THE ROLE OF COHESION AND COHERENCE IN PROCESSING LITERARY TEXTS

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1. INTRODUCTION

The purpose of this paper is to consider the process of comprehending literature from within the framework of a communicative act. The conception of a communicative act adopted here embraces three distinct yet interacting elements: the author as the intentional initiator of a communication, the text as the resulting structured surface representation of the sender's intent, and the reader as the agent by which the communication is processed and meaning is made of it. While there is nothing especially new in this conception (for an early discussion, see Cherry 1957), its implications for text processing in general and for the processing of literary texts in particular remain incomplete.

The process of literary communication will be first examined from the perspective of the nature of literature and literary texts and the differences which exist between literary texts and non-literary texts. This discussion will then be carried forward by adopting the concepts of cohesion and coherence in order to give greater precision and psychological reality to the discussion of the comprehension of literary texts which follows.

2. THE NATURE OF LITERARY TEXTS

Consider the following text fragments, each comprising the first few lines from longer texts:

- [1] About 1,200 anti-nuclear protesters camped outside a U.S. Air Force base Sunday night, the vanguard of thousands expected at a rally against the deployment of new cruise missiles. They pitched tents and erected make-shift shelters in a field turned into a sea of mud by heavy rains to await the arrival of others for today's rally.
- [2] Stately, plump Buck Mulligan came from the stairhead, bearing a bowl of lather on which a mirror and a razor lay crossed. A yellow dressing-gown, ungirdled, was sustained gently behind him by the mild morning air.
- [3] The science that has been developed around the facts of language passed through three stages before finding its true and unique object. First something called "grammar"

> This study, initiated by the Greeks and was studied. continued mainly by the French, was based on logic.

[4] Here let us stand, close by the cathedral.

Here let us wait.

Are we drawn by danger? Is it the knowledge of safety, that draws our feet Towards the cathedral? What danger can be For us, the poor, the poor women of

Canterbury?

[5] The isolation of factors involved in the identification of a word and the meaning it represents is among the most problematic areas in reading research. Yet the need to understand the word identification process and how it develops is critical, as the mastery of rapid context-free word identification appears to be one of the major factors that separates good from poor readers. 1

Although there are similarities among these texts, there are differences too. Put simply, some texts seem to be "literary" while others do not. The question is what makes the difference? Why is it that in reading [2] and [4] one gains a somewhat different "feel" for the text than one does in reading [1], [3], and [5]? It is the nature of these differences, particularly as they relate to the comprehension of literary texts, that is the focus of attention here.

In the first instance, [2] and [4] announce themselves in different ways: they signal a movement into themselves rather than making reference to an external reality upon which their interpretation depends. The reader gains a sense of authorially contrived internal reality formulated within the text external referents cease to exist. which This is immediately apparent in [4] simply by the author's use of blank verse. But the text goes beyond this to reveal a world which, although possessing an apparently historical and therefore externally verifiable reality (Canterbury cathedral), exists as a unique creation within the text itself. The way this works can be demonstrated in the repetitive emphasis in the first line, and the questions which follow. These serve to place the reader in front of the obstinate chorus, questioning their questioning, seeking to understand the ideational configuration which informs their world. This is not the conventional world of the reader's

 $^{^{}m l}$ The sources of these texts are the first lines of the following: [1] an Associated Press news story entitled "Protesters Descend on N-base", The Toronto Globe and Mail, April 8, 1985; [2] James Joyce's *Ulysses* (1960); [3] Ferdinand de Saussure's Course in General Linguistics (1959); [4] T.S. Eliot's Murder in the Cathedral (1935); and [5] a report of a research study entitled "The Influence of Basal Readers in First Grade Reading" by Juel and Schneider (1985) published in the Reading Research Quarterly.

experience; it is a separate world conceived and created by the author which the reader must conceptually enter for it to become comprehensible. That the reader does seek to enter it derives from the reader's interpretive impulse, the reader's felt need to bring order to this new and unexplored conceptual landscape.

With [2], the prose reveals no ordinary man and behaves in no ordinary way. The reader gains a sense of a character being portrayed, of the deliberate development of a personality within an imaginative universe. For example, the bizarre juxtaposition of "stately, plump" introduces immediate evidence of authorial commentary and control. Finely selected and highly adjudicative, are initial components of a carefully contrived the words construct of reality, a construct in which dressing-gown, ungirdled" can be "sustained...by the mild morning air."

All of this contrasts with [1], [3], and [5]. Here the reader is drawn into the text but is at the same time referred outside it for verification. The worlds of an anti-nuclear protest, the history of linguistics, and an experimental study of word meaning all exist beyond the text and depend on external reference for These texts do not pretend to be unique their comprehension. unified and independent of other referential material. in fact fragments of the texts their authors would have the reader construct, and it is their external referentiality which their authors depend upon for the reader to do this. These texts point to what is known as the basis for their discussion of what is to be known. They present a framework which the reader fills in according to his experiential knowledge of the world. In this way, these texts provide a conventionalized context for their communication in that they do not create separate realities whose rules of operation must first be learned if they are to become comprehensible. The references of [1], [3], and [5] are to a world external to the text, to the world of ordinary experience, to the subject of conventional human activity, and not to a self-referential, deliberately contrived world of imagination.

3. COHESION AND COHERENCE IN LITERARY TEXTS

A discussion of the nature of literature and literary texts such as the one above is necessary to provide a basis for a consideration of the comprehension of literature. Without such discussions, literary texts are in danger of being conceived merely as a subset of non-literary texts, peculiar but not necessarily different in their conception and execution, to say nothing of their comprehension. But these discussions are essentially impressionistic and imprecise. While they reveal some of the underlying characteristics of literary texts, they fail to establish in any disciplined way the linguistic and psychological processes through which comprehension is achieved.

For this reason, the concepts of cohesion and coherence are introduced here to add rigor to the discussion of literary comprehension, and to provide the basis for a fuller account of the linguistic and psychological processes upon which literary communication depends.

3.1 Cohesion in Literary Texts

The most comprehensive and generally recognized study of text cohesion has been provided by Halliday and Hasan (1976). They describe cohesion by means of their notion of "text" which they define as "any piece of language that is operational, functioning as a unity in some context of situation" (1976: 293). A text is not a string of sentences making up a larger grammatical unit, but rather it is a semantic unit, a unit "not of form but of meaning" (1976: 2). Semantic unity is achieved through "texture," the relations which exist both within and among the sentences of a text. It is through these relations that cohesion is established. Halliday and Hasan describe these relations in terms of "ties," or occurrences of pairs of related text items. They argue that "the concept of a tie makes it possible to analyse a text in terms of its cohesive properties, and give a systematic account of its patterns of texture" (1976: 4). Their study is mainly concerned with illustrating the different kinds of ties through which English texts supposedly cohere; they reference, ellipsis and substitution, designate these as conjunction, and lexical cohesion. In this way, they demonstrate their contention that cohesion is a relational concept which does not depend on the constituent structures of texts. Instead, they maintain that it is through the "non-structural text-forming relations" established by the various ties of a text that cohesion is established (1976: 7). Cohesion is therefore a property of the surface text; it describes the configuration of interrelations within a text by which its apparent unity is established.

But Halliday and Hasan proceed from a description of the cohesive elements of texts to draw some implications for their interpretation. They argue that "what cohesion has to do with is the way in which the meaning of the [text] elements is interpreted" (1976: 11). Maintaining that "cohesion expresses the continuity that exists between one part of the text and another," they contend that it is this continuity that "enables the reader or listener to supply all the missing pieces, all the components of the picture which are not present in the text but are necessary to its interpretation" (1976: 299).

² The description of text cohesion which Halliday and Hasan presented in their study has recently been reiterated by Halliday (1985).

Halliday and Hasan therefore introduce the question of text processing within their notion of text structure. Through their description of the reader filling in missing pieces in the text, they seemingly unwittingly move from a description of the surface structure of texts to a description of text processing. This process orientation is revealed in their statement at the conclusion of their study that their linguistic analysis "is not an interpretation of what the text means; it is an explanation of why and how it means what it does" (1976: 327-328).

While they admit that the specific nature of interpretation constitutes "one of the major problems in understanding linguistic interaction," they characterize interpretation as a "decoding process" (1976: 299-300). In doing so they reveal their text-based bias, a bias which is further illustrated in their statement that the continuity of a text "is not merely an interesting feature that is associated with text; it is a necessary element in the interpretation of text" (1976: 300). There is a strong suggestion here that it is the text which carries meaning through its cohesive ties establishing the continuity of its message, and it is the task of the reader to interpret this message, albeit an incomplete one, on the basis of these ties. The text becomes in this way an iconic representation of meaning, and its comprehension lies in decoding this meaning from within its cohesive structure.

But the notion of meaning-in-text has suffered almost certain defeat in recent years (see Spiro 1980, for a review). general finding of this research is that the comprehension of texts depends upon an interactive process between information brought to the text by the reader and the information found in While text cohesion - the surface features a text the text. presents to its reader - cannot be dismissed as a factor in comprehension (Gumperz, Kaltman, and O'Connor 1984; Marshall and Glock 1978-1979; Webber 1980), it is now relatively safe to from the accumulated research evidence comprehension does not result exclusively or even directly from the decoding of these features alone. This raises the question of what utility can be drawn from Halliday and Hasan's notion of cohesion in seeking to understand the comprehension of literary texts.

This notion of meaning-in-text is generally characteristic of studies of cohesion. See, for example, Gutwinski's (1976: 25) statement that "the structure of the semiologic stratum...finds its manifestation in the relatively shallower structure of the grammar and is still recoverable from it"; and Grimes' (1975: 18) contention that, "ideally, the factors on which a critic bases his judgment ought to be built into a writer before he starts writing." This reasoning has also provided the basis for a recent discussion of reading comprehension founded on Halliday and Hasan's concept of cohesion (Chapman 1983).

The premise that literary texts display communicative intent provides the basis for a tentative answer to this question. the author, the text, and the reader are seen to be mutually interactive yet independent agents in a communication process, the place of cohesion, particularly in literary comprehension, becomes clearer. Halliday and Hasan provide support for this clarification through their emphasis on cohesion as "part of the text-forming component in the linguistic system" (1976: 27). They state that cohesion may be described as "a set of possibilities that exist in the language for making text hang together: the potential that the speaker or writer has at his disposal" (1976: 18). It is this notion of potential that is important here. Cohesion may be considered as a powerful concept for describing the language resources available to an author.

Seen in this way, as the description of a fundamental resource available to the author, the concept of text cohesion makes a significant contribution to an understanding of the process of literary communication. For the author, cohesion plays a central part in the creative process since it is by the conscious use of the cohesive resources of language that he is able to express the conceptual unity of his imagination. A fair assumption is that the author of a literary work begins with some controlling idea, a macrostructural view of the shape of his work, at the very least the beginning of a conceptual model of the reality he wishes to represent through his work (Harker 1978). through the cohesive power of the linguistic elements he selects that the author effects this encoding. Ιn this way the authorially intended linguistic and ideational fusion of a work of literature comes into being. This fusion has long been recognized by literary critics, although the psycholinguistic processes through which it is achieved have remained relatively unexplored. Viewing text cohesion, not as a determiner of interpretation, nor merely as а description of textual continuity, but rather as an authorial device through which a unified model of an imagined reality is encoded in a literary text, places cohesion in a clearer prospective in literary communication.

3.2 Coherence in Literary Texts

While a text, if it is to communicate anything, must be made cohesive by its author, this is a structural quality of the text itself and does not describe the process by which the reader transforms the text into a meaningful communication. A text with no reader remains an empty vessel, having potential but no

For example, in his essay, "What Does Poetry Communicate?", Cleanth Brooks (1947: 74) writes that "the poem is not only the linguistic vehicle which conveys the thing communicated most 'poetically', but...it is also the sole linguistic vehicle which conveys the thing communicated accurately."

actuality, awaiting a reader to give it meaning. It is through structure becoming process that the relationship between cohesion and coherence is established.

Cohesion refers to the structural unity on the surface of a text produced by its author; coherence refers to the end result of the cognitive process by which the text is transformed into a consistent communication in the mind of the reader. As cohesion is a static, visible quality of the text itself, coherence is the outcome of a dynamic process by which the text is transformed into a psychological unity by the reader. Put another way, cohesion is a property of the text depended upon by the author to express his intended meaning, while coherence is the outcome of comprehending a text experienced by the reader. The former is a conscious device of the author; the latter is largely an unconscious process of the reader. It remains to consider this relationship as it applies to literary texts.

Any attempt to review the full range of research and theory relating to text processing which has arisen in recent years is not possible within the space available here (for a review see de Beaugrande and Dressler 1981). Rather than attempting this, one model has been selected - that of van Dijk and Kintsch (1983) to provide the basis for the discussion of the role of coherence in the comprehension of literary texts which follows. 5 Contending that previous models of text processing have been misguided by a concern with representing the structure of knowledge in the mind, van Dijk and Kintsch propose to explore "the dynamic aspect of processing" (1983: 61), the manner in which knowledge activated and used by the reader during the comprehension process. Their model begins with the text itself as the initial input to the system. The text is then decoded into a list of atomic propositions which represent its meaning elements. propositions in turn become organized into larger units on the basis of knowledge structures (schemata) to make up a coherent It is from this textbase that a macrostructure is textbase.

The van Dijk and Kintsch model evolves out of a continuing program of theory and research which can be traced through the major works of its authors (particularly van Dijk 1972; Kintsch 1974; Kintsch and van Dijk 1978) for over a decade. Their latest model is an extension and elaboration of their 1978 model, and it represents one of the most comprehensive accounts of text processing available. Moreover, an indication of its likely impact on future research can be taken from the fact that, in a recent study of citation rates (Guthrie, Seifert, and Mosberg 1983), their 1978 model was found to be the most frequently cited review in reading research (the term "review" as used by the authors of this report is arguably a misnomer). It is probable that the 1983 model will have a similar impact, and it is on this basis, together with its comprehensiveness, that it is used here.

formed which represents the essential information in the textbase, its gist.

Although van Dijk and Kintsch represent the various stages of processing in terms of levels, from word units up to macrostructures, they do not conceive text processing as proceeding in a linear fashion through these levels. Rather, their model is interactive and characterized by continuous feedback among its lower and higher levels. For this reason they maintain that their model is not a conventional structural model, but a strategic model, one which demonstrates the dynamic processing of the text in the mind of the reader.

This notion of strategy is fundamental to van Dijk and Kintsch's representation of text processing. They describe strategies as being "part of our general knowledge" since "they represent the procedural knowledge we have about understanding discourse" (van Dijk and Kintsch 1983: 11). However, strategies have to be learned before they can become automatic, and various strategies are necessary for the comprehension of different types of text. Strategies may be "local" by which the meanings of clauses and sentences and the meanings and functions of relations between sentences are established, or they may be "global" by which the meanings of discourse fragments or whole discourses are determined. It is by bringing a combination of these two kinds of strategy to a text that the reader establishes its coherence. As van Dijk and Kintsch (1983: 90) put it, "the strategies of a discourse understander not only involve correctly establishing relationship between the sentences as they relationships in our knowledge of reality, but also involve interpreting the selection and ordering evidenced in the discourse." Thus the recognition of the authorially encoded discourse." cohesion of a text is not enough; the reader, to render the text meaningful, brings a coherence of his own making to it. This process of coherence building is essentially strategic.

Together with their account of the reader's construction of a semantic textbase, van Dijk and Kintsch also introduce their notion of the situation model which functions in parallel with the textbase. It is by means of the situation model that the reader integrates his existing world knowledge with information found in the text. The situation model incorporates the reader's previous experiences regarding the situation being read about as well as his general knowledge about the same or similar situations. Thus the information being constructed by the reader in the semantic textbase is constantly being compared with the situation model. The comprehension of a text, then, results from not only what the text conceptually represents in the mind of the reader, but also what comparative world knowledge it refers to in the mind of the reader. It is for this reason that van Dijk and Kintsch (1983: 337) maintain that:

To understand the text we have to represent what it is about. If we are unable to imagine a situation in

which certain individuals have the properties or relations indicated by the text, we fail to understand the text itself. If we do not understand the relations between the local facts and the global facts to which the text refers, we do not understand the text.

In this way, the situation model provides the basis for comprehension: "a prerequisite for a coherent text representation is the ability to construct a coherent situation model" (van Dijk and Kintsch 1983: 361). The situation model contains the knowledge which is conventionally implied by the text or is in some way assumed by it. It expresses the reference to an external reality on which the text depends for its coherence to be established. That literary texts are denied this direct referentiality is one of the most compelling reasons to consider their comprehension as a special case in text processing.

4. CONCLUSION

It has been argued that a literary work creates its own reality and in this sense literary texts are self-referential. They depend for their coherence not upon direct reference to the outside world of conventional affairs (that world which is assumed by the authors of [1], [3], and [5]), but rather upon self-referentiality. own web of Ιt is self-referentiality which defines their uniqueness, both conceived artifices, objects authorially and as reader-directed coherence strategies. There are no guideposts to the understanding of literary texts besides those they express themselves. There are no allusions or direct references to the conventional world. When such allusions or references are made, they are to be viewed with caution, as devices in the hands of authors whose intent is to create through them the different worlds of their imagination, not to refer to the conventional world of normal experience.

Literary texts must therefore be "learned" in a somewhat deliberate way. The textbase built by the reader of a literary work has no explicit external referent, no situation model with which it can be compared. Rather, the internal system of self-referentiality of literary texts must be formulated piece by piece if the reader is to gain control over them, if they are to become coherent in the reader's mind. For this reason, the reader needs to unlearn the conventionalized situation model he brings to the text from the world of his everyday experience. its place he must construct along with the semantic textbase the situational model for the text from within self-referentiality of the text itself. Ιt is this activity, and the processing load it imposes, which might explain the difficulty many readers have comprehending literary texts. It might also explain the multiplicity of interpretations which even "expert" readings of literary texts provide; that these

texts permit, by virtue of their lack of an externally observable reality against which they may be compared, an almost unlimited range of possible interpretations, even taking their textbase into account, explains not only the ubiquity but also the variety of literary criticism.

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