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A MODEL FOR THE COMPOSING PROCESS

By

Miles Myers

Administrative Director
Bay Area Writing Project
University of California, Berkeley

National Writing Project
Occasional Paper No. 3

The National Writing Project is an effort by school teachers, college faculty, and curriculum specialists to improve the teaching of writing at all levels of education. The Project is funded by the CARNEGIE CORPORATION OF NEW YORK, the NATIONAL ENDOWMENT FOR THE HUMANITIES, and the UNIVERSITY OF CALIFORNIA, BERKELEY. The findings of this study do not necessarily represent the views of the National Endowment for the Humanities or the Carnegie Corporation of New York. Individuals desiring information concerning The Bay Area Writing Project or the National Writing Project should write to Bay Area Writing Project, Tolman Hall, University of California, Berkeley, California 94720.

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Model building in the social sciences requires two kinds of decisions, one theoretical and the other methodological. In written composing, the theoretical choice is among a *modelling* theory which defines writing as the production of texts, a *processing* theory which defines writing as cognitive stages or strategies, and a *distancing* theory which defines writing as interrelationships in social situations.

The three methodological choices are *rationalism*, *positivism*, and *contextualism*. *Rationalism* requires the researcher to examine contrasting pieces of data and to use the logic of reason and the insight of intuition to develop a hypothesis. For example, Chomsky examined two contrasting sentences ("John is easy to please" and "John is eager to please") and hypothesized the existence of a deep structure in which the two sentences had different subjects ("Somebody pleases John" and "John pleases somebody"). Chomsky attempted to describe a model of innate competence by describing the contrasting surface data of performance.

In another example, Cicero (*De Oratore*) contrasted the parts of written texts and hypothesized the existence of such forms as *exordium* (introduction) and *perporatio* (summing up). Likewise, Francis Christensen (1976) analyzed contrasting paragraphs from professional writers and hypothesized three forms of organization (coordinate, subordinate, and mixed) and three sentence additions in what Christensen identified as the cumulative sentence (nouns, adjectives, and -ing verbs). In each instance, the test of an idea's validity is the logical consistency of the argument and the reader's recognition of the examples as representative of his/her experience.

In *positivism*, however, the test of an idea's reliability is the numerical weight of the descriptive statistics and the level of significance of the inference statistics. Descriptive statistics are the *mean* (the average), the *mode* (the high point), and the *median* (the mid-point). The inference statistics are the *T-Test* and the *Chi-Square*, among others, and they can tell us to what degree the numerical results are a matter

of chance. Most writing researchers are willing to accept a five percent risk of error. That is, if the probability of chance results can be reduced to one out of twenty, then the writing researcher will accept the result as significant.

The probability of chance can, of course, be reduced by increasing the number of pieces of data. If the number is big enough, the result will be statistically significant, not a matter of chance, but may not be experimentally significant. Experimental significance (or reliability) requires that the subjects in a writing experiment be randomly assigned to different experimental treatments, matching the subjects and the situation on all the variables except the key one for the experiment. The method of social science is the same as the one used to test which fertilizer makes lettuce grow. In fact, this method of experimental design and statistical analysis was developed by R.A. Fisher in studies of productivity in agriculture.

In writing research, the studies of Bateman and Zidonis (1966) and Mellon (1969) are examples of *positivism*, both using control and experimental groups to test the hypothesis that instruction in grammar or sentence combining increases what Mellon called "syntactic maturity " and what Bateman and Zidonis called "structural complexity." Frank O'Hare (1973), also using control and experimental groups, examined not only whether sentence combining of the O'Hare variety would increase syntactic maturity but whether teachers would give higher ratings to those papers with syntactic maturity.

Although *positivism* is the dominant method of research in writing, an increasing number of researchers have started to criticize the positivist assumption that in the pursuit of general laws in the social sciences one must strip away context and put subjects in an experimental or laboratory setting. *Contextualism* differs from *positivism* in that it examines subjects in their natural settings without imposing any experimental constraints from the outside. For example, Graves (1975) began his study by examining the writing folders of ninety-four students in four classrooms, finally arriving at a tentative three-phase structure for the writing process (pre-writing, composing, and post-writing). Next he observed fifty-three writing episodes in four classrooms, and finally he gathered data on one student, including interviews with parents.

Contextualism differs from *rationalism* in that *contextualism* examines writing as an evolutionary process, collecting data over extended periods of time in a "natural" context, and *rationalism* examines writing as a product, collecting examples of the end result. Wallace Chafe's work is an example of *contextualism*, and Northrop Frye's is an example of *rationalism*. Chafe examined story structure by showing subjects a six-minute film about a boy who steals a basket of pears from a man and by asking subjects to then tell "what happened in the film." Several weeks later, the subjects were asked again to tell "what happened in the film." Chafe focused on how stories evolve in a given context. Frye, on the other hand, collected what he considered

to be a representative number of completed stories and then described the categories into which the stories might fall (romantic, secular, and so forth). The difference is the same one that David Olson believes separates Chafe and Chomsky. Olson (1977) says that Chomsky believes language is best represented by the written text, and Chafe believes language is best represented by oral conversational utterances.

Contextual studies can be *clinical* or *episodic*. The clinical approach, used by Piaget in his study of a child's concept of conservation, requires the researcher to give the student the writing problem. Chafe's study, described above, is one example. Janet Emig's is another. She asked eight students, selected by teachers, to write about a person or event. She then asked these students to discuss what writing they liked to do, how they usually went about their writing task, and what writing conditions in school were like.

The *episodic* study is one like Mitchell-Kernan's study of Black discourse forms in Oakland, California. She recorded the conversations heard in her neighborhood and selected particular episodes for study. One episode was the situation in which a speaker "puts down" another person. Labov's studies (1972) of oral narratives in Harlem and the forms of therapeutic discourse (1977) are other examples. Jenny Cook-Gumperz, John Gumperz, and Herbert Simons (1979) have described steps in an *episodic* study of language in a school setting:

1. *Selection of fieldwork site:* The people who work at the site must be willing to be evaluators of data.

2. *Observing the organization of the school day:* Because the contextual study describes events over time, the time framework must be segmented in some way. The segmentation might be the school bell schedule.

3. *Identifying activity grouping:* Observations of the class and interviews with teachers will help the observer group activities. An example would be art time (drawing pictures) and story dictation (show and tell).

4. *Selection of key episodes:* These episodes will be those that seem to reveal something interesting about the writing process. For instance, one might select all incidents of miscommunication, the teacher's method of assigning writing, or the kinds of stories children develop in their pre-writing and art.

Another example of the episodic study is Kellogg Hunt's study (1965) of how many clauses children at different ages could consolidate into a single sentence. Hunt collected one thousand words from each student. Each writing episode was part of the normal course work and free of any control from Hunt. His findings showed, for instance, that the average eighth grader could consolidate five clauses, the average fourth grader only three.

Not all studies are clearly marked as one type or another. Linda Flower and Jack Hayes, for example, had their subjects talk aloud about what they were thinking as they were writing about a given subject. Some researchers feel that this method interferes with the context of the writing and creates an experimental setting closer to the positivist tradition. Other researchers feel the Flower-Hayes method does capture the writing context. Despite some uncertainties the general distinctions are valid and offer a useful way of understanding how a methodology shapes the different kinds of data used to describe writing. Many researchers use a combination of two approaches. James Moffett is an example of a researcher who uses *rationalism* to study writing and *contextualism* to define it. In other words, a researcher can define the field of writing as interrelationships in social situations (*distancing*), but not use *contextualism* as the method of investigation. Moffett's description of the interrelationships in a communication act is applicable to many different contexts:

> The universe of discourse is staked out by a first person, a second person, and a third person; and their interrelationships make up the dynamics of discourse. So the concept I am referring to is the venerable trinity--*I*, *you*, and *it*: informer, informed, and information; narrator, auditor, and story; transmitter, receiver, and message. Like all trinities, this one is a unity--somebody-talking-to-somebody-about-something. Indivisible as it is in reality, to talk about it, we must divide it. The I-you relation is the existential, behavioral, rhetorical relation of speaker and spoken to. It has primacy over the I-it relation, which is symbolic, referential, and abstractive. Cross these two relationships and you have some whole, authentic discourse; omit one and you do not. (1967, p. 118.)

Moffett's distancing theory has been examined by both positivists and contextualists. Crowhurst and Piche (1979), using *positivism*, studied the effects of audience and mode on syntactic complexity, and Sondra Perl, using *contextualism*, studied, among other things, the effects of audience distance on the development of beginning writers. In her study, differences in form were marked by differences in context, including social distance.

In summary, writing has three competing theories for defining the field--*modelling*, *processing*, and *distancing*--and three different methods of investigation--*rationalism*, *positivism*, and *contextualism*. In this paper, I will synthesize the three different writing theories into one model for the writing process and will cite evidence for various parts of the model from studies using different methods of investigation. The model itself, however, is primarily designed for a contextual study, and wherever possible, I will index specific parts of the model to specific words which appear in the writing context. To establish the fact that there is substantial empirical support for the model, I will cite a number of researchers.

Some Assumptions of the Model

The first assumption of the model is that there are two kinds of prose used by writers: prose in which writers process information for themselves and prose in which writers organize texts and information for others. In the former, writers use language to discover and clarify ideas, and in the latter, writers use language to communicate ideas to someone else and to make texts. The same distinction is evident in what Linda Flower and Jack Hayes call "Writer-Based Prose" and "Reader-Based Prose" (1978)[1] and in what Eleanor Keenan calls "unplanned and planned discourse" (1977).

Vygotsky (1962) also acknowledges the use of language for planning and problem solving:

> We have seen that egocentric speech is not suspended in a void but is directly related to the child's practical dealings with the real world--it enters as a constituent part into the process of rational activity--and that it increasingly services both problem solving and planning as the child's activities grow more complex (p. 19).

He also stresses the fact that writing can produce a demand for prose quite different from the speech used for planning and problem solving: "The change from maximally compact inner speech to maximally detailed written speech requires what might be called deliberate semantics--deliberate structuring of the web of meaning" (p.100). The evidence for Writer-Based and Reader-Based Prose pervades the literature on research in writing.[2]

The two functions of language and the two different types of prose are, then, well documented. Each one is necessary in the writing task, the writer alternating back and forth as his/her purposes change. For beginning writers, it may be necessary to do one task first (Writer-Based Prose) and then the other. In any case, *processing* and *modelling*, which often appear in the literature as competing theories (see Olson's comments on Chomsky and Chafe), are, in fact, two parts of the same writing act. *Processing* is what a writer does who writes to discover and clarify (Writer-Based Prose), and *modelling* is what a writer does who writes to package information for someone else and to organize texts. The bridge between the two functions is *distancing*.

The model presented here is linear, but it is not a stage theory. An example of stage theory would be the model of D. Gordon Rohman (1966):

> Writing is usefully described as a process....Different things happen at different stages in the process of putting things into words and words onto paper....We divided the process at the point where the "writing idea" is ready for words and the page: everything

> before that we called "Pre-Writing," everything after that "Writing" and "Re-Writing" ...What sort of "thinking" precedes writing? By "thinking" we refer to that activity of the mind which brings forth and develops ideas....(p.106)

The model in this paper says that writing is more like an alternating current than stages, alternating between Writer-Based functions and Reader-Based functions. However, writing is cumulative and in that sense linear. First one thing is said and then another.

The model presented here also differs from Rohman's in another crucial area. Rohman assumes that a writer thinks and then writes. The model presented here agrees with Chafe (1979) that much thinking and interpretation occurs as part of the act of speaking and writing words: "Not all interpretations take place during perception; there is much that takes place while we are talking as well " (p. 220). Britton (1975) has called this the process of shaping at the point of utterance. Zoellner (1969) is an example of one who takes the position that the spoken word, the verbal behavior, *is* thought. The model presented here stands somewhere between Rohman and Zoellner, accepting mentalisms like thinking and intuition but at the same time accepting the notion that some thinking is the *word* itself at the moment of utterance.

In addition, the model presented here assumes a reciprocity between stimulus and response, accepting Piaget's description of assimilation:

> In other words, associationism conceives the relationship between stimulus and response in a unilateral manner: S→R; whereas the point of view of assimilation presupposes a reciprocity S⇄R; that is to say, the input, the stimulus, is filtered through a structure that consists of action schemes (or at a higher level, the operations of thought), which in turn are modified and enriched when the subject's behavioral repertoire is accommodated to the demands of reality. The filtering or modification of the input is called *assimilation*; the modification of the internal schemes to fit reality is called *accommodation*. (Piaget, 1969, pp. 5-6)

This position is supported by research in a number of areas. Roger Brown in *Words and Things* (1958) says, "Any collection of objects or events is susceptible of a large number of alternative categorizations--exclusive, conjunctive, disjunctive, or relational (p. 13). ...By experiment we discover expectancies linking categories or variables (p.342)." E.H. Gombrich (1960), writing about research in art, makes the same argument:

> All culture and all communication depend on the

> interplay between expectation and observation, the waves of fulfillment, disappointment, right guesses, and wrong moves that make up our daily life (p. 60)....Without some starting point, some initial scheme, we could never get hold of the flux of experience. Without categories we could not sort our impressions (p. 88).

Thinking and perception are not completely separable processes. The act of perception is to some degree the act of thinking, having some internal scheme. What is a thought or idea without words? D.W. Harding (1963) suggests that a thought in such circumstances is like ships appearing on the horizon of the mind, arranged in some seemingly preordained order.

The model, then, views writing as a tension among the three functions--writing for discovery (*processing*), writing for establishing social relations (*distancing*), and writing for making texts and sending messages (*modelling*). The remaining sections of this paper review the research which has attempted to define and explain these three functions.

The Processing Function

Using data from student recall of a five minute film, part of a research project conducted over a five year period, Chafe has identified three *processing* procedures which organize content in verbalization: sub-chunking, propositionalizing, and categorizing. Sub-chunking is the organization of material into scenes, propositionalizing is the organization of scenes into participants and roles, and categorizing is the selection of qualifying words and phrases. These three *processing* procedures--sub-chunking, propositionalizing, and categorizing--produce discoveries of information and Writer-Based Prose.

Sub-chunking, the first step, is the process of breaking larger chunks into smaller ones, and we are usually influenced, Chafe says, "by the prior existence in our minds of certain stereotypical patterns." Many researchers have demonstrated how stereotypical patterns enable us to divide a story into scenes and a subject into parts: the schema (Bartlett, 1932; Piaget, 1959), frames (Minsky, 1975), and scripts (Schank and Abelson, 1975). The fictional modes of Northrop Frye (1957) are another kind of schema, providing stereotypical patterns for the central figures of stories and subjects.[3]

The story formulas in a given context are another form of schema for breaking large chunks of experience into scenes. One example is the story formula for the Caddo Indians when they describe a visit: arrival of the visitor, conversation between host and visitor, action of host directed at visitor, and finally the departure of the visitor

(Chafe, 1979). These scenes are the sequence followed in every story about a visit, and the visit, says Chafe, is "one of the commonest occurrences in Caddo life."

Labov's analysis of narratives of pre-adolescents in south-central Harlem (Labov, 1972) is yet another example of the formula for breaking the chunk of experience into scenes. He found that fully-formed narratives had six elements: abstract, an opening summarizing the whole story; orientation; complicating action; the result or resolution; the coda, an option for signalling that the story is over; and the evaluation, a clause stating the point of the story. The last two elements are part of the *modelling* function of language and do not sub-chunk the scene. They only help package information already processed. But the other elements help to break chunks of experience into scenes.

Writers can often help themselves sub-chunk a scene by drawing diagrams or sketches or by imagining a selected scene. Images are particularly important. Paivio (1975) points to the work of Piaget, Hebb, and Skinner to show that images in the mind do exist and that they are not reproductions like photographs. In Pavio's view, there is a functional continuity between perception, memory knowledge, and imagery, and therefore the image is at least a partial product of interpretation. Teachers who ask students to imagine a scene or to provide particular details would be well advised to tell students to create and invent such images.[4]

The second step in *processing* is propositionalizing. This requires predication of the scene and selection of participants and objects. Josephine Miles (1979) argues that predication is the organizing principle of the story or essay:

> The first help we can give the student, then, is to make him see whether the predication he has chosen to make, the verb he has chosen to apply to the subject, is really supportable by what he knows or can discover (p. 15).

Chafe (1970), making the same point, says that the verb is the central way in which talkers and writers conceptualize the universe:

> My assumption will be that the total human conceptual universe is dichotomized initially into two major areas. One, the area of the verb, embraces states (conditions, qualities) and events; the other, the area of the noun, embraces 'things' (both physical objects and reified abstractions). Of these two, the verb will be assumed to be central and the noun peripheral (p. 96).

The selection of the *verb* produces a particular number and arrangement of participants and objects in the scene. For instance, a verb like *sent* produces two participants, an agent and a receiver, and a

patient or object: Bill (agent) sent Tom (receiver) a nut (object). A *thought* verb, on the other hand, arranges the scene differently: Bill (thinker) thought Tom (described) a nut (label). A *saw* verb requires that the object or label be dropped from the scene: Bill (agent) saw Tom (receiver). Or else add the label by using a comma: Bill (agent) saw Tom (receiver), a nut.

The way the verb organizes the scene into participants and objects was first systematically reported in Fillmore's study of case relationships (1971). The five major case relations are agentive (*Roy* in "The door was opened by Roy"), instrumental (*key* in "The key opened the door"), experiencer (*carpenter* in "The carpenter has a hammer"), goal (*farm* in "Olaf turned the field into a farm"), and locative (*shelf* in "The vase was on the shelf").

Fillmore has continued his study of predication by examining how verbs establish a particular kind of world. For instance, he reports (1971) that judging verbs like *blame*, *criticize*, and *forgive* establish the role structures of *the offended*, *the defendant*, and *the judge* within a world with prescribed moral and ethical values. In an examination of verbs like *hitting* and *breaking*, Fillmore (1979) found that verbs create two different results, one change of state (*break*) and the other stative (*hit*), and thus restrict what objects and participants can be used in the scene.

The selection of the predicate produces a particular number and kind of participants and objects in the scene. The selected objects and participants bring with them a particular arrangement of space. Fillmore (1979), for instance, reports that *on* gives a noun the quality of having a surface and at least one dimension, either left/right (on the line) or up/down (on the wall). *In*, on the other hand, gives a noun a bounded two-dimensional or three-dimensional space (in the city, in the kitchen). But *at* provides simple location and no particular dimensionality. The fact that nouns bring their dimensions with them is evident in the fact that we can say "in the yard" but not "on the yard," "on the lawn" but not "in the lawn," "on the earth" but not "in the earth," "in the world" but not "on the world."

The selection of the predicate also arranges events in time:

Simple Past	He walked.
Simple Present	He walks.
Simple Future	He will walk.
Progressive	Action extended over time in past (he was walking), in present (he is walking), and in future (he will be walking).
Perfect	Action which started in past and ended in past (he had been walking), started in past and may have ended only

recently (he has been walking), and started in past and may end in future (he will have been walking).

The *perfect* tense shows, as Fillmore has indicated (1979), the distinction between event-time and referenced-time. In "He had been walking three years earlier," the event-time is three years earlier than the referenced time, which apparently is marked in some other sentence. Time is always one dimensional (earlier/later, before/after) and often marked the same as spatial movement along a line (from morning to night, from Chicago to Detroit).

The third step or procedure in *processing* is categorizing. After the scene has been selected, after the predicate has established the roles and their relationships in the scene, then such qualities as shape and color and such particulars as the exact noun to use for a given role must be decided. Some concepts are more easily codible than others. For instance, given a color chart in the form of a rectangle, where hue varies continuously from left to right, there are a few points in the chart that people are able to name easily (Brown and Lenneberg, 1954).

Eleanor Rosch made a similar finding. She found that the world is conceived in terms of prototypes, not elaborate definitions. Thus, what people mean when they say they know the meaning of *bird* is that they have a prototype in which *robin* is at the center and *chicken* is on the outer edges. A category then has what is called semantic space, with some items near the center, the prototype, and others near the edges. Rosch (1977) established the category for *bird* by having people first compose three sentences using *bird* and then asking other people to substitute *chicken*, *robin*, and other names of birds. Rosch found that many people judged "A robin is a bird" to be true and "A chicken is a bird" to be false or atypical. Rosch's prototype theory assumes that categorization is more a matter of approximation than a definitive outline of features.

Chafe (1979) makes a similar finding in his study of student responses to his five minute movie of an incident in a pear orchard. Chafe found that when the speaker could not find an adequate word in his/her category, he/she used adjectives, relative clauses, and other modifiers to "delimit what he has in mind." A particular object or idea may be more or less codible, says Chafe, and the method of comparison is analogic and comparative, the ultimate match being "not a matter of yes or no, but a matter of degree."

Processing then has three steps or procedures--sub-chunking, propositionalizing, and categorizing. These procedures are documented in the research describing the conditions in which speakers and writers function. Furthermore, each step can be indexed by looking for formula openings (sub-chunking), verbs (propositionalizing), and nouns and modifiers (categorizing). Each set of words has degrees of meaning within it. Nouns, for instance, carry with them spatial dimensions, and verbs establish degrees of time.

Distancing is the bridge from *processing* and writing for discovery and clarification to *modelling* and writing for text packaging and communication. The writer uses *distancing* to establish what Halliday (1979) has called interpersonal relationships, establishing a personal distance to *task*, *audience* and *subject*. Beginning writers often start with a very close orientation to the task. They begin their essays by writing "I am writing about a topic I have been assigned in my English class" and "I have been sitting here trying to think of how to start this essay." In a paper for Chafe, I counted and classified the beginnings and endings of 159 essays randomly selected from 5,000 papers written by ninth and tenth graders in Oakland, California. The students were asked to write on a favorite person. Sixty-four of the beginnings were "I remember," two were "Why do I remember?" three were "The reason why we remember," and one was "I'll never forget"--a total of seventy out of 159. These writers were orienting themselves to their memories. Sixteen of the other papers, among the lowest in quality, started with "I am writing about... This is an article about ... Well it is about... I have been asked to write about... As I dig into the past..."--all statements showing writers trying to orient themselves to the task of writing on a given subject. All of these eighty-six students have established a close personal relationship to the task. They are literally in the center of it.

Many of the other students, however, were able to put some distance between themselves and the task, what Piaget calls decentering (Piaget, 1969, p. 94). Twenty-six students began their essays with a time-phrase which pushed the focus into the past and away from the immediate writing assignment: "In the fifth grade... About 15 years ago... In elementary school... It happened one day about eight years ago... One day... It seems like only yesterday that... When I... Throughout my... " Twenty-one started with "My best friend, my mother, my ninth grade teacher"--my something-- and thirteen started with "There is a special person who... One of my best friends... Bob... David... A classmate... The person who...." These essays--those with some distance between the writer and the task--consistently received higher ratings from the readers, evidence that those essays had achieved some acceptable level of communication and text packaging.

Students who are beginning to write, who are *processing* Writer-Based Prose, will often start with a close relationship to the task, and the teacher can help the student orient himself/herself to the task by allowing the student to write out that relationship. But as the student begins to move to *modelling* and Reader-Based Prose, the student must modify the relationship by putting some distance between himself/herself and the task.

Another way in which *distancing* is a bridge between *processing* and *modelling* is the various adjustments the writer must make in his/her relationship to subject. This relationship is expressed in the writer's

degree of certainty about the subject, the writer's estimate of the subject's degree of actuality, and the writer's use of connotations. The degree of certainty is expressed in what George Lakoff (1975) called hedges: *sort of*, *kind of*, *in a way*, *really*, *actually*, and *in a real sense*. I chose to make a distinction between the first three in the list and the second three. The first three are *hedges* about degrees of certainty and the second three are *leaps* to certainty. The *hedges* of the first three suggest that certainty is doubtful, and the *leaps* of the second three suggest that certainty is beyond question. The degrees of certainty can be charted, as indeed I have done with some of my writing classes:

HEDGES

The--I don't know what/ you know what I mean	kinda/sorta pretty clear somewhat	I guess/it seems to me in a way/roughly speaking loosely speaking
3 - very doubtful	2 - doubtful	1 - somewhat doubtful

LEAPS

!!!! double underlining WOW	really/indeed actually/always par excellence	in a real sense/principally strictly speaking it is true that
3 - very certain	2 - certain	1 - somewhat certain

Using the scale above, I have asked my writing classes to rank statements as *hedges* or *leaps* and then to score the degree of doubt or certainty on the one-to-three ranking. The point is that *hedges* and *leaps* are used by writers to track their certainty or uncertainty about the evolving subject. Beginning writers need to use *sorta* and *kinda* in order to keep the flow going even when they are not clear about what they are saying. Writer-Based Prose will tend to use hedges and leaps ranked three and two. Reader-Based Prose will use those marked one.

There is a critical point in the composing process. Writers must commit themselves to the ploy that if they keep writing, the language itself will be an instrument of discovery and clarification and will eventually provide sense. The belief that one can find sense in language, despite problems and momentary uncertainties or confusions, is well documented as critically important in learning to read. Torrey, in her case study of a young reader, reports, "He read as though he always expected it to say something understandable" (Torrey, 1973, p. 156). I.A. Richards in *How to Read a Book* advises a reader faced with a difficult text to "read it as though it made sense" (Richards, 1943, p. 41). And William Empson says in *Milton's God*, "We could not use language as we do, and above all we would not learn it when babies unless we were always floating in a general willingness to make sense of it" (Empson, 1961).

The writer can also use modals like *could* and *might* to establish

the writer's estimate of the subject's degree of actuality. Halliday (1979) makes the following observation on the sentence "I wonder if perhaps it might be measles, might it d'you think?":

> This interpersonal meaning, however, is strung throughout the clause as a continuous motif or colouring. It appears as *I wonder, perhaps, might, might,* and *d'you think*; each of these expresses the same modality, and each one could occur by itself. When they all occur, the effect is cumulative; with each one the speaker reaffirms his own angle on the proposition.

The various degrees of actuality expressed by a given modal are as follows:

Definite:	does/do/did	*Imperative:*	must/shall
Expected:	ought/should	*Possible:*	may/might
Potential:	can/could		

Connotations are the third way in which writers establish their relationship to the subject. Says Halliday (1979):

> The interpersonal component of meaning is the speaker's ongoing intrusion into the speech situation. It is his perspective on the exchange...they may be attached, as connotations, to particular lexical items, like 'bastards'... meaning 'people' plus 'I'm worked up.' (p.66)

Students can become aware of the range of personal feelings which can be expressed in connotations by attempting to fill in the blanks in such charts as the one below:

Negative	*Neutral*	*Positive*
skinny	thin	slender
mob	crowd	————
fat	————	plump
————	main character	hero

The writer then can establish his/her relationship to the subject by shifting degrees of certainty with hedges and leaps, by shifting degrees of actuality with the modals, and by shifting negative, positive, and neutral feelings in the use of connotations. In the shift from Writer-Based Prose to Reader-Based Prose the writer will focus less on his/her personal feelings and focus more on the audience's possible response.

The distance to audience is the most critical decision that the

writer must make in the bridge from *processing* to *modelling*. An important decision in propositionalizing is the agent of the predicate, determined in part by the selecting of a scene in sub-chunking from memory. The agent can be *you*, *I*, *we*, *he/she*, *they*, and *it*. *You*, for instance, establishes the possibility of a close distance to audience, but the choices made in *distancing* can change the relationship. The first choice in *distancing* to audience is a general form: a *letter* or *note*, a *report* as observer or participant or both, and a *generalization*, editorial, or announcement. The first form establishes an *I-you* relationship between writer and audience, the second an *I-they* relationship. The first could be revised by placing the letter in a report from someone else. Even though *you* could appear as the agent of a sentence, the surrounding discourse would make clear that the distance between audience and speaker was quite far.

The *letter*, *report*, and *generalization* provide the first framework for *distancing* to audience. This framework is adequate for giving discourse form as the writer moves back and forth between *distancing* and *processing*. At some point, when the writer knows that his/her Writer-Based Prose is far enough along or possibly complete, the writer shifts to Reader-Based Prose and *modelling*. The shift to *modelling*, as we shall see later, will require the writer to return once again to *distancing* decisions.

In *distancing*, as in *processing*, there is substantial research evidence identifying the steps outlined. The work of Halliday and George Lakoff is particularly helpful. In addition, each step in *distancing* can be indexed with signal words like *sorta* (subject), *Dear Fred* (audience), and *I am writing about* (task). The only step that is not indexed by a word or phrase which is a constituent unto itself is the use of negative, positive, and neutral connotations. These relationships can, however, be indexed on a matrix providing for positive, negative, and neutral categories, and, therefore, although they cannot be separated the way *sorta* can be, they can be identified and analyzed.

The Modelling Function

The shift from *processing* to *modelling* is a shift from focusing on what writers know and discover with language to focusing on how language can be shaped into a text and a communication. In *processing*, the writer writes to himself/herself, turning to *distancing* for possible audience. In *modelling*, the writer writes to an audience, turning to *distancing* for devices to create an audience. In addition, in *processing*, the writer is stating propositions; in *modelling*, the writer is connecting propositions, using cohesion to create discourse, those units larger than a sentence. Finally in *processing*, the writer is keeping the flow going, concentrating on fluency; in *modelling*, the writer is shaping a given genre and social artifact, concentrating on the form as

social grace and as communication clarity in a social context.

First, the creation of the audience. Walter Ong (1975) argues that the audience is always a fiction, usually a creation of the author from what the author learns from books:

> If the writer succeeds in writing, it is generally because he can fictionalize in his imagination an audience he has learned to know not from daily life but from earlier writers who were fictionalizing in their imagination audiences they had learned to know in still earlier writers, and so on back to the dawn of written narrative. If and when he becomes truly adept, an 'original writer,' he can do more than project the earlier audience, he can alter it. (p.60)

The audience is created, in part, by the creation of the speaker. Gibson (1966) describes three personas--tough, sweet, and stuffy--who characterize types of assumed speakers with assumed audiences. Gibson described the tough persona as "the hard man who has been around in a violent world and who partially conceals his strong feelings behind a curt manner." The tough persona's language has "short sentences, 'crude' repetitions or words, simple grammatical structures with little subordinating" (p. 41). The audience created by such a speaker has an intimate acquaintance with the speaker but expresses very few outward feelings. The audience assumes the world is fact, rejecting both elaborate theories about the world and suggestions of mystery. The speaker projects an audience relationship that is beyond politeness, beyond explanation.

The sweet persona goes out of his way to be nice, and he uses many devices of informal speech (contractions, fragments, eccentric punctuation) to increase his intimacy with the audience. His sentence structure is simple, but his vocabulary is not. He likes new names, and he likes adding modifiers, avoiding the sparse prose of the tough talker. The cumulative sentence is the sweet talker's favorite. The audience created by the sweet speaker has a warm, intimate relationship with the speaker, has a belief that the world can be described if not altogether understood, and assumes that feelings are a better guide to truth than strict logic and reason.

The stuffy speaker uses long words, sentences with subordination, and many noun modifiers (like "government bulletins"). The speaker assumes his relationship with the audience is not intimate. In fact, the relationship is quite distant. The speaker also assumes the world is orderly and that forces operate within a symmetrical theory. For this reason, the speaker does not assume personal responsibility for events (as the sweet talker often does). The audience is assumed to be at some distance from both events and the speaker and to believe in the value of logic and data as the source of knowledge about the world.

Gibson's description of these three speakers and three audiences has been supported by the investigations of other researchers. Robin

Lakoff (1978) identifies three styles which she believes characterize the way distance is established between speaker and listener--distance or formality, deference or hesitancy, and equality or camaraderie. And Josephine Miles (1979) also identifies three styles, representing the same distinctions one finds in Gibson and Lakoff. When these three are combined in three categories, a world view begins to reveal itself:

GIBSON:	*Sweet*	*Tough*	*Stuffy*
LAKOFF:	*Camaraderie*	*Deference*	*Distance*
MILES:	*Adjectival*	*Predicative*	*Classical* or *Connective*

These three styles create not only a given world but also a given audience. Gibson (1950) says that sometimes we reject a book because we refuse to become the mock reader the writer wants us to be. Wayne Booth (1961), quoting Gibson with approval, provides an example of his own:

> We can see from this standpoint the trouble I had with Lawrence's implied second self...can equally well be described as my inability or refusal to take on the characteristics he requires of the mock reader (p. 138).

The writer, in order to develop a particular audience, will need to review some of the previous decisions in *distancing*. For instance, *sorta* and *kinda* can contribute to a sense of intimacy. So, too, can words like "now" and "this August." Fillmore (1979) has outlined the way words define whether or not the speaker and the listener are in the same time and space frame or a different one. *Deixis* is the term given to words putting the speaker and the listener in the same time frame. Fillmore provides the following example as the worst case of a sentence with an unanchored framework in space and time. A person finds afloat in the ocean a bottle with a note which reads, "Meet me here tomorrow with a stick about this big." Such a sentence forces the reader to be an intimate of the speaker. Other phrases like *It was* can also help create the audience by stressing the intimacy of speaker and audience. For instance, Chafe (1976) says that *It was* in "It was John who did the dishes" is establishing a contrast which the speaker assumes the reader will recognize.

Gibson argues that the subject matter does not determine whether the writer will use a persona who is tough, sweet or stuffy: "...in fact it seems to me doubtful that there can be any subject which by definition requires any particular voice" (p. 23). Nevertheless, the variations in voice are influenced by the physical distance between the speaker and the audience. For example, if the writer were to assume that the speaker is talking to the reader over the telephone, then the speaker persona will have more characteristics of the sweet talker,

using language marking an intimate relationship. Figure One below shows how various language markers are distributed in the various shifts of distance.

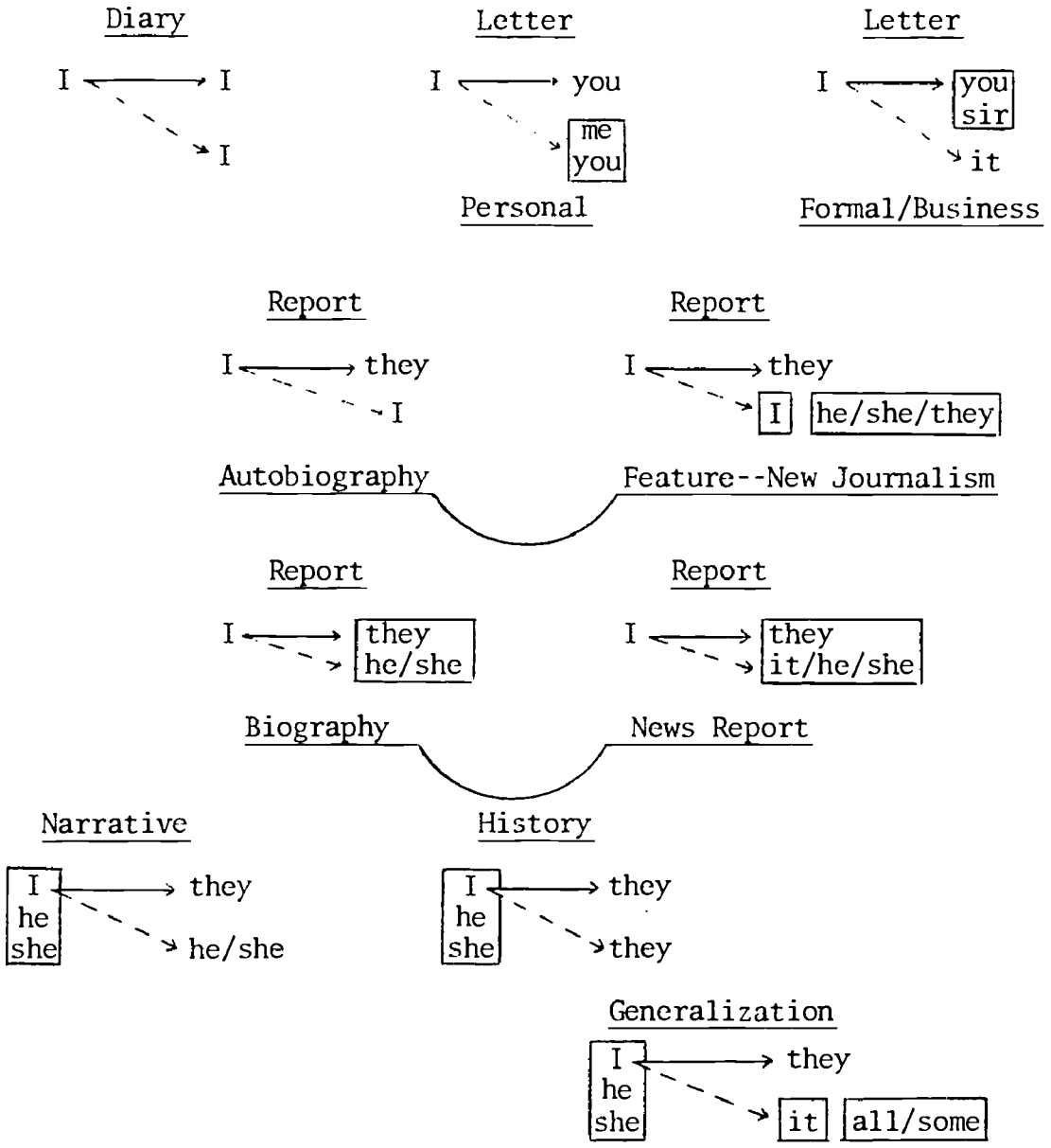
FIGURE ONE

X = Presence O = Absence THE FEATURE	A Physical Distance					B Form Changes					C Voice Changes		
	Face to Face Conversation	Telephone conv.	Prayer	Lecture/Speech	TV Newscast	Personal Notes	Diary/Journal	Personal Letters	Business Letters	Bulletin Board Announcements	Tough	Sweet	Stuffy
1. Dearest _____ ,	X	X	X	O	O	X	X	X	X	O	O	X	O
2. You	X	X	X	X/O	O	X	X	X	O	O	X	X	O
3. Hedges (sorta) Leaps (really)	X	X	X	O	O	X	X	X	O	O	O	X	O
4. I/We	X	X	X	X	O	X	X	X	X	O	X	X	O
5. Adjective Modifier	X	X	X	O	O	X	X	X	O	O	O	X	O
6. Noun Modifier	X	X	X	X	O	X	X	X	X	O	O	O	X
7. Few Modifiers	O	O	O	O	X	O	O	O	X	X	X	O	O
8. Long Sentences/ Subordination	O	O	O	X	X	O	O	O	X	X	O	X/O	X
9. Much Given Info (the)	X	X	X	O	O	X	X	X	O	O	X	X	X
10. Much New Info (A)	O	O	O	X	X	O	O	O	X	X	O	O	X
11. Many Cohesion Markers (In Summary)	O	O	O	X	X	O	O	O	X	X	O	O	X
12. Many Facts/Neutral Nouns	O	O	O	X	X	O	O	O	X	X	X	O	X/O

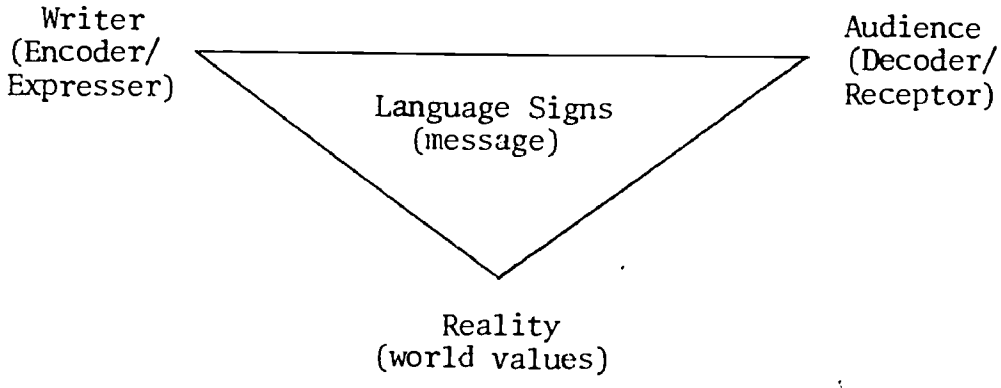
In addition to creating a speaker and an audience, the writer in *modelling* is also creating a text. At this point, the writing begins to be not only communication to someone but communication as an object. The text begins to be a creation in the same way that brush strokes begin to be a painting and musical notes begin to be a symphony. One of the first

steps in text creation is the recognition that the writing is taking the form of a particular genre. Here again distancing is the bridge between *processing* and *modelling*. In the distancing, the relationship between speaker and audience is first established as either *I-you* or *I-they*. In *modelling*, the distance to subject begins to evolve, establishing the genre for the text. For example, the student starts with an *I* writing to a generalized *you*. But the subject matter begins to be quite personal, too personal, in fact, for a letter. So the student decides to write to himself/herself, some generalized alter-ego. Thus the genre has become a diary. If the student decided that a given *you*, some known person, can handle the subject matter, then the writing evolves into a letter. In Figure Two below, the dark line is the speaker-audience relationship and the dotted line is the speaker-subject relationship.

FIGURE TWO



Voice and *genre* are ways of talking about the interrelationships among the writer, the audience, the reality, and the language:



James Kinneavy (1971) calls this communication triangle the "one solid foundation for the discipline" (p. 19) of English study and argues that the various modes of writing are emphasizing one part of the triangle or another:

Emphasis	Purpose	Discourse
Writer	Express self	Expressive (Journals/Diaries)
Audience	Convince or persuade others	Persuasive (Editorials/Sermons)
Reality	Describe data	Referential (Histories/News Reports)
Language	Arrange parts of text	Literary (Poetry/Drama/Songs)

Voice (or persona) and *genre* are ways of learning how to use the communication triangle to organize texts. Bruner (1977) makes the point that what we know must be a condensation and simplification:

> We remember a formula, a vivid detail that carries the meaning of an event, an average that stands for the range of events, a caricature or picture that preserves an essence--all of them techniques of condensation and representation. What learning general or fundamental principles does is ensure that memory loss will not mean total loss, that what remains will permit us to reconstruct the details when needed. A good theory is the vehicle not only for understanding a phenomenon now but also for remembering it tomorrow. (p. 25).

Gibson suggests that we learn the personas as caricatures that preserve for us the essence of a point of view. Culler (1975) makes the same point about genre:

> A genre, one might say, is a conventional function of language, a particular relation to the world which serves as norm or expectation to guide the reader in his encounter with the text....To read a text as a tragedy is to give it a framework which allows order and complexity to appear. Indeed, an account of genres should be an attempt to define the classes which have been functional in the processes of reading and writing, the sets of expectations which have enabled readers to naturalize texts and give them a relation to the world or, if one would prefer to look at it another way, the possible functions of language which were available to writers at any given period. (p. 136).

Thus, the writer must use some caricatures of form (genre) and speakers (voice) as reference points in the creation of texts. Examples of voice are the following:[7]

Sweet

> The store in which the Justice of the Peace's court was sitting smelled of cheese. The boy, crouched on his nail keg at the back of the crowded room, knew he smelled cheese, and more: from where he sat he could see the ranked shelves close-packed with the solid, squat, dynamic shapes of tin cans whose labels his stomach read, not from the lettering which meant nothing to his mind but from the scarlet devils and the silver curve of fish--this, the cheese which he knew he smelled and the hermetic meat which his intestines believed he smelled coming in intermittent gusts momentary and brief between the other constant one, the smell and sense just a little of fear because mostly of despair and grief, the old fierce pull of blood. He could not see the table where the Justice sat and before which his father and his father's enemy (*our enemy* he thought in that despair; *ourn! mine and hisn both! He's my father!*) stood, but he could hear them the two of them that is, because his father had said no word yet:
>
> 'But what proof have you, Mr. Harris?'
>
> --William Faulkner
> *Barn Burning*

If you really want to hear about it, the first thing you'll probably want to know is where I was born, and what my lousy childhood was like, and how my parents were occupied and all before they had me, and all that David Copperfield kind of crap, but I don't feel like going into it, if you want to know the truth. In the first place, that stuff bores me, and in the second place, my parents would have about two hemorrhages apiece if I told anything pretty personal about them. They're quite touchy about anything like that, especially my father. They're *nice* and all--I'm not saying that--but they're also touchy as hell. Besides, I'm not going to tell you my whole goddam autobiography or anything. I'll just tell you about this madman stuff that happened to me around last Christmas just before I got pretty run-down and had to come out here and take it easy. I mean that's all I told D.B. about, and he's my *brother* and all.

--J.D. Salinger
Catcher in the Rye

Tough

Mother died today. Or, maybe, yesterday; I can't be sure. The telegram from the Home says: YOUR MOTHER PASSED AWAY. FUNERAL TOMORROW. DEEP SYMPATHY. Which leaves the matter doubtful; it could have been yesterday.

The Home for Aged Persons is at Marengo, some fifty miles from Algiers. With the two o'clock bus I should get there well before nightfall. Then I can spend the night there, keeping the usual vigil beside the body, and be back here by tomorrow evening. I have fixed up with my employer for two days' leave; obviously, under the circumstances, he couldn't refuse. Still, I had an idea he looked annoyed, and I said, without thinking, 'Sorry, sir, but it's not my fault, you know.'

Afterwards it struck me I needn't have said that.

--Albert Camus
The Stranger

What makes Iago evil? some people ask. I never ask.

Another example, one which springs to mind because Mrs. Burstein saw a pygmy rattler in the artichoke garden this morning and has been intractable since: I never ask about snakes. Why should Shalimar attract kraits. Why should a coral snake

need two glands of neurotoxic poison to survive while a king snake, *so similarly marked*, needs none. Where is the Darwinian logic there. You might ask that. I never would, not any more. I recall an incident reported not long ago in the Los Angeles *Herald-Examiner*: two honeymooners, natives of Detroit, found dead in their Scout camper near Boca Raton, a coral snake still coiled in the thermal blanket. Why? Unless you are prepared to take the long view, there is no satisfactory "answer" to such questions.

Just so. I am what I am. To look for 'reasons' is beside the point. But because the pursuit of reasons is their business here, they ask me questions.

--Joan Didion
Play It As It Lays

Stuffy

This capacity to find the heart of the problem to which the well-known methods are to be applied is a part of inquiry that must precede the actual understanding or application of the methods. It is what comes at the beginning which is the key to success, since it is the effectiveness with which one initiates inquiry that directs one to the key facts and designates the appropriate methods.

Notwithstanding its importance and the difficulty of handling it effectively, the initiation of inquiry has received very little attention. Scientists know the techniques for performing experiments once they know what experiments to perform. Theoretical physicists and pure mathematicians know how to carry through rigorous logical deductions and precise calculations once they know the postulates or assumptions with which they are to begin. All the methods for the later stages of inquiry are well known. Countless books about them have been written. But what to do at the very beginning in order to determine which of the possible methods is to be used for the inquiry in question and in order to find among the infinite number of facts in experience the particular ones to which the particular methods chosen are to be applied--with respect to these initial difficulties the textbooks on methodology are ominously silent, or if they say anything their authors unequivocally disagree.

--F.S.C. Northrop
The Logic of the Sciences and Humanities

Every age in the history of philosophy has its own preoccupation. Its problems are peculiar to it, not for obvious practical reasons--political or social--but for deeper reasons of intellectual growth. If we look back on the slow formation and accumulation of doctrines which mark that history, we may see certain *groupings* of ideas within it, not by subject-matter, but by a subtler common factor which may be called their "technique." It is the mode of handling problems, rather than what they are about, that assigns them to an age. Their subject-matter may be fortuitous, and depend on conquests, discoveries, plagues, or governments; their treatment derives from a steadier source.

The 'technique,' or treatment, of a problem begins with its first expression as a question. The way a question is asked limits and disposes the ways in which any answer to it--right or wrong--may be given. If we are asked: 'Who made the world?' we may answer: 'God made it,' 'Chance made it,' 'Love and hate made it,' or what you will. We may be right or we may be wrong. But if we reply: 'Nobody made it,' we will be accused of trying to be cryptic, smart, or 'unsympathetic.' For in this last instance, we have only seemingly given an answer; in reality we have *rejected the question.*

--Susanne K. Langer
Philosophy In a New Key

The same subject can be written from the point of view of different personas:

BUFFALO BILL

Boy heart of Johnny Jones--aching today?
Aching, and Buffalo Bill in town?
Buffalo Bill and ponies, cowboys, Indians?

Some of us know
All about it, Johnny Jones.

Buffalo Bill is a slanting look of the eyes,
  A slanting look under a hat on a horse.
He sits on a horse and a passing look is fixed
  On Johnny Jones, you and me, barelegged.
A slanting, passing, careless look under a hat on a horse.

Go clickety-clack, O pony hoofs along the street.
Come on and slant your eyes again, O Buffalo Bill.
Give us again the ache of our boy hearts.
Fill us again with the red love of prairies, dark

nights, lonely wagons, and the crack-crack of
rifles sputtering flashes into an ambush.

--Carl Sandburg

Buffalo Bill's
defunct
who used to
ride a watersmooth-silver
stallion
and break onetwothreefourfive pigeonsjustlike that
Jesus

He was a handsome man
and what i want to know is
how do you like your blueeyed boy
Mister Death

--e.e. cummings

The first poem has a sweet persona, emphasizing feelings, descriptions, personal address. The second poem is closer to the tough persona, although one might argue that "Jesus" expresses too much emotion for the tight-lipped style of the tough talker. Many speakers are a mixture of two voices, in this case a tough talker with some inclinations toward the emotion of the sweet talker.

Voice and *genre* interract with each other. *Genre*, however, is a particular form, as shown in the following examples:

A. progris riport 2--martch 6

I had a test today. I think I faled it. and I think that maybe now they wont use me. What happind is a nice young man was in the room and he had some white cards with ink spilled all over them. He sed Charlie what do you see on this card. I was very skared even tho I had my rabits foot in my pockit because when I was a kid I always faled tests in school and I spilled ink to.

B. I killed Yellow Hand, a Cheyenne chief, in a single-handed fight. You will no doubt hear of it through the papers. I am going as soon as I reach Fort Laramie, the place we are heading for now, to send the war bonnet, bridle, whip, arms and his scalp to Kerngood (a Rochester neighbor who displayed it for weeks in his clothing-store window) to bring it up to the house so you can show it to the neighbors....My health is not very good. I have worked myself to death. Although I have shot at lots of Indians I have only one scalp I can call my own; that fellow fought single-handed in sight of our command and the cheer that went up when he fell was deafening....

C. Almost at the same instant my own horse went down, he having stepped into a gopher hole. The fall did not hurt me much, and I instantly sprang to my feet. The Indian had also recovered himself, and we were now both on foot, and not more than twenty paces apart. We fired at each other simultaneously. My usual luck did not desert me on this occasion, for his bullet missed me, while mine struck him in the breast: he reeled and fell but before he had fairly touched the ground I was upon him, knife in hand, and had driven the keen-edged weapon to its hilt in his heart. Jerking his war bonnet off I scientifically scalped him in about five seconds.

D. The reserve Indians came swarming down from the ridge to the rescue, turning savagely on Buffalo Bill and the little party at the out-post.

CODY KILLS YELLOW HAND

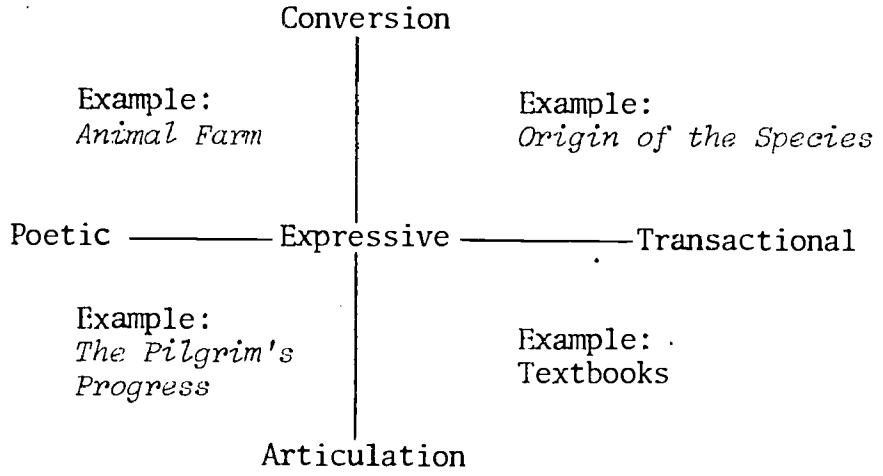
The latter spring from their horses and into the charing charge with a volley. Yellow Hand, a young Cheyenne brave, came foremost, singling out Bill as a foeman worthy of his steel. Cody coolly knelt and, taking deliberate aim, sent his bullet into his horse's head. Down went the two, and before his friends could reach him, a second shot from Bill's rifle laid the redskin low.

Three of the selections--*B*, *C*, and *D* focus on the same event, but use different genres. *B* is a *letter* from Buffalo Bill (see the *you*), *C* is an *autobiography* written by Buffalo Bill, and *D* is a *history* or *news report*, all describing the killing of Yellow Hand. *A* is a diary entry. In *B* the form is addressed to another person, but in *A* the writer is speaking to himself. *A* comes from a short story called "Flowers for Algernon," showing that some *genres*--a short story, for instance--can be created from other *genres*.

Genres are, then, governed by the conventions of form, and the writer uses these conventions to shape the text. Genres are also the result of the writer's choice either to send a message to someone or to create a text which will be an end in itself. Britton (1975) argues that writing can take one of three forms: *expressive*, *poetic*, or *transactional*. The *poetic* is a form in which the writer plays a spectator role, shaping an event in text in much the same way that people might stop to watch a building being torn down. The text becomes an end in itself, like a good story or an art object. The *transactional* form is one in which the writer plays a participant role, attempting to send a message to someone for some functional purpose. The writer in this form is participating in an event, dialogue, or project, and the text is a way of transacting business in an ordered fashion. The *expressive* form is one in which the writer writes for himself--journals, diaries, notes. Some interpreters of Britton have called the expressive form a prewriting stage before the *poetic* or the *transactional*. But in

Britton's terms, the *expressive* form has its own integrity.

Finally, genre can be influenced by the writer's decision either to report or to convert. Applebee (1977) has added this dimension to Britton, and the result is a rather elegant description of the writer's elaborative choice:



In addition to establishing *voice* and *genre* in the modelling of text, the writer establishes a *text time-frame* which is different from the *event-time* and *referenced-time* within the narrative itself. A *text time-frame* will be *all-time* (generalizations, arguments, research reports), *present-time* (drama, monologue, *Playboy* interviews, newspaper Question Man, court transcripts), or *past-time* (history, news reports, fables). The *text-time frame* tells us when the actions in the text are happening. A play, for example, happens now. The results in a research report are supposed to be replicable, happen all the time. But the events in a history book are intended to be matters which happened in the past. Within this *text time-frame*, events will be reported using the event time and referenced time in the narrative. The following selections illustrate the different levels of time.

A.	*Interviewer*: What production of *After the Fall* did it the most justice?	*Text-Time* Interview
	Miller: I saw one production which I thought was quite marvelous. That was the one Zeffirelli did in Italy. He understood that this was a play which reflected the world as one man saw it. Through the play the mounting awareness was to be enlarged in its consciousness of what was happening. The other productions that I've seen have all been really *realistic* in the worst sense.	*Event-Time* The Zeffirelli production in the past
B.	*New York*--'I can't dance, I can't dance,' rhythm-and-blues singer Bettye LaVette insisted	*Referenced-Time* The past rehearsal

to the director of 'Bubbling Brown Sugar.'

'You can learn, you can learn,' he replied, just as insistently.

'I only had four days of rehearsal before I went into the show,' Bettye recalled, 'but there was no such thing as my not being ready for the greatest event in my life.

'It took me weeks to really learn the big tap dance finale, but it's so beautiful that people in the audience cry. It still amazes me to look down and see what my feet are doing.'

Event-Time
The Present
Stardom

Bettye is one of the stars of the black musical revue which opens Tuesday night in San Francisco. She will join Charles 'Honi' Coles, Mabel Lee and James 'Big Stump' Cross for the five-week run, the first event in the Curran Theater's 'Best of Broadway' series.

Text-Time
The Interview

Bettye was on her way to a costume fitting in the theater district when I met her for lunch at Sardi's. She walked into the fabled theater restaurant wearing a smart little brown suit, with a smile on her face and a copy of her latest disco single under her arm. It's 'Doin' the Best That I Can' on the West End label, a surprisingly bright entry in the mindless disco market.

Both selections have an interview which is the *text-time*, the time framework in which the writer is speaking. But the *event-time* in *A* is the past production of Zeffirelli and in *B* is the continuing stardom of Bettye LaVette. *B* also adds a *referenced-time* in the past which acts as a backdrop to the stardom of *event-time*. In *referenced-time*, Bettye LaVette does not appear headed for stardom.

The selection of *event-time* raises the problem of what will be the unit of analysis--what will be the whole and what will be the parts. The parts in *processing* sometimes become the whole in *modelling*. Many writers have commented on how a minor character took over a novel or how a parenthetical question became the central theme of a book. The unit of analysis puts boundaries on the size of the time-frame.[5]

Time Frame	The Unit	Writers
Beginning of Context and Interchange to End	The Situation	John Searle Robin Lakoff
The Speech Act	The Speaker and Audience	James Moffett
The Speaker Only	The Speaker	Walker Gibson

One Piece of Discourse	The Essay	Frank D'Angelo
One Part of Essay	The Paragraph	Francis Christensen
One Part of Paragraph	The Sentence	Francis Christensen
One Moment of a Sentence	The Case	Charles Fillmore
Instant of Sound	The Phoneme	

Finally, in addition to creating text by using the procedures of *voice*, *genre*, and *time-frame*, the writer shapes text by using four discourse forms, three structural forms, four semantic forms and four types of metaphors. The four discourse forms are *heaps*, *billiard-balls*, *time-chains*, and *spotlights*. Heaps are the *lists* typical of the very early writing of children: "My mom, my dad, a bird, a car in the street," (Applebee, 1978). The adult form of *heaps* is the grocery list or inventory list. The cohesion for the grocery list is often the numbers next to the item (1,2,3...) and the cohesion for inventory lists is often the alphabetical system (see Goody, 1977, Chapter Five: "What's in a List?").

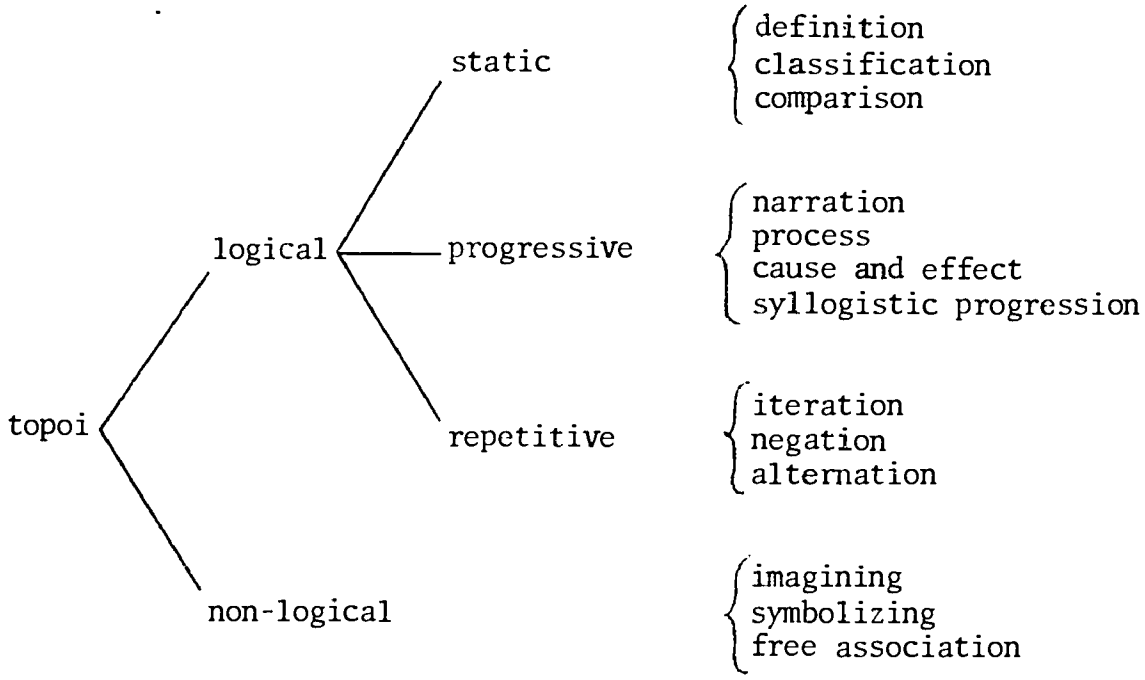
Billiard-balls are the forms which usually develop next: "My dad came home with a cigar. He got that cigar at the drug store. That's where I got my watch. My friend lost my watch. He has my bike. I got it for Christmas..." Children who write this kind of story have a problem getting the story stopped, and they usually solve the problem by writing "The End" in big letters. *Time-chains*, called narratives by Applebee (1977), usually follow *billiard-balls*, using such expressions as *Once upon a time* to mark the forward movement of a story over time. Finally, in *spotlights*, the child is able to stop the action and describe a person or scene in an instant of time.

These forms, although typical of child language in the early forms of acquisition, do appear in adult language, both oral and written. Keenan (1977) makes this fundamental point in her pioneering work on planned and unplanned discourse. She says, "Becoming more competent in one's language involves increasing one's knowledge of the potential range of structures (e.g., morphosyntactic discourse) available for us and increasing one's ability to use them. In this view communicative strategies characteristic of one stage are not replaced. Rather, they are retained, to be relied upon under certain communicative conditions." (p. 2).

D'Angelo (1975) finds four similar forms in the conceptual structure of discourse (see Figure 3).

D'Angelo believes that the patterns of discourse represent the mind's patterns of thought. The *static* is the *spotlight* form, the *progressive* is the *time-chain*, and the *repetitive* is the *billiard-ball* form. However, D'Angelo sees the *billiard-ball* form as one which moves from the exact repetition of things under new guises, including the rhythmic regularity of blank verse and the rhyme scheme of terza rhyme. D'Angelo also differs in the way he defines *heaps* or the *non-logical*. He analyzes the following

FIGURE 3



passage to show how a non-logical passage uses certain types of repetition (flower/flour, Pennsylvania/Transylvania) to give the discourse structure:

> I am the President of the United States. I will be the last President. I will not be present because I am not a resident of Pennsylvania. Pennsylvania in Transylvania. Transcontinental trains are the best kind. In trains when it rains. Rains in April bring May flowers. Flour makes bread. Cast your bread upon the water. Blood is thicker than water. I am of royal blood. Red blood, black blood, black power. I am the most powerful except for policemen and police dogs. The German shepherd was the best dog this year. (p. 50).

D'Angelo would probably find grocery lists and inventory lists too logical for the *heaps* category. Nevertheless, these forms, although structured by their numerical or alphabetical listing, are often close to free association--one thing causing the writer to think of another thing.

D'Angelo's method of analyzing form complements Christensen's earlier work (1976) which described three structural forms for texts. Christensen defined the paragraph as a sequence of structurally related sentences. The sequences are of three types--*coordinate*, *subordinate*, and *mixed*--and the topic sentence is nearly always the first sentence of the sequence. The following paragraphs illustrate the three sequences:

A. Coordinate Sequence Paragraph

1 This is the essence of the religious spirit--the sense of power, beauty, greatness, truth infinitely beyond one's own reach, but infinitely to be aspired to.
2 It invests men with a pride in a purpose and with humility in accomplishment.
2 It is the source of all true tolerance, for in its light all men see other men as they see themselves, as being capable of being more than they are, and yet falling short, inevitably, of what they can imagine human opportunities to be.
2 It is the supporter of human dignity and pride and the dissolver of vanity.
2 And it is the very creator of the scientific spirit; for without the aspiration to understand and control the miracle of life, no man would have sweated in a laboratory or tortured his brain in the exquisite search after truth.

--Dorothy Thompson
"The Education of the Heart"

B. Subordinate Sequence Paragraph

1 The process of learning is essential to our lives.
2 All higher animals seek it deliberately.
3 They are inquisitive and they experiment.
4 An experiment is a sort of harmless trial run of some action which we shall have to make in the real world; and this, whether it is made in the laboratory by scientists or by fox-cubs outside their earth.
5 The scientist experiments and the cub plays; both are learning to correct their errors of judgment in a setting in which errors are not fatal.
6 Perhaps this is what gives them both their air of happiness and freedom in those activities.

--J. Bronowski
The Common Sense of Science

C. Mixed Sequence--Based on Coordinate Sequence

1 The other [mode of thought] is the scientific method.
2 It subjects the conclusions of reason to the

arbitrament of hard fact to build an increasing body of tested knowledge.

2 It refuses to ask questions that cannot be answered, and rejects such answers as cannot be provided except by Revelation.

2 It discovers the relatedness of all things in the Universe--of the motion of the moon to the influence of the earth and sun, of the nature of the organism to its environment, of human civilization to the conditions under which it is made.

2 It introduces history into everything.

3 Stars and scenery have their history, alike with plant species or human institutions, and nothing is intelligible without some knowledge of its past.

4 As Whitehead has said, each event is the reflection or effect of every other event, past as well as present.

2 It rejects dualism.

3 The supernatural is in part the region of the natural that has not yet been understood, in part an invention of human fantasy, in part the unknowable.

3 Body and soul are not separate entities, but two aspects of one organization, and Man is that portion of the universal world-stuff that has evolved until it is capable of rational and purposeful values.

4 His place in the universe is to continue that evolution and to realize those values.

--Julian Huxley
Man in the Modern World

Christensen argues that those sentences at the same level of generality (the same number in the sequence) are often marked with *first*, *second*, *third*, or *on the other hand*, *however*, and *in addition*. But sentences which move to another level of generality are marked with *for example*, *this*, and *those*--all referring to some particular part of the previous sentence and creating a subordinate relationship. Halliday and Hasan (1976) call these terms *cohesive ties* and identify five basic types: *reference* (this, these, that), *substitution* (same, one), *ellipsis* (Some people work *ten hours*. Others *nine*.), *conjunction* (and, of course, well, surely), and *lexis* (The *task* is easy--synonym for word which came before). These ties are directional, being either *anaphoric* (the presupposed element preceding) or *cataphoric* (the presupposed element following). For instance, an *anaphoric* reference is *this* in "This apple tastes good," and a *cataphoric* reference is *that* in "That was good. It was the best apple I've ever eaten."

Metaphor is another way of organizing text, usually around notions that have already been identified in information processing. Cassirer

says that myth and metaphor are ways that man uses to sharpen one's focus (1946). He says, "...no matter how widely the contents of myth and language may differ, yet the same form of mental conception is operative in both. It is the form which one may denote as metaphorical thinking" (p. 34). In myth and metaphor, the part "usurps the whole--indeed it becomes the whole" (p. 95) in the "magic of analogy" (p. 82). Finally, says Cassirer, "it may be observed that as soon as a man employs a tool he views it not as mere artifact of which he is the recognized maker, but as a being in its own right, endowed with powers of its own" (p. 59).

It is precisely this use of metaphor as a tool in the organizing of text that is the thesis of Stephen Pepper's book *World Hypotheses* (1942). This extremely valuable book outlines the history and application of four metaphors used to organize theory: *Formism*, whose root metaphor is similarity (or, as I have explained it in the classroom, the way the housewife categorizes similar commodities on the kitchen shelves); *mechanism*, whose root metaphor is the machine and its various parts; *contextualism*, whose root metaphor is the various interactions within an event; and *organicism*, whose root metaphor is the organism which evolves over time. The four theories can be grouped in two different ways. *Formism* and *contextualism* are dispersive theories which suffer from inadequacy of precision. *Mechanism* and *organicism*, on the other hand, are integrative theories which suffer from inadequacy of scope. Furthermore, *formism* and *mechanism* are analytical theories, and *contextualism* and *organicism* are synthetic theories. Analytical theories are those which emphasize factors and parts. Although a synthesis may result in an analytical theory, the parts are of primary concern. Synthetic theories, on the other hand, emphasize synthesis first, giving the parts and factors a secondary priority.

What is particularly interesting about Pepper's book is that it provides a framework, a metaphor if you will, for examining how metaphor is used to package texts. For instance, Abrahams in *The Mirror and the Lamp* (1953) uses mirror as a metaphor for mimetic theories of criticism and uses lamp as a metaphor for expressive theories. One of Abrahams' chapter titles seems to take a page out of Pepper: "The Psychology of Literary Invention: Mechanical and Organic Theories." A recent composition book by Ann Berthoff (*Forming, Thinking, Writing*, 1978) is another interesting example. Her book is organized around the metaphor of *contextualism*, a constant interaction and dialectic between different concepts. It is as if she expects the text to give the student the experience of the composing process and to teach through the student's interactions with the event.

In summary, the writer who is organizing text has four different resources: *discourse forms* (heaps, billiard balls, time chains, and spotlights), *three structural forms* (Christensen's coordinate, subordinate, and mixed structures), *four semantic forms* (Miles' disjunction, conditional comparison, and concession), and *four metaphors* (Pepper's formism, mechanism, contextualism, and organicism). Finally, the writer who is modelling text as communication and an object in itself uses not only these procedures of organization but also procedures of *voice*, *genre*,

and *text time-frames*, including the establishment of part-whole relationships.

This model of the composing, an interaction between the functions of *processing* and *modelling*, with *distancing* a bridge between the two,[8] functions differently as the context changes. For instance, in some contexts, writing appears to be almost entirely *processing*. This seems especially true of young children who are just learning to hold the pencil and make marks. Yet, even here, at some point the writing becomes *modelling*, an object which hangs on the wall and to which the child proudly points. In other situations, where the message is routine and highly conventionalized, the emphasis appears to be almost exclusively on *modelling* for a particular audience (notices of late payment, job inquiries). Yet the *distancing* bridge even here will often lead the writer to discover some new piece of information in an old situation.

This model of composing also reveals how the three separate functions interact with each other. For example, Young and Becker's work (1975) in processing heuristics parallels the work of Pepper (1942) in organizing metaphors:

Processing Heuristics (Young and Becker, 1975)		*Modelling Metaphors* (Pepper, 1942)
Particle Analysis: How does it differ?	→	Formism
Wave Analysis: How can it change and still be itself?	→	Organicism
Field Analysis: How does it fit into a larger system?	→	Mechanism Contextualism

So, too, the speaker-audience relations and speaker-subject relations are first suggested in the propositions of *processing*, more clearly defined in *distancing*, and fully established in the genre devices of *modelling*.

This model also suggests that *positivism* and *rationalism* as research methodologies may have very limited usefulness in the study of how writing is learned and taught. A functional model gives high priority to *contextualism*, a unit of analysis which attempts to capture the social situation. Ignoring the social situation and context can lead to serious misinterpretations of the decisions that writers make. Because *voice*, for instance, establishes an attitude toward the world--either as fact, rational order, or mystery--an analysis of the composing process must at some level consider the context in which discourse takes place. A tough talker may seem intelligent in some contexts and unintelligent in others. In one context, a short sentence may establish an abrupt tone and in another context establish the politeness of turn taking. In one context, an ending which ties together all the loose ends may seem logical and

rational, and in another context, the same ending may seem to the reader to cut off discussion and leave nothing for the reader's imagination. The writer's decisions are guided by a context either given or created.

Finally, this model of the composing process reveals some interesting relationships between research and practice (see Appendix). A preliminary review of the parallels suggests that case grammar might lead to teaching practices which have not yet been explored, and that some instructional programs overemphasize a given function.

When teachers are asked what approaches they use in teaching writing, they identify six: *genre*, *subject*, *situation*, *sentence*, *problem solving*, and *cosmetic*. Each approach emphasizes one part of the composing process.

The *genre* approach answers the question "What is composition?" by pointing to various examples of written texts. In the *genre* approach, readers read (and writers write) because they have in their heads a literary competence which is a representation of texts (Culler, 1975). This representation of texts enables readers and writers to guess fairly adequately what comes next.

In this approach, teachers believe that one learns to write by learning to read, analyzing the parts of existing texts, and then imitating the examples. Benjamin Franklin in his *Autobiography*, for instance, describes how he learned to write by imitating the style of the *Spectator*, taking notes from his reading and then trying to reconstruct the original form, sometimes turning the tales first into verses and then into their original prose. Says Franklin, "By comparing my work afterwards with the original, I discovered my faults and corrected them."

The textbooks of this model are usually samples of various genres--narration, description, argumentation--followed by assignments like "Find the thesis and three supporting deails" or "Try writing an introduction like the one above." Some of these materials (Brooks, 1973) ask students to imitate the style of a given passage and insert their own experience. Usually the passage selected should be at the upper edge of the student's reading ability, forcing the student to read slowly and attend to details.

These imitations are very helpful for many students, but the model has some limitations. Some students, not learning by analyzing and imitating others, must have the opportunity to discover textual shape in their own thoughts and experiences. In the *subject* approach, teachers attempt to solve this problem by designing story starters for the student's previous experience ("I wish... I remember..."), by juxtaposing opposite views on a controversial issue, and by presenting new experiences through photographs of people and events. These teachers argue that writing can be used for both discovery and communciation. Writing can be used for discovery because, as Piaget (1969) has explained, people are in a constant search for coherence and organization. The act of writing facilitates that search, helps people assimilate data and then forces them to find some accommodation between the data and the structures people use to give experience some shape. Because the process forces recognition

of the need for new structures or new data, writing is a primary method for discovering what one wants to say and needs to know.

In the *subject* approach teachers often give assignments which ask students to fit data to a given structure or to change a structure. One structure which these teachers emphasize is predication. That is, giving topics like "my horse," "my hometown," or "capital punishment" does not help young writers find the shape of their subjects. The verb is necessary. "My horse" is not a helpful topic, but "my horse died" is. Many students do not know what they want to do until they are told what they must do. Giving the topic with a verb gives the students a framework to change, helping the student find his/her own direction.

Despite the evident value of the *subject* approach, many students do not write well unless they have a sense of writing's social significance. For these students, subject matter alone is not enough. They need primarily what the *situation* approach provides--a social situation with a defined audience and a functional relationship to subject matter. In one example of this approach, students are asked to interview someone about a given topic and then write a report on the results for a particular audience. To provide a variety of situations, teachers using this approach often ask students to play different roles, shifting both the points of view on the subject and the distances to audience. For instance, an assignment with the photograph of a house destroyed by a tornado asks the student to write an ad for the local newspaper, attempting to sell the house for $100,000 ("...unusual design...suitable for those with carpentry as a hobby"). Then the student is asked to describe the house from the point of view of an owner writing to an insurance company.

The distance from speaker to audience determines questions like diction, punctuation, style, form (Moffett, 1968). Furthermore, the evidence from developmental psychology suggests that close personal audiences are easier for students in the early stages of development. Northrop Frye (1957) has found another pattern in man's evolving heroes. Man's first heroes were supernatural and divine, then half-mortal and half-god, next the king or human hero, next the average man, and finally the anti-hero. For students, the sequence begins with fairy tales, then Spider Man or Bionic Woman, next sports heroes or astronauts, next Dick and Jane, maybe Nancy Drew, and finally the anti-hero characters in Hemingway or Camus. One problem for the junior high writer is that at the very age when he/she has one foot in the real world (Spider Man looks human) and one foot in a fantasy world (Spider Man can crawl up walls), he/she is asked to put both feet in the real world in such junior high assignments as "Report on the economy and government of a nation of your choice." The junior high writers need an assignment that somehow combines the real world and fantasy. The previous assignment might be rewritten:

> Imagine that you are planning a tour to the country of your choice next summer. You may travel as anyone you wish. Describe the person you want to be

on the trip and how much this person has to spend. Then describe your tour, giving the itinerary for each day. Information is available in brochures in the classroom.

Some students find *situation* assignments somewhat overwhelming. At least for variety, these students like smaller units now and then. Teachers using the *sentence* approach argue that *situation* assignments give the students all of the problems of compostion at once and that what is needed is some attention to the sentence alone. *Sentence* approaches have changed radically over the last twenty years, usually in response to some new development in linguistics. The first approaches asked students to diagram sentences, dividing the sentence into its immediate constituents, beginning with subject and predicate. The next sentence approach asked students to write various sentence types (Subject-Verb-Object, for instance), using the prevailing types from structural linguistics. The early textbooks identified eight or nine types, and just when the number reached thirty-three in one textbook, transformational grammar arrived and changed the approach. Transformational grammar introduced sentence combining, giving students the simple sentences in deep structure and asking them to combine the sentences into various surface structures (*The man saw Bill* and *The man is in the house* become *The man in the house saw Bill.*). Most teachers find the most recent approaches less heavily loaded with pedagogical baggage and quite useful for giving students an awareness of syntactic options. Although combining sentences is not an end in itself for any writer, the ability to combine sentences is one sign of a young writer's developing maturity (Hunt, 1965; Loban, 1976).

But the *sentence* approach, like the others, has its limits. Some teachers have argued that writing is primarily a problem-solving activity. These teachers emphasize the importance of teaching writers how to solve such problems as how to get started and how to revise. One of the principal problems for the beginning writer is how to do everything at once (hold the pencil, make the letter, spell the word, make the sentence, keep the margin, stay on the line, stay on the same subject, and so on). Because the young writer can only keep a limited number of things in mind at one time, short term memory can become a bottleneck for the young writer and can cause him/her to give up in frustration. Just getting older can help because as children get older their short term memories seem to be able to handle more problems simultaneously (Pascual-Leone, *et al.*, 1978). Just having practice with something can also help because with practice several problems can become chunked into one (Miller, 1956). Chunking is the process of making something automatic, not requiring separate attention for each operation. Driving, walking, reading a page--in all of these activities students learn many different operations separately and then chunk them into a single scheme. Writing works the same way.

But how does one help a young writer who is overloaded with problems? One solution, say the *problem solving* teachers, is to divide the task into parts and pay attention to only one part at a time. For very young stu-

dents, this often means dividing the writing task into drawing first and writing second (Graves, 1975). Drawing is an efficient method for getting the story on paper fast. Then later when the student has to write letters slowly and laboriously, the drawing is a reminder of what the writing (the word or phrase) is all about. Many teachers have extended this idea to older students, developing mapping techniques for both reading and writing (Buckley and Boyle, in press).

For older students, the separation of the writing task into parts can produce three kinds of writing for each assignment--the prewriting draft, the composed draft for reading aloud to a response group, and the revised paper using suggestions from the response group of three or four students (Healy, 1980). The response-group technique is based on the assumption that one way to solve a problem is to divide it into a series of questions. Some teachers give the response groups questions to start with and then later ask the group to list some of its own questions and to identify the two or three most helpful questions or suggestions.

In the *cosmetic* approach teachers argue that although response groups are very helpful, they are not very effective for solving problems of writing cosmetics. These matters include subject-verb agreement, capitalization, some spelling, some punctuation, and some paragraphing. Punctuation problems involving issues of meaning and emphasis can be effectively learned in response groups, but matters like the apostrophe on words ending in *-s* are largely cosmetic, not semantic, and require special handbook expertise not usually found in student response groups. So too with paragraphing. Narrow columns, for instance, will require more paragraphing than wider columns. Teachers of *cosmetics* argue that students should be taught cosmetic editing by being given student writing samples to edit and by doing exercises from usable handbooks.

Each of these six approaches to teaching composition--*genre*, *subject*, *situation*, *sentence*, *problem solving*, and *cosmetic*--emphasizes a different part of the composing process. A model of the composing process provides, then, one way of judging whether a writing program is giving adequate emphasis to all the social functions and cognitive strategies of writing. Second, a model of the composing process provides a framework for describing instruction. This framework helps explain the differences among teaching approaches.

In summary, the model satisfies some of the pragmatic requirements for an educational theory: it has implications for instruction, it provides a basis for weighing research methodologies, and it synthesizes research findings from many different fields.

NOTES

[1]Flower and Hayes suggest that the two types of prose reflect two types of memory: "One way to account for why Writer-Based Prose seems to 'come naturally' to most of us from time to time is to recognize its ties to our episodic and semantic memory" (1978). These types of memory--episodic for storing experiences and semantic for storing rules and principles--come from Tulving's research (1972).

[2]*Researcher*	*Writer-Based Prose*	*Reader-Based Prose*
Graves (1975)	reactive writer	reflective writer
Emig (1971)	reflexive	extensive
Sapir (1956)	expressive	referential
Polanyi (1958)	heuristic act	routine performance
Nystrand (1977)	heuristic act (accommodatory)	explicative investigation (assimilatory)
Flavell (1977)	private-cognitive	social-communicative
Krashen (1979)	subconscious language learning (acquired language)	conscious language learning (monitor language)
Olson (in press)	conversational utterance, interpersonal, ideational	prose text rhetorical, logical
Bobrow and Norman (1975)	data driven process	concept driven process
Bereiter (1979)	ass[illegible]ve writing	communicative writing and epistemic writing

[3]Frye (1957) gives us five types: the divine figure of myth, superior to both men and environment; the mortal-immortal figure of romance, a mortal but with a degree of superiority over other men and environment; the heroic man of epic drama and tragedy, superior in degree to other men but not environment; the average man of comedy and a Dickens novel, superior to neither other men nor environment; and the anti-hero, the Hemingway or Camus figure who seems somehow inferior to both environment and the forces that move other men.

[4]Part of the necessity for an interpretative recreation of images may be the restricted space in which the mind apparently places images. Kosslyn (1975) discovered that people took 200 milli-seconds longer to evaluate the properties of animals that were imagined standing next to elephants than to evaluate the properties of the same animals standing next to flies. The results suggest that mental images

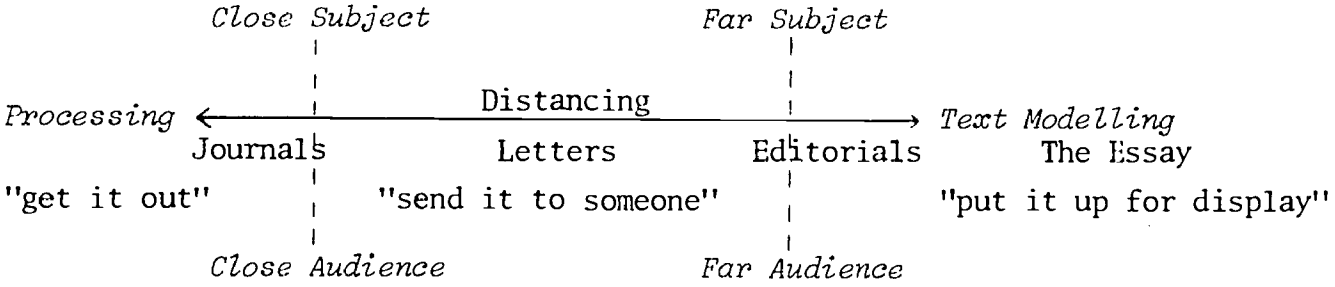
are formed within restricted space, putting limits on image size. Asking students to provide details from a scene may require the students to rearrange the size of objects.

[5]The chart here is the work of the author, but the idea was suggested by a chart developed by James Kinneavy, "The Relation of the Whole to the Part in Interpretation Theory and in the Composing Process," in *Linguistics, Style, and the Teaching of Composition*, edited by Donald McQuade (The Department of English, University of Akron, 1979).

[6]Halliday (1979) also distinguishes four different ways of expressing relationships: logical-paratatic (as in "He sang, then people applauded, then..."), logical-hypotatic ("After he had sung, people applauded"), textual ("He sang. Afterwards, people applauded."), and experiential ("Applause followed his song"). Halliday's research into the relationship between semantics and structure complements Josephine Miles's earlier work (1979) in which she identifies four semantic forms of textual organization: separation, contract and disjunction (*either/or, on the one hand/on the other, not this/but that*), conditional (*if/then, because/therefore*), comparison (*also, moreover, in addition*), and concession (*nevertheless/however, although/yet*).

[7]The categories of tough, sweet and stuffy come from Gibson (1966). Josephine Miles (1979) suggests adjectival, predicative, and connective-subordinative; Mark Schorer (1952) uses the loquacious, the lyrical, and the tight-lipped; Eric Auerbach (1953) uses the two styles of Homeric and Old Testament as his starting point.

[8]The relationship of the three functions is a subject for another paper, but the following diagram illustrates how distancing can be a bridge:



This relationship defines communication (or Reader-Based Prose) as having two distinct forms, one which emphasizes interpersonal relationships (*distancing*) and another which emphasizes the text as an object (*modelling*). The typical forms of *processing* are lists and notes for oneself. The typical forms of *modelling* are highly conventionalized poetry, such as the sonnet, or prose, such as an oath of office. A letter or editorial are instances of distancing because the relationship to the audience is a primary concern in both genres. Exactly where one function ends and another

begins is not always clear. In the middle forms, some overlap of *distancing* with *modelling* and *processing* is inevitable. Some letters, for instance, are written for display, not for the priority of a given interpersonal relationship.

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A MODEL FOR THE COMPOSING PROCESS

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
GENERAL: PHASE ONE		
Processing: Writing as Discovery	General Studies of Processing	General Practice:
The Sequence of Processing	Rohman (1966): Prewriting Chafe (1979): Verbalization Flower and Hayes (1978): Writer-Based Prose/Reader-Based Prose Tulving (1972): Memory-Episodic and Semantic	Regular Journal Writing
I. Sub-Chunking: Select scene or topic	I. Invention Research	I. Invention Practices
	A. Drawing: Graves (1975) Kellogg (1969)	A. Drawing pictures and then dictating and labelling
	B. Memory Images: Paivo (1979)	B. Brainstorming with visual maps
	C. Mapping: Buckley and Boyle (1981)	C. Questioning to generate information: 1. Particle: how does it differ? 2. Wave: how can it change and still be itself? 3. Field: how does it fit into a larger system?
	D. Heuristics: Young and Becker (1975)	D. Selecting topic from lists or asking for comparison/contrast of two or more given items
	E. Topics Given: Aristotle (Freese, 1926)	E. The Pentad: Action: What is happening? Agent: Who is doing it? Agency: How is it being done? Scene: Where and when? Purpose: Why?
	F. Burke's Pentad: The dramatic method for generating related topics: Burke (1945)	
	G. Language as Discovery: Nystrand (1977)	
	H. Thought Before Language: Harding (1963), James (1890)	
II. Propositionalizing: Select verb	II. Proposition Research	II. Proposition Practices
A. Participants and Objects in the Scene	Linguistics	A. Finding the different forms of a word: Agent: Teacher Action: ____ (teaching) Goal: ____ (the taught) Description: ____ (teachable) Manner: ____ (teacherly?)
1. Equals Verb: Is, Was It ____ red. The Attribution Scene	A. Linguistics Predication: Chafe (1970), Miles (1979)	
2. When-Where-How Verb He ____ very slowly. The Single Actor Scene	B. Participants-Cases of Nouns: Fillmore (1968)	
	C. World View Created by Verb: Fillmore (1971, 1979)	

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
The Sequence of Processing (cont.)		
II. Propositionalizing (cont.) 3. Two-Person Verb He ____ the TV set. Agent Object/Receiver The Receiver Scene 4. Two-Person/One Object Verb He ____ Bill the letter. Agent Receiver Obj/Person The Gift Scene 5. Two-Person/One Label Verb He ____ Bill a nut. Agent Receiver Label The Name Calling Scene B. The Space Relations of Nouns 1. The in space: two to three dimensional (in the yard) 2. The on space: one dimensional (on the wall) 3. The at space: non-dimensional (at the corner) C. The Case Relations of Nouns 1. Agent: Roy in "The door was opened by Roy." 2. Instrument: Key in "The key opened the door." 3. Experiencer: Bill in "Bill has a dog." 4. Goal: Mile in "Bill ran the mile." 5. Location: Shelf in "The vase was on the shelf." D. The Time Relations 1. All-Time: He walks. 2. Simple Past: He walked.	II. Proposition Research (cont.) D. Spatial Relations in Nouns: Fillmore (1979) E. Time Relations in Verbs: Fillmore (1979) F. Sentence Development in Children: Loban (1976), Hunt (1965) Psychology-Cognitive G. Processing Limits: Miller (1956) Piaget (1959) H. Processing Development in Children: Pascual-Leone et al. (1978) I. Strategies to Cope with Limits: Scardemalia (in press), Bereiter (1979), Flower and Hayes (1978), Bobrow and Norman (1975) J. Inner Speech: Vygotsky (1962), Piaget (1959) K. Self Image: Torrey (1973), Richards (1943), Empson (1949) L. Development of Case Relations in Child Language: Greenfield and Smith (1976) M. Priorities of Recall: Sachs (1967) Note: See Studies of Oral Language Patterns-Linguistics: Tannen (1979), Kroll (1978), Keenan (1977)	II. Proposition Practices (cont.) B. Changing role relationships in a sentence: Put agent at end of sentence: Bill saw the movie (the movie was seen by Bill). C. Combining kernal sentences: The man is strong. The man ran. He ran home. The strong man ran home. Note: see Strong (1973) D. Teaching E. Having two or three students work together in sentence combining and paper editing: Healy (1980), Hawkins (1976) F. Establishing Faith in Meaning and Belief in Meaning Making: 1. Book binding: makes writing a reality 2. Posting writing: makes writing part of the world 3. Textbooks and homework: creates atmosphere of seriousness

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
The Sequence of Processing (cont.) II. Propositionalizing (cont.) 3. Present: He is walking (now). 4. Progressive: (action extended over time) Past: He was walking. Future: He will be walking. 5. Perfect: (action which started in past--referenced time--and is going on up to event time) Past: He had been walking. Present: He has been walking (up to this point-event time) Future: He will have been walking (up to that point-event time in the future)		
III. Categorizing: Find the right word for the action or role.	III. Categorizing Research A. Categories: Rosch (1975, 1973), Kelley (1955) B. Schema Theory: Bartlett (1932), Minsky (1975), Schank and Abelson (1975) C. Predicting and Guessing in Reading: Ruddell (1968, 1976) D. Perception and Thinking are the Same: Brown and Lennenberg (1954), Brown (1958), Gombrich (1960) E. Models of Meaning: Ullmann (1962), Ogden and Richards (1936), Osgood, Suci and Tannenbaum (1957) F. Pauses in Processing: Matsuhashi and Cooper (1978)	III. Categorizing Practice A. Finding analogies (see SAT practice tests) B. Finding synonyms and antonyms C. Inventing words from given prefixes, suffixes, and roots D. Preparing scales of meaning measurement, following Osgood, Suci, and Tannenbaum E. Ranking words on scale of concrete to abstract

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
PHASE TWO: THE BRIDGE Distancing: Writing as the Establishment of Interpersonal Relationships		
I. Distancing to Task: Moving from "I am writing about..." to "The person who..."	I. Research on Distancing to Task A. Study of Writing Problems: Shaughnessy (1977)	I. Task-Distancing Practice A. Ratings scales for distance to task B. Rewriting sentences to change distance to task
II. Distancing to Subject: The writer establishes his/her personal relationship to subject: A. Degrees of certainty: (how certain am I about what I am saying?): not certain, certain, very certain B. Range of emotions/connotations: (How do I feel toward the matter?): negative, neutral, positive C. Degree of participation in subject or event--either in or out: from I speaker to He	II. Subject-Distancing Research A. Sex Territories in Writing: Graves (1975) B. The Spelling Presumption in Writing: Giacobbe (1979), Chomsky (1972) C. Hedges: Lakoff (1975), Zadeh (unpublished paper) D. Interpersonal Meaning in Modals:. Halliday (1979) E. Range of Connotations: Halliday (1979), Ullman (1962) F. Sentence as Instrument of Identification: Christensen (1976) G. Spectator to Subject or Participant in Subject: Expressive and Other Forms of Language: Britton (1970)	II. Subject-Distancing Practice A. Ranking degrees of certainty in statements B. Rewriting passage and changing degrees of certainty C. Ranking degrees of actuality in statements D. Finding range of connotations of given words E. Using different forms of the Christensen cumulative sentence F. Shifting point of view on subject, from I to He, and changing point of view to a different he/she.
III. Distancing to Audience A. From I-you to I-they, establishing a general distance to audience, either close and personal or far and somewhat impersonal	III. Audience Distancing Research A. Role Playing in Children: Flavell (1967), Piaget (1959) B. Degrees of Audience Distance: Moffett (1968) C. Technique as Discovery: Schorer (1952) D. Rules of Speech Acts: Grice (1975)	III. Audience Distancing Practice A. Changing personal letter to editorial (we) and changing diary entry to a letter for the letters-to-the-editor B. Answering Dear Abby letters C. Changing Question Man responses to personal letter D. Changing personal letter to business letter

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE

PHASE THREE: MODELLING: Writing as the Making of Texts (Communication as an End in Itself)

I. The Creation of Voice and Audience
The writer creates a speaker for the text and, at the same time, an audience for the text.

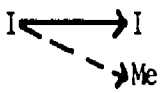
A. Tough Speaker: The audience is intimate but not personal and shares the speaker's attitude that all problems are beyond words. The essential truth is the fact of existence. The audience rejects signs of emotions, excessive description and long words.

B. Sweet Speaker: This audience believes in emotion and celebrates the mysterious, the irrational, and the uncertain. Long words, much description, and disjointed sentences are accepted by this audience.

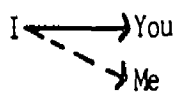
C. Stuffy Speaker: This audience celebrates the rational, the logical, and the long words needed for intellectual discussions. Subordination and parallelism are admired. The world is reason and order to this audience.

II. The Creation of Genre: The writer establishes a particular distance to both subject and audience, thereby shaping a particular genre

A. Diary



B. Letter--Personal



I. Voice Research

A. Speakers: Gibson (1966), Booth (1961)

B. Style: Miles (1979), Auerbach (1953), Jones (1961), Gombrich (1960)

C. Audience Creation: Ong (1975)

D. Audience Relationship: Grice (1975) Lakoff (1973, 1978)

E. Deixis: Fillmore (1979)

F. New and Given Information: Chafe (1976)

G. Speech Acts and Intentions: Austin (1962), Searle (1969)

H. Stress Patterns Marking New and Given Information: Halliday (1979)

II. Genre Research

A. Genre Shaped by Subject: Frye (1957)

B. Genre Shaped by Schema Interaction: Culler (1975)

C. Genre Shaped by Purpose: Bain (1888), Kinneavy (1971)

D. Genre Shaped by Concept: Vygotsky (1962), Applebee (1978), D'Angelo (1976)

E. The New Journalism Genre: Wolfe (1973)

I. Voice Practice

A. Categorizing speakers in selected pieces

B. Ranking belief system of audience for a given selection

C. Changing point of view on given scene

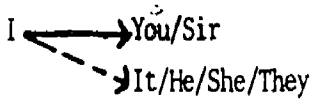
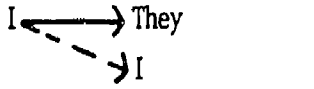
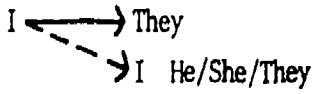
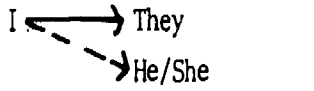
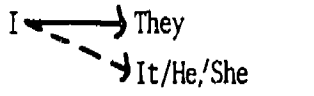
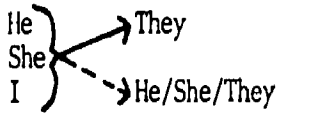
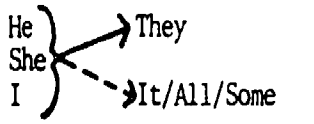
D. Imitating style of given authors

II. Genre Practice

A. Changing audience distance on material (from I to they)

B. Changing speaker's role from participant in event to observer of event

C. Writing different genres, using model given

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
II. The Creation of Genre (cont.) C. Letter--Business  D. Report--Autobiography  E. Report--New Journalism  F. Report--Biography  G. Report--News Report  H. Narrative/History  I. Generalization  	II. Genre Research (cont.) F. The Folktale Genre: Propp (1968) G. Children's Humor: Wolfenstein (1954) H. The Myth Genre: Cassier (1946)	
III. Text Time-Frame: This is the time-frame in which the text is packaged for the reader A. When 1. Happens now: interview/drama 2. Happens in past: history/narrative	III. Time Research A. Temporal Relations-Developmental: Clark and Clark (1977) B. Event Time/Referenced Time: Fillmore (1979) C. The Unit of Analysis: Kinneavy (1971)	III. Time Practice

THE MODEL	THE RESEARCH	CLASSROOM PRACTICE
III. Text Time-Frame (cont.) 3. Happens in all time: generalization, research study B. Time Relation 1. Text time 2. Referenced time (perfect) 3. Event time		
IV. The Organization of Text: The writer creates a sequence of text A. Four discourse forms 1. Heaps 2. Billiard Balls 3. Time-chains 4. Spotlights B. Three Structural forms 1. Coordination 2. Subordination 3. Mixed C. Four Semantic Forms 1. Disjunction 2. Conditional 3. Comparison 4. Concession	IV. Research on Organization A. Discourse Forms: Applebee (1978), Vygotsky (1962), D'Angelo (1975) B. Beginning and Endings: Pradl (1979) C. Cohesion: Halliday and Hasan (1976), Winterowd (1975) D. Three Structures: Christensen (1976) E. Four Semantic Forms: Miles (1979) F. Four Metaphors: Pepper (1942)	IV. Practice of Organization A. Organizing scrambled paragraphs B. Adding verbs (-ing), nouns, and adjectives to form Christensen cumulative sentence, using coordinate, subordinate and mixed sequence C. Imitating forms (argument, letter, editorial, fable, and so forth)

APPENDIX: A MODEL OF THE COMPOSING PROCESS--Tension Among Functions

I. Processing: Function--To Discover and Review Information

A. Sub-Chunking

- Frames (scripts)
- X
- Topics

B. Propositionalizing

- One participant (or one set)
- Verb
- Two or more participants (or sets)

C. Categorizing

- Hedges (uncertainty)
- X
- Leaps (certainty)

II. Distancing: Function--to Establish Social Relationships

A. Speaker to Task

I am writing about -------	------ I remember --------	---- The person who
Task-on-surface	Task implied	task submerged

B. Speaker to Subject

I	you	he/she	they	it (generality)
Close ----------	----------	----------	----------	---------- Far

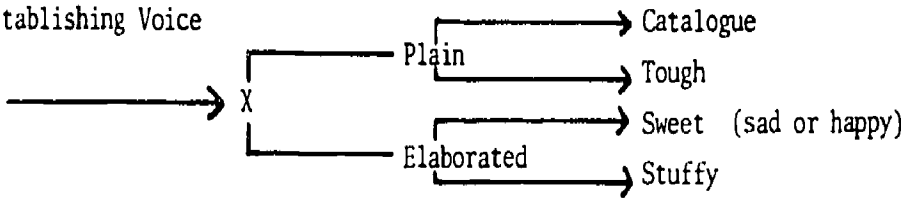
C. Speaker to Audience

I	you	he/she	Sir	it/they
Close ----------	----------	----------	----------	---------- Far

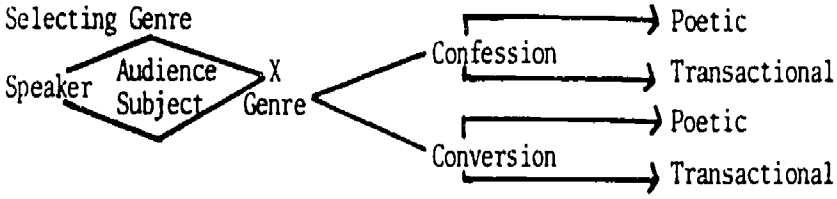
A MODEL OF THE COMPOSING PROCESS--Tension Among Functions (cont.)

III. Modelling: Function--to Send Messages and to Create Artifacts (text)

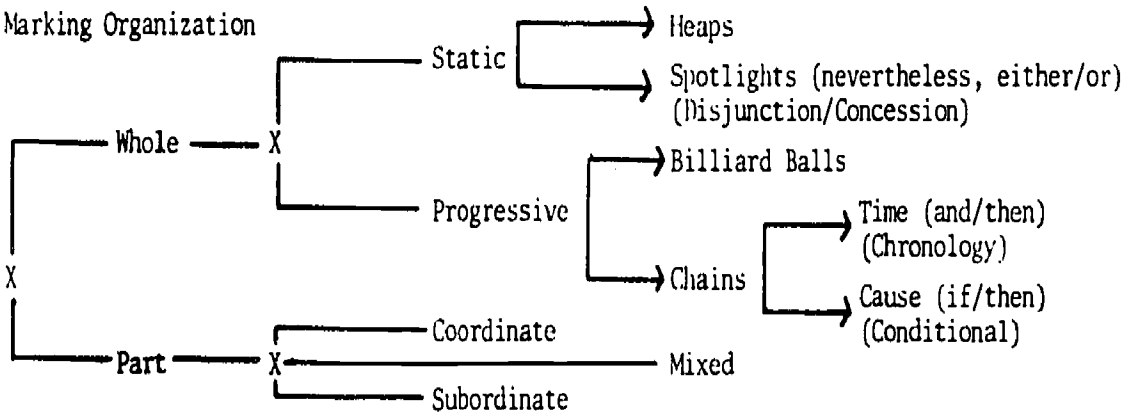
A. Establishing Voice



B. Selecting Genre



C. Marking Organization



D. Marking Meaning