THEME, METHOD OF DEVELOPMENT AND EXISTENTIALITY: THE PRICE OF REPLY[1]

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0. Introduction

This paper will explore, albeit in a partial way, the problem of replying to highly critical reviews such as that tendered by Huddleston (1988) with respect to Halliday's (1985a) *Introduction to Functional Grammar*. Huddleston's objections to Halliday's analysis of Theme in English will be taken as point of departure and considered in some detail. Evidence will be presented that Halliday's analysis is in fact a very responsible one as far as discourse considerations are concerned and that Huddleston's critique is based on a serious misrepresentation of Halliday's views. So serious a misreading raises questions about the functionality of dismissive reviews such as Huddleston's as far as negotiating understanding in the discipline is concerned. The paper will open and close by contextualising the discussion in these institutional terms.

1. The Dismissal genre

Huddleston's review falls into a genre of scholarly critique which was popularised in linguistics during the 1960's as part of Chomsky's so-called revolution (Newmeyer 1980, 1986). Key exemplars are found in Postal (1964, 1968); Newmeyer (1980:45-52) discusses oral implementations of the genre. The basic argumentative strategy in this 'dismissal genre' involves recasting another's work in one's own terms (usually under the guise of simply making 'intelligible' or 'explicit' what another scholar must have meant) and then rendering it absurd with respect to one's own 'in-house' criteria. The overall ideological function of the genre is three-fold:

> i. to demonstrate publicly that theoretical foundations of a discourse are fundamentally flawed.

> ii. to reassure colleagues that one's own discourse is not challenged by this potentially subversive discourse in any way.

> iii. to undermine the institutional position of subjects interpellated by the flawed discourse (with respect to assessment, appointment, promotion, conference presentations, publication, programmes of study, research funding, 'executive' positions, interdisciplinary work etc.).

Huddleston's review has been a very successful one in all three respects, especially in Australia, whatever his intentions when deciding to participate in the dismissal genre (which may have been quite honorable ones, though politically naive as will be argued in section 5 below). This paper will focus on just one aspect of his co-opting argumentative strategy - his treatment of Halliday's interpretation of Theme; the argumentation is however illustrative of the approach

developed by Huddleston throughout his review (for a detailed reply see Matthiessen & Martin 1991). The key quotation runs as follows:

> It is not clear that 'point of departure' or 'starting point' can sustain an interpretation that is independent of syntactic sequence - that the theme is the point of departure for the message in a more significant sense than that of being the first element. This leaves us with the meaning of Theme as what the clause is concerned with or about - an interpretation reinforced when Halliday writes of *that teapot the duke gave to your aunt*, for example, 'Here the teapot is Theme ("now about that teapot:")' (77). The interpretation of theme (or topic, as it is more often called) as what the clause is about is of course a familiar one - but it is surely not an interpretation that can be consistently associated in English with the initial element. I can't make any sense of the idea that *Nothing will satisfy you, You could buy a bar of chocolate like this for 6d before the War* (spoken, let us assume, to someone born after the War), *There's a fallacy in your argument*, are respectively about 'nothing', 'you' and 'there'. These are elementary and familiar types of example and it is symptomatic of the lack of dialogue referred to above that Halliday does not attempt to forestall objections like this. He does in fact explicitly analyse existential *there* as Theme (e.g. pp. 46, 65, 99). (Huddleston 1988:158)

This passage is open to two very plausible readings, which will be presented informally by way of introduction to the paper at this stage. The first might be glossed as the ideational reading. This reading tracks the 'logic' of Huddleston's argument as follows:

'logic' (ideational reading):

"It is not clear that 'point of departure' means more than coming first,
<u>therefore</u> Theme (what 'we' call topic) means what the clause is about,
but topics don't always come first (e.g. *nothing, you, there*),
as Halliday well knows and can't even be bothered to acknowledge
(he even goes so far as to actually analyse *there* as Theme in print)."

The critical manoeuvre is that between steps one and two in this precis. Huddleston argues that he does not find the notion that 'point of departure' means more than coming first clear. At no point in the review does he discuss why he does not find this notion clear. This supposed lack of clarity is the basis for his reappropriation of Halliday's Theme as topic (with topic meaning what the clause is about), which Huddleston goes on to critique. In summary the logical strategy is one of deft reappropriation followed by a more leisurely reductio ad absurdum - a textual strategy on which the dismissal genre depends (see section 3.1 below for a more detailed deconstruction). Without deft reappropriation much more time would have to be spent contextualising and then rebutting the position being critiqued; this would make it impossible to dismiss an entire discourse in the space of a short review.

Passages such as those quoted above are also open to equally plausible interpersonal readings. The rhetorical flavour of the Huddleston quotation can be rendered as follows:

'rhetoric' (interpersonal reading):

"I can't make any sense of what you're saying;
anyway, why don't you use our terms?
If you did you'd see you were wrong.
You're just being wilfully iconoclastic;
and how can you be so perversely blatant about it?"

The tone, which abounds in this and other instances of the dismissal genre, is that of exasperated abuse. The scholar being critiqued is constructed as an irresponsible adolescent, going their own way for no good reason other perhaps than being immature. Taken at face value,

the rhetoric of the dismissal genre is apparently designed to publicly embarrass a scholar (perhaps by way of encouraging them to see the light). Combined with the reappropriation gambit exemplified above however its overwhelming effect is simply to frustrate and alienate the scholar or scholars in question - at times reducing them to silence, in some cases alienating them from the discipline completely, and on occasion provoking the same tone of exasperated abuse by way of reply. There can be little doubt that considerable personal and professional damage has been accomplished by means of the dismissal genre, although this is the least likely of their effects to be documented sympathetically by mainstream historians such as Newmeyer (contrast Hymes and Fought (1975/1981), an unusual attempt to set straight the history of American structuralism from a non-hegemonic position).

2. Theme in English

Halliday's interpretation of Theme in English needs to be approached from the perspectives of both how Theme is realised and of what kinds of meanings it constructs. These will be taken up in turn in this section of the paper in order to demonstrate the depth of Huddleston's misreading as well as his failure to address in any way the relevant Prague School and systemic functional literature (see Davidse (1987) for discussion of the affinities between Halliday's work and that of the Prague School).

2.1 Manifestation

Halliday (1985a) offers the following as a general characterisation of the way in which Theme is grammaticalised in English:

> As a general guide, the Theme can be identified as that element which comes in first position in the clause. We have already indicated that this is not how the category of Theme is **defined**. (Halliday 1985a:39)

Halliday's first point in other words is that English makes use of sequence to realise the grammatical function Theme. In this respect English contrasts with a language like Tagalog which uses the particle *ang* to grammaticalise Theme[2]; the *ang* phrase in Tagalog typically comes last in a clause, but may appear in any position since *ang* marks the Theme irrespective of clause sequence (Martin 1983). Halliday's analysis of Theme is illustrated in 1-3 below (Themes in bold face).

1. **The toothed whales** are found world-wide in great numbers.

2. **The introduction of factory ships by Japan and the USSR** intensified whaling still further.

3. **For one thousand years**, whales have been of commercial interest for meat, oil, meal and whalebone.

In addition Halliday distinguishes between marked and unmarked Theme, depending on MOOD. In declarative clauses for example the textual function Theme conflates with the interpersonal function Subject in the unmarked case; marked Themes are found where Theme conflates with an Adjunct, Complement or Predicator[3] (preceding the Subject). A further example of an unmarked Theme is given in 4 below (examples 1-3 also exemplified unmarked Themes); the initial prepositional phrase realising the Adjunct in 5 precedes the Subject and so realises a marked Theme.

4. Theme/Subject | Rheme
They | concentrated on the slow-moving Right whales.

5. Theme/Adjunct   Rheme
   About 1000 A.D.,   whaling started with the Basques using sailing vessels and row boats.

Unlike English, Tagalog distinguishes between marked and unmarked Theme by realising unmarked Theme last and marked Theme first in the clause; an *ang* phrase in first position in the clause is linked to the rest of the clause with the 'inversion marker' *ay* (Schachter & Otanes 1972:485-493; Martin 1983).

One further aspect of Halliday's interpretation of Theme that needs to be reviewed here is his suggestion that different types of Theme deriving from different metafunctional components in the grammar need to be recognised. To this point, the kinds of Theme considered have all been experiential in origin: *the toothed whales, the introduction of factory ships by Japan and the USSR, for one thousand years, they, about 1000 AD* . Halliday refers to these as topical Themes. In addition Halliday makes way for interpersonal Themes (expressions of MODALITY, ATTITUDE, VOCATION, MOOD or POLARITY which precede topical Themes) and textual Themes (connectives of various types). Theme in other words gives a metafunctional preview of the various strands of meaning that are mapped together in the multi-tiered functional structure Halliday employs. Examples of topical, textual (single underlined) and topical, and interpersonal (double underlined) and topical Themes respectively are given in 6-8 below and outlined schematically in Table 1.

6. **David Griggs** served us a smorgasbord of ideas from out west.

7. **However,** we have to note a possible down-side as well.

8. **Maybe** that is rubbing off in other areas.

		David Griggs	served us a smorgasbor[d] of ideas from out west.
	Maybe	that	is rubbing off in other areas.
However,		we	have to note a possible down-side as well.
Theme			**Rheme**
textual	interpersonal	topical	

Table 1: Examples of textual, interpersonal and topical Theme

Tagalog provides another point of contrast with English as far as the realisation of different types of Theme is concerned. As in English, textual Themes come first; but a syntagmatic complementarity is set up between initial position, where interpersonal Themes succeed a textual Theme (if any), and final position, where topical Themes are realised when unmarked (Martin 1990). It is the topical Theme in Tagalog which is marked with *ang* .

The presence of various types of Theme raises the question of how far to extend the concept of Theme from left to right in the English clause. Halliday's suggestion is that an effective rule of thumb is to analyse up to the first topical Theme and stop. This needs to be qualified however

with respect to Halliday's association of the textual metafunction with a wave-like pattern of realisation (Halliday 1979a, Matthiessen 1988, 1992, forthcoming). Drawing a line between peak and trough invariably involves some degree of arbitrariness and it is for this reason for example that the Prague School (e.g. Firbas 1964) treated communicative dynamism as a matter of degree (more or less rather than yes or no). For purposes of textual analysis and interpretation however it generally proves more practical to draw a categorical line between Theme and Rheme (to segment the wave[4]) and this strategy will be followed throughout the analyses presented below.

In short then Halliday suggests that English grammaticalises the Theme function as clause sequence (initial position), distinguishes between unmarked and marked Themes depending on MOOD, and allows for experiential, interpersonal and textual contributions to the Theme function. We have also noted that these grammaticalisation strategies are English ones and contrast in important ways with those used in other languages, for example Tagalog.

2.2 Meaning of Theme

The kind of meaning Theme constructs is glossed by Halliday using the term 'point of departure' as follows (it is this aspect of his interpretation of Theme that Huddleston finds unclear).

> The Theme is the element which serves as the point of departure of the message; it is that with which the clause is concerned. (Halliday 1985a:38)

In this section of the paper evidence will be presented which indicates that point of departure does indeed mean something more than coming first. To begin, Fries' (1981/1983)[5] work on Theme and method of development will be reviewed. Halliday 1985a draws heavily on Fries' work in his exemplification of the meaning of Theme, as illustrated in Chapter 3, section 9, 'Thematic interpretation of a text' and Appendix 1 (Halliday 1985a:64-67 and 365-368 respectively). Neither of these exemplifications is acknowledged by Huddleston, one very plausible implication for naive readers being that Halliday has simply not bothered to demonstrate what point of departure means.

Fries' (1981/1983) article is a milestone as far as the interpretation of Theme in English is concerned. His lasting contribution is to present convincing evidence that the choice of Theme in Halliday's sense is motivated by discourse considerations. Fries sums up this demonstration as follows (see also Fries forthcoming for further elaboration):

> (a) the lexical material placed initially within each sentence of a paragraph (i.e. the themes of each sentence of a paragraph) indicates the point of departure of the message expressed by that sentence, and (b) the information contained within the themes of all of the sentences of a paragraph creates the method of development of that paragraph. (Fries 1983:135)

Fries uses a number of texts in his article to exemplify this interpretation of the meaning of Theme. Two of these will be reviewed here. The first is a paragraph of historical exposition by Strachey, who is discussing the development of the English Constitution. Fries points out that in this text choice of Theme does not in fact pattern with respect to the constitution itself, the topic of discussion, but rather with respect to Strachey's argument that the constitution is the child of wisdom and chance. The text is presented as 9 below, with topical Themes in bold face (additional conventions of analysis, generally following Fries, are as noted).

[Topical Themes are in bold face in this text, and marked topical Themes are underlined. Theme has not been analysed in hypotactically dependent clauses (non-finite b, c, p and finite q) nor in branched paratactic clauses with Subject ellipsis (h and l)]

9. TOPICAL THEMES (marked Themes underlined)

a   **The English Constitution - that indescribable entity** - is a living thing,

b   growing with the growth of men,

c   and assuming ever-varying forms in accordance with the subtle and complex laws of human character.

d   **It** is the child of wisdom and chance.

e   **The wise men of 1688** moulded it into the shape we know,

f   but **the chance that George I could not speak English** gave it one of its essential peculiarities - the system of a cabinet independent of the crown and subordinate to the Prime Minister.

g   **The wisdom of Lord Grey** saved it from petrification,

h   and set it upon the path of democracy.

i   Then **chance** intervened once more.

j   **A female sovereign** happened to marry an able and pertinacious man,

k   and it seemed <u>likely</u>[6] that an element which had been quiescent within it for years - the element of irresponsible administrative power - was about to become its predominate characteristic

l   and change completely the direction of its growth.

m   But <u>**what chance gave**</u> chance took away.

n   **The Consort** perished in his prime,

o   and **the English Constitution,....,** continued its mysterious life

p   dropping the dead limb with hardly a tremor

q   as if he had never been. (Fries 1983:123-124)

Fries is particularly concerned with the systematic way in which Theme structures the opposition of wisdom and chance. This opposition is predicted for the text as a whole by clause 9.d and is outlined in Table 2. According to Fries the Themes structure the opposition in a manner which is constitutive of the text's method of development.

9.d - IT IS THE CHILD OF **WISDOM** AND **CHANCE**.

'Wisdom'	'Chance'
The wise men of 1688	
	but the chance that George I...
The wisdom of Lord Grey	
	chance
	likely
	what chance gave

Table 2: The thematic opposition of wisdom and chance in 9

This particular method of development correlates in an important respect with another aspect of text 9's discourse structure - its internal conjunction (Halliday & Hasan 1976, Martin 1983b, Martin in press a). Basically Strachey presents two arguments in favor of his thesis that wisdom and chance shaped the English constitution. The first is given in 9.e-f; the second is given in 9.g-q (the second half of the paragraph in fact involves a long elaboration of the second role played by chance in 9.j-q). In each argument the effect of wisdom is contrasted with the effect of chance. The first four of the realisations of wisdom and chance as Theme in text 9 key precisely on the logical manoeuvres just outlined. This interaction between internal conjunction and choice of Theme is outlined in Fig. 1.

Internal conjunction   Theme

```
                      →d    It (is the child of wisdom and chance)
    imp/e.g.
                       e     The wise men of 1688

    imp/e.g.           f     but the chance that George I...

                       g     The wisdom of Lord grey

                       h

                      →i     Then chance
    imp/i.e.
                       j

                       k     likely

                       l

                       m     But what chance gave

                       n

                       o

                       p

                       q
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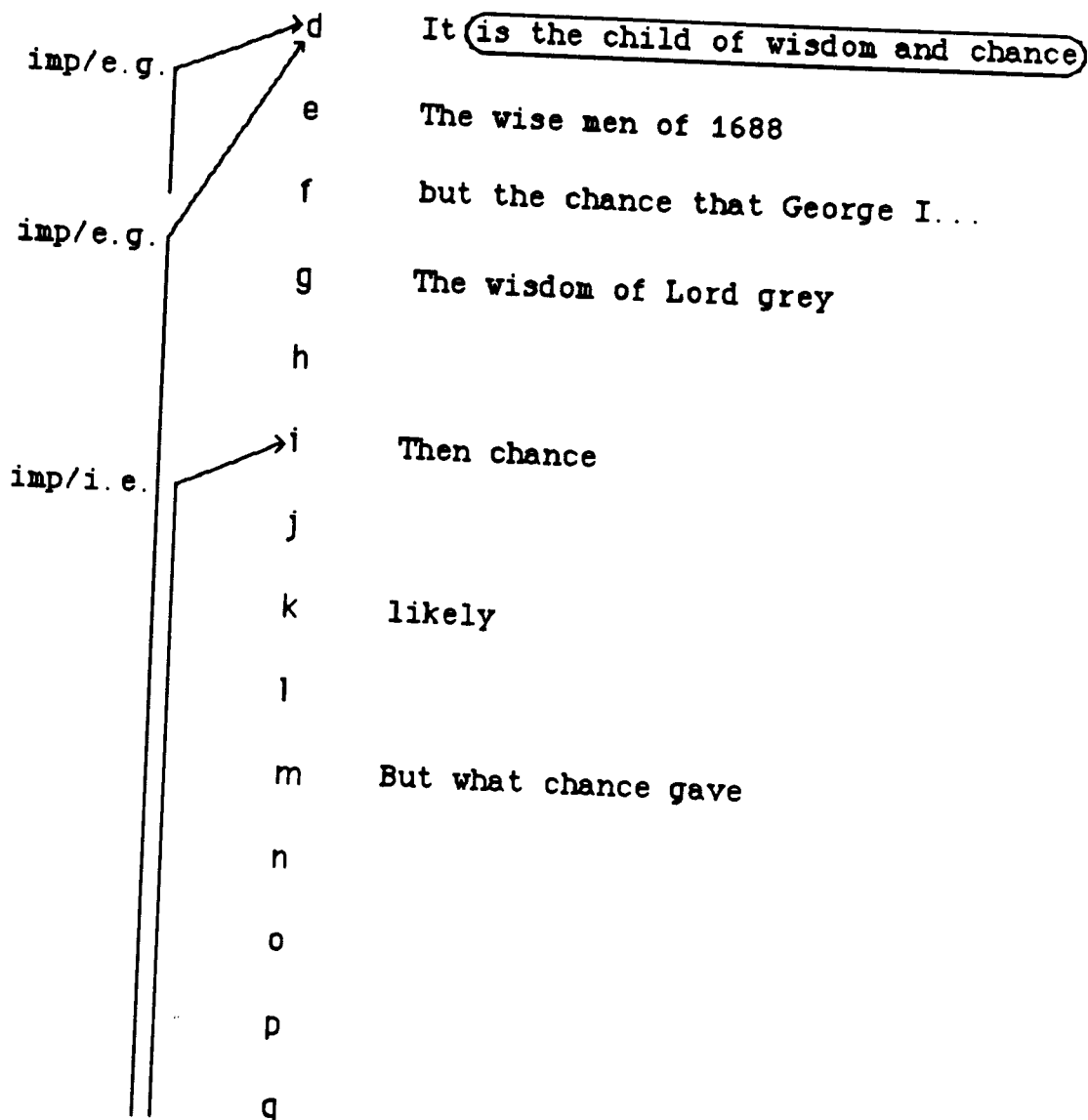
Fig. 1:   Interaction of internal conjunction and choice of Theme in text [9]

Method of development in text 9 is realised for the most part through unmarked Themes (the exceptions being the theme predicated *likely* in 9.k and *what chance gave* , realising the conflation of Theme with Complement in 9.m). In the second of Fries' texts to be reviewed however it is the pattern of marked Themes which constructs the text's method of development. In this text (10 below), Morrison explores a piece of US naval history, contrasting the role played by the navy in WWI and WWII. This difference is explicitly announced in 10.a-b and then exemplified five times. As the analysis presented below outlines, the opposition of one great war to the other is constructed thematically for each example except the fourth where *airpower* rather than *in the earlier conflict* is selected as topical Theme (note however the reservations expressed above about particularising a wave and an alternative reading of the text which over- rides the punctuation to treat *in the earlier conflict* as a Qualifier of *airpower*).

[Topical Themes are in bold face and marked Themes underlined in [2] below; β clauses appearing before their α are taken as marked Themes, and Theme is not analysed in the following α]

10. (highlighting method of development and marked Themes)

a **Although the United States participated heavily in World War I**,
b the nature of that participation was fundamentally different from what it became in World War II.
c **The earlier conflict** was a one-ocean war for the Navy and a one-theatre war for the Army;
d **the latter** was a two-ocean war for the Navy and one of five major theatres for the Army.
e **In both wars** a vital responsibility of the Navy was escort-of-convoy and anti-submarine work,
f but **in the 1917-1918 conflict** it never clashed with the enemy on the surface;
g **while between 1941 and 1945** it fought some twenty major and countless minor engagements with the Japanese Navy.
h **American soldiers who engaged in World War I** were taken overseas in transports
i and landed on docks or in protected harbours;
j **In World War II** the art of amphibious warfare had to be revived and developed,
k since **assault troops** were forced to fight their way ashore.
l **Airpower**, in the earlier conflict, was still inchoate and almost negligible;
m **in the latter** it was a determining factor.
n **In World War I** the battleship still reigned queen of the sea,
o as **she** had in changing forms, since the age of Drake.
p and **Battle Line** fought with tactics inherited from the age of sail;
q but **in World War II** the capital naval force was the air-craft carrier taskgroup,
r for which **completely new tactics** had to be devised.

As in text 9, this method of development correlates strongly with the text's conjunctive structure which is for the most part developed around relations of implicit or explicit contrast. This correlation between method of development and external conjunction is outlined in Fig. 2[7].

In summary then, using texts like 9 and 10 as exemplars, Fries provided evidence that Themes pattern in discourse, that these patterns may be predicted, and that these patterns may be solidary with other aspects of text structure (for example conjunction). Coming first in texts like 9 and 10 in other words means more than coming first; coming first in fact constructs a particular angle of interpretation on the topic of each text which resonates with other aspects of discourse organisation. Fries' point, following Halliday, is that first position in the English clause is not arbitrary, but rather a textual resource which is systematically exploited to effect patterns which constitute a text's method of development[8]. It is this position, functioning as a textual resource of precisely this kind, that Halliday (1985a) names Theme and defines as the point of departure for the clause as message.

2.3 Hierarchy of periodicity (layers of Theme)

In developing Halliday's work on Theme and method of development in English, Fries naturally returned to the work of the Prague School linguists who pioneered discourse interpretations of clause structure and from whom Halliday borrowed the term Theme (1985a:38). Huddleston makes no reference to the work of the Prague School on functional sentence perspective in his review. Fries drew in particular on Daneš' (1974a:118-119) work on thematic progression, one of whose suggestions will be developed here.
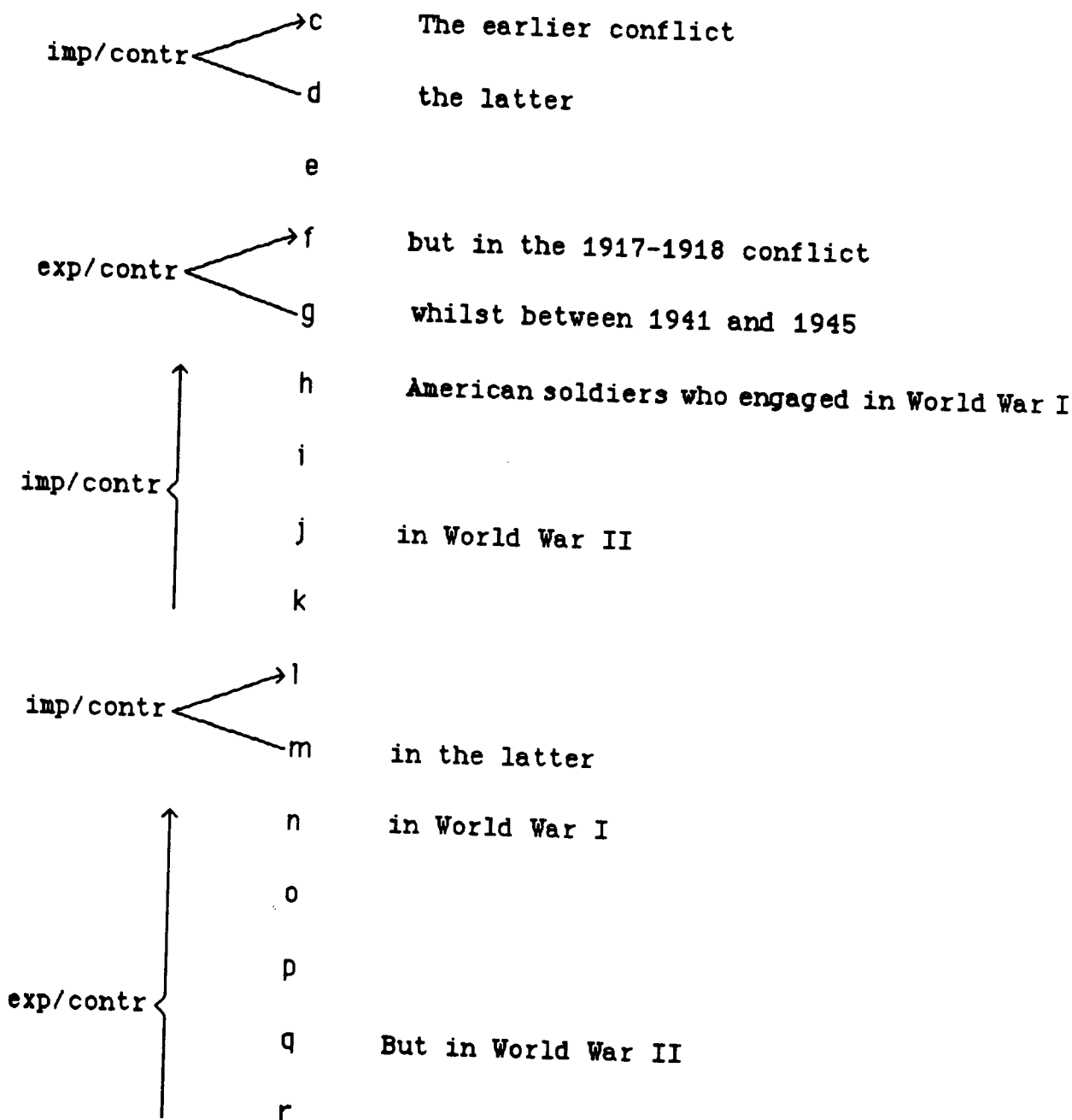
ernal conjunction   **Theme**

imp/contr   →c   The earlier conflict

       d   the latter

       e

exp/contr   →f   but in the 1917-1918 conflict

       g   whilst between 1941 and 1945

       h   American soldiers who engaged in World War I

imp/contr   i

       j   in World War II

       k

imp/contr   →l

       m   in the latter

       n   in World War I

       o

       p

exp/contr   q   But in World War II

       r

Fig. 2: Interaction of external conjunction method of development in text [10]

Like Halliday and Fries, Daneš is concerned with the discourse function of Theme and looked at the ways in which Themes patterned with each other or with non-thematic material in order to interpret this function. One of the patterns he noted was that of a Theme predicting a number of ensuing Themes. Daneš (1974a:120) termed the original, 'over-arching' Theme a hyper-Theme. Had clause 9.d in the English constitution text considered above been written as 11 below, with *wisdom and chance* as Theme, then *wisdom and chance* would have functioned as a hyper-Theme for text 9 in Daneš' terms.

11. **Wisdom and chance** gave birth to the English Constitution

[cf. 9.d **It** is the child of wisdom and chance.]

Daneš' apparent limitation of the notion of hyper-Theme to clause Themes in relation to ensuing clause Themes seems too restrictive given the predictive patterns already noted in texts 9 and 10. In text 9, as just noted, *wisdom and chance* were not introduced as clause Themes; but 9.d does nevertheless function to predict the method of development Fries unpacks. Similarly in text 10, it is the whole of 10.a-b that predicts Morrison's method of development (*Although the United States participated heavily in World War I,the nature of that participation was fundamentally different from what it became in World War II.*), not simply the topical Theme of the text's first or second clause (*the United States* or *the nature of that participation*) or even the whole of the clause complex's β clause where that is taken as a marked Theme (*Although the United States participated heavily in World War I*).

On the basis of examples such as these Martin (forthcoming a, b) suggests revising Daneš' characterisation of hyper-Theme to embrace an introductory clause or group of clauses which is established to predict a pattern of Theme selection in following clauses. In these revised terms *It is the child of wisdom and chance* would function as the hyper-Theme of 9. Extended in this way the notion of hyper-Theme corresponds roughly with the concept of topic sentence of school rhetoric and traditional composition teaching.

This strategy of interpretation can be pushed a step further to incorporate an additional layer of discourse organisation by establishing a category of **macro-Theme** defined as a clause or group of clauses (possibly a paragraph) which predicts a set of hyper-Themes. A macro-Theme would thus tend to correlate with the introductory paragraph of school rhetoric. The fact that this analysis can be extended indefinitely (to incorporate categories of say super-Theme, ultra-Theme, mega-Theme etc.) depending on the number of layers of structure in a text reflects the clumsiness of attempting to model concentric waves of texture (aptly referred to by Halliday as a "hierarchy of periodicity" - in Thibault 1987:612) in segmental terms (cf. Matthiessen (1988) on textual meaning and representation); this problem of metafunctions and modes of meaning will not be pursued here (see Matthiessen forthcoming for further discussion). For purposes of this paper, the notions of hyper-Theme and macro-Theme as just defined will suffice. The relevant proportionalities are as follows (macro-Theme is to 'text' as hyper-Theme is to 'paragraph' as Theme is to clause):

macro-Theme:text::
hyper-Theme:paragraph::
Theme:clause

Drawing on Fries' work this line of interpretation is exemplified by Halliday in both his sample analysis at the end of Chapter 3 (the Chapter in which he introduces his analysis of Theme) and in Appendix I (in which he uses his grammar to interpret a short spoken text in considerable detail). The relevant quotations are presented below by way of documenting the kind of exemplification effaced in Huddleston's review (Fries' paper, entitled 'On the status of Theme in English: arguments from discourse' is item 13 in Halliday's Bibliography, which Huddleston (1988:139) evaluates as making "no reference, or virtually none, to the literature, either functional or formal"; in addition items 2, 4, 7, 8, 14, 15, 28, 31, 32, 33, 34, and 40 in Halliday's Bibliography contain material which is theoretically and/or descriptively of direct relevance to the discussion[9]):

The thematic organization of the clauses (and clause complexes, where relevant) expresses, and so reveals, the method of development of the text...Paragraph by paragraph the development proceeds as follows: ...[Halliday exemplifies the development - JRM] This is the thematic line, from which we know where the text is going... (Halliday 1985a:67 - 'Thematic interpretation of a text.')

From this display we can see clearly what has been called the 'method of development' of the text. The whole of the first clause is thematic in the discourse: it is the 'topic sentence' of the 'paragraph', to use the terminology of composition theory...Thus the thematic progression is: job - silver - customers - Anne - customers. (Halliday 1985a:367 - 'Appendix I.')

The patterning of Themes and hyper-Themes illustrated by Fries and Halliday, is outlined in Fig. 3 along with Martin's extension to include a layer of macro-Themes which will be exemplified in texts 12 and 13 below.

Macro-Theme

Macro-Rheme   Hyper-Themes

          Hyper-Rhemes   Themes
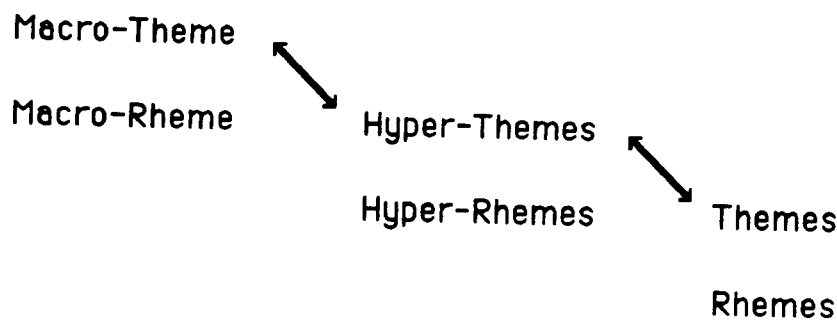
                      Rhemes

Fig. 3: Solidarity across levels of Theme

Text 12 is a science report, written by a professional marine biologist as part of an address to the Canadian Wildlife Federation in 1989. It functions as a semi-technical introduction to the classification of whales. This function is announced at the beginning of the text in its macro-Theme: *There are many species of whales. They are conveniently divided into toothed and baleen categories* , echoing of course the text's title *Whales* . Most of the remaining text is organised around its two ensuing hyper-Themes: *The toothed whales are found world-wide in great numbers* and *There are fewer species of the larger baleen whales, that filter krill and small fish through their baleen plates* . The last paragraph of the text in fact makes a break with the pattern of Theme selection flowing from the text's macro-Theme. A marked Theme, *as with the growing interest in birding* , is used to signal this shift in orientation, which also marks a reworking of the text's genre. This kind of analogy across the recreational use of wildlife resources is not predictable in a taxonomising report of this kind (there is of course nothing surprising about the analogy once the report is recontextualised as part of a longer paper addressing the question of innovative fisheries management at a annual meeting of hunters, anglers and naturalists).

[Macro-Theme in bold face, small caps, 12 point; Hyper-Themes in small caps, 10 point; Themes in bold face; marked Themes underlined]

12. <u>Whales</u>

THERE ARE MANY SPECIES OF WHALES. THEY ARE CONVENIENTLY DIVIDED INTO TOOTHED AND BALEEN CATEGORIES. THE TOOTHED WHALES ARE FOUND WORLD-WIDE IN GREAT NUMBERS. **The largest** is the Sperm whale, which grows to about the size of a boxcar. **Other species familiar to Canadians** are the Beluga or white whale, the Narwhal with its unicorn-like tusk, the Killer whale or Orca, the Pilot or Pothead whale, which is commonly stranded on beaches, the Spotted and Spinner Dolphins that create a problem for tuna seiners, and the Porpoises which we commonly see along our shores.

THERE ARE FEWER SPECIES OF THE LARGER BALEEN WHALES, THAT FILTER KRILL AND SMALL FISH THROUGH THEIR BALEEN PLATES. **The largest** is the Blue whale which is seen frequently in the Gulf of St Lawrence. **It** reaches a length of 100 feet and a weight of

200 tons, equivalent to about 30 African elephants. **The young** are 25 feet long at birth and put on about 200 lbs. a day on their milk diet. **Other species** are: the Fins which at a length of 75 ft. blow spouts of 20 ft., the fast swimming Seis, the Grays so commonly seen on migrations along our Pacific coast between Baja California and the Bering Sea, the Bowheads of Alaskan waters, the Rights, so seriously threatened, the Humpbacks enjoyed by tourists in such places as Hawaii and Alaska, the smaller Bryde's whales, and the smallest Minke whales, which continue to be abundant worldwide.

As with the growing interest in birding, increasing numbers of whale watchers can distinguish the various species of whales. [W R Martin 1989:1]

These solidary layers of thematic organisation in text 12 are reviewed schematically in Table 3. As suggested above the text's macro-Theme is predictive of its hyper-Themes which function in turn as sign-posts to the method of development constructed by clause Themes. The thematic organisation of text 12, embracing the notion of anticipation is outlined schematically in Fig. 4.

macro-Theme:

> There are many species of whales. They are conveniently divided into toothed and baleen categories.

hyper-Theme:

> The toothed whales are found worldwide in great numbers.
>
> > The largest [toothed whale]
> > Other species [of toothed whale]

hyper-Theme:

> There are fewer species of the larger baleen whales, that filter krill and small fish through their baleen plates.
>
> > The largest [baleen whale]
> > It [the Blue whale]
> > The young [of the Blue whale]
> > Other species [of baleen whale]

break from macro-Theme:

> As with growing interest in birding,

Table 3: Solidarity across layers of thematic structure in text 12

species of whale –
toothed & baleen

toothed whales   baleen whales

the largest   the largest
other species   it
                                  the young
                                  other species

Fig. 4: Patterns of thematic 'prediction' in the whale Report (text 12)

Text 13 is the next section in this same address to the Canadian Wildlife Federation. In 13 the genre shifts to historical recount as the history of whaling is reviewed; as in text 10 above, the text's method of development is constructed by marked Themes.

In the whaling recount there is some uncertainty as to whether the first sentence functions as a macro-Theme or hyper-Theme: *For one thousand years, whales have been of commercial interest for meat, oil, meal and whalebone* . The sentence makes clear predictions about Theme selection of the rest of the first paragraph which is developed through Circumstances of location in time. At the same time the sentence can be construed as making predictions about the first sentence in the third paragraph as well (*While this high-seas drama was unfolding, coastal, shore-based whaling developed around the world*) since the author's rhetorical strategy is to deal first with the development of high-seas whaling and then with shore-based whaling. The problem with this strategy seems to be that high-seas whaling developed from shore-based whaling and that shore-based whaling did not really develop (or if it did, then the history of this development is not recounted). To the extent that paragraph three has a method of development (only a single sentence follows the hyper-Theme just noted), it is organised around location in space, not location in time (*In Canada...*). Probably the best way to interpret what is going on thematically in this text is to treat the first sentence as a hyper-Theme responsible for the method of development of paragraph one, which is later reconstrued by the text as a macro-Theme correlating with the introductory sentence of paragraph three. Unfortunately this more dynamic reading of texture, oriented as it is to both the text's ongoing development and in addition to what might have been cannot be pursued here (see Martin (1985, in press a) for discussion). The text's second paragraph will be set aside at this point and dealt with separately in section 4 below.

[hyper-Themes in small caps, 10 point; Themes in bold face; marked Themes underlined]

13. Whaling

FOR ONE THOUSAND YEARS, WHALES HAVE BEEN OF COMMERCIAL INTEREST FOR MEAT, OIL, MEAL AND WHALEBONE. About 1000 A.D., whaling started with the Basques using sailing vessels and row boats. They concentrated on the slow-moving Right whales. As whaling spread to other countries, whaling shifted to Humpbacks, Grays, Sperms and Bowheads. By 1500, they were whaling off Greenland; by the 1700s, off Atlantic America; and by the 1800s, in the south Pacific, Antarctic and Bering Sea. Early in this century, the Norwegians introduced explosive harpoons, fired from guns on catcher boats, and whaling shifted to the larger and faster baleen whales. The

introduction of factory ships by Japan and the USSR intensified whaling still further.

The global picture, then, was a mining operation moving progressively with increasing efficiency to new species and new areas. **Whaling** reached a peak during the present century.

WHILE THIS HIGH-SEAS DRAMA WAS UNFOLDING, COASTAL, SHORE-BASED WHALING DEVELOPED AROUND THE WORLD. **In Canada,** for example, it was native whaling for Belugas and Narwhal in the Arctic, and commercial whaling from northern Vancouver Island in the Pacific, and from Quebec, Nova Scotia and Newfoundland in the Atlantic. [W R Martin 1989:1]

These solidary layers of thematic organisation in text 13 are reviewed schematically in Table 4. Note how the third paragraph could easily have been elaborated, using location in space as its method of development, as follows:

In the Canadian Arctic, for example, native peoples caught Belugas and Narwhal. **On Canada's Pacific coast,** commercial whalers operated from northern Vancouver Island. **And in the Atlantic,** there was commercial whaling from Quebec, Nova Scotia and Newfoundland.

Theme has in other words been used to scaffold the discussion of whaling, creating a discourse potential that is well developed in paragraph one but arrested in paragraph three (possibly because of the space and time limitations faced by the speaker[10] in question). The thematic organisation of text 13 is outlined schematically in Fig. 5.

hyper-Theme (reconstrued dynamically as macro-Theme):

For one thousand years, whales have been of commercial interest for meat, oil, meal and whalebone.

    About 1000 A.D.,
    They [the Basques]
    As whaling spread to other countries,
    By 1500,
    and by the 1800s,
    Early in this century,
    The introduction of factory ships by Japan and the USSR

    [The global picture
    Whaling...]

hyper-Theme:

    While this high-seas drama was unfolding, coastal, shore-based whaling developed around the world.

        In Canada

Table 4: Fulfillment, frustration and reconstrual of thematic prediction in text 13

```
for 100 years whaling
has been of commerical
interest
```

about 1000 AD
as whaling spread to other countries
by 1500
by the 1700s
by the 1800s
early in this century

while this high-seas
drama was unfolding

Fig. 5: Patterns of thematic prediction in the whaling recount (text 13)

In summary then, in this section of the paper evidence has been presented that Halliday's analysis of Theme in clause structure has important repercussions for other levels of discourse organisation. The Theme ^ Rheme structure proposed by Halliday for the English clause is echoed in larger units in such a way that patterns of Theme selection in the clause tend to be predicted by hyper-Themes which may in turn be predicted by macro-Themes (and so on depending on the number of layers of structure in the text). This resonance across layers of text structure is the basis for a powerful discourse interpretation of clause Theme - an interpretation which raises serious questions about Huddleston's suggestion that Theme means no more than coming first.

3. Existential themes

In this section of the paper Huddleston's rejection of *there* as Theme in existential clauses will be considered. In order to pursue the discussion it is necessary to unpack Huddleston's re-appropriation strategy in more detail.

3.1 Reappropriation

Reappropriation, as practiced in the dismissal genre, typically involves various degrees of reductive co-option. One scholar's ideas are taken out of context and 'translated' into another framework. In Huddleston's case, Halliday's concept of Theme is reworked as the more traditional notion of topic. Huddleston's position is that topic can be made explicit by means of what Halliday (1985a:142) would refer to as Circumstances of matter in clause initial position: *as for...*, *with regard to...*, *about...* ; in all other cases, according to Huddleston, the topic of the clause depends on the context, with the apparent proviso that anything recognised as a contextually determined topic must have the potential to be made an explicit topic in clause initial Circumstances of matter such as those just reviewed.

Huddleston's examples are given below. In 14 and 15 Huddleston's position is that Theme (his Topic) is explicitly grammaticalised. In 16 however *my wife* and *the dog* are both candidates for Theme, depending on context.[11]

14. As for my wife, she can't stand the dog.   [wife = topic]

15. As for the dog, my wife can't stand it.   [dog = topic]

16. My wife couldn't stand the dog.   [wife/dog = topic]

This translation functions as a reductive distortion of Halliday's position in four key respects.

i. metafunctional restriction on Theme

Huddleston's position involves a restriction of Halliday's Theme to topical Theme. Inter-personal and textual Themes are not recognized since they are not what the clause is about:

> This leaves us with the meaning of Theme as what the clause is concerned with or about - an interpretation reinforced when Halliday writes of *that teapot the duke gave to your aunt*, for example, 'Here the teapot is Theme ("now about that teapot:") (Huddleston 1988:158)

> One may find some plausibility in his argument that it is in some sense natural for a WH-interrogative to begin with the WH-phrase and for a yes-no question to begin with the finite verb...But this is a very different matter from accepting that all initial elements can be assigned a common function, called Theme, interpretable as indicating what the clause is about. (Huddleston 1988:60)

ii. limitation of Theme to participant functions

Since Huddleston's test for Theme is a unit's potential to function as the complement of a preposition in a Circumstance of matter in clause initial position, Theme is limited to nominal groups:

> A further difficult with his explanation of Theme as what the clause is about or concerned with arises from the fact that the expression 'about' and 'concerned with' take nominal complements, whereas the Theme function is not always filled by a nominal group. (Huddleston 1988:159)

iii. conflation of Theme ^ Rheme & (Given) ^ New

One aspect of Halliday's analysis which Huddleston finds 'counter-intuitive' is that 'natural question-answer pairs' more often than not involve a change of Theme. Huddleston's example is as follows:

17. What's the new boss like?
    - She seems okay.

Halliday's interpretation of (Given) ^ New structure, as realised by intonation, is not mentioned by Huddleston in spite of the fact that it provides a perfectly straight-forward explanation of the sequence of constituents in the reply: the question asks for information about the boss and this new information is placed last in the response where it can be realised prosodically as unmarked news (as explained in Halliday 1985a, Chapter 8). Halliday's complementary Theme ^ Rheme and (Given) ^ New analysis is presented in Fig. 6.

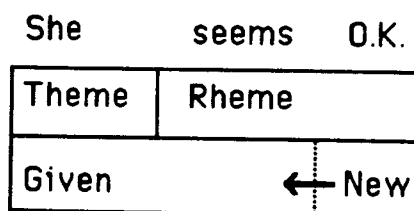| She	seems	O.K.
Theme	Rheme	
Given	←—New	

Fig. 6: Complementary textual perspectives on *She seems O.K.*

It is clear from this critique that Huddleston expects his topic notion to do the explanatory work distributed across Theme ^ Rheme and (Given) ^ New structure in Halliday's model; Huddleston's position in other words involves an apparent conflation of (in systemic terms a confusion of) the concepts of Halliday's Theme and Rheme with Given and New.

> Those who acknowledge that examples like (19c [= 16 above; JRM]) do not encode the theme (at least in the verbal, as opposed to the prosodic, component of the utterance)... (Huddleston 1988:159)

> One very counter-intuitive consequence of Halliday's analysis is that natural question-answer pairs more often than not have a change of theme. Thus in the exchange A *What's the new boss like?* B - *She seems O.K.* the answer will be analysed as being about the new boss, but the question won't - its Theme is *what*. (Huddleston 1988:159)

iv. rejection of unmarked Theme

Finally, Huddleston's position challenges Halliday's distinction between marked and unmarked Theme. As noted above, only one of the types of marked Theme recognized by Halliday is taken as explicitly marking Theme - clause initial Circumstances of matter. Otherwise the interpretation of Theme depends on context - clause sequence, Huddleston argues, is irrelevant. English does not in Huddleston's view grammaticalise unmarked Theme. Note that what Huddleston is arguing here is that in texts 9, 10, 12 and 13 above the fact that the material recognized by Halliday as Theme is realised initially is not significant and that there is no thematic difference between texts like 9 and 12 which realise their method of development through unmarked Themes and those like 10 and 13 which take marked Themes as their point of departure.

> I think that the quoted remark about *as for*, etc. ("Sometimes in English the Theme is announced explicitly, by means of some expression like *as for...*, *with regard to... about..."* Halliday 1985a:40) is correct as far as it goes: these expressions explicitly assign thematic status to their complements. But this formulation invites the inference that clauses not introduced by such an expression do not have an explicitly marked theme: the thematic interpretation depends on the context - and in general I think that too is correct. (Huddleston 1988:158)

Huddleston's reappropriation needs to be read in the context of Halliday's explicit warning against a reduction of precisely this kind (and re-read in the context of Huddleston's complaints about the 'lack of dialogue' in Halliday's grammar):

> Some grammarians have used the terms Topic and Comment instead of Theme and Rheme. But the Topic-Comment terminology carries rather different connotations. The label 'Topic' usually refers to only one particular kind of Theme [the topical; JRM]; and it tends to be used as a cover term for two concepts

that are functionally distinct, one being that of Theme and the other being that of Given... (Halliday 1985a:39)

Halliday's qualification (with *'Sometimes ...'* as interpersonal Theme) on the use of clause initial Circumstances of matter[12] to explicitly announce the Theme is also relevant here:

Sometimes in English the Theme is announced explicitly, by means of some expressions like *as for..., with regard to..., about...* Usually it is only nominal expressions that are introduced by a locution of this kind... (Halliday 1985a:40)

3.2 Existentials

It is on the basis of the reappropriation documented in points i-iv of section 3.1 above that Huddleston cannot make any sense of the idea that existential *there* can function as a clause Theme (because **as for there* is ungrammatical; a clause cannot be about *there*). Reasoning grammatically, however, with respect to Halliday's own analysis of Theme, it would be quite surprising if this were in fact the case. The reason for this is that existential clauses have a full paradigm as far as conflating Subject, Complement or Adjunct with Theme is concerned and it would accordingly be rather odd if English did not make use of this potential to organise text.

The different possibilities for point of departure in existential clauses are outlined below. The display is complicated by the fact that when Complement or an experiential Adjunct are conflated with Theme, then *there* , the clause Subject, is not usually realised - presumably because in Halliday's (1985a:76-78) terms existential *there* is not a likely host for modal responsibility (importantly however when selected as unmarked Theme, *there* is used to make a clause's existentiality explicit). This means that examples 20 and 22 can be read as attributive rather than as existential clauses[13] (in which case they would be tagged *wasn't he?* instead of *wasn't there?*); it is the existential reading that is intended here.

Theme/Subject
(existentiality as point of departure)

    18. **There**   was a guard on the gate.[14]

Theme/Complement
(Existent as point of departure)

    19. **A guard**   there was on the gate.[15]
    20. **A guard**   was on the gate, (wasn't there?)[16]

Theme/Adjunct
(Circumstance as point of departure)

    21. **On the gate**   there was a guard.
    22. **On the gate**   was a guard, (wasn't there?)[17]

Some of the ways in which English exploits these thematic possibilities will be illustrated in section 3.2 below.

3.2.1 Establishing method of development

The existential clauses just reviewed are ideally designed for introducing participants as unmarked news at the end of the clause (see section 4 below) and reinforcing their introduction by taking their existence as point of departure (i.e. Theme). The reason for this is that the un-

marked Theme (i.e. the Subject) of this clause type does not realise a participant, but functions simply to map the meaning 'existence' onto Theme - as outlined in Fig. 7 (for an excellent discussion of *there* 's presentative function see Downing 1990).

There   are   many species of whale

	Process	Existent
Theme	Rheme	
(Given)	⟵ New	

Fig. 7: Experiential and textual structure of an existential clause

This makes existential clauses particularly well suited for establishing a text's method of development. As unmarked Theme, *there* is anticipatory; it signals that something is coming - namely the new participant at the end of the clause. Where this participant predicts a pattern of ensuing Themes (or hyper-Themes) the clause itself is thus mimetic of its function in structuring larger units. Existential clauses were in fact used twice in this symbolic way in text 12 above, once in the text's macro-Theme and later in its second hyper-Theme:

macro-Theme (text 12):

> **There** are many species of whales. They are conveniently divided into toothed and baleen categories.

hyper-Theme (text 12):

> **There** are fewer species of the larger baleen whales, that filter krill and small fish through their baleen plates.

Note that in both cases *there* functions appropriately in the context as unmarked Theme, contrasting with an existential variation such as *In the world's oceans (there) are many species of whale* or a material alternative such as *Many species of whale are found in the world's oceans.*

3.2.2 Revising method of development

The same experiential and textual properties which make existential clauses appropriate choices for establishing a text's method of development make them useful for reconstruing a prediction that needs to be reworked. Text 23 is an example of a another taxonomising report (like text 12 above). Its macro-Theme (23.1-b) proposes a classification of substances into two groups as far as conductivity is concerned. This is then developed through two anticipated hyper-Themes (23.c and 23.h) and the thematic selections they predispose. Then in 23.n a third category of conducting substances is announced, whose existence was not predicted by the text's macro-Theme. An existential clause, with *there* as unmarked Theme, is chosen to rework the method of development at this point in the text. The taxonomy of substances being constructed in this report is outlined in Fig. 8 below.

[topical Theme in bold face, marked Theme underlined; macro-Theme in small caps, 12 point; hyper-Theme in small caps, 10pt]

23. (a) AS FAR AS THE ABILITY TO CARRY ELECTRICITY IS CONCERNED, (B) WE CAN PLACE MOST SUBSTANCES INTO ONE OF TWO GROUPS. (c) THE FIRST GROUP CONTAINS MATERIALS WITH MANY ELECTRONS THAT ARE FREE TO MOVE. (d) These materials are called conductors (e) because they readily carry or conduct electric currents. (f) Conductors are mostly metals (g) but also include graphite. (h) THE SECOND GROUP CONTAINS MATERIALS WITH VERY FEW ELECTRONS THAT ARE FREE TO MOVE. (i) These materials are called nonconductors (j) and are very poor conductors of electricity. (k) Nonconductors can be used to prevent charge from going where it is not wanted. (l) Hence they are also called insulators. (m) Some common insulators are glass, rubber, plastic and air. (n) THERE ARE A FEW MATERIALS, SUCH AS GERMANIUM AND SILICON, CALLED SEMICONDUCTORS. (o) Their ability to conduct electricity is intermediate between conductors and insulators. (p) Semiconductors have played an important role in modern electronics. (Heffernan & Learmonth 1983:212)

```
                              ┌metals
              ┌conductors ───►│
              │               └graphite
              │
              │               ┌germanium
conducting    │               │
substances ──►│semiconductors─►│silicon
              │               │
              │               └. . .
              │
              │               ┌glass
              │               │
              │               ├rubber
              │               │
              └nonconductors ─►│plastic
                              │
                              ├air
                              │
                              └. . .
```
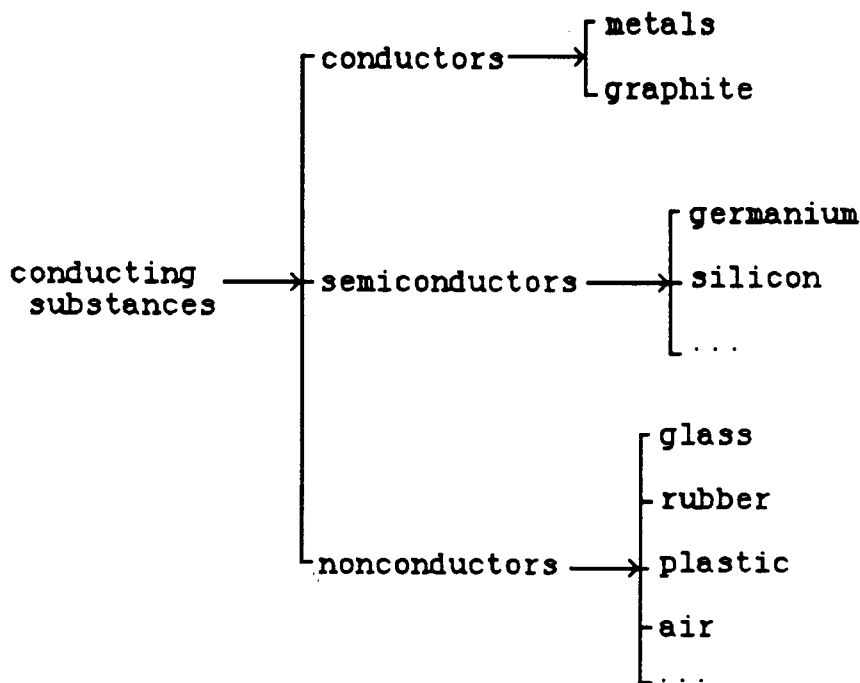
Figure 8: Taxonomy of conducting substances constructed in text 23

The same pattern of existential thematic resistance is found in 24. As in 23, the macro-Theme (reinforced by the heading) does not predict the existence of semi-conductors: *In electrical work generally, materials can be grouped as either conductors or insulators.* When the semi-conductors are introduced, they are introduced with an existential clause: *In addition to this there are materials in which the degree can be varied* (note that in this example *there* is preceded by the textual Theme *in addition to this* , but maintains its function as unmarked topical Theme).

24. Conductors and insulators

All the practical effects of electricity are produced by the movement of electrons. **In electrical work generally, materials can be grouped as either conductors or insulators.** As a general definition a conductor has the ability to conduct electrons easily, while an insulator tends to prevent the flow of electrons. The production of charges as described in Section 2.1 is more readily demonstrated because the rods used are made of

materials that are poor conductors. Most metals are good conductors and, with one or two exceptions, most non-metals are poor conductors (insulators).

Whether a material is a good or bad conductor cannot be decided in some arbitrary fashion, because there is no sharp dividing line. All materials have some opposition to the movement of electrons and the degree of opposition governs the use of the material. For example, an electric light receives electricity by means of a good conductor (copper) and to ensure the electrons flow only where desired, the copper wires are encased in a plastic sheathing (a poor conductor or a good insulator). The circumstances governing a material's use also have an effect on the selection.

Some salts are insulators when solid but are good conductors when molten. Neon is an insulator when not put under electrical stress, but becomes a conductor when the applied voltage is high enough to ionise the gas.

It is important to realise that there are degrees of conductivity. Under normal everyday usage, there is no perfect conductor, nor is there a perfect insulator. **In addition to this[18] there are materials in which the degree can be varied.** These are called semi-conductors and in the highly refined state are very poor conductors (i.e. good insulators). As their content of impurities is increased, their ability to conduct electrons also increases. Semiconductors are first purified and then "doped" to the required degree of impurity to control the rate of flow of electrons through them.

Insulators that are porous and capable of absorbing moisture must be regarded with caution because as they become damp their insulating qualities decrease markedly. These materials (e.g. wood) are often impregnated with varnish to prevent the absorption of moisture. (Jenneson 1980:23.)

It is interesting to observe that 24 in effect 'softens up' the reader with three additional existential clauses before presenting semi-conductors:

It is important to realise that there are degrees of conductivity. Under normal everyday usage, there is no perfect conductor, nor is there a perfect insulator.

But *there* does not function as point of departure in this preparatory material. The first *there* is prefaced by *it is important to realise* , the second and third[19] by the marked Theme *under normal circumstances.* It is only at the point of actually presenting the third category of conducting substance that *there* is mapped onto Theme to signal that the existence of a new participant is precisely what the clause will be about.

It is also worth commenting at this point that the recurrent selection of existential clauses in this paragraph shows that a text might well choose existentiality as its method of development:

Importantly	**there** are degrees of conductivity.
	There is no perfect conductor,
nor is	**there** a perfect insulator under normal everyday usage.
In addition to this	**there** are materials in which the degree can be varied.

The possibility of such a pattern of thematic choice is further evidence against rejecting *there* as a potential candidate for Theme in existential clauses.

By way of concluding this brief commentary on certain aspects of the way in which existential clauses participate in establishing or reconstruing a text's method of development, consider text 25 below. Unlike texts 23 and 24 the macro-Theme (reinforced by the heading) of this text predicts the existence of conductors, insulators and semiconductors. Predictably an existential Theme *is not employed to introduce semi-conducting* substances; rather, semiconductors themselves function as unmarked topical Theme (the text's macro-Theme is in 12 point bold face and its hyper-Themes in 10 point bold face below).

25. Conductors, Insulators and Semiconductors

If we connect a battery across a body, there is a movement of free electrons towards the positive end. This movement of electrons is an electric current. **All materials can be classified into three groups according to how readily they permit an electric current to flow. These are: conductors, insulators and semiconductors.**

In the first category are substances which provide an easy path for an electric current. All metals are conductors, however some metals do not conduct well. Manganin, for example, is a poor conductor. Copper is a good conductor, therefore it is widely used for cables. A non-metal which conducts well is carbon. Salt water is an example of a liquid conductor.

A material which does not easily release electrons is called an insulator. Rubber, nylon, porcelain are all insulators. There are no perfect insulators. All insulators will allow some flow of electrons, however this can usually be ignored because the flow they permit is so small.

Semiconductors are midway between conductors and insulators. Under certain conditions they allow a current to flow easily but under others they behave as insulators. Germanium and silicon are semiconductors. Mixtures of certain metallic oxides also act as semiconductors. These are known as thermistors. The resistance of thermistors falls rapidly as their temperature rises. They are therefore used in temperature-sensing devices. (Glendinning 1980:1)

4. Theme and New (method of development and point)

As noted in section 3.1 above, Huddleston's reappropriation gambit involves an apparent reduction of Halliday's complementary Theme ^ Rheme (realised by clause sequence) and (Given) ^ New (realised by intonation) structures to the notion of topic. Fries (1981/1983:117) discusses the origin of what he calls the 'combining' approach in the work of the Prague School. Firbas's (1964:268) translation of Mathesius's proposed definition of Theme clearly treats Theme as a combination of what Halliday separates as independent variables, Theme and Given: "[the theme] is that which is known or at least obvious in the given situation and from which the speaker proceeds."

The appropriateness of the combining or separating approach to Theme is very probably a language specific variable, and this may well have influenced Mathesius in his definition. The combining approach for example is a much more attractive strategy of analysis in a language like Tagalog in which Themes are next to categorically definite (Martin 1983) than in English where the association of Theme with presupposed information is far weaker. For English, Fries prefers Halliday's separating approach, with clause sequence and Tonic placement as independent parameters. And this complementarity has important implications for English discourse structure which will now be briefly reviewed.

Basically Halliday's position is that English uses initial position in the clause to grammaticalise Theme, as has already been noted. (Given) ^ New structure on the other hand is realised through intonation. In the unmarked case an information unit's major pitch movement, marking its Tonic, is placed as late as possible - on the final salient syllable in the unit. The Tonic in this case signals minimally that the final salient syllable of the highest information unit constituent it falls on is New. Thus in 26, 27 and 28, with the Tonic falling in unmarked position on the syllable /key/, New is minimally defined as O.K. in 26, *quite O.K.* in 27, and *what I'd call O.K.* in 28.

26. // She seems O.K. //

27. // She seems quite O.K. //

28. // She seems what I'd call O.K. //

Halliday's suggests that English leaves the question of how far New extends leftwards from this minimally marked constituent open; the amount of New depends then on context, which is why parentheses have been used in this paper to enclose the function Given in the structural formula (Given) ˆ New - if the whole of the information unit is New, there may not in fact be any Given. The indefinitely bounded domain of New is a reflection of the wave like pattern of realisation associated with textual meaning noted in section 2.1.

Marked tonicity is realised by moving the Tonic leftwards from the final salient syllable in the information unit. This automatically makes any constituents with salient syllables following the Tonic Given, leaving open the leftward domain of the New. Thus in 29, the intonation marks the process *seems* as minimal New, treating *O.K.* as Given (since *she* is obviously recoverable in *this context the Given is discontinuous in 29 she...O.K.*)

29. // She **seems** O.K. //

Halliday treats the complementarity of Theme (initial position) and unmarked New (final position) as representative of the kind of realisation associated with the textual metafunction - peaks of prominence which define a wave-like pattern of manifestation. The complementarity underlying this textual periodicity is outlined for example 30 in Fig. 9, which incorporates Halliday's segmental analysis with a more iconic attempt to model culmination as a wave.

30. //1 But then he might well have got rather **sick** //

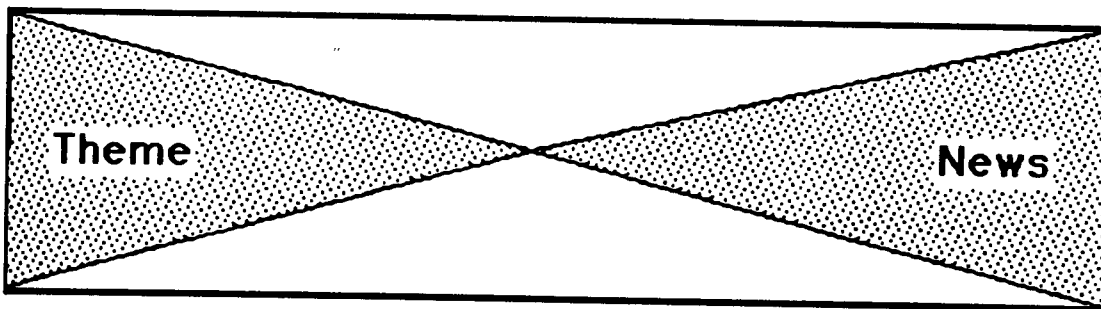| But then he	might well have got rather sick
Theme	Rheme
Given	?← **New**

Figure 9: Textual periodicity as constructed by THEME and INFORMATION

The textual distribution of Circumstances in the first paragraph of text 13 above very nicely illustrates this complementarity of Theme and New. The relevant circumstances are highlighted in bold-face below:

13'. **For one thousand years**, whales have been of commercial interest **for meat, oil, meal and whalebone. About 1000 A.D.**, whaling started **with the Basques using sailing vessels and row boats.** They concentrated **on the slow-moving Right whales.** As whaling spread **to other countries**, whaling shifted **to Humpbacks, Grays, Sperms and Bowheads. By 1500**, they were whaling **off**

Greenland; by the 1700s, off Atlantic America; and by the 1800s, in the south Pacific, Antarctic and Bering Sea. Early in this century, the Norwegians introduced explosive harpoons, fired **from guns on catcher boats,** and whaling shifted **to the larger and faster baleen whales.** The introduction of factory ships by Japan and the USSR intensified whaling **still further.**

The two main types of circumstance in the paragraph have to do with locating events in time and in space:

LOCATION IN TIME:

LOCATION IN SPACE:

For one thousand years
About 1000 A.D.

on the slow-moving Right whales
to other countries
to Humpbacks, Grays, Sperms and Bowheads.

By 1500
by the 1700s,
by the 1800s,
Early in this century

off Greenland;
off Atlantic America;
in the south Pacific, Antarctic and Bering Sea.
from guns on catcher boats
to the larger and faster baleen whales

Throughout the paragraph, Circumstances of location in time function systematically as Theme (as discussed in section 2.3 above) while Circumstances of location in space function as News. In the middle of the paragraph this textual periodicity takes over completely as far as clause structure is concerned; as outlined in Fig. 10 below, the second and third clauses in the clause complex *By 1500, they were whaling off Greenland; by the 1700s, off Atlantic America; and by the 1800s, in the south Pacific, Antarctic and Bering Sea,* consist solely of Theme and New.

By 1500 by the 1700s by the 1800s	they - -	were whaling - -	off Greenland off Atlantic America in the South Pacific, Antarctic and Bering Sea
Theme [marked]	Rheme		
Given			New

Fig. 10: Complementarity of Theme and New in text 13

The problem of textual meaning and representation will not be pursued here (see Halliday (1979a), Matthiessen (1988, 1992) for further discussion). The point of introducing Halliday's complementary perspectives on textual prominence in the English clause here is simply to open up discussion of the discourse implications of a separating as opposed to a combining approach. Halliday's analysis for example raises the question as to whether there are discourse proportionalities associated with New corresponding to the hyper-Theme:Theme proportionality reviewed in section 3 above. Does the Theme/New complementarity in other words resonate through higher levels of text organisation than the clause? An initial layer of resonance in outlined in Fig. 11.

Hyper-Theme ⟶

        Theme   New
        Theme   New
        Theme   New
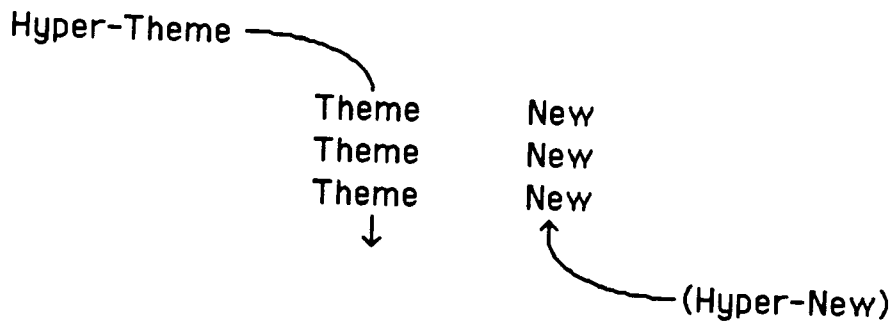   ↓   ↑

                      (Hyper-New)

Fig. 11: Complementarity of hyper-Theme & hyper-New

Due to limitations of space, this aspect of discourse organisation cannot be pursued in detail here (see Martin forthcoming a, b for discussion). Note however the way in which the second paragraph of text 13 above functions as a summary of meaning presented as New in paragraph 1:

> **The global picture**, then, was a mining operation moving progressively with increasing efficiency to new species and new areas. Whaling reached a peak during the present century.

Paragraph 2 in other words functions to consolidate news and complements in this respect the text's first hyper-Theme which announced the pattern of Themes around which this news would be developed. The paragraph functions then as hyper-New[20]. Fig 12 outlines the consolidation of information in operation here:

with the Basques using sailing vessels and row boats; explosive harpoons, fired from guns on catcher boats; still further

off Greenland; off Atlantic America; in the south Pacific, Antarctic and Bering Sea

the slow moving Right whales; to Humpbacks, Grays, Sperms and Bowheads; to the larger and faster baleen whales

a mining operation moving with (increasing efficiency) to (new areas) and (new species)
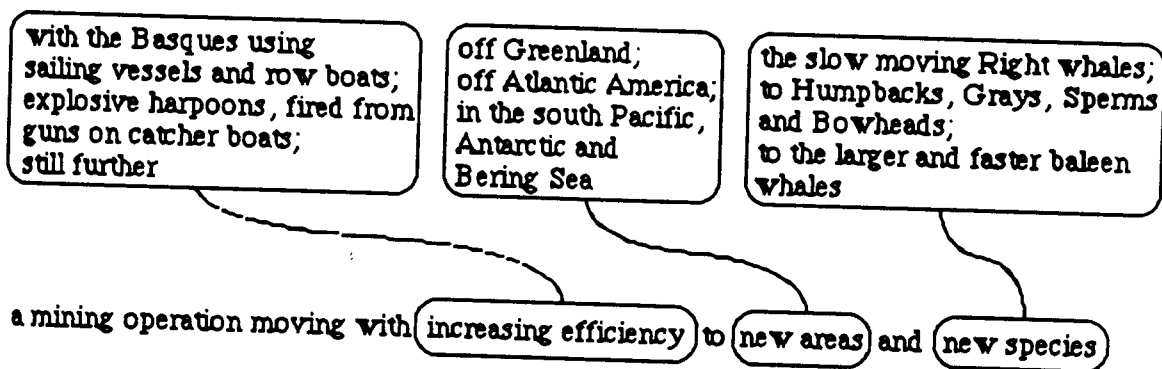
Fig. 12: Consolidation of news in the hyper-New of text 13

Later, in the recommendations section of this Canadian Wildlife Federation address this hyper-New will itself be picked up and incorporated as part of a text culminating macro-New:

> In spite of **the whaling experience of mining whale resources** until innovative approaches could be applied to whaling management, we continue to mine our high seas fisheries resources. (Martin 1989:4)

These solidary relations between clause and various layers of discourse organisation are just beginning to be explored. And it seems clear that the more consciously constructed (i.e. the more 'written') the text under examination, the more strongly these pattern will emerge - with a general tendency for texts to place more emphasis on prediction (layers of Theme) than on consolidation (layers of New). The hierarchy of periodicity being introduced here is partially summarised in Fig. 13 below, borrowing the term 'point' from Fries (1981/1983) to complement his

now familiar method of development. Note that the articulation of a discourse model of this kind depends absolutely on the separating approach to textual meaning in the English clause advocated by Halliday and his suggestion that text structure symbolises in important respects the structure of the clause (e.g. Halliday 1982). Contextual considerations are also important, since the complementarity at issue here redounds with different contextual variables - method of development tends to be deployed to organise the staging structure of genre, while point is more concerned with elaborating field (see Martin in press a, Chapter 6 for discussion).

Method of Development
(genre focus)

Point
(field focus)

Macro-Theme^n

Hyper-Theme

predict

Theme...New

accumulate
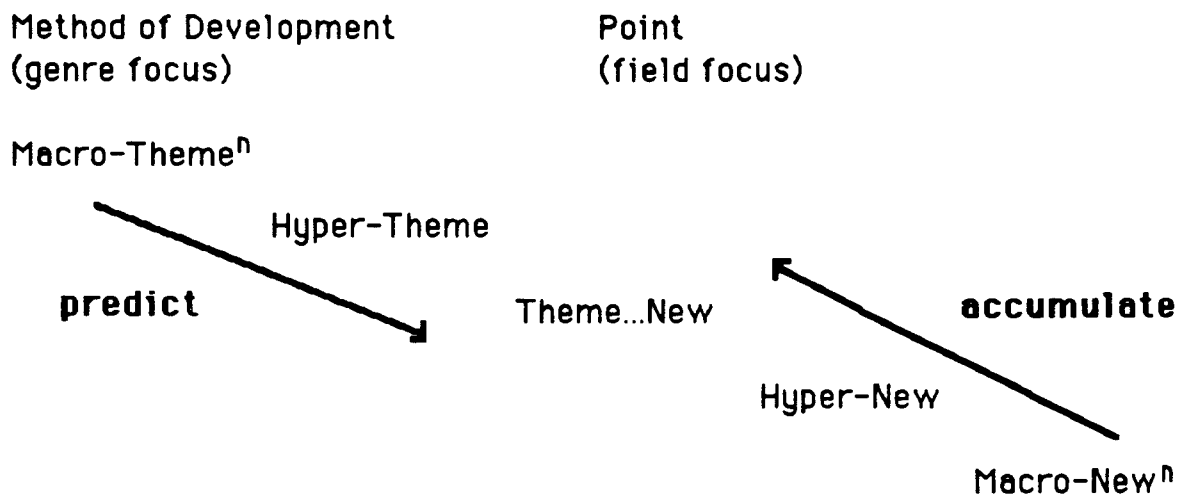
Hyper-New

Macro-New^n

Fig. 13: Sandwich texture in abstract written discourse

Martin (in press a) unpacks the hierarchy of periodicity crudely modelled in this figure, albeit somewhat metaphorically as follows. This quotation should be read as an informal gloss on Halliday's notion of point of departure and his complementary concept of textual news:

> Method of development takes these harmonising meanings [deriving from cohesive harmony; see Hasan (1984) - JRM], and finds a peg to hang them on - it establishes an angle on the field. This angle will be sensitive to a text's generic structure where this is realised in stages. Method of development is the lens through which a field is constructed; of all the experiential meanings available in a given field, it will pick on just a few, and weave them through Theme time and again to ground the text - to give interlocutors something to hang onto, something to come back to - an orientation, a perspective, a point of view, a perch, a purchase.

> Point is the discourse complement of method of development. Where Theme ties the text down, point elaborates it, developing it as news. A much greater range of meanings will be realised in New than Theme, though not a random set. A text's principle strings and chains will still be there, constrained by cohesive harmony; but there will be lesser strings and chains and odds and ends as well. A text is never hermetically sealed; a text, like the system behind it, is a dynamic open process - and point is a source of openness: a resistance to the closure predicated on cohesive harmony and method of development.

> In short, method of development is where a text is coming from; point is where it's going to. Theme is how a speaker looks at things; New is where she takes the listener to. Hyper-Theme is what a speaker's going to say; hyper-New is what a listener's learned. Macro-Theme is their way in; macro-New is where they've

been. A text is a trip: method of development is the route taken, while point is why you went there in the first place - what you've seen/learned/experienced/ taken away. Method of development is the plan; point is the holiday. (Martin in press a)

In closing, one further aspect of the implications of the separating as opposed to the combining approach to Theme for discourse analysis will be considered, returning to text 25. This text is taken from a set of ESP materials, *English in Electrical Engineering and Electronics* (Glendinning 1980) published by Oxford University Press as part of its 'English in focus' series. Stuart Holloway, a professional ESL teacher and writer of technical textbooks, who drew this text to my attention, commented at the time that students found it hard to understand and that it had clearly been written by someone who was an 'outsider' as far as electrical engineering and electronics were concerned. On the basis of Fig. 11 it is possible to offer an evaluative commentary on where this text goes wrong.

The thematic structure of text 25 is outlined in detail below, including layers of macro-Theme, hyper-Theme and Theme. Like texts 12, 23 and 24 the text is a taxonomising report, presenting a classification of conducting substances and this is clearly reflected in its layers of macro-Theme and hyper-Theme. Note however that conductors, insulators and semiconductors tend to be realised last in the text's clauses, as New; they are not woven systematically through Theme to constitute the method of development the text's higher order Themes predict.

[Topical Theme in bold face; marked Themes underlined; conductors, insulators and semi-conductors dotted underlined when News]

title:

Conductors, Insulators and Semiconductors

macro-Theme:

If we connect a battery across a body, there is a movement of free electrons towards the positive end. **This movement of electrons** is an electric current. **All materials** can be classified into three groups according to **how readily** they permit an electric current to flow. **These** are: conductors, insulators and semiconductors.

hyper-Theme 1 (and following text):

In the first category are substances which provide an easy path for an electric current.

All metals are conductors, however **some metals** do not conduct well. **Manganin**, for example, is a poor conductor. **Copper** is a good conductor, therefore **it** is widely used for cables. **A non-metal which conducts well** is carbon. **Salt water** is an example of a liquid conductor.

hyper-Theme 2 (and following text):

A material which does not easily release electrons is called an insulator.

Rubber, nylon, porcelain are all insulators. **There** are no perfect insulators. **All insulators** will allow some flow of electrons, however **this** can usually be ignored because **the flow** they permit is so small.