15 On Theme, Rheme and discourse goals

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THEMATIC STRUCTURE AND RELATED ISSUES

In recent years, a number of linguists have been interested in the flow of information in texts.[1] I have been using a systemic–functional approach to discourse analysis to demonstrate the usefulness of the concept of Theme. As a part of that endeavour, it is necessary to develop a better description of Theme. Halliday has defined Theme in the following terms.

> The English clause consists of a 'theme' and a 'rheme' . . . [the theme] is, as it were, the peg on which the message is hung, . . . The theme of the clause is the element which, in English, is put in first position; . . .
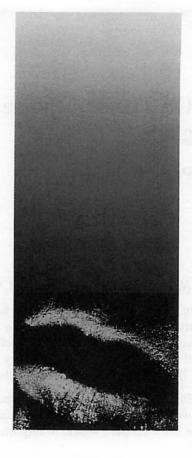>
> (Halliday 1970: 161)

> The Theme is a function of the CLAUSE AS MESSAGE. It is what the message is concerned with: the point of departure for what the speaker is going to say.
>
> (Halliday 1985: 36)

It is useful to notice that 'pegs' and 'points of departure' are semantic notions. The statement that Theme occurs in first position in English is a realizational statement for English, not a definition of the notion of Theme. Further, the definitions quoted here describe Theme as an element of structure of the clause, although elsewhere Halliday makes it clear that he believes other structures, such as clause complexes (1985: 56–9) and nominal and verbal groups (1977: 183; 1985: 158, 166, 176), also have Thematic structures. Following Halliday's suggestion, I have found it useful to treat Thematic structures in independent conjoinable clause complexes. This structure consists of an independent clause together with all hypotactically related clauses which are dependent on it. The independent conjoinable clause complex is very similar to the T-unit of American educational literature (see Hunt 1965), and so I will use the term 'T-Unit', since it is so much shorter.

In Fries (forthcoming a), I have also rephrased Halliday's definition of the meaning of Theme somewhat less metaphorically in the following terms:

ADVANCES IN WRITTEN TEXT ANALYSIS

Edited by Malcolm Coulthard

ROUTLEDGE

The Theme of a T-unit provides a framework within which the Rheme of that T-unit can be interpreted.[2]

Text 1 illustrates the use of Thematic information.

Text 1

1   What does the term *culture* mean throughout this book?
2   *As used by anthropologists*, the term *culture* means any human behavior that is learned rather than biologically transmitted.

(Gregg 1985: 2)

In text 1, the author is obviously aware that the word *culture* is often used with radically different interpretations from the one she intends to use. By placing the restriction *as used by anthropologists* first in sentence 2, she 'prevents' the response 'That's not what *culture* means to me'.

Before continuing with a discussion of Theme, it is useful to point out two related concepts – information structure and participant reference – which should not be confused with Thematic meanings. Information structure includes the division of what is said into units of information and the signalling of which portions of those information units are most important. In the spoken language, units of information are signalled by the location of tone-group boundaries, while the location of tonic prominence indicates the culmination of the information that is being presented as New. Halliday defines New information as 'information which is being presented by the speaker as . . . not recoverable by the listener' (1985: 277). New information is contrasted with Given information, which is defined as 'information which is being presented by the speaker as recoverable . . . to the listener' (1985: 277). I prefer to rephrase Halliday's definition of New positively, as 'information which is being presented as "newsworthy"'. (Indeed, this rephrasing is in keeping with Halliday's intent, since he elaborates on the meaning of New by saying, 'the meaning [of New] is: attend to this; this is news' (1985: 277).) The revised description of New has the added advantage of being quite different from the description of a related factor, the notion of participant identification.

Participant identification refers to the ways the various participants are introduced and referred to in the development of a text. In text 2, for example, Alice has the task of introducing two new participants (*a book* and *a newspaper*) into the discourse, while Betty needs to refer to one of those participants (*the book*) as already on stage and in attention.

Text 2

Alice: I have a book and a newspaper. Which do you want?
Betty: Could you give me the book?

Alice achieves her task by introducing the participants with indefinite articles, while Betty achieves her task by referring to the participant with a definite article. Many linguists describe the use of the indefinite article as

introducing a referent which is not recoverable from the context, while definite articles are said to introduce referents which are recoverable from the context. Of course, these descriptions introduce an ambiguity, since 'recoverability' has already been used to describe the difference between Given and New information. Since the two concepts are similar, this is a serious ambiguity. In the case of participant identification, we are concerned with referential identity. In the case of information structure, referential identity is not a primary focus. We are, rather, concerned with what is considered 'news'. One way to avoid the confusions inherent in the different interpretations of 'recoverability' is to avoid that term altogether. I have already chosen to use the term 'newsworthiness' to describe the meaning of New in information structure. In the issue of participant reference, I will follow Martin (1992) in distinguishing presenting and presuming reference. Presenting reference introduces new referents into the discourse, and, in English, is associated with indefiniteness. Presuming reference, on the other hand, introduces participants which are familiar to the audience, and, in English, is associated with definiteness.

It has long been noticed that a correlation exists between the concepts discussed so far. Many linguists (including Halliday 1967, 1985; Chafe 1980, 1984) have noted that each new intonation contour signals a new chunk of information (or new information unit, to use Halliday's term). Similarly, Halliday (1967: 200–1; 1985: 274) and Chafe (1984: 437) note an unmarked correlation between the clause and the information unit. Finally, they also note a general tendency for the last major constituent of the clause to receive a tonic accent. That is, there seems to be a general correlation between Rhematic status and the culmination of the New information. At the other end of the clause, most Themes are presented as Given information, and often contain presuming reference. It would be wrong, however, to assume that the correlations between these concepts are perfect. Many Themes (particularly marked Themes) are pronounced as separate tone groups and thus are presented as New information, and while most Themes do contain presuming reference, many do not. Similarly, while Rhemes usually are presented as containing New information, many are not so presented. (Indeed, Davies (1989) points out that the placement of Given information in the Rheme can function as a cohesive device.)

The role of information structure may be illustrated by a discussion of text 3:

Text 3

//4 ⌣ in / **this** job / Anne we're // 1 working with / **silver** / ⌣ //

(Halliday 1985: 283)

Text 3 is the initial sentence of a conversation in which a job trainee is being oriented to a new job. This is one of several jobs which the trainee has encountered or will encounter. Both participants know this fact. The sentence is divided into two tone groups (tone-group boundaries are marked by //).

Each tone group contains one tonic syllable (marked in bold). In this sentence the New information is restricted to the tonic syllables. In this context the listener can recover the notions of 'job', 'working', etc. The newsworthy part of the message lies in 'this' (in opposition to other jobs) and 'silver' (in opposition to other sorts of objects). The restriction of New to single words is merely an aspect of this example, and should not be interpreted as a general restriction on the occurrence of New. Indeed, later in this chapter, examples will be seen in which entire sentences will be considered to function as New. The example in text 3 illustrates a Theme being presented as a separate information unit and therefore containing New information. That information is presuming reference. Thus, the example shows that Thematic status and presuming reference are independent of status as Given information.

Two important points should be made about the definitions of Given and New. (1) Given and New are oriented toward the listener. They constitute instructions to the listener about how to interpret what is said and how it is to be related to what the listener already knows. (2) The decision of what to signal as Given or New rests with the speaker. It is a meaningful choice, and therefore it is not predictable. That is, even if we know that the listener knows some bit of information, and we know that the speaker knows that the listener knows that information, we still cannot predict with certainty that that information will be presented as Given.

DISCOURSE EFFECTS OF THEME AND RHEME

So far my presentation has followed the Hallidayan model fairly closely. There are several problems, however. One problem lies in the description of the meaning of Theme. The Hallidayan descriptions of 'the peg on which the message is hung' and the 'point of departure of the clause as message' are clearly metaphorical. Even my rephrasing of this notion 'providing a frame-work for interpretation', though less metaphorical, is still difficult to interpret in many examples. In my work on Theme, I have tried to provide a better 'fix' on the meaning of Theme by a three-pronged approach. (1) I have tried to describe strategies for the development of texts which would lead one to make certain items of information Thematic in specific contexts (see Fries forthcoming a). (2) I have tried to connect Thematic content with the perceived meanings of texts (see Fries 1981). (3) I have tried to contrast the effect of giving information the status of Theme with the effects of information which has been given other sorts of status (see Fries 1981).

Points (2) and (3) can be seen in the following hypotheses, which I made in Fries (1981).

(1) If a text segment is perceived as having a single method of development, then the words which contribute to the expression of that method of development will occur Thematically within the T-units of that text segment.
(2) If a text segment is perceived as expressing a single point, then the words

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which contribute to the expression of that point will occur within the Rhemes of the component T-units of that text segment.

(3) The perception of a nominal item as topic of a text segment is unrelated to the Thematic or Rhematic placement of the references to that item.

The model used here is a correlational model.[3] No claim is intended that every text segment must have a single simple method of development or must express a single point, or must have a simple nominal topic. Indeed, many people object to using the notion of a single method of development or single point, since many text segments do not have such phenomena. Even in these more complicated text segments, however, the intent of my basic hypothesis remains: Themes and Rhemes of clauses and clause complexes are used for different purposes. As part of specifying the uses of Thematic information, it is useful to examine a longer text which is not so uniform as the ones I previously examined. I will use a written text because I suspect that the differences between the uses of Thematic and Rhematic information will be more prominent.[4]

First, let me explain why I believe that the differences between Thematic and Rhematic information will be most prominent in formal written English. We have already said that New information is that which is being presented as 'newsworthy', and that in the spoken language, the culmination of the New information is signalled by the location of the tonic accent. Of course, in the written language, there is no accent, and thus a major means of signalling New information is lost. What alternatives exist within the written language to signal 'newsworthiness'? Perhaps the most obvious means are graphic signals such as underlining, capitalization, the use of coloured ink or the use of different type faces or sizes. In addition there are considerations such as paragraphing and placement of information on the page. Most of these means are used with restraint in more formal writing. (Editors often do not approve of using capital letters or underlining for emphasis.) As a result, writers in these formal contexts are restricted to using other means to indicate what is 'newsworthy'. Two major resources come to mind: (1) writers sequence the information in their texts so that readers have the relevant background information in their attention as they read each new sentence; (2) writers tend to sequence the information presented in each sentence so that, where possible, the New information is placed where the unmarked tonic accent would be in the spoken sentence. That is, writers will tend to place New information towards the end of the clause, thus strengthening the correlation of New with Rheme.[5]

THEME, N-RHEME AND DISCOURSE GOALS

To summarize, we are assuming that there is a correlation between Thematic position and Given information on the one hand, and Rhematic position and New information on the other. My hypothesis is that writers use position at

the end of the clause to indicate the newsworthy information to their readers, and that they use the beginnings of their clauses to orient their readers to the message which will come in the rest of the clause.

We already have a good term ('Theme') for the first clause-level constituent at the beginning of the clause. However, we need a term for the end of the clause. Rheme is too inclusive, since in Halliday's terminology it includes everything that is not Theme. Since we are interested in the unmarked association of Rheme with New, and since New typically is associated with the last constituent of the clause, we can coin the term N-Rheme to indicate the last constituent of the clause.

As we examine the text, we should keep in mind that the N-Rheme is the newsworthy part of the clause,[6] that is, the part of the clause that the writer wants the reader to remember. As a result we should expect the content of the N-Rheme to correlate with the goals of the text as a whole, the goals of the text segment within those larger goals, and the goals of the sentence and the clause as well. On the other hand, the Theme is the orienter to the message conveyed by the clause. It tells the reader how to understand the news conveyed by the clause. As a result, we should expect the choice of Thematic content usually to reflect local concerns. For example, if we are examining a text which has a problem–solution structure, we should expect the meanings to change as the text moves from the description of the problem to the description of the solution. Both the Thematic content and the N-Rhematic content should change. However, the content of the N-Rhemes should be more obviously connected with the goals of each text portion. For example, in the section which describes the problem, the N-Rhemes should have an obvious connection with what is wrong, while in the section which describes the solution, the N-Rhemes should have an obvious connection with what was done to solve the problem. The Themes of the problem section, on the other hand, might well concern different aspects of the item which is causing the problem (say an engine which is not functioning properly), while the themes of the solution section might concern notions such as the relative temporal order of the actions taken in solving the problem.

A SAMPLE ANALYSIS

I wish to take as my text a fund-raising letter sent out by the political action group Zero Population Growth (henceforth ZPG). The text of the letter is provided in Appendix I, while Appendix II contains the same letter with items labelled to facilitate reference. Each new paragraph has been assigned a capital letter and each punctuated sentence has been given a number. Each non-embedded clause in each sentence has been given a lower-case letter and placed on a separate line. The logo, the date and other information associated with the genre of letter writing have also been assigned capital letters and numbers even though they do not clearly constitute clauses, sentences or paragraphs. Since not every item that has been assigned a

number is actually a sentence, I will refer to numbered items as segments. (Thus, 'segment 7' refers to clauses 7a and 7b.) The Theme of a clause is written in small capitals, while the N-Rheme of the clause is indicated by italics. All underlining is in the original.

The letter was written by an officer of ZPG to people who were on her mailing list, usually because they had already contributed money. That is, the audience was presumed to be already sympathetic. But sympathetic as the audience might have been, the author still needed to persuade her readers to contribute money to this particular project, and she chose to take an advertising approach to the task. This is not the only approach which might have been used, but it is not an unusual one. The approach she took is basically one of first motivating a request, and then expressing that request.[7] How can she motivate her request? Two points are obvious: (1) she must show a need for money; and (2) she must show the value of her project. Since the author is writing to an audience that she presumes is already sympathetic with the basic issue, she can assume that her readers agree that overpopulation is an issue. As a result, she does not emphasize that idea. Rather, she spends her effort on describing the value of this particular project. One way of showing the value of a political action project is to show the effects it has had. Relevant effects for a political action group are of two basic types: (1) getting the message heard (so that political forces can be brought to bear); and (2) influencing decisions made by political officials. Thus, the author should show the effects of ZPG on three audiences: public officials (who make decisions), members of the media (who can get information out to the public), and the public (who can affect decisions that the public officials make). The need can be demonstrated by showing (a) that harmful things are happening to the organization because of the lack of funds, or (b) the organization could be much more effective if it had more funds to take advantage of opportunities which are being presented at this time. This appeal can be made more dramatic by adding a note of urgency. (Indeed, in general, it would seem to be prudent when trying to raise funds to do one's best to get the audience to send the money *now*, or they may find other things to spend it on.)

A couple of other general factors in the situation also affect this letter. First, in our society requests are better received if they are personalized. That is, if they are seen as coming from some person (or group) and as showing that the person they are addressed to has some personal stake in the success of the group. As a result, we should expect that the author of this fund-raising letter will try to involve the reader, and will try to make the organization more obvious as a group of people. Finally, the request cannot be too direct. The author cannot merely say 'Send money!' From what has been said here, we may hypothesize that the letter will generally emphasize the following meanings:

(1) the value of the project;
(2) the reactions of non-ZPG people. This description will include the reaction of the three primary groups mentioned above:

        (a) public officials;
        (b) members of the media;
        (c) the public;
(3) the need for help;
(4) the urgency of the need for help.

Since these meanings relate to the goals of the text, we predict that they will regularly be found in the N-Rhemes rather than the Themes of the component clauses.

The above list describes a number of meanings which can be seen to be important for the functioning of a fund-raising letter, particularly one which attempts to raise funds for a political action group. That is, the list applies to the purposes of the text as a whole. Since the goals of the various portions of the text may vary, we also need an interpretation of the text which describes the goals of each of its parts. Rhetorical Structure Theory (RST), as developed by William Mann and Sandra Thompson (see, for example, Mann and Thompson 1985, 1986), provides just such an interpretation. RST analysis describes a text as composed of a number of text portions. Each text portion (except the largest) is related to at least one other text portion by one of a small list of relations such as antithesis, concession, etc. The combination of the two is then seen as a larger text portion, which has a nucleus and satellite structure. Finally, each relation is seen as deriving from a goal which the author wishes to achieve by adding the satellite to the nucleus. Appendix III presents an analysis of the ZPG letter published in Mann, Matthiessen and Thompson (1992). It provides a detailed interpretation of certain aspects of the ZPG text, one which relates explicitly to the presumed goals that the author had in creating this text. Finally, I should note that it was done by others independently of my work, and without consideration of Thematic and N-Rhematic structures.

Since their analysis concerns relations between clauses and larger portions of the text, Mann, Matthiessen and Thompson have not treated those aspects of this letter which concern its structure as a letter. For example, segments 1–3 – the ZPG logo, the date and the address to the reader – are missing from their analysis. Rather they have focused on the body of the letter. They find that the body of the letter expresses two requests: the first is expressed in segments 4–23, and the second is expressed in segments 29–30. The nucleus of the first request is segment 22. Segments 4–21 and 23, then, constitute two motivations for the reader to comply with the request expressed in 22. Within the first motivation section (segments 4–21) there is again a nucleus–satellite structure, with segments 11–16 constituting the nucleus of the motivation, and groups 4–10 and 17–21 constituting the satellites. In this case, the two satellites each provide evidence to support the claims in 11–16. Within the group which includes segments 4–10, segments 4–6 provide a background for segments 7–10. Segments 4, 5 and 6 are in a sequence relation and in fact constitute a small narrative. But, of course this narrative is the beginning of

a section intended to motivate the reader to comply with a request to send money. Let us examine what happens in that narrative.

4　**AT 7.00 A.M. ON OCTOBER 25** our phones *started to ring*.
5　**CALLS** jammed our switchboard *all day*.
6a　**STAFFERS** stayed *late into the night*,
6b　answering *questions*,
6c　**AND** talking *with reporters from newspapers, radio stations, wire services and TV stations in every part of the country*.

The information which is emphasized in this passage (see Appendix II for conventions) seems to begin with activity (*started to ring*) and then moves into the duration of that activity (*all day*) and the range of that activity (*with reporters from newspapers . . . in every part of the country*). One of the interesting aspects of this small narrative is the absence of action on the part of *we* (= ZPG). That is, while *started to ring* describes an activity, it is the phones, not the people, that engage in that activity. Further, we know that phones ring in response to someone else calling. Though *jamming* is a material process, it is the nominalized process *calls* that is the actor. To uncover the people involved in this process, one must infer something such as *people called us*. Again, the ZPG is the goal of the action and is seen to respond to the actions of others. Finally, *stayed* (in 6a) is not an activity but a relational process. It is only when one gets to clause 6b that one finds a human connected with ZPG actually doing something – answering questions – and even that activity is clearly done in response to some other person. In the light of all the reactive meanings in the previous clauses, one could very well interpret the last clause ((6c) *talking with reporters . . . country*) also as ZPG personnel reacting to others outside the organization.

Indeed, in segment 7, the author does refer to the previous narrative as a response.

7a　**WHEN WE** released *the results of ZPG's <u>1985 Urban Stress Test</u>*,
7b　**WE** had *no idea we'd get such an overwhelming response*.

In fact this reference is located at the very end of segment 7 (the N-Rheme of both the clause and the sentence), where it receives a natural prominence. Further, the term *overwhelming* is used to describe the response. What justification have we been given for this description? The reactive nature of ZPG in the narrative has already been pointed out. The author has prepared us for 'overwhelming' by consistently placing information which would lead to that judgement in the N-Rhemes of the component clauses.[8] In clauses 5 and 6a *all day* and *late into the night* indicate the (great) extent of the reaction. The N-Rheme of 6c details the wide range of the reaction. We are given a list of the major news media. Such a list has much the same effect as saying 'all the major news media'.

Segment 8 explicitly repeats the evaluation of the response described in segment 7.

8   MEDIA AND PUBLIC REACTION has been *nothing short of incredible.*

Mann, Matthiessen and Thompson describe the relation between segments 7 and 8 as one of Restatement. But there is a difference between the two segments. In segment 7 the grammar of the main clause focuses on the surprise the response caused. (*We'd get such an overwhelming response* is an embedded clause within the noun phrase *no idea we'd get such an overwhelming response.*) Clearly, the notion of surprise *had no idea* is grammatically prominent here. Segment 8 focuses exclusively on an evaluation of the response (*nothing short of incredible* is an attribute of *media and public reaction*). It is of interest to note that in this context, receiving an overwhelming reaction to an activity is good, since the goal of the organization is to affect people's lives. Doing something which people react to is therefore an indication of being effective.

Lest that message be lost on the reader, the author goes on in segments 9 and 10 to elaborate on the nature of that reaction:

9   AT FIRST, THE DELUGE OF CALLS came *mostly from reporters eager to tell the public about Urban Stress Test results and from outraged public officials who were furious that we had 'blown the whistle' on conditions in their cities.*

10   NOW, WE are hearing *from concerned citizens in all parts of the country who want to know what they can do to hold local officials accountable for tackling population-related problems that threaten public health and well-being.*

Again, the N-Rhemes are devoted to the elaboration of the range of response engendered by the report. Segments 9 and 10 consist of single clauses. Segment 9 is coded as a metaphorical motion, with the source of the calls coded as a directional source, while segment 10 is coded as a mental perception, again with the source being coded as a direction. In both cases, the N-Rhemes of the clauses are entirely devoted to an elaborate description of the sources of the calls – that is, the people who are doing the calling. Again we are given a list and it is seen to include the people whom ZPG might well consider it important to affect (i.e. reporters, public officials and concerned citizens).

Clearly, it is obvious from the content of the N-Rhemes of segments 4–10 that the author is emphasizing the great reaction engendered by the release of the ZPG Urban Stress Test. At this point, a large reaction is good. One would expect this from the general mode of argumentation used by other letters in similar situations, and one can see this value in the wording of this portion of the ZPG letter.

However, the letter undergoes a change at this point. Mann, Matthiessen and Thompson indicate this change by saying that segments 11–16 constitute the nucleus of the motivation of the request. Segments 11–12 form a background for segment 13. Segments 11–13 are in a concessive relation to segments 14–16 and, finally, segment 12 elaborates segment 11, while clause

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11b elaborates 11a. How are these relations reflected in the Thematic and N-Rhematic structures of these segments?

We see that the Themes in segments 11–13 all refer to the Urban Stress Test. The Urban Stress Test is being elaborated in this passage, and this portion of the letter focuses on the various attributes of the Urban Stress Test. This effect is achieved by repeatedly placing references to the Urban Stress Test within the Themes of each clause, which has the effect of making the ZPG Urban Stress Test the method of development of this portion of the letter. The N-Rhemes, on the other hand, contain the new information about the elaborated item. In this case, the N-Rhematic information gives a general description of the nature of the test (in 11a), emphasizes the work that went into developing the test (in 11b), gives a more detailed description of the test (in 12) and describes who might use it (in 13). All these attributes are quite useful in helping the reader understand the nature of the test, and in pointing out the quality and usefulness of the test.

11a **ZPG's** <u>1985 URBAN STRESS TEST,</u> «F11b», is *the nation's first survey of how population-linked pressures affect U.S. cities*
11b created *after months of persistent and exhaustive research.*
12   IT ranks 184 urban areas *on 11 different criteria ranging from crowding and birth rates to air quality and toxic wastes.*
13   THE URBAN STRESS TEST translates complex, technical data *into an easy-to-use <u>action tool</u> for concerned citizens, elected officials and opinion leaders.*

At this point in the letter, the author apparently feels that she has established the basic argument as to the effectiveness of the organization. She then turns to an argument to establish the need for further support. While she has to demonstrate that the organization is doing well, she cannot afford to imply that the organization is so effective that it no longer needs help. That is, she needs to prevent the response 'If the organization has done so well so far, why does it need my money right now?' She does so at this point by distinguishing between having a tool and using it well. Mann, Matthiessen and Thompson describe the relation between 11–13 and 14–16 as Concession. Thus this portion of the text has roughly the meaning of 'Though we have this marvellous tool [implying that we do not need help], we still need your help'. Certainly, the author emphasizes the truth of segment 14 and devotes segment 15 to supporting it. The author must emphasize the notion of need at this point, and it can be seen that the N-Rhemes of the various clauses do contain meanings which relate to that notion:

14a BUT TO USE it *well,*
14b WE urgently need *your help.*
15a <u>OUR SMALL STAFF</u> is being <u>swamped *with requests for more information*</u>
15b <u>AND OUR MODEST RESOURCES</u> are being <u>stretched *to the limit.*</u>
16   YOUR SUPPORT NOW is *critical.*

Clause 14a implies a distinction between having the test and using it well (with *well* receiving emphasis as the N-Rheme of the clause). Similarly, the N-Rheme of 14b contains *your help* as the object of *need*. Clauses 15a and 15b seem to provide evidence to support the statement in 14b. The N-Rheme of 15a (*with requests for more information*) encoded as the Actor of the process of *being swamped* links the great reaction described in segments 4–10 to the present problems of ZPG. The harmful aspect of the great reaction is also emphasized in 15b by placing *to the limit* in the N-Rheme of its clause as an adverbial of the verb *being stretched*. It is worth noting again that the N-Rhemes do not necessarily contain *all* the New information in the clause. Thus in segment 14b, the New information would probably include *urgently need* in addition to *your help*. Similarly, the New information in 15a would include *swamped*, and the New information in 15b would include *stretched* in addition to the italicized portions of those clauses. Thus, while the N-Rheme of these clauses does not exhaust the New information contained in the clause, each N-Rheme does contain at least a part of the New information.

The negative effects described in clauses 15a and 15b are applied directly to aspects of ZPG. (*Our small staff* is goal of *being swamped*, and *our modest resources* is goal of *being stretched*.) So, in this passage, we see that the good results of the reaction mentioned at the beginning of the letter have their bad aspects for ZPG.

Finally, in segment 16, *critical* is coded as an attribute of *your support now*, with *critical* emphasized by being made N-Rheme of the clause. As in the case of segments 7 and 8, Mann, Matthiessen and Thompson suggest that segments 14 and 16 are in a restatement relation, and indeed, these clauses provide very similar information. However, these segments have rather different information structures and emphasize different aspects of the message. *Your help* is N-Rheme in 14b, *your support* is Theme in 16. *Urgently* is neither Theme nor N-Rheme in 14b, but *critical* is N-Rheme in 16. The clause Theme of 14b is *we* (= ZPG). This sets up clauses 15a and b, which describe the reason why help is needed and continue the Thematic content of the Theme of 14b (14b . . . *we* . . . , 15a *Our small staff* . . . , 15b . . . *our modest resources* . . .). Clearly, all of the clauses in segments 14–16 emphasize meanings which can be seen to relate to the need of ZPG for funds by placing these meanings within the N-Rhemes of the component clauses.

SUMMARY

Rather than continue with a detailed analysis of each clause in context, let me turn now to general trends which are evident in the letter. Several bits of evidence point to the fact that N-Rhemes are being used as a position of emphasis, and that the information placed within the N-Rhemes relates to the general goals of the text.

First, the N-Rhemes regularly contain evaluative terms, and usually these terms involve extreme evaluations. That is, if we look at the placement of

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words and phrases which indicate the author's involvement in the information – phrases such as *all day*, *late into the night* or the use of extended lists (such as the list of major news media in clause 6c) – we see that the N-Rhemes of the various clauses of the text regularly contain such terms. The N-Rhemes of twenty of the thirty-five clauses in this text contain such terms. This count includes clauses 11a–13, where the author describes the characteristics of the Urban Stress Test. (These are clauses which are supposedly completely objective.) By contrast, only three Themes obviously contain such words (*deluge* (segment 9), *now* (segment 16) and *every day* (segment 20)), and two other themes might be regarded as containing such words (*small* (clause 15a) and *modest* (clause 15b)). In other words, at most, only a total of five out of twenty-six[9] clauses have Themes which contain such words. While N-Rhemes contain a high concentration of evaluative terms, the Themes contain most of the references to the ZPG organization, its members and the Urban Stress Test. Nineteen of the thirty clause Themes contain such references, while only six N-Rhemes refer to the ZPG organization, its members or the Urban Stress Test. Clearly there is a major difference in the content between the Themes and the N-Rhemes of this text.

Second, even where Themes and N-Rhemes contain similar information, that information is being used in different ways. For example, temporal adverbials appear both Thematically and N-Rhematically. However, these adverbials have quite different effects in the two positions. Chart 1 lists the clauses which contain Thematic temporal adverbials.

Chart 1: Thematic temporal adverbials

4 AT 7.00 AM ON OCTOBER 25, our phones started to ring.

7a WHEN we released the results of ZPG's 1985 Urban Stress Test,

9 AT FIRST, THE DELUGE OF CALLS came mostly from reporters eager to tell the public about Urban Stress Test results and from outraged public officials who were furious that we had 'blown the whistle' on conditions in their cities.

10 NOW, WE are hearing from concerned citizens in all parts of the country who want to know what they can do to hold local officials accountable for tackling population-related problems that threaten public health and well-being.

20 EVERY DAY decisions are being made by local officials in our communities that could drastically affect the quality of our lives.

Chart 2 contains all the clauses of the ZPG text which contain temporal adverbials in the N-Rhemes of the clauses.

Chart 2: N-Rhematic temporal adverbials

5 Calls jammed our switchboard *all day*.

6a Staffers stayed *late into the night*,

11b created *after months of persistent and exhaustive research*,

22 Please make a special contribution to Zero Population Growth *today*.

23 Whatever you give – . . . – will be used *immediately*.

In chart 1, with one exception (that in segment 20, which I wish to return to later) the adverbials are being used to locate the clause in time. One Theme, *when* in clause 7a, is a structural Theme and is required to be initial in its clause. As a result, I do not wish to lay great store on the fact that it is Thematic.[10] In the remainder of these examples, the temporal adverbial seems merely to locate the action described in the rest of the clause. It is not a major part of the news. This is true even in cases in which the initial adverbial is separated from the remainder of its clause by a comma (as in segments 4 and 9), and so can be seen to require a focus of information. (In fact, when I read segments 10 and 20 aloud, I also tend to emphasize the initial adverbials. As a result, these can be seen to convey important information. However, that information seems to be used to orient the reader to the message which follows – the function that we have been hypothesizing for the meaning of Theme.)

By contrast, the temporal adverbials in chart 2 seem to constitute an integral part of the message. One might say that this impression results from the different nature of the adverbials. For example, the first three clauses contain adverbials of extent (*all day*, *late into the night* and *after months of persistent and exhaustive research*). However, the other two adverbials (*today* and *immediately*) locate the action in time, and convey meanings similar to the ones expressed by the adverbials in chart 1. However, there is a great difference in the effect of the use of *today* and *immediately* in segments 22 and 23 from the use of *at 7.00AM on October 25* (in segment 4), *at first* (segment 9) or *now* (segment 10). In segments 22 and 23, the adverbials are much more an integral part of the message. There is an urgency about the use of these words in this context that the other examples do not convey. Note that the urgency is not merely conveyed by the nature of the words themselves. That is, the same words, used in a different way would not have the same effect. Note the difference between saying 23 and 23i:

23 Please make a special contribution to Zero Population Growth today.
23i Today, please make a special contribution to Zero Population Growth.

Example 23i simply does not have the same urgency as segment 23 has.[11]

Finally, as my third point, let me return to the five segments (mentioned above in point 1) which contain evaluative terms in their Themes. These are given in chart 3.

Chart 3: Evaluative terms in the Themes

9   **AT FIRST, THE DELUGE OF CALLS** came *mostly from reporters eager to tell the public about Urban Stress Test results and from outraged public officials who were furious that we had 'blown the whistle' on conditions in their cities.*

15a **OUR SMALL STAFF** is being swamped *with requests for more information*

15b **AND OUR MODEST RESOURCES** are being stretched *to the limit.*

16 **YOUR SUPPORT NOW** is *critical.*

20 EVERY DAY decisions are being made by local officials in our communities *that could drastically affect the quality of our lives.*

The examples in chart 3 are exceptional in that the Themes contain words which are evaluative. Do these examples constitute counterexamples to the basic hypothesis that the N-Rheme of the clause generally contains evaluative terms while the Themes do not? The answer is 'no', for the N-Rhemes of these clauses also contain evaluative material. Indeed, the N-Rhemes of these clauses contain information which is much more relevant to the goal of the clause in its context. For example, the purpose of segment 9 is to elaborate on the nature of the public and media reaction mentioned in segment 8. *The deluge of calls* is a cohesive phrase referring back to and evaluating the reaction mentioned in segment 8, while the list of callers is given in the N-Rheme of segment 9. Clauses 15a and 15b provide similar examples. Segment 14 asserts that we need help, and segment 15 describes why that help is needed. *Our small staff* and *our modest resources* (from segment 15) again involve cohesive reference together with evaluation, while the main point of the clauses is the swamping with requests and the stretching to the limit – the information that is found within the Rhemes of the two clauses.

Segment 16 is slightly different. Here *now* modifies *support*, and since *support* has been made Theme, *now* is also included as part of the Theme. It is worth noting, however, that segment 16 contains *critical* as N-Rheme, a word which clearly contains an urgent evaluative meaning which is directly relevant to the purpose of that clause.

Segment 20 is, perhaps, more interesting. In the discussion of the clauses in chart 1, segment 20 was exceptional in that it contained a temporal Theme which clearly communicated a sense of urgency. However, let us look at the structure of that clause more closely. It is reproduced below:

20 EVERY DAY <u>decisions</u> are being made by local officials in our communities *<u>that could drastically affect the quality of our lives</u>*.

The double underlined portions constitute a single noun phrase that has been separated by placing the relative clause at the end of the including clause. If we examine this relative clause, we see that it contains the 'emotive' term *drastically*. Further, it describes the practical effect of the decisions. That is, the relative clause describes the urgent importance for us of the decisions which are being mentioned. Thus, segment 20 fits into the pattern that we have already seen in this letter: the N-Rhemes of the component clauses express ideas that involve some emotive judgement, and show the importance of what is being discussed for the reader. Segment 20, however, contains two portions which convey that sort of information: the postposed relative clause, and *every day*. Given the content of that segment, the author had to choose which meaning was most important to emphasize, and chose to emphasize the effect of the decisions on the lives of the readers. I believe that she could very

well have chosen to emphasize the urgency via the frequency. She could have chosen to write:

20i   Decisions that could drastically affect the quality of our lives are being made by local officials in our communities every day.

But that wording would have had another effect. (Notice that although placing the relative clause at the beginning increases the 'weight' and complexity of the Subject and thus the flow of the resulting sentence is rather unusual, the resulting construction is far from ungrammatical. That is, we cannot explain the appropriateness of the actual wording of segment 20 merely by referring to sentence-internal concerns.)

In summary, then, all of the five clauses in chart 3 contain N-Rhemes which are directly relevant to the goals of their respective clauses. Indeed, most of those N-Rhemes contain strongly evaluative terms such as *to the limit*, *critical* and *drastically*. In other words, the importance to the goals of these clauses of the information in their N-Rhemes seems to outrank the evaluative meanings which appear in their Themes. Thus, there seems to be a hierarchy of relevance to the goals of these segments with the highest-ranking information appearing in the N-Rheme of the clause.[12]

In the interests of ease of investigation, I have taken a particularly rigid approach to the notion of information. Something either is or is not 'newsworthy', and I considered placement in the N-Rheme to be the indicator of 'newsworthiness' in writing. In spite of that rigid approach, there is a general correlation of newsworthiness and placement within the N-Rheme. In only one of thirty-six clauses was there a true exception to this tendency. One case was doubtful. In several other clauses the New information included more than merely the N-Rheme. This last situation is merely a complication of the picture, however. By contrast, information placed Thematically in the clauses was never informationally prominent in a way paralleling the role of the N-Rheme. In other words, the author of the ZPG letter clearly used Thematic and N-Rhematic position in the clause for different purposes. The content of the N-Rhemes regularly concerned information which related to the purposes of the text, of the text segment, and of the sentence and clause of which it was a part. On the other hand, the content of the Themes, even when they were separated from their main clauses by commas, regularly did not relate to the purposes of the text and text segments. Rather the content of the various Themes served as orienters to the information contained in the clauses. Comparing the information placed in the two positions helps us develop a better sense of the operation of each one separately.

APPENDIX I

[[ZPG LOGO]]

November 22, 1985

Dear Friend of ZPG:

At 7.00 a.m. on October 25, our phones started to ring. Calls jammed our switchboard all day. Staffers stayed late into the night, answering questions and talking with reporters from newspapers, radio stations, wire services and TV stations in every part of the country.

When we released the results of ZPG's <u>1985 Urban Stress Test</u> we had no idea we'd get such an overwhelming response. Media and public reaction has been nothing short of incredible!

At first, the deluge of calls came mostly from reporters eager to tell the public about Urban Stress Test results and from outraged public officials who were furious that we had 'blown the whistle' on conditions in their cities.

Now we are hearing from concerned citizens in all parts of the country who want to know what they can do to hold local officials accountable for tackling population-related problems that threaten public health and well-being.

ZPG's <u>1985 Urban Stress Test</u>, created after months of persistent and exhaustive research, is the nation's first survey of how population-linked pressures affect U.S. cities. It ranks 184 urban areas on 11 different criteria ranging from crowding and birth rates to air quality and toxic wastes.

The Urban Stress Test translates complex, technical data into an easy-to-use <u>action tool</u> for concerned citizens, elected officials and opinion leaders. But to use it well, we urgently need your help.

> <u>Our small staff is being swamped with requests for more information and our modest resources are being stretched to the limit</u>.

Your support now is critical. <u>ZPG's 1985 Urban Stress Test</u> may be our best opportunity ever to get the population message heard.

With your contribution, ZPG can arm our growing network of local activists with the materials they need to warn community leaders about emerging population-linked stresses <u>before</u> they reach the crisis stage.

Even though our national government continues to ignore the consequences of uncontrolled population growth, <u>we can act to take positive action at the local level</u>.

Every day decisions are being made by local officials in our communities that could drastically affect the quality of our lives. To make sound choices in planning for people, both elected officials and the American public need the population-stress data revealed by our study.

<u>Please make a special contribution to Zero Population Growth today</u>. Whatever you give – $25, $50, $100 or as much as you can – will be used immediately to put the Urban Stress Test in the hands of those who need it most.

Sincerely

Susan Webster

Executive Director

P.S. The results of ZPG's <u>1985 Urban Stress Test</u> were reported as a top news story by hundreds of newspapers and TV and radio stations from coast to coast. I hope you'll help us monitor this remarkable media coverage by completing the enclosed reply form.

APPENDIX II

ZPG test – Analysed by non-rankshifted clauses

Key

BOLD SMALL CAPS   indicate the Theme of the clause
Italics   indicate the N-Rheme of the clause
Underlining   as in the original
Numbering
Capital letters indicate paragraphs.
Arabic numbers indicate punctuated sentences or other segments.
Small letters indicate clauses within a sentence.

B4   **AT 7:00 A.M. ON OCTOBER 25,** our phones *started to ring.*
B5   **CALLS** jammed our switchboard *all day.*
B6a   **STAFFERS** stayed *late into the night.*
B6b   answering *questions*
B6c   **AND** talking *with reporters from newspapers, radio stations, wire services and TV stations in every part of the country.*
C7a   **WHEN WE** released <u>*the results of ZPG's 1985 Urban Stress Test,*</u>
C7b   **WE** had *no idea we'd get such an overwhelming response.*
C8   **MEDIA AND PUBLIC REACTION** has been *nothing short of incredible!*
D9   **AT FIRST, THE DELUGE OF CALLS** came *mostly from reporters eager to tell the public about Urban Stress Test results and from outraged public officials who were furious that we had 'blown the whistle' on conditions in their cities.*
E10   **NOW, WE** are hearing *from concerned citizens in all parts of the country who want to know what they can do to hold local officials accountable for tackling population-related problems that threaten public health and well-being.*
F11a **ZPG's <u>1985 URBAN STRESS TEST</u>,** «F11b», is *the nation's first survey of how population-linked pressures affect U.S. cities.*
F11b created *after months of persistent and exhaustive research,*
F12   **IT** ranks 184 urban areas on *11 different criteria ranging from crowding and birth rates to air quality and toxic wastes.*
G13   **THE URBAN STRESS TEST** translates complex, technical data *into an easy-to-use <u>action tool</u> for concerned citizens, elected officials and opinion leaders.*
G14a **BUT** to use it *well,*
G14b **WE** urgently need *your help.*
H15a <u>**OUR SMALL STAFF**</u> is being swamped *<u>with requests for more information</u>*
H15b <u>**AND OUR MODEST RESOURCES**</u> are being stretched *<u>to the limit.</u>*
I16   **YOUR SUPPORT NOW** is *critical.*
I17   **ZPG's 1985 URBAN STRESS TEST** may be *our best opportunity ever to get the population message heard.*

J18 **WITH YOUR CONTRIBUTION**, ZPG can arm our growing network of local activists *with the materials they need to warn community leaders about emerging population-linked stresses <u>before</u> they reach the crisis stage.*

K19a **EVEN THOUGH OUR NATIONAL GOVERNMENT** continues to ignore *the consequences of uncontrolled population growth,*

K19b <u>WE</u> can *act*

K19c <u>to take</u> positive action *at the local level.*

L20 **EVERY DAY** decisions are being made by local officials in our communities *that could drastically affect the quality of our lives.*

L21a To make *sound choices in planning for people,*

L21c **BOTH ELECTED OFFICIALS AND THE AMERICAN PUBLIC** need *the population-stress data revealed by our study.*

M22 **PLEASE MAKE** a special contribution to Zero Population Growth *today.*

N23a **WHATEVER YOU GIVE** – «N23b» – will be used *immediately*

N23b $25, $50, $100 or *as much as you can*

N23c to put the Urban Stress Test *in the hands of those who need it most.*

O24 Sincerely

O25 [SIGNATURE]

O26 Susan Weber

O27 Executive Director

P28 P.S.

P29 **THE RESULTS OF ZPG's <u>1995 URBAN STRESS TEST</u>** were reported as a top news story *by hundreds of newspapers and TV and radio stations from coast to coast.*

P30a **I** *hope*

P30b **YOU'll** help us monitor *this remarkable media coverage.*

P30c **BY** completing *the enclosed reply form.*

NOTES

1 This is a revised version of 'The flow of information in a written English text', published in Michael Cummings and Michael Gregory (eds), *Relations and Functions in Language.*

2 See also Winter (1977b: 475) for a similar wording when describing the meanings of Theme and Rheme.

3 A correlational model is actually too simple. For example, it is highly likely that Thematic status in particular structurally important sentences in a text segment will correlate with perception of a nominal constituent as a topic. I am using the simple correlational model first in order to get a rough approximation.

4 Certainly, such a study could be carried out on spoken text, but the results would probably differ. The interest in N-Rheme arose here from the limited tools available to writers to signal emphasis, and the hypothesis that one major tool which they use is word order. Since speakers have a number of additional tools available to them to signal their emphases, one would suspect that the correlation of N-Rheme and emphasis would not be as great in the spoken language.

5 Chafe (1984) provides figures comparing adverbial clauses in written and spoken English. These figures give rough evidence that something of this sort takes place.

6   Saying that the N-Rheme is the newsworthy part of the clause should not be taken to imply too close an association between the N-Rheme and the placement of the tonic accent. Though the initial reason for positing N-Rheme lay in the unmarked placement of the tonic on the last major constituent of the clause, there are a number of reasons for deviating from this pattern. The question is whether the N-Rheme can be seen to correlate with the goals of the text and the text segments, regardless of whether or not it would receive the tonic accent if read aloud. Thus, in segment 4 of the text that will be analysed here, the N-Rheme would probably not receive the accent, since the action of ringing is predictable from the fact that <I1>*our phones*<I2> is the Actor. In this particular case, however, since this segment constitutes the beginning of the letter, the entire clause is news and <I1>*started to ring*<I2> describes the first event of the narrative. As a result, this N-Rheme is considered to be closely related to the goals of the text and of the text segment of which it is a part.

7   Winter (1992: 147–8) points out the intimate relation between imperatives and motivations.

> We are, so to speak, linguistically free human beings; we have a very strong tendency to why-question any imperative. The rule runs something like this: if an imperative is *not* preceded by a reason, then this reason is predicted as the next clause. If, however, the reason *does* precede the imperative, then it is linguistically complete and no longer predicts the reason to come.
>
> (emphasis in the original)

8   It has already been pointed out that the New information in a clause may not be restricted to the content of the N-Rheme. The whole of segment 4 is clearly New information. Similarly, we can reasonably say that *jammed* in segment 5 and *stayed* in clause 6a would most likely form part of the New information in those clauses.

9   The difference in total numbers for the Theme and the N-Rheme counts arises because eight non-finite dependent clauses which begin with Predicators and segment 23b (which is not a clause) do not have Topical Themes according to Halliday's analysis.

10 While one cannot draw major conclusions on the basis of the placement of *when* within its clause, we can move up a level and examine the relative placement of the two clauses within the T-unit in segment 7. At the level of T-unit, the entire clause 7a serves as a temporal adverbial for segment 7. Further, it functions as Theme for the T-unit by setting the time-frame for the event depicted in that T-unit. In other words, when considered as a whole, Segment 7 fits the pattern of the effects of the Thematic placement of temporal adverbials established by the other clauses in chart 1.

11 It is worthy of note that most fund-raising letters contain some identifiable request such as this one, and the sentence which expresses that request will usually contain a temporal adverbial in the N-Rheme. A survey of 21 fund-raising letters shows that all letters contained at least one identifiable request. Some letters contained more than one request so that the corpus contained a total of 26 requests. Of these 26 requests, four made no mention of time. The remaining 22 made at least one reference to time. One contained two references to time. As a result, the corpus contained 23 references to time. *Today* (with 14 occurrences) and *now* (with six occurrences) were the most frequently used temporal adverbials in the data. Two temporal adverbials were neither Theme nor N-Rheme. Four temporal adverbials were placed within the Themes of their clauses, while 17 temporal adverbials occurred in the N-Rhemes of their clauses.

12 This approach is reminiscent of the notion of communicative dynamism discussed by Firbas (1982).

APPENDIX III: DIAGRAM FOR THE BODY OF THE ZPG LETTER
(Mann, Matthiessen and Thompson 1992: figure 6)