the vertical and horizontal edges of the corner frame extend well over 50% of the distance of the page borders. The line graph is also visually salient in terms of the surrounding type, taking up a significant proportion of the available space in the top half of the page. This prominence is emphasised via the use of shadowed boxes for the whole visual frame and the individual line graphs, giving a three-dimensional sense that they are being raised to prominence from the surface of the surrounding white space on the page, with the effect of foregrounding them for the viewer.

In terms of the *Degrees of framing of elements on the page*, the first and most obvious feature is the fact that both the visuals in the *Mountains* text compete to varying degrees with the verbal aspect of the text for page space. With the sketch caricature this sense of competition is realised by the fact that there is no uniform division between the verbal (type) space and the visual space of the sketch caricature. If there were a typical clear division in framing terms, there would most probably be a line border, or an orderly (linear) clear space around the visual to delineate it clearly. Here however, the sketch caricature forces the type to conform to its shape, a technique referred to as a *runaround* and purposely used by graphic designers for effect. White claims it is often seen as a dangerous technique in design terms however, because whenever it is used there must be some sacrifice in legibility (White 1982:106-7). This also creates problems for the typesetter in that the type has to be arranged around the visual in such a way that the reader's reading path is not too disrupted, so that there is a clear even space between the visual and the type, and so that the arrangement of the elements on the page in relation to each other does not create a sense of disunity, or a sense of too much disturbance or disharmony.

The dangers in using the runaround can be minimised by adapting the type in some way (usually by changes in font, size or bolding), but in the *Mountains* text this is not done. The severity of this "battle" for space created by the variable runaround on the page between the sketch caricature and the type is however

compensated for by the use of the visual as a page corner framing device. The bottom right corner of the sketch caricature acts as a continuation of the page frame, thus lessening the sense of conflict and giving it a greater sense of inclusion with the type, and a feeling of flow and of compositional unity with the whole page. The bottom right hand corner of the visual actually replaces the type and conveys the visual sense that it is part of the visual frame. Despite this competition for space, the overall effect for the reader is of compositional complementarity, that the sketch caricature forms an integral part of the page, and the two modes in a sense “melt” or blend with each other. In this way, there is an intersemiotic compositional co-operation which conveys to the reader a sense of visual unity, and lends compositional support to the intersemiotic semantic relations in the text.

The same can be said about the visual-verbal compositional interaction between the type and the line graphs. Here the type is again forced to conform to the visual via the use of a linear, evenly spaced runaround. However, the disruption to the type caused by this technique is minimised by the effect created by a more conventional linear border used to cordon off or frame the visual in a clearer and more severe way. There is some contention for page space, but the more conventional runaround in combination with the linear border allows the reader to retain a sense of uniformity and complementarity between the two semiotic modes.

An examination of the visual to visual interface in the *Mountains* text shows some interesting features in terms of how the two different visual coding orientations, naturalistic and mathematical, complement each other in supporting the realisation of the intersemiotic complementarity between the visual and verbal modes. The intersemiotic relation relevant here has been referred to in Chapter Five as Inter-visual synonymy, a relation which is concerned specifically with the degrees of semblance in form across visual modes that work to present a kind of cross-modal harmony, or a compositional intersemiotic complementarity. This complementarity can occur whether the visuals are from the same or different coding orientation — in either case there is the potential for some semblance in

form, shape or colour across the page which can work to mirror the meanings expressed by both visuals.

This kind of inter-visual synonymy can be seen between the sketch caricature and the line graphs, where there are subtle visual harmonies created by the axes they contain. In both visuals, the information that is to be conveyed is above and to the left of the point of origin from which the actual and perceived “x, y” axes can be derived. This axial similarity across modes conveys to the viewer a sense of visual harmony in that the focus of the information they are both presenting is a left to right, climbing/ascending, rising/falling action, and a sense of energy, dynamism and variability. These are realised by the intersemiotic correlations between the upward slope and the rising graph lines, the ledge and the graphic peak (two pausing places), and the downward slope and the falling graph lines.

This compositional complementarity is even further reinforced in the sketch caricature almost exactly mirroring the right-hand line graph’s movement — the sketch caricature represents a movement from left to right up a steep(ening) slope, there is the ledge or peak, and there is a further potential action rising up a steeper slope. The semantic thrust of the verbal headlines ‘*Slumpingmounting*’ lend verbal support also, where the sketch caricature shows someone mounting a slope, and the right-hand line graph shows the numbers of something also rising. The content-focus of both the visuals is supported as well through the use of the verbal labelling of ‘*Lloyd’s*’ in the sketch caricature, and the labelling of the source of the graphic data in the line graphs as being derived from ‘*Lloyd’s of London*’. There is therefore not only a directional and configuration-based synonymy between the visuals, but also lexical repetition and synonymy to reinforce the intersemiotic complementarity in compositional terms they realise.

The importance of potential reading paths is related to the ways that the page space is approached, or the directions which readers of a multimodal text take when they interact with an article. As discussed in Chapter Five, in the SFL model, the textual metafunction is realised in those grammatical and discourse features which serve to organise text, and these resources provide readers with

cues as to where they are and where they are going. In English, what is expressed first, or is in the left hand position in the reading path, is very often what carries information which may be retrieved from the context, may be considered given, or understood as known by the reader. This Given-New structure is mapped onto the thematic structure of a text, providing a “composite texture to the discourse and thereby relat[ing] it to its environment” (Halliday 1994:299). In English the first position in a clause expresses an important and distinct kind of meaning; it signals what the message is about. This is a kind of signpost for the development of the text, and is referred to in SFL as the THEME, or “what the message is concerned with: the point of departure for what the speaker is going to say” (op.cit.38). The rest of the clause, or the new information, is referred to as the RHEME. The semantic relationship between Given-New information structure and thematic structure in language occurs as a result of a speaker choosing a THEME from within what is Given, and then positioning the important subject matter of the New somewhere in the RHEME (op.cit.299).

In the visual semiotic system however, the left to right orientation of the reading path in English and the organisation of meaning into a Given-New contrast is also of importance in organising the ways that meanings are represented to the viewers, but in ways that are of course peculiar to the visual mode. As explained in Chapter Five, in a visual semiotic there are strong culturally-based conventions for interpreting how visuals can be read, one of these being the left to right reading path orientation and the visual expectancy that this can produce in viewers. The discussion which follows will attempt to examine how this sense of expectancy in visuals can be reinforced intersemiotically by the discourse organisation in the verbal text, producing compositional intersemiotic complementarity.

Interpreting visual-verbal intersemiotic relations in the *Mountains* text in the light of the Given-New organisation, and assuming that the visuals should and most

Given/ New	Narrative Stage	Sketch Caricature	Names Line Graph	Syndicates Line Graph	Discourse Stage
GIVEN	PAST	The slope below the boulder represents the past (the path already travelled in terms of losses, names and open years).	The movement of the graph over the years 1982 to January, 1993. A report on past data.	The movement of the graph over the years 1982 to January, 1990. A report on past data.	Reporting the background. Predictions/comment on what has occurred with this topic in the past, and leading up to the current situation. It reports on Lloyd's problems: its losses, decreasing names, lawsuits and the effects on the Lloyd's market. Makes predictions about the release of new loss figures in June 1993, and the effect of these losses on the number of open year syndicates.
GIVEN	PRESENT	The point where the boulder is actually touching the mountain represents the present situation, that of struggling with current problems.	The point on the graph which shows the number of names as at March 27, 1993, the date of the Mountains text publication.	The point on the graph which shows the number of open years as at March 27, 1993 (note the system of reporting accounts back-dated 3 years).	Reporting the current situation. A report on what is happening now as a result of the background events discussed in the preceding section. What is happening now is the unveiling of a business plan by the new management team of Rowland and Middleton to attempt to deal with the already mentioned problems.
NEW	FUTURE	The slope to the right of the boulder, the ledge and the even steeper slope represents the future path (a prediction by the writers about the nature of the future problems confronting Lloyd's).	No information.	The movement of the graph over the years from June 1990 to early 1991. An obvious prediction about the graph's future movement since no data is available due to the system of back-dated reporting.	Problematising the situation. A discussion, analysis and comment on three problem areas which The Economist magazine feels should be addressed in order for the current situation to resolve itself. These problems are treated and analysed in order: the number of open years, litigation by names' syndicates, and financing the 1990 losses. Concluding and commenting. An opinion expressed about the current situation (the two managers' willingness to listen to names, policy-holders and prospective investors), a modulated predictive and summarising conclusion (Lloyd's may not survive if it does not meet the three problems discussed), and a final coda-comment (the stakes are very high - i.e. Lloyd's survival).

Table 7.10 Discourse staging and visual narrative staging

likely would be read with a left to right reading path by its potential viewers, we find a clear link between the narrativisation inherent in the visuals and the text's organisation at the level of discourse. The action portrayed in both the sketch caricature and the line graphs is not simply projected as action in isolation, but is in fact action as part of a narrative which through visual means projects past, present and future meanings. This narrativisation in the sketch caricature is seen in the profile of the actions of the two men attempting to ascend the mountain-side under a heavy burden, where the Given is the represented past path they have already trodden (to the left of the boulder and below their feet) and the represented current position of the boulder (the point where it touches the mountain). The New however is the represented upper slope (the expected future or path they have to tread (all the slope to the right of the boulder)).

This narrativisation can also be seen in the line graphs where the action in the graphic lines' movement up and down along the vertical plane is to be interpreted according to the passage of time (these movements and what they represent in quantitative terms are mostly Given in that they are reporting the past and the current situation, or that which should be understood as fact — the already-mentioned quantitative prediction with the open year syndicates figures can be treated as New). The narratives portrayed in these visuals are realised in visual terms by the already-discussed vectors produced by the represented participants, the culturally-based left to right reading paths, as well as the supplementary support provided by the effects of visual salience and balancing centres produced by the visuals themselves. The discourse and visual narrative staging in accordance with this Given-New and past-present-future staging can be seen in Table 7.10.

Table 7.10 summarises the interactive, intersemiotic complementarity relationship the narrative messages of the visual modes have with the unfolding stages of the *Mountains* text's verbal discourse structure. What this table shows clearly is that the division into past, present and future time periods or scenes in the two visuals, as well as their status as Given or New information, is intersemiotically complemented by the stages of the discourse structure of the *Mountains* text. In

the same ways that both the visuals report on the past in terms of what has happened with Lloyd's and its problems in recent years, so too does the verbal aspect of the text, which sets up the analysis of Lloyd's problems leading up to the current situation by referring to the major problem areas it has been dealing with: decreasing names, lawsuits, the effects of these on the market. The present situation of Lloyd's is projected in visual and verbal terms also, in that the line graphs show current data, and the sketch caricature represents the two men and the boulder at a certain point on the mountain-side. This is mirrored in the verbal aspect of the text by a discussion of the rescue plan and the people involved with it. Both the past circumstances and the current situation reportage are to be considered as Given in that their elements have been covered in the texts published in the two years prior to the publication of the *Mountains* text — again this is evidence to support the importance of the text's intertextual history as an influence on the text's current form. The New or future information is also presented by the sketch caricature (the upper slope) and to a degree the syndicated line graph (data over the years 1990-1991), and this is complemented by the verbal analysis of the current situation, and the opinions and predictive conclusions that are expressed and which are based on that analysis.

7.5 Discussion of Results and Summary

The analysis carried out in this and Chapter Six of this study has attempted to show that a metafunctional interpretation of the visual-verbal intersemiotic relations in a multimodal text would prove fruitful in interpreting the ways that these intersemiotic relations are realised. It has also been proposed that both the verbal and visual modes project their meanings in concert via semantic relations which realise intersemiotic complementarity, and that these meanings are dialectically related to various contextual features of the *Mountains* text, as well as aspects of *The Economist* magazine's context of culture.

The analysis in Chapter Six of the context of the *Mountains* text and *The Economist* magazine as an eco-financial publishing institution revealed that apart from being situated in the broader UK and world economic, financial and eco-political environment, a specific multimodal text like the *Mountains* text is also

situated in a context of creation which includes the ways that the artistic conventions of the authors' community, their conception of their audience, and their individual preoccupations, are built into the text. The analysis of aspects of *The Economist Style Book*, *The Numbers Guide*, and the interview with the head of the graphic design team at *The Economist's* headquarters illustrated the ways that *The Economist's* own publications and the graphic design team's writing and graphic design policies can influence the nature of the end-product, a multimodal text — important factors found were concerned with the team's conceptions of the magazine's page-based medium, their ideas about relative primacy of the visual and verbal modes, the general subject-matter the magazine covers, the recommended typographic and writing/stylistic conventions, and various institutional preferences in terms of visual and verbal typology. The analysis and in-house publications also gave certain indications about *The Economist* magazine staff's perception and attitudes towards its readership, and how they interpret their roles as a writers/publishers dealing with economic, financial and eco-political issues.

Chapter Six also demonstrated the ways that the multimodal *Mountains* text is a product of its environment, and that it functions in that environment by being both activated by the context in which it occurs, and simultaneously working to construe this context. The *Mountains* text was also seen as a multimodal text that has been influenced by or is the product of other texts, especially those which have appeared before it. This text's intertextual history is therefore important, because the many articles published beforehand in *The Economist* deal with relevant issues that have developed over time, and are related in varying ways to the *Mountains* text. This includes the text's subject matter and the issue addressed, the attitudes expressed towards this issue, and the ways that the magazine has produced them in visual and verbal terms. It was suggested that these contextual features could be used to inform an intersemiotic interpretation of the multimodal *Mountains* text in terms of three main hypotheses.

Firstly, it was hypothesised that intersemiotic complementarity will obtain when the ideational meanings in both modes are related lexico-semantically through the

intersemiotic sense relations of repetition, synonymy, antonymy, meronymy, meronymy, and collocation.

In the analysis of the intersemiotic ideational features of the *Mountains* text, it was found that the experiential meanings (glossed as VMEs) embodied in the processes, participants, circumstances, and attributes presented visually in the sketch caricature and line graphs were semantically complemented by the verbal mode. Firstly, it was shown that the visually represented processes of “Climbing - pushing up (enacting solutions with effort)”, “Graphic focus - increasing loss”, and to a lesser degree “Slumping ... mounting” were repeated, synonymised, and collocationally referred to by a range of identified lexical items in the verbal aspect of the text.

Secondly, it was also clearly shown that the visually represented participants were to varying degrees repeated, synonymised, and collocationally referred to by various lexical items, as in the significant repetition and synonymising of the institution of “Lloyd’s”, “Source: Lloyd’s of London” and “Active names”, and the repetition of the names of the two financiers, “Rowland and Middleton”. Further, there were lexical items which were semantically related to the visuals’ represented participants meronymously by referring to the part of the whole of some phenomenon, as in lexical items referring to parts of the Lloyd’s of London institution, particular parts of the time period under discussion, and to a lesser degree to numerical figures which formed part of the sets of numbers graphically portrayed. There were also other lexical items which were semantically related to the visuals’ represented participants hyponymously, by being referred to as a sub-type of some category of phenomenon, as in the treatment of the types of problems that Lloyd’s was having (the “boulder”), or the different types of solutions that the rescue plan would have to cover (the “upper ledge/slope”).

Finally, it was shown that the visual features represented as circumstances (the whole “Mountain”), and the supplementary attributes (“struggle and effort” and “financial/banking executives”) were also, to varying degrees, semantically related to the verbal aspect of the *Mountains* text by being repeated, synonymised,

and collocated. An interesting aspect is that the visual feature represented as circumstances (locative: the whole “Mountain” as a chronological view) is also semantically related to the verbal aspect of the *Mountains* text by being meronymised, in that there are a number of references to parts of the time period which describes Lloyd’s past, present and future. In intersemiotic ideational terms therefore, the analysis of the *Mountains* text shows that both visual and verbal modes do ‘work together’ on the page, at the very least in terms of the general subject matter, and that this intersemiotic complementarity is realised mainly through the significant usage of intersemiotic repetition, synonymy and collocation, intersemiotic sense relations which perform the function of introducing and maintaining the topic and subject matter. This usage is supported to a lesser degree by the intersemiotic sense relations of meronymy and hyponymy, both of which seem to relate in a supplementary way to the discussions and analysis of the main subject matter of the text.

Secondly, it was also hypothesised that intersemiotic complementarity will obtain when the interpersonal meanings in both modes are related through intersemiotic reinforcement of address, and through intersemiotic attitudinal congruence and attitudinal dissonance (modality) relations.

In the analysis of the intersemiotic interpersonal features of the *Mountains* text, it was found that the readers and viewers were addressed by both modes in the same the ways, and that this was realised by the intersemiotic interpersonal relation referred to as reinforcement of address. In the visual mode, both the sketch caricature and the line graphs were interpreted as making a range of visual statements. In the sketch caricature the absence of any gaze or facial expressions towards the viewer indicating a question is being asked (no vectors can be drawn from some point of origin to the viewer’s face), or gestures which command (no vectors towards the viewer), suggested that it is simply offering information to the viewers. It was also found that these visual features were supported by the ways that the sketch caricature utilised mechanisms to realise little or no involvement (horizontal angles), neutral or equal power relations (vertical angles), and degrees of social distance (size of frame) between the viewers and the image. These

findings were also applicable to the line graphs (except size of frame - realising social distance) — these were also interpreted as offering information, since the represented (quantitative) participants form no other relationship to the viewer(s) than being simply a display of numbers and graphic lines interacting with each other to present information or data which can be agreed or disagreed with, or acknowledged or contradicted. It was found that the verbal mode reinforced this visual form of address by consisting entirely of verbal statements about the subject matter discussed, and that this could be seen in the MOOD structure of the clauses, all of which utilised the order Subject/Finite, the order which realises the Declarative and the speech function of making statements.

The analysis also found that the mode-based statements with which the readers and viewers were addressed were characterised by the intersemiotic interpersonal relation referred to as attitudinal congruence. Each of the VMEs which were analysed in the ideational analysis were examined here in terms of the kinds of attitudes portrayed in both the visuals, and also how they were treated attitudinally in terms of Modality features in the verbal aspect of the text. Three general intersemiotic features were found — the first is the attitudinal congruence between the definite statements made by the line graphs and the discussion of them as established fact in the verbal aspect of the text; the second is the attitudinal congruence between most of the VMEs in the sketch caricature and the line graphs and the high modality displayed in their treatment in the verbal aspect of the text, and the third is the attitudinal congruence between the VME dealing with Lloyd's future in the sketch caricature and the relatively lower modality in evidence in the verbal aspect of the text.

The variations in the modality were linked to the nature of the visual coding orientations utilised in the text, in that the higher modality shown for the line graphs is because they are mathematical statements which are backed by an 'official' *imprimatur* ("Source: Lloyd's of London") and thus are able to make firm reportage statements. The sketch caricature, though a whimsical representation, does show a scene which metaphorically refers to a realistic situation of which the viewers and readers of *The Economist* magazine on this

issue would be well aware — the problems of Lloyd's and the rescue package being organised by Rowland and Middleton. It is a 'believable' situation in that sense, which is caricatured for reasons of attraction rather than to cast doubt on the veracity of its propositional content. The relatively lower modality accorded the caricatured representation of Lloyd's future and the references to it in the verbal aspect of the text is of course due to the fact that the sketch caricature portrays an almost impossible future (the upper mountain-side) for the rescue plan — this is matched by the verbal references to the plan, which suggest that its success is not so assured.

The analysis also revealed that attitudinal congruence between the visuals and the verbal aspect of the text is realised intersemiotically through the attitudinal attributes and adjectives assigned or used with various represented participants. The intersemiotic attitudinal features relevant here are the use of forms of address and attitudinal adjectives in the verbal aspect of the text which cohere in a synonymous way with the visual attitudinal message elements. The first feature examined was the nature of the references or forms of address used for Middleton and Rowland in the verbal aspect of the text, and how this complements their represented visual attributes. It was found that both men are portrayed only in such a way as to facilitate recognition by the viewers, and as such are treated with a modicum of respect by being portrayed in the pin-striped suits which accord them some kind of 'official' status — they are not portrayed as being incompetent or silly, or in a disjunctive way by being out of the 'uniform' of the finance industry. The analysis here revealed that this portrayal of their attributes is mirrored in the forms of address used for identifying them in the verbal aspect of the text.

The other significant instance of intersemiotic complementarity in terms of attitudinal features were the references made to the magnitude of Lloyd's problems, as represented by the visually salient boulder, and by the use of adjectives referring to Lloyds' problems in general, the size of its problems with increasing losses, and the need for raising enough sums of money. The occurrence of these two significant uses of support for the attitudes expressed in the visuals

lends weight to the interpretations of the visuals in terms of their main visual message focus — that of the problems that the management of Lloyd's are having and will have in the future with the magnitude of its financial problems. Thus, in both the modes the two men are represented and referred to in reasonably respectful terms, and the attitudes projected regarding the magnitude of the problems that Lloyds is having are also attitudinally congruent. Thus we have, in interpersonal terms, further evidence to support the central proposition of this study, that both the verbal and visual modes in the *Mountains* text intersemiotically complement each other to produce a coherent multimodal text through reinforcement of address and attitudinal congruence.

The lack of attitudinal dissonance was also briefly discussed, in that opposite or ironical attitudes displayed between the two modes were not in clear evidence. It was suggested that this analysis shows that both modes are placed on the page to work together synonymously in terms of their propositional content, to offer information via both verbal and visual statements, and to ensure that the ways that it is received and dealt with by the viewers and readers are in agreement. This was interpreted as being in accord with the findings of the analysis of *The Economist* magazine's contextual features, as shown in the expressed aims of the graphic design team at the magazine; i.e. images are generally designed and used to attract the potential viewer/reader in some way, and mathematical visuals are used to support the informational content contained in the article (although this comment should be mediated by the fact that line graphs like those used in the *Mountains* text do contain an element of editorialising, as the graphic headings "Slumping ... mounting" show).

Finally, it was hypothesised that intersemiotic complementarity will obtain when the compositional meanings are integrated by the compositional relations of information value, salience, visual framing, visual synonymy, and potential reading paths.

The analysis of the compositional aspects of the *Mountains* text revealed that it is in reality a complex interplay between the visual and verbal modes in terms of

such compositional relations as information valuation on the page, salience on the page, and degrees of framing of elements on the page, as well as supplementary influences provided by inter-visual synonymy, and the importance of potential reading paths.

The examination of information valuation on the page showed that the vertical or top/bottom placement of the visuals in the *Mountains* text is an important compositional influence — the sketch caricature for example is placed in the lower status half of the page, but this is compensated by the primary position it occupies in relation to the spine, and its visual salience in terms of its size and colour saturation. The line graph is however placed in the centre of the top-half of the page, a primary position with visual weight and a divider or balancing centre between the two halves of the type. The line graphs act as a stabiliser of this ‘weight’, where the visual elements in the central area assist the objects outside the centre zone to be unified and stabilised by being grouped around a balancing centre. The central placement of this visual is thus stabilising, and the sense of compositional unity and intersemiotic coherence across the page space is maintained.

The relative size, or salience on the page of the sketch caricature and the line graphs in relation to the amount of space taken up by the type shows that they are a very significant part of the page and have important parts to play in addressing the reader/viewers. This is accentuated by the colour saturation of the thick blackness of the mountain, which helps to catch the eye of the potential reader/viewer (again, an aspect of the graphic design policy at *The Economist*), and the fact that the edges of the corner frame work as part of the page borders. The line graph is also salient on the page, taking up a significant proportion of the available space in the top half of the page and forcing the viewer to take notice of it.

The analysis of the degrees of framing of elements on the page, shows that both the visuals in the *Mountains* text compete with the verbal aspect of the text for page space to varying degrees. The sense of competition of sketch caricature with

the verbal aspect of the text is realised by the lack of a uniform division between the type space and the visual space. The sketch caricature forces the type to conform to its shape through a runaround which causes a kind of “battle” for space. This conflict between type and visual is however compensated by the use of the visual as a page corner framing device. The overall effect for the reader here therefore is of intersemiotic compositional complementarity, where the sketch caricature forms an integral part of the mostly verbalised page.

Two further aspects of the intersemiotic compositional complementarity displayed by this multimodal text were found in the visual to visual interface in the *Mountains* text. This showed that the two different visual coding orientations, naturalistic and mathematical, also complement each other in supporting the realisation of the intersemiotic complementarity between the visual and verbal modes. This is concerned with inter-visual synonymy, which is concerned specifically with the degrees of semblance in form between the sketch caricature and the line graphs — the analysis revealed that there are subtle visual harmonies created by the axes both the visuals contain. In both visuals it was found that the information they attempt to convey is above and to the left of the point of origin from which the actual and perceived “x, y” axes can be derived, and that this axial similarity across modes conveys to the viewer a sense of visual harmony which can be derived from the focus of the information they are both presenting — a left to right, climbing/ascending, rising/falling action, and a sense of energy, dynamism and variability. Inter-visual synonymy was also found between the upward slope and the rising graph lines, the ledge and the graphic peak (two pausing places), and the downward slope and the falling graph lines. One final aspect of this is that the compositional complementarity between the visuals is even further reinforced by the fact that the sketch caricature almost exactly mirrors the right-hand line graph’s movement — the sketch caricature and line graphs move upwards from left to right on a steep(ening) slope, there is the ledge or graphic peak, and there is a further potential action rising up the steeper slope of the mountain-side and the graph.

These compositional intersemiotic relations were also revealed in the chronological (past-present-future) and Given-New complementarity displayed between the text's verbal discourse stages and the visual narrative stages. Here the importance of potential reading paths is related to the ways that the page space is approached, or the directions which readers of a multimodal text take when they interact with an article. The analysis of the *Mountains* text revealed that there is a clear link between the narrativisation inherent in the sketch caricature and the text's organisation at the level of discourse. The action portrayed in both the sketch caricature and the line graphs is action as part of a narrative which through visual means projects past, present and future meanings. This narrativisation in the sketch caricature and the division into past, present and future time periods or scenes in both the visuals, combined with their status as Given (past and present situation) or New (the expected future) information, is intersemiotically complemented by the stages of the discourse structure of the *Mountains* text. Thus, the typical reader/viewer who may start with the 'attract' images like a sketch caricature will be immediately exposed to the narrativisation presented in terms of the Given and New information; if the reader/viewer then commences to read on, he or she will find that this visual narrativisation is synonymised by the unfolding discourse of the verbal aspect of the text. If, in the more unlikely and unexpected case, a potential reader/viewer starts to read the verbal aspect of the text first, and then either goes back and forth between the visual and the verbal, or looks at the visuals after reading the whole of the verbal, the same synonymy between the visual narrativisation and the Given and New of the discourse will still hold — it will just have been approached in a different way. There is therefore still a Given-New intersemiotic complementarity, no matter what potential reading path the reader/viewer may follow.

Thus, the analysis of these aspects found that in the same ways that both the visuals report on the past in terms of what has happened with Lloyd's and its problems in recent years, so too does the verbal aspect of the text, which sets up the analysis of Lloyd's problems leading up to the current situation by referring to the major problem areas it has been dealing with: decreasing names, lawsuits, the effects of these on the market. The present situation of Lloyd's is projected in visual and verbal terms also, in that the line graphs show current data, and the

sketch caricature represents the two men and the boulder at a certain point on the mountain-side. This is mirrored by the verbal aspect of the text in a discussion of the rescue plan and the people involved with it. Both the past circumstances and the current situation reportage are to be considered as Given in that their elements have been covered in the texts published in the two years prior to the publication of the *Mountains* text — again this is evidence to support the importance of the text's intertextual history as an influence on the text's current form. The New or future information is also presented by the sketch caricature (the upper slope) and to a degree the syndicates line graph (data over the years 1990-1991), — this is complemented by the verbal analysis of the current situation, as well as the opinions and predictive conclusions that are expressed and which are based on that analysis.

The intersemiotic analysis of the *Mountains* text in terms the three intersemiotic metafunctions, the ideational, the interpersonal, and the compositional, has therefore demonstrated that the intersemiotic complementarity found in this text is realised via a complex interplay of various intersemiotic relational elements, such that any reader of this multimodal text would need to interact with this complexity by being required to simultaneously:

1. Comprehend the mode-based processes, participants, circumstances and attributes which are represented, as well as the semantic relationships between them.
2. Respond to the mode-based ways that he or she is being addressed, and the attitudes that are presented in concert with that address. This may be in terms of any potential visual or verbal statements being made or questions asked, as well as a variety of projected attitudes and judgements about the information presented.
3. Appreciate in visual and verbal terms the coherence between one part of the article and every other part, as well as the relative information values assigned to the messages delivered by each mode.

Based on the analysis carried out in this study therefore, the multimodal *Mountains* text can be interpreted as a coherent metafunctional construct in that it is a mode-based complex of simultaneously interacting ideational, interpersonal and compositional meanings.