

DOCUMENT RESUME

ED 205 987

CS 206 539

AUTHOR Rivers, Thomas M.  
 TITLE A Catalogue of Invention Components and Applications.  
 PUB DATE Mar 81  
 NOTE 20p.: Paper presented at the Annual Meeting of the Conference on College Composition and Communication (32nd, Dallas, TX, March 26-28, 1981).

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Behavior Patterns; \*Classification; Higher Education; \*Individual Characteristics; Writing Instruction; \*Writing Processes  
 IDENTIFIERS \*Invention (Rhetorical)

ABSTRACT

This paper lists and describes inventionist themes that writers and writing teachers can use during rhetorical invention. It defines invention as the process whereby writers discover ideas to write about, and the inventionist as one who focuses on this discovery process, whether that focus be pedagogical or theoretical. The items included and explained as inventionist themes are (1) motivation, (2) ritual, (3) perception, (4) language and perception, (5) heuristics, (6) investigation, and (7) character. These seven themes are ordered hierarchically for the purposes of classifying material on rhetorical invention, diagnosing problems involving rhetorical invention within the writing process, and developing sequences of assignments based on the logical progression of one invention theme to another. (RL)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.  
• Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy.

Thomas M. Rivers

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

ED205987

## A CATALOGUE OF INVENTION COMPONENTS AND APPLICATIONS

"Cura sit verborum; sollicitudo rerum" (Quintilian)

Thomas M. Rivers

The hoped for end of this paper is to supply its readers with a listing and description of invention components, as well as, their potential applications. Invention is defined as the process whereby writers discover ideas to write about and inventionist refers to those who focus on this discovery process, whether that focus be pedagogical or theoretical. Ordinarily, this emphasis is equated with heuristic procedures.<sup>2</sup> However, this paper will view heuristics as one of seven items that are implicit in the invention or discovery stage. Though it is clear, from composition texts and the theoretical work invention oriented texts may be indebted to, that invention involves more than heuristics (e.g. Rhetoric, Discovery and Change by Young, Becker, and Pike), it would be helpful to attempt to describe more explicitly what is implicit in the invention stage, and to show why such explicitness is of value.

Such a catalogue would have a number of possible uses. One obvious use of such a catalogue, though certainly not a major one, would be to allow those of us with a strong inventionist bent in our approach to composition to arrange in an orderly and retrievable fashion the myriad articles and books that treat the subject of invention and the composing process. Such a catalogue for this purpose would be useful, since the books and articles that treat invention are seldom written with an audience agreed about taxonomy.

Before continuing, let me first merely list the "catalogue" items. Items in the catalogue are as follows. Motivation, Ritual, Perception,

Language and Perception, Heuristics, Investigation, and Character. This category of items is not intended to be viewed as a natural ordering in the invention stage or to imply that invention itself is a temporally prior step in the composing process. The catalogue items, however, are intended to be seen as logically related to each other and this relationship will be explained in the following pages.

From the outset it needs to be stressed that such a catalogue is primarily intended for those who see the domain of discourse as necessarily, a concern with the writer's involvement in the subject or material of his discourse (this certainly is not to suggest that invention only takes place before writing). Quintilian's Cura sit verborum; sollicitudo rerum eloquently states the issue for many inventionists, though I do not presume to incorporate the ontological and epistemological context that spawned Quintilian's words. Furthermore, an acceptance of this challenge to be "solicitous" about our matter assumes that invention can and should be taught. Rhetoric rightly assumes under its rubric (Aristotle noted that rhetoric is without a subject) the solicitous concern of writers with their subject matter.<sup>3</sup>

The most important use of this catalogue of inventionist themes is suggested by the way they are ordered. The sequencing recommends the way these themes can be introduced and how succeeding themes logically flow from the preceding ones. I accept the caution that the invention process is not reducible to clear cut steps. I recognize that, like the biologist who kills the cat on the dissecting table in order to know cats better, any attempt to classify steps within invention in order to know invention better runs the risk of "killing" invention. But an awareness of these items is useful for pedagogical purposes, particularly for focusing student writers' attention on the necessary ingredients needed for a successful and "solicitous" involvement with their subject.

One other use that will be stressed, as I define and explain the catalogue, will be its diagnostic value. We have a number of useful ways of diagnosing problems that show up in the finished product, but none that allows us to pinpoint where in the invention stage our student writers may have gone wrong.<sup>4</sup>

To some extent the following items definitions are prescriptive, as well as descriptive.

Motivation--Motivation includes a concern with writing assignments that involve a student in the composing process in a meaningful way, and, in some important ways, mirror those reasons that motivate real writers outside of the classroom setting. Such assignments ought to aim, for example, at qualifying Bell Telephone's "Long distance is the next best thing to being there." The qualification could point out that the state of "being there" can also be achieved with the written word--that the written word's "presence," though different from the presence of the spoken word, is worth cultivating and preserving. Likewise, such justifications of writing ought to avoid seeing motivating composition assignments as necessarily vocation, job, or work related. Writing ought not be justified, in other words, by showing how survival in the world-of-work requires good writing. Rather, one should support a justification that entails a fusion of a liberal and a vocational education.

Failure to consider motivation invariably results in composition courses that see writing as primarily a concern with the first half of the Quintilian quote--cura sit verborum. Furthermore, students are seldom attentive to expression when it is expression without purpose, without some felt connection to the subject matter about which they are writing and the audience for whom it is intended (including themselves). I do not want to be too narrow in what I would prescribe as a properly motivating assignment, but those approaches

that stress problem solving, those approaches that include subjects that press upon and demand a sense of community (I do not assume that "motivating" means students "like" the assignment), and those approaches that make manifest to students that, to a great extent, they are what they say, are good approaches for motivating writing in an invention-stressing course. One particular assignment I use is to ask my students to respond to the following: "Why write at all? Long Distance is the next best thing to being there."

It is not enough to tell students that good grammar and style are needed in the world-of-work. Such a tactic is somewhat like teaching ethics by teaching etiquette. If students are going to be motivated to write they need to know that to write means being motivated to discover. And they need to know, rather be convinced, that to write is to act. To put something in writing is an act with permanence, with all the rewards and pains of such acts.

Ritual--Ritual includes the concern with the conscious cultivation of habits conducive to invention, as well as, for the actual writing stage. I note again that invention occurs throughout the composing process, including the editing stage. Such a concern would include emotional, psychological, and physiological components of habits. Ritual is defined then as a consciously developed constructive habit. Furthermore, such a concern would involve the breaking of bad habits. Ritual would embrace such practical things as urging students to have a desk of their own (a few years ago College English published an article entitled "A Desk of One's Own" by Nora Weinerth) to techniques for allowing what studies of invention and creativity refer to as "incubation."

Student writers need to become aware that having a subject about which they have a felt need to explore and communicate is not enough if they cannot budget time, if they are too tired to think, if their diet and overall well-being are ignored. I am not necessarily recommending that teachers become

mother hens or that we become promoters of altered states of consciousness. I do encourage, however, telling our students about some of the unusual techniques of writers--e.g. Voltaire soaking his feet in ice water while writing, Proust stuffing his desk with rotting apples, Hemingway and his ever-present typewriter. I am suggesting that we call our students' attention to something that those of us who write as part of our professional, personal, or civic life constantly attend to--our own idiosyncratic rituals. Students are almost always fascinated by such rituals and are eager to experiment.

The diagnostic value of focusing on ritual is often overlooked. Far too many compositions are failures because students did not attend to ritual, most notably the budgeting of time for invention.<sup>5</sup> It can be a crushing task to evaluate a theme whose main source of trouble came from poor habits. Considering "ritual" as an invention theme gives the teacher more discrimination in zeroing in on the problems dealing with the subject. No need to assume that the student does not know how to investigate or how to use a heuristic procedure, as is often the case. It is quite possible that the student failed to be "solicitous" about her matter because she did her exploration when she was either emotionally, psychologically, or physiologically least equipped to do so.

There is no way a teacher can prescribe ritual, parents have a hard enough time and no longer are we in loco parentis. And even if we could act in loco parentis, we would not want to. Ritual cannot be prescribed, because everyone is different in this respect. What students can come to know and use, as they explore the reality they will communicate about, is those habits that hinder and those that help. Those that help can become ritual. The stress on ritual further emphasizes the important motivational concept that writing is an act and that ritual is an essential ingredient of action. It is seen in the ball-player who tugs at his cap before pitching, in primitive man's harvest dance,

6.  
which caused emotional preparedness for the work of a harvest not rain, and in the writer who clears off her desk before writing.

Perception--Perception includes the stress on the perceiver's or knower's contribution to the known. Since I include an item in my catalogue devoted to Language and Perception (as a special instance of the above concern with Perception), this item will not include an emphasis on language's contribution to the known. This item stresses that productive thinking about, and involvement with, a subject one is going to explore and eventually communicate about, requires an awareness of and an application of those views that posit the unique relationship between perceiver and perceived, between subject and object.

The Perception item is an important one to the inventionist because students of writing who fail to consider their own role in exploring and discovering reality often fail to understand their subject well and, therefore, communicate things that are untrue, incomplete, or not useful. Theories are often born of the equipment one uses, and this particular invention theme focuses, in effect, on our perception equipment.<sup>6</sup>

If Archie Bunker were in my composition class and I were evaluating a less than satisfactory piece on the ERA, I would not begin my diagnosis with a stress on grammar or his malapropisms. Rather, I believe, I would find that he was not "solicitous" about the matter of his writing. And, more than likely, this lack of solicitous would not be the result of poor motivation--Archie is seldom detached--but the result of prejudice or bias, and a failure to see to what extent he has predetermined what he supposedly "discovers" (I am assuming that Archie wrote a piece against ratification of the ERA. I am not assuming that ratification is a good thing.) Invention is not concerned with the truth of one's ideas in an absolute sense, but about the journey to discovery.

7

7.

I find it is quite useful to give assignments (not necessarily of a controversial, contemporary nature) that reveal directly the link between knower and known, that reveal the effects of prejudice or ethnocentric thinking. I particularly find it useful to generate topics from anthropological anecdotes like the following:

The missionary saw the Chinese stewing rice over the graves of his ancestors, and said, "When do you expect your departed ones to come back and eat this rice?" The Chinese replied, "At about the same time your ancestors come back to smell your flowegs."

Besides supplying my students with motivating material, the assignment reinforces the concern with perception. Whether it is jingoism, sexual chauvinism (which is in part the result of the pink and blue blanket syndrome), ethnocentrism, or the isms of various schools of thinking, the object of this particular invention theme is not to eliminate the perceiver's contribution to meaning or to alter the perceiver's equipment to fit the teacher's notion of correct bias. Rather it is to allow the student to become aware of probably the most critical element in one's "solicitous" concern about matter--the writer's inevitable contribution to the reality of which they would speak or write. Twentieth-century man may be the measure of all things, but he will be a poor conveyor of knowledge about this world if he does not know the nature of his yardstick.

Language and Perception--This item is a special instance of the preceding invention theme. It is deserving of special interest because language not only represents what we mean but, in significant ways, creates what we mean. Quintilian's words, for many twentieth-century rhetoricians, would not be "solicitudo rerum" but "solicitudo verborum," because words are the things (res) of which discourse is made of and words do more than merely represent what we mean. Whether one views language as the ultimate creator of reality or whether one views language as an acquisition that draws on abilities common to a variety



of cognitive activities, such views hold, in varying degrees, the union of thought and word. Such a concern rightly belongs in a catalogue of invention themes, granting, of course, some of the cautions mentioned earlier--i.e. that invention occurs throughout the composing process. I might add, however, that many theorists do not see invention as language-bound as others and therefore, would be less uncomfortable with the notion of "an invention stage."

One value of including this item in the catalogue is that it may help us rescue composition classes that center on language awareness texts that are almost exclusively devoted to the persuasive nature of language and seldom to its role in how we shape reality and create meaning. If students need to be made aware of how the knower contributes to the known then they certainly need to view language under this principle.

This invention theme, for example, would include a concern with metaphor--not as a shaper of one's audience's thought, but as a shaper of one's own thinking on a subject (solicitousness about matter). And, in particular, those metaphors that are built into our way of looking at things, often without our conscious awareness. George Lakoff's and Mark Johnson's recent book, entitled Metaphors We Live By, contains a number of very useful illustrations. A particularly useful one involves their explication of the metaphor "time is money." They show how pervasive the metaphor is as a concept that governs our everyday functioning--often without our being aware that the concept is not a necessary way for human beings to conceptualize time. "Corresponding to the fact that we act as if time is a valuable commodity--a limited resource, even money--we conceive of time that way. Thus we understand and experience time as the kind of thing that can be spent, wasted, budgeted, invested wisely or poorly, saved or squandered."<sup>7</sup>

One of the metaphors they discuss has an immediate and direct bearing on rhetoric--the war metaphor that conceptualizes our notion of argumentation.

9.

From "Your claims are indefensible" to "You disagree? Okay, shoot!", it becomes clear that "the language of argument is not poetic, fanciful, or rhetorical; it is literal. We talk about arguments that way because we conceive of them that way--and we act according to the way we conceive of things." Such metaphors, then, are metaphorical concepts, and, because they operate at the conceptual level, they become more than words--they are thought and action. Lakoff and Johnson ask us to imagine a culture where an argument is viewed as a dance instead of as a war. "In such a culture, people would view arguments differently, experience them differently."<sup>8</sup> It is an intriguing idea, and, for my immediate purpose, it exemplifies this concern with language and perception.

Emerson wrote that a weed was a plant whose virtues had not yet been discovered. One of the most physically concrete ways I bring this concern with language and perception to my student's attention is to have them collect what they clearly view as weeds and to pot them and cultivate them during the course of the semester. In many instances the weed's "plantness" becomes noticeable--that is, its ornamental and aesthetic value is seen to rival many "storebought" plants.

It is certainly true that a stress on this aspect of language could also develop a critical ear and eye for those instances of language use that would control or limit our thinking on critical matters. In Ronald Reagan's Inaugural Address the word hero was so redefined that it threatened to eliminate altogether a meaningful notion of "hero" in a time when such a notion is sorely needed. President Reagan stated that shopkeepers who open their shops and consumers who purchase their goods were heroic--the real unsung heroes of the American experience. Such a redefining of the word hero, particularly if it were to become part of our nations' conceptual equipment, would certainly limit to some extent our capacity to assess, imitate, or achieve heroic stature. One

could also add the use of football metaphors during the Viet Nam War as an example of such uses of language to disguise the facts.

I do not believe that any particular kind of writing assignment is needed to reveal the role of language in perception, though admittedly we would not observe the effect of language on perception in our student's writing until after the assignment was completed (for example, a student defending a certain East/West Cold War scenario may not be fully aware of how the "domino theory" may be conceptually limiting). But I find it helpful to give some writing assignments that bear directly on this issue. A very useful assignment, that I also believe motivates (in particular, I mean that it is part of a gradual attempt to build up respect for language), that illustrates the general concern with perception, and that illustrates this particular concern with language and perception, is to have my students explore and explode the common nonsense of a number of metaphors that fill the last page of company newsletters--e.g. "In the game of life, as with all sports, it's easy to spot the winners. They're the ones who aren't complaining about the officiating."

Heuristics--This item would include the wide range of various plans or aids to invention--from Aristotle's topics to Burke's pentad, from finite to infinite plans, from specialized heuristics like the scientist's or the reporter's, to the commonality of analogous thinking. This concern with heuristics is by far the chief center of attention for those concerned with invention. The attention is well founded, but I believe that the invention stage, as it is spoken of in the teaching of composition, is better served by seeing heuristics as a distinct invention theme, and one which is led up to as part of a total sequence. For example, all heuristic devices are by definition a particular manifestation of the previous invention theme dealing with perception--i.e. the perceiver cannot be separated from the perceived. Theories are born of the equipment one uses,



and heuristic procedures are part of our mental equipment. And all of them demonstrate the knower's contribution to exploring reality and creating meaning.

One of the reasons for the centrality of heuristics in a catalogue of invention themes is its central role in the conscious generation of what we need to discover in order to know or become convinced. A student who struggles to decide whether she should be for or against gun control will reveal, either in her rough draft or notecards or the final copy, whether she employed a certain item in many of the available heuristic strategies--e.g. the topic of comparison and contrast. Failure to use this particular item will be evident and can, for diagnostic purposes, be explained to the student--not necessarily to give the student more "ammunition" for her cause but to get her to be open to the possibility that her mind ought not yet be made up.<sup>9</sup>

This stress on heuristics also reinforces a ritual concern. In the cartoon entitled Shoe, one of the characters, a parrot, is shown speaking to a bespectacled owl staring out into the night's darkness. The parrot says, "You're staring out the window again. A writer should be pounding the keyboards." The owl answers, "Wrong. Typists pound keyboards. Writers stare out windows." Fair enough. The hyperactivity of many college students needs to be dampened. Their energy needs to be redirected--away from the view that writing is always or most usefully a spontaneous and extemporaneous act. It is important, for our students, to learn to deal ritualistically with the solitude of composition. Ritual itself can be seen as a composing process--not of words but of mind and body. "Being together," being "composed," is essential for the "putting together" of composition.

Investigation--The owl is partially right about writers staring out windows. But writing is not simply an armchair adventure. It is important to ask the right questions (heuristics), but it is equally important to find answers. It is cer-

tainly valuable as a motivating, ritualistic, and heuristic strategy for students to write without necessarily planning to communicate with someone else or without taking on the concomitant responsibility to investigate their subject well. Nevertheless, the more traditional ends of rhetoric require an involvement in someone else's world besides our own. 10

The concern then with investigation is a concern with answering questions we have generated in prior stages and logically follows from a concern with heuristics. Even one's method of investigation can be viewed as part of our concern with perception, and thus the need for seeing investigation as much more than secondary research. To concentrate solely on secondary research in a composition class (though I know students need more experience in secondary research) suggests that answers to questions are always best answered by someone else's investigation and even someone else's words. Insofar as it is possible, students ought to become aware of what primary investigation abilities they already possess. To do so does not just give them another way of answering questions or of showing how some questions are best answered by various strategies--interviews, advice, letters of inquiry, questionnaires, hands-on. Most importantly, it fosters the helpful motivation force that writing is an act--an act that requires the active participation of the writer. Even secondary research needs to be set up in such a way that students are acting like writers not readers. The paraphrasing of one or two articles will not do. Imaginative assignments that require and thus motivate students to actively participate in their own arrival at knowledge and conviction are needed. Moreover, a comprehensive and vigorous concern with investigation reinforces the need for ritual. Students, for example, who budget their time poorly or who neglect to consider the role their total well-being plays in being "solicitous about their matter" will readily see the results when they are

confronted with the demanding, physically and emotionally, nature of a great deal of investigation.

Character--Non posse oratorem esse nisi virum bonum.<sup>11</sup> So said the early Greek and Roman rhetoricians. I believe their words are relevant today. This final invention item is seldom considered an invention item or even considered at all in most composition or speech texts. Perhaps this absence can be changed if by "good man" we mean a collection of virtues (habits), that do not necessarily imply correct moral action in a given situation, or a particular religious or humanistic tradition; but, rather, a possession of attributes essential for engaging in knowing one's subject (being solicitous to one's matter) and in communicating to others. This is not to say that only writers have to be concerned with being a good man, or that one's reputation is the reason for this stress, though certainly one's reputation or ethos may contribute to the writer's effect on audience.

Character, then, stands at the end of the invention sequence and at the beginning of a concern with audience. As mentioned earlier the position of this item is not to be seen as temporally last in the invention process. Character is a pervasive element in the invention process and its place in the sequence is intended to be a logical place to summarize the prior items while at the same time placing the writer into the ethical domain. The good man, then, is in possession of, defined by, certain virtues readily seen as necessary for being "solicitous" to one's matter, as well as, "attentive" to one's expression.

Our good man is honest--intellectually honest. This honesty is not merely sincerity, though sincerity is certainly preferable to insincerity. But too often sincerity is no more than mouthing falsehoods with conviction. This honesty is not merely frankness. As Walter Kaufmann says about frankness, "One tells people what one thinks of them and assumes that extreme rudeness is proof of



moral superiority."<sup>12</sup> Confusing honesty with sincerity and frankness are popular misconceptions because they place honesty within the reach of all of us. Nor do sincerity and frankness require the kind of attention to one's subject matter that the preceding invention themes have been concerned with. Kaufmann's canon of honesty is quite similar to those things stressed in the preceding themes. "High standards of honesty mean that one has a conscience about what one says and what one believes. They mean that one takes some trouble to determine what speaks for and against a view, what the alternatives are, what speaks for and against each and what alternatives are preferable on these grounds."<sup>13</sup> Honesty, then, is the virtue that addresses the imperatives of inquiry. The preceding themes become imperatives that can eventually become a matter of habit (ritual)--a virtue. The arrival at conviction and an approximation of truth as best as one can know it requires intellectual honesty.

Our good man possesses courage. To investigate certain subjects, to raise objections, or to suggest alternatives requires, in many instances, courage. To communicate our convictions arrived at honestly, by the act of speaking and writing, requires courage. Whether it be "solicitousness" to our subject matter in the ethical, political, or scientific sphere, the temptation to get by, to conform, to commit blindly, or to stay silent is great, and courage is needed to resist. Courage does not mean, however, foolhardiness. Thomas More exemplifies the man of honesty and courage, who does, however, know when to be silent. It may, in some instances, take courage to be silent.

Our good man must also possess love. Love, as defined by Kaufmann and accepted by me, "is the habit of trying to imagine how others feel and what they think, to share their griefs and hurts at least in some small manner, and to help."<sup>14</sup> To communicate with the goal of assisting, or benefiting

in some way your audience (as opposed to the goal of getting your way) is an act of love. The cultivation of a social conscience is possible. Love may not be entailed by rationality but it is desirable. We know how indebted we are to those who showed extraordinary concern for others and we try to cultivate such concern in ourselves and in our children. In the cultivation of this habit, as it relates to communication, our students become aware of how complex the task is. Love may, for example, conflict with honesty. So be it. Was the "whiskey priest" in Graham Greene's The Power and the Glory dishonest for carrying out his priestly duties even though he had no faith? There is no denying that he was lying to them in some way, but in this instance his concern for their well-being overrode the demands of honesty. There is, then, no guarantee that these virtues will not compete with each other. Cultivation of and possession of these virtues will not necessarily make the good man's life any easier, nor will it make the decisions that accompany writing and speaking any easier.

The final attribute involves humility. Humility is required in the face of an incredibly complex phenomenon that may not be successfully accomplished. One may not discover what is needed to understand or reach conviction, or one may be in possession of a truthful approximation and one's audience may be unable, or chooses not to understand him. One can only hope that successful bridges can span the gulf that separates human minds from each other. Our good man ought to stand in awe of the task of understanding his world and communicating his understanding to others.

The composition class is an ideal place to stress the moral dimension of the act of knowing and the act of communicating. The link between rhetoric and the good man has its roots in Plato and is pointed out throughout a reading of the history of rhetoric. Incorporating character as an invention theme in a twentieth-century composition class is to be part of a long and admirable



tradition. The fragmentation of knowledge, the assault on a liberal education by those who do not see that a vocational and a liberal education must be the same in crucial ways, leaves a vacuum that composition courses ought to fill, not because we ought to be reaching out and becoming more over-burdened, but because being a writer and a speaker and a good man are necessarily and essentially related to each other. If we have got to unburden ourselves, let it be the shackles of writing etiquette. As real etiquette results from one's ethical fine tuning, so too will the fine tuning of writing take care of itself, if first we attend solicitously to our matter.

I have suggested three applications of this catalogue of invention components. The first application was a minor one--a kind of Library of Congress system for filing and retrieving inventionist material. The second application was diagnostic. This application suggested the need for discrimination in diagnosing problems involving an absence of "solicitousness about matter." I recommended these components as a way of pinpointing where in the invention process the writer may have gone wrong. The third application was the possibility of developing a sequence of assignments based on the logical progression of one invention item to another. I believe there are as many strategies and assignments as there are enterprising and conscientious composition teachers. Admittedly, any assignment will involve the whole composing process, but they can be set up so that each one focuses on one of the invention items more than the others, while revealing its relationship to the invention items that came before.

I would like to suggest two other possibilities that I have not fully explored, but which may be fruitful to speculate about. Is it possible, first of all, to view these seven items as a model for how the composing process works in most instances? It is one thing to see the themes as logically and

hierarchially related and as a model to aid in discussing invention. It is quite another to claim that it is a natural not an artificial ordering.

A final use might be to meet the challenge for a broader definition of literacy. One that combined the goals of writing and reading--not only the technologies of writing and reading but their liberating and humanizing aspects as well. Perhaps these seven themes share a common goal with the development of reader-response approaches to teaching literature. I see some similarity between these inventionist themes and the reading research of Alan Purves and others, and their use of the terms engagement, perception, interpretation, and evaluation in the cataloguing of student responses to literature. This final application would be an attempt to link poetics with rhetoric in a pedagogically (not necessarily theoretically) productive way. Such a goal is worth pursuing.

## FOOTNOTES

<sup>1</sup>"To your expression be attentive; but about your matter be solicitous."

<sup>2</sup>The term prewriting is not used either, since I treat it, like heuristics, as simply one of several items implicit in the invention stage. In particular, as will be seen, I treat prewriting as a special instance of the invention theme, Language and Perception.

<sup>3</sup>Our world view, as well as our epistemological notions, have changed since Aristotle's time and as they have changed so too has the stress on invention. It is safe to say, for today, however, that the need for a "sensus communis" and the concern of linguists, psychologists, philosophers, and rhetoricians with the relation between the knower and the known, justifies, at least to a number of composition teachers, a thorough involvement with invention. This article intends no quarrel with those of us who are less desirous, as they may see it, of extending and expanding the domain of discourse.

<sup>4</sup>This diagnostic use is particularly appropriate for teachers with large composition classes or three or four composition sections, who rightly feel the need to grade the content of a piece of writing, but are often forced to concentrate on, primarily, problems that are problems in the finished product, usually low level matters of punctuation, spelling, grammar, etc... Such teachers often only have time for a broad statement at the end of the composition that may or may not be on-the-mark as to where the students went wrong during their invention stage.

<sup>5</sup>I find it useful to require the majority of my assignments to take up to two weeks, thus allowing my students to recognize that writing is not always a spontaneous, extemporaneous act, and that discovery requires, among other habits, the habit of making the best use of time.

<sup>6</sup>I exclude, for now, language, though admittedly language is, in varying degrees, depending on whose epistemology you are in most agreement with, an integral part of our perception equipment.

<sup>7</sup>George Lakoff and Mark Johnson, Metaphors We Live By (University of Chicago, 1980), p.8.

<sup>8</sup>Ibid., p.6.

<sup>9</sup>Even if teachers did not require their students to master systematic plans of inquiry, they themselves ought to master them. Failure to do so inevitably leads to teachers noticing an absence of thorough inquiry only when they themselves have already explored the subject. But if students are writing on subjects the teacher has not explored herself, a thorough knowledge of heuristic procedures still allows the teacher to note if there are gaps in a student's knowledge and how these gaps may have come about.

<sup>10</sup>Simply putting one's thoughts down on paper, as in a journal, is valuable in itself. And, in many instances, the very act of writing down whatever one is thinking is useful in exploring what one already knows about his subject. In many ways what is known as prewriting is within, as well as without, this concern with a catalogue of invention themes. As mentioned before, invention occurs in the very act of writing and even in the act of editing the finished product. I tend to file most material I run across so labeled as "prewriting"--e.g. some of the work of Peter Elbow, Ray Kytle--under Language and Perception.

<sup>11</sup>It is not possible to be an orator unless one is a good man.

<sup>12</sup>Walter Kaufman, Beyond Guilt and Justice: From Decidophobia to Autonomy (New York: Peter H. Wyden, Inc./Publisher, 1973), p. 177.

<sup>13</sup>Ibid, p. 178.

<sup>14</sup>Ibid, p. 118.