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TAGMEMIC THEORY AND ITS CONTRIBUTION
TO COMPOSITION TEACHING

by

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Dedication

To my wife, Joan, for her longsuffering, her loving, diligent support and secretarial/editorial expertise;

to Matthew and Mary for their good-natured patience with a too-often preoccupied daddy;

and to my parents and grandparents for their financial and spiritual support without which my schooling would have been impossible.

Preface

Imagine being invited to a party--a party in which the host
and the other guests, not to mention the rationale for the party
itself,were unknown. You arrive at the party and, while
engaging in polite conversation with the other guests, realize
most of the others have the same bewildering ignorance regard-
ing their presence at and the purpose for the party. The host
himself, though quite gracious, has no more insight into the
party's ultimate purpose than you do--he is just another con-
fused guest looking for purpose and direction. A game soon
begins, a game whose goal is vague and whose rules are open to
varied interpretation and generally contradictory. No one
knows who may be winning, what winning would look like anyway
and when the game could be said to be over. Your impulse is to
grab your coat and head for the door; but then all seem to be
enjoying themselves despite the purposelessness of the play.
Eventually the search for meaning and direction becomes tedious,
trivial, frankly irrelevant. The important thing is that you
are at the party at all, playing. Any newcomers to the party
are simply assimilated into the group without formal briefing
or initiation which, were it possible, would probably be point-
less anyway.

This perhaps overdrawn picture portrays one initiate's entry into the composition field. As one examines the literature of the field he/she is struck by the directionless and contradictory notions frequently offered up to a profession whose members are seemingly "tossed to and fro by every wind of doctrine." This month's sparkling new insight is (sometimes literally) next month's anachronism. The bases of evaluation and criticism shift often and sometimes disappear altogether. What "really works" may simply depend upon who has the floor at the time. Impressionistic, highly subjective "techniques" have so dominated the marketplace that it has only been in the past sixteen years that a self-consciousness has emerged to challenge the theoretical underpinnings or lack thereof within the profession.

Limiting this self-consciousness to the past sixteen years is not an altogether arbitrary gesture: it dates from the publication in 1963 of Research in Written Composition, edited by Richard Braddock, et al. The work, which became a standard reference in English education, concluded that the state of composition research at that time could be compared to "chemical research as it emerged from the period of alchemy: some terms are being defined usefully, a number of procedures are being refined, but the field as a whole is laced with dreams, prejudices and makeshift operations."[1] Nineteen sixty-three was also the year Albert Kitzhaber published his survey of composition courses, Themes, Theories and Therapy: the Teaching of Writing

in College. Kitzhaber echoed the sentiments of Braddock,
et al., speaking of "widespread uncertainty about aims, a
bewildering variety of content, [and] a frequent lack of
progression in the course."[2] He concluded, "Freshman English
in the nation's colleges and universities is now so confused,
so clearly in need of radical and sweeping reforms, that
college English departments can continue to ignore the situa-
tion only at their increasing peril."[3]

About two years later, Richard E. Young and Alton L.
Becker issued a manifesto "toward a modern theory of rhetoric"
in the Harvard Educational Review.[4] The impetus for this
new attempt at fashioning a rhetoric which would in I. A.
Richards' words, "minister to important needs," was Kenneth
L. Pike's tagmemic linguistic theories. In the mid-sixties,
Young, Becker and Pike were all professors at the University
of Michigan and from that base mined the elements of tagmemic
theory which would assist composition teachers in actually
teaching composition. Their collaboration resulted in an
important textbook, Rhetoric: Discovery and Change, and has
stimulated a growing body of literature which explores the
implications of tagmemic theory for rhetoric and composition.

The purpose of this paper is to introduce and explicate
the tagmemic contribution to composition and to offer a critical
evaluation of its usefulness and its future in the profession.
However, some background material regarding both the status of

contemporary composition theory and the development of tagmemic theory must be set forth in order to make clear the relationship(s) between tagmemic theory and the framework it attempts to dislodge or replace. Consequently, the paper is conveniently organized into these four sections: (1) Paradigm Lost: The "Current-Traditional Rhetoric" and the Search for a Sound Theoretical Base for the Composing Process; (2) The Development of Kenneth L. Pike's Tagmemic Theories; (3) The Use of Tagmemic Theory in Composition Teaching; and (4) The Place and Promise of Tagmemic Theory in Composition: An Evaluation.

"There are two things necessary. . . a way of
discovering those things which are to be understood, and
a way of teaching what we have learned."

Augustine

I. Paradigm Lost: The "Current-Traditional Rhetoric"
and the Search for a Sound Theoretical Base
for the Composing Process

In his widely praised book, The Structure of Scientific
Revolutions, Thomas S. Kuhn sets forth a theory of "paradigms,"
disciplinary matrices consisting of values held in common,
beliefs and methodologies all of which determine the nature and
conduct of a discipline.[5] The paradigm acts as a lens to see
through, a guiding perspective which includes and excludes,
directs and restricts and generally decides the course, in-
cluding the kind and area of research, of a discipline. It
is a discipline's paradigm, Kuhn argues, that ultimately must
be altered, expanded, dislodged in order for "revolution" to
take place--it is only after members of the discipline begin
to go beyond the existing paradigm in experimentation and refuse
to be bound by its limitations that further progress can occur.
In this way, inadequate paradigms can be continually updated or
superseded by paradigms built upon more accurate, supportable
data.

Borrowing Kuhn's terminology, Richard E. Young cogently
argues that the composition field is in the grip of a crisis
which is paradigmatic.[6] Despite the apparent lack of a
paradigm suggested by the work mentioned in the preface by
Braddock and Kitzhaber, Young maintains that in fact there

does exist, however tacit and unacknowledged, an identifiable matrix which prescribes and limits the composition profession: "I think a reasonable case can be made for the proposition that for several decades, members of the discipline have shared a remarkably stable system of beliefs, a system that Daniel Fogarty. . .has called 'current-traditional rhetoric.'"[7] This "current-traditional" paradigm is characterized by certain "vitalist" assumptions, remnants of the Romantic notions of creativity and imagination. As Young explains,

> Vitalism, with its stress on the natural powers
> of the mind and the uniqueness of the creative
> act, leads to a repudiation of the possibility
> of teaching the composing process, hence the
> tendency of current-traditional rhetoric to
> become a critical study of the products of
> composing and the art of editing.[8]

The overt features and emphases of the current-traditional rhetoric illustrate this vitalist bias: "the analysis of discourse into words, sentences and paragraphs; the classification of discourse into description, narration, exposition and argument; the strong concern with usage (syntax, spelling, punctuation) and with style (economy, clarity, emphasis)."[9] "Composition" taught under the auspices of the current-traditional paradigm ultimately becomes the cultivation of editorial skills

to the exclusion of invention--that is to say the <u>composing process</u> itself.

In fact, the contrast between <u>process</u> and <u>product</u> has become a commonplace in the composition field and hardly a text can be marketed that doesn't take some kind of bow toward this feature. Unfortunately, however, most of the texts that seem to be taking this contrast seriously are clearly written within the current-traditional framework, incorporating most of its drawbacks and none of the insights that the contrast might imply. A case in point is William J. Kerrigan's <u>Writing to the Point</u>, a text which seemingly emphasizes the process over the product. Kerrigan's conception of the writing process is quite different from that of the tagmemicists we will be looking at, for his methodology can, in his words, guarantee results because "it is automatic: it relies on itself, not on any skill of yours; it does not depend on your having good ideas, a good vocabulary, or good expression."[10]

Kerrigan cautions the student against expecting "literature" and, depending upon what one means by the term, one can probably go along with him here. On the other hand, Kerrigan's rationale for this caution needs to be carefully examined. Kerrigan tells the student parenthetically, "To produce literature you would ordinarily need to have done a lot of reading and writing, besides, of course, having been born with unusual gifts" (p. 4). Kerrigan has already told the student that his foolproof method works because it doesn't depend at all on him; he then

suggests that the student need not expect "literature," because that requires "unusual gifts." Curious and curiouser. It would seem then that Kerrigan's student world is populated chiefly by two types, one at an opposite pole from the other: the specially gifted student capable of producing literature and who therefore is hardly in need of Kerrigan's text and the ungifted student who barely has to be involved in the writing process at all, considering the all-inclusiveness of the Kerrigan methodology. Consequently, in the Kerrigan composition class, one of two items is trivial and irrelevant: Kerrigan's text or the student himself. The instructor turns out to be rather inconsequential either way.

If the case against Writing to the Point seems overdrawn at this point, consider Kerrigan's own explanation of what it means to "write to the point" in his "Breathing Space" section midway between steps 1-4 and the last two steps:

> First of all, writing sentence X forces you at the very beginning of your theme to decide what your point is. That's of the greatest importance, because if you haven't decided what your point is, how are you going to know what to write? (Conversely, deciding at the very beginning what your point is makes your course immediately clear--you know with certainty which way you have to go or which ways are open to you.) (p. 66)

The very "point" at issue in teaching the composing process is, where, when and how does one get a point? That "deciding at the very beginning what your point is" automatically "makes your course immediately clear" is an assertion either perversely naive or criminally ignorant. It is quite apparent here that Kerrigan divorces any notions of invention from the writing process he is attempting to teach. His bold and self-congratulatory claims that "far from restricting students, the tight structure soon frees them to say what they really want to say" and "their themes become as individual as their handwriting" ring hollow in the glaring omission in his methodology of a way to help the students discover "what they really want to say." (p. vi). "What do I say next?" and not "How do I organize my point?" is the question most students must grapple with.

To use Writing to the Point the way Kerrigan prescribes is to elicit from students the kind of banal, predictable responses composition teachers traditionally have demurred. To supplement the text with, say, an invention process of one's own is to undermine and betray the carefully crafted rationale Kerrigan himself has written into his methodology. (It also obviously would argue for the removal of the text altogether, for the very purpose in using the Kerrigan text is ostensibly to give the student one text which will provide him all he needs to write well.) Kerrigan seems to sense this absence for there is some feeble attempt in Step 4 to argue a kind of "generation"

aspect to the revision of a theme but this is hard to take seriously in the midst of Kerrigan's overall portrait of the writing process. One must frankly ask whether any writers, professional or otherwise, in the "real world" actually write the way Kerrigan describes.

One thus comes away from the problematic Writing to the Point perplexed. What place, finally, can there be for a text like Kerrigan's in the composition classroom? I'm compelled to answer that if "composition" is to be taken literally in that sentence, Writing to the Point has no place whatsoever. "Composing" itself seems to have little to do with the process Kerrigan outlines in his text. Unless. Unless, "composing" means always sitting down to write with an extraordinarily clear conception of what one wants to say, what form it should take and which details and illustrations will support it. Unless, "composing" is a rather impersonal, mechanical process which requires only the stimulus of an "assignment" to be put in motion and carried to its end. Unless, the teaching of "composing" can be reduced to the dissemination of a pre-packaged body of information and the consistent exhortation and admonition to the student to follow each rule and formula exactly and circumspectly without the slightest divergence.

We have already said it is a commonplace now to emphasize the process over the product and Kerrigan purports to do the same--but in the most superficial way. For, ultimately Kerrigan's "process" cannot yield the kind of product he

describes as desirable; the embellishments that round a Kerrigan theme into shape must come from outside the system because they cannot be accounted for in the system itself: they are part and parcel of the invention process he ignores or excludes. In the final analysis, Kerrigan's text misleads the student, isolating him from the complex, frustrating, yet ultimately satisfying, process of writing; for Kerrigan, composing is not only simple, it is simplistic.

Tagmemic theory presents composition teachers with a way to fill the vacuum left by the current-traditional rhetoric's neglect and virtual disavowal of invention. It provides both a theoretical foundation and a formal apparatus for employing invention effectively in teaching composition. What is more, tagmemic theory potentially provides the composition profession with an exciting, viable alternative to the current-traditional paradigm which has harnessed and harrassed the development of composition theory. It is the burden of the rest of this paper to demonstrate the usefulness and scope of tagmemic theory in helping to solve some longstanding problems in composition teaching.

II.   The Development of Kenneth L. Pike's Tagmemic Theory

     In 1948, Kenneth L. Pike began the search for a syntactical
counterpart to the phonological and morphological terms,
phoneme and morpheme--something at the sentence level which
could function as a key identifying unit in the same way that
these well-established terms functioned. Pike was looking for
a high-level generalization that could characterize all human
language and which would simplify the training of missionaries
and Bible translators who would encounter previously unstudied
and thus grammatically uncharted languages. The result of
Pike's search was the tagmeme and the linguistic system that
has come to be known as tagmemics. But what was most interest-
ing about his search was the fact that what started as merely
a "language theory" soon evolved into a structural theory
that attempts to account for all of man's behavior. Indeed,
Pike's seminal work of three volumes is entitled, Language in
Relation to a Unified Theory of the Structure of Human Behavior.
     The impetus for this expansion of the tagmemic theory
was an epistemological question: how is it that we can recog-
nize objects without knowing everything about them? As Pike
explains, "Tagmemic theory staked its claims on the belief
that essential to the description of human behavior as we live
it must be the ability to recognize a friend even though he

has just had Wheaties for breakfast, cut his long hair, and replaced his necktie."[11] What is it about a "unit," i.e., any person, event, situation, object, concept that allows one to recognize and describe it adequately? Pursuing the implications of this question further, Pike soon departed from the strictures of the structural linguistics he had been trained in; he could no longer treat language as a sui generis, autonomous phenomenon that could be studied in isolation from other, non-linguistic human behavior.

Pike insists that language must be considered a part of the whole of human behavior and his belief that a unified theory is needed to account for the whole is seen in two major contributions of tagmemics to linguistic thought: (1) the concept of the trimodal structure of behavior and (2) the distinction between emic and etic descriptions of behavior.

Pike argues that every unit of behavior to be well de-scribed must be characterized in these three ways: (1) how it differs from everything else in its class; (2) what its range of variability is, i.e., how much it can change and still be itself; and (3) what range of contexts can appropriately contain it, i.e., its distribution among other systems.[12] Theoretically, any unit of human experience can (and ultimately must) be viewed through this trimodal structure. Pike then combines this notion of the trimodal structure of behavior with a model from the physical sciences: any unit can be viewed as a particle, as a wave or as a field. The correlation of these two concepts

results in a matrix which is useful in effectively defining
and describing any unit of experience. This matrix forms
the heuristic procedure Young, Becker and Pike employ in
their textbook, <u>Rhetoric</u>: <u>Discovery</u> <u>and</u> <u>Change</u>. This will
be explored in greater detail later.

One of Pike's other contributions to linguistic theory
is his distinction between <u>emic</u> and <u>etic</u> viewpoints. Pike
coined the terms from the endings of the words, phonemic and
phonetic. The "emic" view is the perspective of the insider,
the native, and is concerned with the contrastive, patterned
system within a universe of discourse; the "etic" view of a
unit is the perspective of the outsider who looks for universals
and generalizations. The "emic" view is the view we expect
from a participant within a system; the "etic" view is the view
we expect of the alien observer. John Algeo has suggested a
useful illustration of these kinds of perspectives:

> A noncardplayer observing a game of bridge will
> see different things than a bridge-player will.
> The noncardplayer, who is an "alien" in this
> situation, may notice that the cards are handled
> and passed around, that the players pick up the
> cards in front of them and carry on a short con-
> versation in cryptic phrases, that one player then
> puts all of his cards on the table while the other
> three put theirs down one by one as this player or

that pulls little piles of cards in front of him. . . What the bridge-player sees as a "native" to the game is a distinct unit called a "hand," consisting of the deal, the bidding, the play and the scoring. The noncardplayer observes a number of etic facts, some of which fit into the emic categories of the bridge-player and some of which are irrelevant. . . To know which events at the card table are significant for the game, which are not, and how the significant events are related to one another, one must know the rules of the game--that is, one must know the events emically.[13]

This etic/emic contrast is used by Pike to distinguish between those elements in an uncharted grammar which are crucial, indispensable factors (emic) and those which are incidental, insignificant (etic). We will also have more to say about this aspect of tagmemics below when we examine the use Young, Becker and Pike have made of this distinction for composition.

Pike's work in tagmemic theory has not, in general, been as widely accepted by scholars as the work of Noam Chomsky and other transformationalists. Nevertheless, individual concepts within tagmemics have been adopted and adapted by a variety of disciplines.[14] Tagmemics can be seen, in a sense, as being all things to all men, with a remarkably wide range of applications, especially in but not limited to, linguistics. Austin Hale

confesses that "it is at present quite possible to be a tag-
memicist in good standing without subscribing to any particular
doctrine regarding the form of grammar. To one who received
a good portion of his linguistic upbringing within the tradi-
tion of transformational generative grammar, this realization
comes as a shock and a revelation."[15] Though popularly cate-
gorized as a "slot-grammar," Kenneth L. Pike's peculiar insights
into the nature of language and behavior are compatible with
and not in opposition to the insights of other schemes and
systems. Two concerns do, however, set the work of Pike
apart from the others: (1) Pike is interested in fashioning
a total system of human behavior--and not just one that
accounts for language behavior; and (2) Pike is preeminently
humanistic in his orientation, and decidedly opposed to any
mechanistic view of man or his language behavior. These con-
cerns will be of interest when we later consider attacks that
have been made against the tagmemic conception of the composing
process.

In view of its adaptability and intended scope, it is
not difficult to see how there come: to be such labels as
"tagmemic rhetoric," "tagmemic discovery procedure," "tagmemic
composition theory" and so on. It is not so much that a
"grammar theory" has gotten out of hand and invaded territory
once considered inaccessible and inappropriate for such
theories, but that certain insights discovered in the study
of language as language have been found to be useful and

helpful in the teaching of composition. In 1964, in an article
in College Composition and Communication, Pike suggested a
possible contribution to composition teaching by linguistics,
tagmemics in particular. In that ground-breaking article, Pike
asked, "Would it be possible to explore a number of the axioms
of such a language theory [as tagmemics] in order to develop
exercises based on these axioms about language structure, but
specifically designed to develop writing competence?"[16]

Pike's work in training linguistic students to analyze
and write descriptions of foreign languages enabled him to
"develop a body of theory general enough to apply to any
language whatever. . . and at the same time to invent exercises
which would break down the learning problem into small bits
in terms of simulated language. . . ."[17] Pike and his col-
leagues attacked the problem by creating "languagettes" or
artificial languages for analysis and inventing exercises to
help students learn the effective use of such languages. Pike's
ploy here is reminiscent of C. C. Fries' work in applying the
insights of structural linguistics to English when he suggests
that exercises formerly designed to teach effective use of
foreign languages can be successfully used in the English
composition classroom.

From that salvo in 1964, Pike, with Michigan colleagues
Young and Becker, began to explore the application of the
theory to composition teaching. The theory was initially
employed to improve the grammatical competence of students;

though helpful here, the theory's potential in serving
rhetorical concerns soon became the focus of research and
experimentation.[18] While the three Michigan professors con-
tinued to collaborate throughout the decade, their work
culminating in the text, Rhetoric: Discovery and Change, the
seventies saw Richard E. Young emerge as the major spokesman,
theorist and researcher for "tagmemic composition theory."
Starting "merely" as a language theory, tagmemics has now
generated methodologies for helping native speakers to improve
their use of their language, supplied the framework for "a
modern theory of rhetoric" and, more recently, given impetus
to a promising new means of discourse analysis.[19] The stage
is now set for the what and how of tagmemic theory: an
exploration of the nature and application of the theory itself.

III. The Use of Tagmemic Theory in Composition Teaching

A. The Paradigm

It shouldn't be surprising that although tagmemic theory
has been around for more than twenty-five years, it is only in
the past decade that its implications for disciplines other
than linguistics have been recognized and pursued. Linguistics,
as a "science," has perennially held out much potential for
other disciplines, but seemingly has failed to "deliver."
Interest in tagmemics' possible use in composition began, as
related above, as early as 1964. In the preface to their text,
Rhetoric: Discovery and Change, the authors explained the
combination of events which brought them together:

> Pike, a linguistic scholar, had sought to determine
> whether linguistics could provide the basis for a
> method of improving competence in writing. Many
> linguists and composition teachers had assumed that
> it could, yet the actual contributions of linguis-
> tics had not borne out the assumption. New methods
> of grammatical analysis and pattern practice, and
> sophisticated approaches to punctuation and usage--
> to name some of the more significant contributions--
> came nowhere near providing the basis for a coherent

and comprehensive method. Pike suggested that one particular linguistic theory, tagmemics, could make a much more extensive and fundamental contribution by supplying the theoretical principles and problem-solving procedures necessary for a distinctly new approach to rhetoric. Becker and Young, for several years teachers of freshman rhetoric, were convinced that rhetoric was potentially an important part, perhaps the most important part, of a college student's education; yet they were dismayed by the intellectual emptiness and practical ineffectiveness of conventional courses. The solution Pike proposed to his problem seemed also to offer a solution to their own.[20]

All three sought, not a stop-gap measure, but a comprehensive method--and beyond that, a paradigm--which would provide composition teachers with an effective means for teaching what the profession had assumed it had always taught: composing.

Between the years 1964 and 1970, these professors experimented, tested, probed and pried, searching out and fashioning, first, a pedagogy, elucidated in and exemplified by the text, Rhetoric: Discovery and Change; and since 1970, centering their work in the search for a paradigm, a context in which the pedagogy established earlier could be put to the greatest use.

In the first part of this section, I want to explore the paradigm developing around the tagmemic pedagogy; in the second section, I want to explicate the pedagogy itself. To make it easier to clarify the theoretical base of tagmemic theory and how the pedagogy comes out of it, I will thus reverse the order of their actual conceptualization.

Young, Becker and Pike believe, as do other tagmemicists working in composition, that the composing process should be the focus of composition teaching and that, indeed, it is something which to some degree can be taught. That is, of course, in direct opposition to the "current-traditional rhetoric" which either denies there can be any direct influence over the process or ignores it altogether as irrelevant. The tagmemicist basically sees invention--the category which, along with arrangement, style, memory and delivery, formed the basis for classical rhetoric--as the key to the composing process. And he sees invention as essentially a "problem-solving" activity. "Problem-solving" here does not mean "puzzle-solving" but is a concept derived from the work of the Swiss psychologist, Jean Piaget.

Piaget posits that humans think in terms of resolving "disequilibriums" in their lives. This process, which begins at a very early age, manifests itself in different strategies which are employed by a person to resolve or eliminate the "disequilibriums" or problems. According to Piaget, all human activities such as play, fantasy, analytical thought--

in short, all "creative processes" manifest the same goal, eliminating the disequilibrium or dissonance which a person senses in his life.[21] The three conclusions of Piaget which have the greatest significance for the tagmemicist are these: (1) our understanding of ourselves and our world is always subject to revision--we are continually adapting, synthesizing, maneuvering; (2) the activity the mind engages in during these "maneuverings" is, to some degree, accessible to us through inferences drawn from careful observation and experimentation; and (3) these activities/strategies of the mind are acquired through experience.[22]

The implication of these conclusions for the tagmemicist is clear: if Piaget is right, then this "problem-solving" activity is the key process that underlies human behavior and if the activity is accessible, if one can isolate and identify its features and further if the process is learned empirically, then it may form the basis for a new rhetorical procedure which can be taught to the student. Richard E. Young puts it this way:

> The awareness of inconsistencies in one's image [of the world] produces the wrinkled brow and uneasy feeling characteristic of the earliest stage of inquiry. If the inconsistency is sufficiently uncomfortable, we set about eliminating it. But

how do we get enough control over the felt difficulty
to begin systematic investigation?[23]

Young answers his own question later on:

Control over a felt difficulty begins with its
articulation. . . . Could we develop a set of
operations, a heuristic procedure which can help
us articulate problems?[24]

What Young is asking for is a means by which the "problem-
solving" activity--which Piaget argues is basic to human
consciousness--can be tapped, goaded and enlisted in the
struggle for the articulation of "felt difficulties." What
is needed, Young says, is a way to summon what is basic and
natural to human mental processes. His solution is Kenneth L.
Pike's tagmemic discovery matrix which we will consider in
the second portion of this section.

This budding paradigm is thus part linguistics, part
psychology. The framework on which it is built challenges
not only the content of the "current-traditional" paradigm
but also the educational theory on which it is founded. The
tagmemicist argues that the predominant dictum of education
has been that the educational process, the role of the teacher,
may be defined as the dissemination of a body of pre-packaged
information--an inherited, intrinsically valuable set of facts,
beliefs, worldviews. The student's role is simply to "acquire"

this information by whatever means at hand. He is "educated" when he has mastered this body of information. But here an epistemological question is raised. What if human consciousness is not designed to be a passive receptor of pre-packaged information? What if the education process as described not only does not utilize, but actually handicaps and stunts the manifestation of the basic human impulse to "resolve disequilibriums"? It is often observed that children seem to be more alive to the world, more curious, more interested, etc., than adults. What if, say, this lively inquisitiveness on children's part was a manifestation of this inquiring, "problem-solving" activity? A good case could easily be made that this process is eventually drained and eroded out of the child by the "education" he/she endures during the twelve years of public schooling.

The tagmemicist thus demands the "radical and sweeping reforms" for composition programs which Albert Kitzhaber called for in 1963. Such reforms must involve not only content, but also the educational theory upon which those programs are founded. New techniques and tricks are only band-aids on third-degree burns when what is needed is a new paradigm. More than anything else the student needs to be motivated toward inquiry--toward a recovery of what was active in childhood but has disintegrated in the intervening years because of a well-meaning but misguided educational theory. As Lee Odell puts it:

> The teacher's role in education is: 1) to help the
> student learn to recognize those experiences that
> create dissonance for him; 2) to help the student
> in his attempt to solve his problem by changing his
> world, his understanding of the world, or both.[25]

Specifically in regard to composition teaching, Young draws a broad contrast between the "current-traditional" paradigm and the one he envisions as its replacement. Because of its orientation, the "current-traditional" paradigm can only offer a "trial and error" method of approaching writing problems; it survives as a monument to the befuddled state of pedagogy and the weakness of the educational theory supporting it. Young has characterized it well here:

> Today the trial and error method is generally used
> to solve writing problems. It characterizes the
> efforts of both the experienced writer and the
> beginner as they move toward a finished discourse.
> And it provides the rationale for the instructional
> techniques in our composition courses. Typically,
> the teacher gives the student an assignment which
> loosely describes the completed discourse either by
> asking a question which the discourse answers or by
> specifying some of its features (a definition of,
> an essay on the subject of an essay in imitation of,
> or some combination of structural, semantic and

phonological constraints). In addition to a loose specification of the terminal product, the input is sometimes specified as well (e.g., after reading x's article, write a 1000 word critical review). False leads filling his wastebasket, the student somehow develops solutions to the work of rhetorical problems, finally producing something which meets the specifications of the assignment. He then submits his *work* for comment (an attempt at verification) and revises it, if unsatisfactory. He tries, errs, and tries again until the instructor feels the work meets the assignment. By repeatedly making mistakes and learning from them he solves his problems, and in the process develops, hopefully, that complex set of intuitive habits characteristic of the skilled writer.[26]

In contrast to this arduous, inefficient, enormously time-consuming default method, Young offers an alternative, based on the problem-solving paradigm and tagmemic theory. The core of it is Pike's tagmemic matrix.

This matrix presents a "heuristic" or discovery procedure intended to stimulate and tap that mental process at the center of human behavior. Young carefully distinguishes this heuristic *procedure* from rule-governed, mechanical procedures and random, trial-and-error ones:

A rule governed procedure specifies a finite
series of steps that can be carried out in mechanical
fashion without the use of intuition or special
ability and that infallibly results in a correct
answer. . . .

A heuristic procedure, on the other hand, provides
a series of questions or operations that guides
inquiry and increases the chances of discovering
a workable solution.[27]

Thus the heuristic procedure is mid-way between rule-governed
and trial-and-error methods; like "trial-and-error," it does
require the use of "guessing"--it is open-ended, uses "intui-
tion,"--but unlike "trial-and-error" the guesses are not random
but systematic. The questions or operations of the heuristic
procedure are determined beforehand to guide inquiry and in
this way it is like rule-governed behavior.

The "current-traditional rhetoric" has long dealt with the
conscious, editorial, "product" side of composition. The
missing dimension, however, is the long neglected inventive,
"process" side of composition--that which is unconscious. The
tagmemicist argues that the composition teacher must start
earlier--before the words get to the page in order to make
any successful progress with the would-be writer. But the
tagmemic principles cannot be simply tacked on to existing
methods and means; they demand not just a new pedagogy, but a

new paradigm.. The "current-traditional" paradigm stifles, not starts the student on the way to finding his "authentic voice."

The question which of course must be raised is, "If the existing paradigm is so bad, how did any of us learn to write?" A facile answer would be something to the effect that we learned in spite of or oblivious to the paradigm. But Young himself frankly admits,

> It would be wrong to say that this [trial-and-error] method is inappropriate or unproductive. The loosely specified product and the absence of any attempt to control the process by a sequence of precise operations implies, quite correctly, that rhetorical problems belong to a class which may have several acceptable answers. There is no single correct essay which meets the assignment; many reasonable solutions are possible. Furthermore, the method allows the writer to bring into play all his intuitive capacities, special knowledge and values. Although nothing in the method stimulates imaginative and original work, it at least permits it. Undoubtedly, many people learn to write with this method; most of us did (with or without the help of a teacher), and many of our students do.[28]

The choices, then, are clear; the profession as a whole can

continue safely within the borders of the tacit, unarticulated, "Current-traditional" paradigm, foundering in a sea of impressionistic strategies; or it can move boldly into a new framework, incorporating the insights of psychology, linguistics and other disciplines into its pedagogy and attempt, perhaps for the first time, to face up to its responsibilities for teaching <u>composing</u>.

B. The Pedagogy

Though it was published almost a decade ago, <u>Rhetoric:</u> <u>Discovery</u> <u>and</u> <u>Change</u> remains the fullest and most accessible statement of tagmemic pedagogy. And since to a great degree the composition profession <u>is</u> its texts, it is both purposeful and crucial to spend time in close, critical analysis of those texts. I propose here to examine Young, Becker and Pike's text, concentrating mainly on the "six maxims" that form its theoretical core. From this examination, a clear picture should emerge, depicting how the tagmemic pedagogy "works" in the classroom setting. I have avoided trying to suggest how any given assignment might be derived from this core, assuming that the would-be user could visualize his own syllabus of activities after he understood the principles involved.[29]

The authors maintain a much broader view of "rhetoric" than is normally conceded, positing that it "is concerned mainly with a creative process that includes all the choices a

writer makes from his earliest tentative explorations of a
problem in what has been called the 'prewriting' stage of the
writing process, through choices in arrangement and strategy
for a particular audience, to the final editing of the final
draft."[30]   The text then is heavily weighted in favor of
"process," of invention; such matters as grammar, spelling,
punctuation and usage are treated only briefly.   The authors
explain their controlling theme this way:

> In planning this book we sought to isolate and
> describe the choice-points in the writing process--
> the points between first discovery and finished
> work at which the writer has a major choice to
> make.   To make appropriate choices the student must
> understand the process of writing and must have
> procedures for controlling it.   The contributions
> of tagmemics to understanding and controlling this
> process are presented in a series of six maxims.
>
> (pp. xi-xii)

These six maxims are:

(1)   People conceive the world in terms of repeatable units.

(2)   Units of experience are hierarchically structured
systems.

(3)   A unit, at any level of focus, can be adequately under-
stood only if three aspects of the unit are known: (a) its

contrastive features; (b) its range of variation; and (c) its distribution in larger contexts.

(4) A unit of experience can be viewed as a particle, or as a wave, or as a field.

(5) Change between units can occur only over a bridge of shared features.

(6) Linguistic choices are made in relation to a universe of discourse.

Each maxim will be discussed separately and a final part in this section will attempt to synthesize in coherent form the strategy and goals of tagmemic pedagogy.

Maxim One

This first assumption arises from simple observation of the world we live in. Each human being brings his own unique perspective to existence; all events need interpretation. In the plethora of experiences in life and the ever changing, dynamic flow of events, personalities, things, how can one make sense out of life, eliminating or at least sidestepping misunderstandings and misinterpretations in order to lead a fairly well-ordered life? The answer, as Maxim One states it, is that we all view life in terms of repeatable units. Despite the fact that things outside of us, as well as inside us, are constantly changing, we are still able to recognize a degree

of sameness, able to maintain our own identity which we our-
selves can recognize and which others can also.

Language provides a way of "unitizing" experience. As
the authors put it, language is a "set of symbols that label
recurring chunks of experience" (p. 27). Their example is a
chair. Despite the fact that "chair" is a label given to a
number of different things (rockers, recliners, sling chairs,
etc.) and although its meaning changes as people use it in
different situations, each individual chair is seen as a
special instance of a recurring unit. "Language depends on
our seeing certain experiences as constant or repeatable"(p. 27).

Maxim Two

Maxim One leads naturally into Maxim Two: besides
"unitizing" experiences into recognizable chunks, people are
also able to focus on these "chunks" in different ways, from
different perspectives. The authors' example here is a base-
ball game. Baseball, with its nine innings constituting a
game, can be seen as a recognizable, repeatable chunk or unit.
Yet within each game itself, there are smaller units, such as
individual pitches, plays and players. In addition to activity
on the field itself, there are announcements over the P. A.
system, shouts from the spectators and so on. Each unit of the
game may be broken down into still smaller subunits and can as

well be seen as units in a larger context. Thus each
repeatable unit can be seen as a part of a larger whole,
as a unit in itself, or as a system made up of still smaller
parts. Thus, one could choose to focus on (1) the game as
a whole, the spectacle of the two teams playing against each
other, or (2) any individual player and his role in the game,
say the pitcher, or (3) something in particular about the
player, the way he winds up when he throws or how he walks
off the mound after an inning.

These first two maxims set the stage for the presentation
of the tagmemic discovery procedure which is visually portrayed
as a matrix in which any unit can be seen under the perspective
of any one of nine possible categories. Maxims Three and Four
constitute this matrix, which is pictured in the chart on
page 31.

Maxims Three and Four

Maxim Three suggests that any unit, to be understood,
must be explained under three rubrics: its contrastive
features, its range of variation and its distribution in
larger contexts. In other words, in order for the unit to
be understood, one must know, first of all, how it contrasts
with everything else in its class, then, how much it can
change and still be itself, and then finally, the part it
plays within the larger system of which it is a member. The

questions which Maxim Three can generate about a unit are
limitless, as the authors' illustration of teaching handicapped
children to swim indicates:

(1) What are the contrastive features of this unit?
What makes teaching handicapped children different
from teaching other children? Is teaching them to
swim different from teaching them other things?
How was this experience unique for me? What makes
it stand out in my memory as a significant
experience?

(2) What is the unit's range of variation? Conceived
of as a unit, the experience of teaching handicapped
children to swim is a recurring experience--it can
be done more than once. Nevertheless, each instance
of the unit is somewhat different. How did the
experience change from day to day? What different
sorts of situations did I encounter? How did
different kinds of handicaps alter the experience?
What particular experiences with particular children
illustrate the sorts of problems I encountered and
the different results I achieved? How did I myself
change from day to day or from the beginning to the
end of the summer?

(3) What is the unit's distribution in larger contexts?
That is, what place, or slot, does it occupy in a
larger pattern or system? Where and when did this
teaching take place? What was the physical setting?
What was the larger program of which swimming lessons
were a part? What was the function or purpose of
swimming in this program? How did this experience
fit into my life? What other experiences preceded
it? Followed it? What other experiences were
similar for me? Can I conceive of it as one of a
class of experiences that all share some feature?
(pp. 56-57)

Maxim Three combines with Maxim Four to establish a
heuristic, or method of systematic inquiry, which generates
information about a problem and asks fruitful questions. It
is at this stage that another dimension evolves in the system.

Young, Becker and Pike's Tagmemic Discovery Matrix

	CONTRAST	VARIATION	DISTRIBUTION
PARTICLE	(1) View the unit as an isolated, static entity.	(4) View the unit as a specific variant form of the concept, i.e., as one among a group of instances that illustrate the concept.	(7) View the unit as part of a larger context.
WAVE	(2) View the unit as a dynamic object or event.	(5) View the unit as a dynamic process.	(8) View the unit as part of a larger dynamic context.
FIELD	(3) View the unit as an abstract, multi-dimensional system.	(6) View the unit as a multi-dimensional physical system.	(9) View the unit as an abstract system within a larger system.

Maxim Three deals with characteristics of the unit itself--
how it contrasts, changes, is distributed; Maxim Four deals
not with the unit, but with the perceiver of the unit and
the perspective he brings to it. Consequently, Maxim Four
takes the unit as a given and asks the perceiver to view it
from three different perspectives: "as if it were static,
or as if it were dynamic, or as if it were a network of
relationships or part of a larger network" (p. 122). The
unit is not to be looked upon as either a particle or a wave
or a field, but can be seen as any of the three at any time.

Thus the chart on page 31 provides the framework for a
systematic exploration of a given unit. As an example, the
authors chose a common oak tree and worked their way through
the chart in this fashion:

(1)   "Old Faithful" contrasts in size and age with the
      surrounding trees.

(2)   It is shedding its leaves more slowly than the
      other trees. Although still stately, it has passed
      its lifetime peak of mature, vigorous health.

(3)   It is composed of roots, trunk and branches, leaves,
      and reproductive system (the last is not readily
      discernible and, for this inquirer, constitutes an
      unknown); each part is composed of subsystems (which
      again are not discernible and constitute unknowns).
      Since all trees have roots, trunks, branches, and
      so on, this oak probably differs from other kinds of
      trees most clearly in the peculiarities of its
      subsystems. The parts can be classed according to
      function: vegetative and reproductive. They exist
      in a typical spatial relationship; and each of the
      parts is governed by an intricate timetable--acorns
      appear early in the year, leaves fall late, and
      roots continually draw sustenance from the soil or
      store food for later use, and so on.

(4) It is now old, nearly leafless, with one broken
     limb and numerous scars where others have fallen
     off. Ten or twenty years ago it was the same tree,
     but not at its inception as a seed. Then it was
     only potentially a tree. When it falls and rots
     or is cut up into lumber, it will lose its identity.

(5) It is clearly rotting; some of the branches are
     already dead and others show signs of decay.

(6) Its subsystems support, feed, and repair each other
     by means of a physiological network. The state of
     the system differs from hour to hour (e.g., in the
     regulation of moisture loss) and from day to night
     (in the handling of carbon dioxide). Some parts
     of the system can be lost, either temporarily
     (leaves) or permanently (some branches) without
     destroying the system.

(7) It is a member of a class of trees called hardwoods,
     which in turn is part of a larger class system that
     includes all trees. One of the few remaining trees
     of the original stand of oaks and hickories (a
     characteristic kind of forest in this part of the
     country), it dwarfs the second-generation trees
     around it.

(8) As part of a scene, its branches stand out sharply
     against the sky, like irregular lacework, but from
     a distance its dark trunk merges almost indistinguish-
     ably with the trunks of surrounding trees. The vines
     growing on it give it a special charm but probably
     contribute to its decay. It shelters wildlife; it
     draws raw materials for growth from the earth in
     which it is rooted and in turn enriches the earth
     with its fallen leaves.

(9) A system in itself, it fills a place in a larger
     system, a niche in the ecology of the area. (With-
     out extremely close observation and a knowledge of
     ecology, these questions constitute significant
     unknowns.)

                                        (pp. 128-129)

This operation, as the authors suggest, hardly exhausts the

possibilities left to be explored, but suffices as an illustra-

tion of the kind of discovery that the method can generate.

Maxim Five

This assumption considers the basis upon which a writer
can effect change in his audience and reflects the traditional,
classical view of rhetoric as the art of persuasion. Maxim
Five declares that the writer must seek out the experience he
happens to share with his audience; these features must not
only exist, but the writer _must_ employ them in his presenta-
tion or the desired change will not take place. It is apparent
that the foundation of the maxim is Pike's emic/etic distinc-
tion discussed earlier. If a writer is to be successful in
his attempt to persuade, he must communicate in an emic way--
that is, he must learn the perspective, manner of expression,
et al. of his audience as it were from the _inside_, as a
participant within a system. If he speaks or writes only in
an etic fashion, clearly as an outsider, there is little chance
of his success. Consequently, the writer must seek out these
shared features and again the heuristic procedure defined by
Maxims Three and Four provide an adequate means of identifying
them. Here is how the authors illustrate the point:

> Suppose that a student interested in physics
> wants to describe a recent invention, a fuel cell,
> for example, to the members of his composition class.
> He might begin his quest for shared features by
> asking:

(1) "How do my fellow students differ from other readers?"
   a) They differ from a class of physics students in that they probably have more varied backgrounds in science.
   b) They differ from newspaper readers in that on the whole they probably have more intellectual curiosity.
   c) They differ from engineering students in that they have widely different vocational and academic interests.

(2) "What is the range of variation of my audience?" Although in terms of membership it is still the same class that began the semester, it has changed in certain ways.
   a) Since concrete explanation and definition of terms have been stressed in class, the students are likely to look for these features in his paper.
   b) The last time the writer wrote for the class, one student said he didn't know what he was talking about and proved it. At the beginning of the semester the writer was an unknown; now he has a reputation to overcome.

(3) "What is the distribution of my audience in class, sequence, space, and array?"
   a) In class, they are university students, freshmen, socially and economically middle-class, and so on.
   b) In sequence and space, all are freshmen in their late teens; most are urban midwesterners, and so on.
   c) In systems of categories, they are, as fresh-men, at the bottom of the undergraduate hierarchy; they are potentially members of widely different disciplines within the uni-versity community.

(pp. 179-180)

A corollary to Maxim Five, though not explicitly put forward as a "maxim" in itself is the argumentative strategy devised by psychologist Carl Rogers. His strategy is based upon the view that "out of a need to preserve the stability of his image, a person will refuse to consider alternatives

that he feels are threatening, and hence, that changing a person's image depends on eliminating this sense of threat" (p. 274). This strategy is designed to accomplish three things: (1) to let the reader know he is understood, (2) to explain the areas where the reader's position is valid, and (3) to convince the reader that he and the writer share similar moral qualities, such as honesty and integrity, and aspirations, such as discovering a mutually acceptable resolution to a problem (p. 275). Thus a Rogerian argument would be patterned like this:

(1) An introduction to the problem and a demonstration that the opponent's position is understood.

(2) A statement of the contexts in which the opponent's position may be valid.

(3) A statement of the writer's position, including the contexts in which it is valid.

(4) A statement of how the opponent's position would benefit if he were to adopt elements of the writer's position. If the writer can show that the positions complement each other, that each supplies what the other lacks, so much the better.

(p. 283)

Maxim Six

Maxim Six attempts to underscore the necessity for appropriate choice in composition. Such choices are affected by several different factors, including the structure of the language to be employed, the personality of the writer and

the peculiarities of the topic, the audience and the kind of discourse being attempted. Such factors comprise the writer's "universe of discourse," the context of his creative effort. "Appropriate" choice will take into account each of these factors. Consequently, this maxim is an exhortation to be aware of one's context in composing; to ignore it is to stumble haphazardly through the communicative process and leave effective writing to chance.

C. A Summary

Tagmemic composition theory is thus a synthesis of (1) a linguistic heuristic procedure; (2) a process-oriented, problem-solving paradigm; (3) a Rogerian-based argumentative strategy. As such it attempts to replace a misdirected "current-traditional rhetoric" whose emphasis is upon editorial, after-the-fact skills. It assumes that what the student needs most is not more attention to mere grammatical correctness, but a means to tap unused mental resources and a motivation to resolve unarticulated problems in his worldview. Tagmemic theory aims at a comprehensiveness uncommon to rhetorical and educational theory and consequently is quite eclectic in its orientation to other disciplines. Far from being a completed system, tagmemics continues to evolve, incorporating linguistic, psychological and technological insights as they demonstrate promise for teaching the writing process.

IV. The Place and Promise of Tagmemic Theory in Composition: An Evaluation

Considering the ambitious efforts of the tagmemicists in composition, their aim at comprehensiveness, the impressive array of experimentally verified results they have assembled, it would seem that by now their theories would have set the profession on fire, making it alive with debate and discussion of its potentialities. Instead, there is a strange silence. In fact, tagmemic theory has made no more impact on composition pedagogy than it has on linguistic thinking. Of course, there are small cells of enthusiastic supporters, "true believers," as it were, in both realms. But there has been no "revolution." Rather than being hailed as visionaries and innovators, Young, Becker, Pike and company have been received, at best, as eccentrics, and, at worst, as technological demons. How does one explain it?

Several explanations suggest themselves before any sifting through the facts is done. One possibility is that tagmemic theory is, in the final analysis, unsupportable. Its promoters are merely shadow-boxers who have fashioned an elaborate theory that has no practical application in "real life" teaching situations. Consequently, the profession, seeing through this veneer of theoretical respectability, has rejected an unsound, problematic construct. Another possibility

is that although tagmemics has been proven successful to some
degree, other competing theories and systems have been shown
to be even more helpful and insightful in teaching the com-
posing process and thus have overshadowed whatever merits
tagmemic theory may possess. In a "free market," in other
words, only the strong survive. Still another explanation
might be that there is a calculated conspiracy of silence in
the profession, a product of clandestine political machinations,
designed precisely to keep tagmemics down--an effort on behalf
of bewildered professors, textbook publishers and promoters
of general chaos. Despite the substantiated claims of
tagmemicists, the profession has determined to ignore them
and thus consign true progress to the trash heap in exchange
for political/financial/professional gain.

All of these explanations are implausible; some more than
others. First of all, the tagmemic "theory" (using the term
in the pejorative sense educators use when they mean, "im-
practical and uncorroborated") has been rigorously tested
over and over again in the past decade in various classroom
situations, involving students ranging from twelfth-graders
to college seniors, and has been shown to be successful in
improving students' writing quality and also in helping them
to articulate and resolve "felt difficulties."[31] Further,
there is no prejudice in the profession against formally
unsubstantiated, impressionistic methodologies. Secondly,
although there are several invention schemes which are, in

some sense, "in competition" with the tagmemic one, there can
hardly be any such thing as "rivalries" in a profession which
has pushed invention to the periphery of composition pedagogy.
Not only is there no popularly conceived competing "system,"
there is ample evidence in any one issue of the profession's
journals that its notions are as fragmentary and rudderless
as ever. That is to say, there is no apparent rhyme or reason
to the kinds of classroom practice and theoretical research
being reported on therein. There is nothing remotely resem-
bling a "consensus" of where composition theory is and where
it ought to go. There are as many answers as there are
answerers. The third suggestion, "a conspiracy of silence,"
is equally implausible, but perhaps not for the obvious reason
that such a conspiracy would require one to think the absolute
worst of a profession on a monstrous scale. The fact is,
such a "conspiracy of silence" would require a kind of co-
operation and consensus unknown in the profession, except in
quite extraordinary circumstances, such as the "Zoellner
affair" of a few years back.[32] No, there are more plausible,
significant explanations than these for the general failure of
tagmemic theory to invade the composition profession and take
a foothold; such explanations involve shortcomings within the
profession and within the tagmemic theory, or more parti-
cularly, presentations of the theory. I believe the reasons
are fourfold: (1) the profession as a whole has been reluctant
to consider invention an integral part of composition pedagogy

and tagmemic invention has not been perceived as convincingly more successful than other available schemes; (2) tagmemic composition theory has not been expressed in an easily accessible form and neither has it supplied a convenient means of training teachers how to use it successfully; (3) there exists an anti-technological/scientific bias in the humanities and the composition profession has conceived tagmemic theory in mechanical, anti-humanistic terms; (4) the tagmemic system, for all its comprehensiveness, must go beyond (and be perceived as going beyond) its concern with invention on to the development of equally useful methods of dealing with stylistic and grammatical concerns. Each of these explanations needs further amplification.

(1) The Problem of Invention

The "current-traditional rhetoric," which prevails by default over the profession, considers the composing process quite outside the framework of composition teaching and, consequently, invention is excluded as well. The tagmemicist, on the other hand, believes that the process *is* accessible and teachable and that invention is not only a "part" of composition, but it is an essential part. Unlike Young, Becker and Pike, who give invention a rather inclusive domain, governing the writing process from first to last, most composition teachers seem to have a quite limited concept of what it

entails. As I tried to explain this more inclusive defini-
tion of invention to a group of graduate students who were
exploring various kinds of composition theories, it was clear
that they could not get beyond thinking of invention merely
as "topic selection."

The tagmemic heuristic is one of four that have been
utilized to fill the void left by the current-traditional
rhetoric's failure to take invention seriously. The others
are: (1) The revival of the classical topoi, as represented
in a text like Edward P. J. Corbett's Classical Rhetoric for
the Modern Student; (2) the pre-writing techniques of Gordon
Rohman and Albert Wlecke; and (3) Kenneth Burke's dramatistic
method, which uses a "pentad" of act, agency, actor, scene and
purpose.[33] Of the four, only classical rhetoric and Burke's
pentad are remotely familiar to the textbook writers. And
even these, except in Corbett's own text of course, are usually
given the most perfunctory treatment. As a result, even for
those who want to include some kind of invention scheme in
their teaching, the tagmemic heuristic looms simply as one
among many, no better and no worse. In fact, the tagmemic
heuristic is more comprehensive than any of the other four;
its procedure is specifically designed not only to "retrieve
relevant information already known by the student," but also
as a means to "analyze problematic data" and to "discover
new concepts and ordering principles."[34]

James Kinney's recent article typifies the indifferent and somewhat negative reception the tagmemic heuristic procedure has engendered. Kinney, like most every other composition teacher, seems to be looking for a foolproof panacea; his expectations had been heightened by the "over-inflated claims" of the tagmemicists but, after "a more detailed. . . study," he refuses "to accept the basic premise that the kinds of knowledge it provides constitute total, or in some cases, even significant, knowledge about any subject."[35] Further, to Kinney, tagmemics is no improvement over existing procedures, like the topoi of classical rhetoric: "the difference then between the tagmemic heuristic and at least some others seems more nominal than real. . . . It is simply one among many such procedures" (p. 143). Betraying his ignorance of tagmemics' origins, he relegates it to the merely taxonomic, stifling procedures of structural linguistics which suffers in comparison to the more generative transformational theory, "If you recall, structural linguistics contributed to classroom teaching of composition the 'patterns practice' exercise, which never accomplished a whole lot, whereas transformational grammar has given the classroom teacher 'sentence combining,' which has produced some dramatic results in developing syntactic fluency" (p. 144).

First, it may be well to ask whether Kinney has understood the tagmemic procedure. If he did, he could not make some of the remarks he has made in this article. The procedure

involves both intuitive guessing and systematic analysis; as such it is open-ended--and thus potentially successful and potentially unsuccessful. There are no guarantees. No tagmemicist has suggested that the heuristic provides any "knowledge" at all, let alone "total knowledge"; rather, as Lee Odell argues in his reply to Kinney, "It simply raises questions and suggests cognitive operations that can help one explore a topic."[36] In Young, Becker and Pike's words, the procedure "guides inquiry and increases the chances of discovering the solution [to a problem]."[37] If any extravagant claims have surfaced, they have not come from those associated with the tagmemic work itself; far from extravagant, the claims of tagmemicists are quite guarded, in some cases, downright overly modest,

> The experiment, however, did not establish that the improved ability to explore problematic data was directly related to the nine-cell discovery procedure. . . . In addition, the tests did not indicate that the theory as presently formulated and the course as it was taught increased the sensitivity to problematic situations.[38]

In response to Kinney's assertion that the tagmemic procedure is not an especial improvement over existing ones, Odell argues, by use of the tagmemic procedure itself, that "we cannot assume that two procedures are equal in all respects

simply because they are comparable in some respects" (pp. 148-149). One would be hard-pressed to come up with any kind of heuristic that didn't have something in common with classical rhetoric; there are only so many kinds of questions that can be asked. On the other hand, there are potentially more effective ways of presenting and "packaging" these inquiries and the tagmemic heuristic has been demonstrated to be more comprehensive and useful in guiding inquiry.

Finally, Kinney's frustrating experience with tagmemics reflects a common attitude among composition teachers: growing impatient with existing methods, latching on to every new one that comes along, but unwilling to spend the time to master the procedure and/or theory behind it--their efforts fail and they return again to the "current-traditional rhetoric." They return to something they can deal with, editorial skills. In response to public outcries of "Why can't Johnny write," the profession is looking for easygoing formulas, quick, easy, painless; the writing process isn't that way, but in view of the "current-traditional rhetoric," we might say, "isn't it pretty to think so?" Better to have, as Kinney puts it, a method like sentence combining which develops "syntactic maturity" (no mean achievement, of course) than to wade waist-deep in the swampy waters of the composing process which might yield significant content to express in such "syntactic maturity." If tagmemics is to make any inroads into the profession, teachers must first be convinced that invention is

not an optional embellishment in the teaching of composition.
And then, tagmemicists must convincingly demonstrate that
their procedure is indeed superior to any existing heuristic
schemes. But this latter obstacle is part and parcel of the
second problem facing tagmemics, that of accessibility and
teacher training.

(2) The Problem of Accessibility

Even in the most favorable circumstances, where a pro-
fession was anxiously awaiting some new revelation about the
role of invention in composition, tagmemics would probably not
fare well. As Kinney puts it, "tagmemics seems a theory more
talked about than understood" (p. 141). Here he echoes the
conclusion of Donald C. Stewart, who had surveyed 34 of the
most popular composition texts on the market. Stewart dis-
covered it "difficult to find. . .any evidence that Pike's
tagmemic theory has been either widely understood or adopted.
The only text which presents it fully is Rhetoric: Discovery
and Change by Young, Becker and Pike. As far as I am aware,
the book has not been widely adopted, and its theories have
scarcely been incorporated into even a small minority of texts
now on the market."[39] Of the four reasons to be considered
here, perhaps this is the greatest stumblingblock to the
acceptance of tagmemics in the profession. Simply put,
tagmemics requires more of an intellectual effort to understand

it than some are willing to make, and the oblique way it has
been presented has not encouraged too many to try.

Consider some remarks from two early, generally favorable
reviews of Rhetoric: Discovery and Change:

> Pike the theorist and Young-Becker the experienced
> teachers of composition have written their book un-
> compromisingly, without deference to the monetary
> potential. When asked how Rhetoric might do in
> sales, Pike answered rhetorically: "Would you rather
> write a book that may add to the world of ideas, but
> that may sell poorly for quite a time, or a book that
> may be widely adopted at once, but that cannot contri-
> bute to knowledge because of the necessary populari-
> zation and simplification?". . . . In summary,
> Rhetoric is an evocative, intellectual book, demand-
> ing the full mind of the reader in order to be under-
> stood and appreciated. It employs tagmemic principles
> so skillfully, but naturally, that each new, ever-
> widening formulation can seldom be challenged.[40]

> In spite of my admiration for the concepts of
> this book, however, I cannot give it my highest
> recommendation. The ideas, brilliantly conceived,
> have not been rendered with equal brilliance. . . .
> The appeal to the students' intellectuality is
> strong; the emotional appeal is almost totally
> lacking. . . . In addition, the language of the

explanatory sections is difficult. Although the students are specifically addressed, the language-- as one [of my students] commented--seems addressed to the instructor. . . . The failure of this book to adequately realize the concepts on which it is based is unfortunate; it has much to offer as a new approach to the teaching of writing.[41]

These are, of course, comments specifically about one textbook and must be understood in that context; however, the remarks of these reviewers reflect the experience of many who have tackled not only this text, but other writings from the tagmemicists as well. Several things stand out. The authors would not risk watering down or "compromising" their theory for the purpose of popularization and monetary success. Consequently, they have presented the theory and the pedagogy "on their own terms," so to speak. It's all there--the reader, whether teacher or student, must simply roll up his sleeves and dig in. Perhaps this is a subtle ploy by the authors to illustrate that unless the instructor/student is willing to make the supreme effort to master this system, it will be of no use to him anyway. But given the realities of the profession--one made up to a large degree of graduate students pressed for time and in search of helpful methods simply put-- some concessions should have been made. An uncompromising concern for fidelity to a well-conceived theory is admirable

but this fidelity must be balanced with clarity of presentation.

In a milieu already suspicious of linguistic or pseudo-linguistic schemes to improve students' writing and just as wary of any approach that smacks of the "technological," tagmemicists would be well advised to go out of their way to present their paradigm and pedagogy in the most accessible manner. If the theory is as promising as testing indicates and as I personally believe it is, then another formulation, another textbook is in order. It seems perverse to allow such a potentially revolutionary system to remain in obscurity as the property of a few theorists or schools which are perceived by the profession as eccentrics. "Contributing to the world of ideas" is a laudable goal; working those ideas into an understandable, accessible form is even better. Perhaps once the pedagogy of the system is itself clarified, effective teacher training will be assisted as well. Until then, handing the beleaguered teacher a text with some words of exhortation and admonition will not be fruitful.

Finally, work in tagmemics has not seemingly been as visible and available to the profession as it could have been. After an initial flurry of articles in the mid-sixties, report of research in tagmemics has been confined to dissertation abstracts, obscure speech, rhetoric and linguistic journals and scattered seminars. The work of Dr. Richard E. Young, formerly of Michigan but now at Carnegie-Mellon, for example, was reported for the most part in the hard-to-get <u>Studies in</u>

Language and Language Behavior, published by the University of
Michigan. It is now only available through the ERIC system;
few teachers or graduate students are willing to spend the
time necessary to sift through the microcards to ascertain
Young's explanations of what has been done and what is left
to be done. Until very recently, little about the theory had
appeared in the profession's major publications, College English
and College Composition and Communication, and much of the
current discussion, reflected in James Kinney's article, has
been negative. There are enough obstacles in the profession
for tagmemics to overcome without contributing to them in this
way. The tagmemicist must create confidence in his work, not
assume it. His theories are yet to be accepted into the
composition canon.

(3) The Problem of Anti-technological/scientific biases

The willingness of the tagmemicists to found and evaluate
their system on objective, scientific grounds has won it
praise from several quarters. In his review of Young and
Koen's study of the tagmemic heuristic procedure, W. Ross
Winterowd exemplifies this appreciation of rigorous experi-
mentation and examination,

> The humanities are sustained by faith--their glory
> and their curse. Faith gives the humanist the

ability to endure, but it often diverts him from
the systematic testing of his assumptions. We
have faith that humane pursuits--including written
and spoken composition--are good for people as
human beings. We also have faith that our metho-
dologies are sound and that our results are worth-
while.

Our faith keeps us too often from testing our
assumptions in any controlled, systematic way.
For this reason, among others, the study by Young
and Koen is exceptional.[42]

Winterowd's enthusiasm for bringing scientific methods into
the profession, however, is not shared by the majority in the
profession. If there was ever any doubt about this, it was
dispelled in 1969 when College English published Robert
Zoellner's "Talk-Write: A Behavioral Pedagogy for Composi-
tion."[43] Zoellner's monograph elicited a vehemently hostile
reaction from the profession, and that interesting episode in
the recent history of the profession is here analyzed by
Donald C. Stewart:

In a sense, Zoellner was also attacking deficiencies
in the current-traditional paradigm's presentation
of the composing process, but his approach had little
in common with the four already cited [Corbett,
Rohman/Wlecke, Burke and Pike]. Whereas they

attempted to deal with aspects of cognition, Zoellner
introduced a new dimension, physical behavior, into
the writing process. Teachers were not ready then,
as some still are not, to believe that writing
difficulties, particularly in the work of remedial
students, have less to do with how their minds
work and more to do with the way their muscles have
been conditioned. . . . Zoellner's approach is
still so original and so fundamental and so far
beyond the boundaries of the current-traditional
paradigm that most English teachers still regard it
with intense hostility. Significantly, Zoellner
was the first to recognize that problems with a
dominant paradigm underlay resistance to his
hypothesis.[44]

Most in the profession seem to view English, literature and
composition, as the last outpost, the last humanistic strong-
hold on the borders of creeping scientism. The idea that the
composing process is accessible to an outside observer and
is thus chartable and teachable is perceived as an assault on
the humanistic conception of art and creativity. Images of
computerized geniuses begin to emerge, Shakespeares and
Rembrandts programmed by the right combination of psychological
probes and environmental stimuli. In other words, tagmemics,
whose terminology is drawn somewhat from the physical sciences

and whose substance to some degree is the psychological insights of men like Piaget and Rogers, is perceived as a threat to the romantic notions of creativity cherished in the humanistic tradition.

In a highly polemical exchange of a few years ago, Ann Berthoff and Janice Lauer debated the possible consequences of using the tagmemic heuristic to teach composition students to write. Berthoff, writing passionately against the use of heuristics, warned that "The concept of problem solving serves the belief that the school's function is to prepare citizens for life in the technological society."[45] "Problem-solving" or heuristics is not seen by Berthoff as a neutral tool; rather, "Teachers studying heuristics as understood by Sister Janice Lauer will soon discover that a theory of learning as problem-solving requires a view of language as signal code, a notion that converts meaning to 'information,' form to 'medium,' interpreting to 'decoding,' etc. By thus misconceiving of the human use of language, communication theory or, rather pedagogy deriving from it falsely defines the forms of knowing" (p. 93). Berthoff thus seems to understand "problem-solving" in a pejorative mechanical sense--a kind of arithmetical "puzzle-solving" procedure which effectively limits the imagination and undervalues the intuitive faculties of the mind. Lauer's reply basically laments Berthoff's indiscriminate dichotomizing and out-of-hand rejection of the insights other disciplines might yield

for teachers of writing. She concluded, "I would like to argue for pluralism in our thinking. Those working seriously on heuristics are dealing with studies in psychology, philosophy, mathematics and rhetoric as they must, since this is where the important theoretical work is being done. . . . Unless both the textmakers and the teachers of composition investigate beyond the field of English, beyond even the area of rhetorical studies for insight into the nature of the creative process of composition, 'the process of naming the world,' they will find themselves wandering in an endless maze."[46]

Berthoff's remarks reflect the odd notion that there is a domain belonging peculiarly to the humanities, territory which is paradigmatically off-limits to other disciplines-- as if to say the various disciplines are not already hopelessly intertwined and interdependent. Again, here is evidence of tacit acceptance of a current-traditional paradigm which intends to keep the process of discovery, knowing, writing a secret--if only by ruling out research and experimentation in this area. Still, one can understand the hesitancy of a profession to accept an increasingly scientific approach which seems to trade on a number of its own myths: "objectivity," only the quantifiable is true, the mistrust of emotion. Scientism (as opposed to the "scientific method"), with its emphasis on the outward, the physical and physiological, with its pretense of explaining everything and on the basis of

"molecular collisions," is itself a paradigm to be watched
carefully; empiricist notions need to be balanced with
rationalist ones. This is the point of Susan Wells' recent
criticism of both tagmemic rhetoric and Francis Christensen's
generative rhetoric of the sentence. In a far ranging
indictment of composition theory's tendency to reflect the
linguistic status quo, she raises two cautions:

> First, and most simply, students naturally and
> justifiably translate heuristic methods they
> learn, including the informal heuristics they
> have learned by osmosis, into tools of explication.
> If we base students' reading or encourage them to
> base their own reading, on an empirical foundation,
> we reinforce those ideas that make them resistant
> to writing built on any different ground. . . .
> Second, we should beware of assuming that the forms
> of discourse that our students are accustomed to
> reading and expected to write are themselves
> unproblematic.[47]

Cautions like those of Berthoff and Wells are, certainly,
well-taken; methodologies do mold students' perceptions and
worldviews. Perhaps there are no "neutral tools." Yet, there
still seems to be a fundamental misunderstanding of what the
heuristic is designed to do. Berthoff and Wells seem to
regard tagmemics as just part of the general disenfranchising

of the human spirit, of creativity, of the imagination that
has occurred with the onrush of science and technology.
Anything that smacks of computer-like, mechanical procedure
becomes suspicious, for it may turn its practitioners into
robots. But isn't this a caution that can be reserved for
any theory or methodology--on either side of the question?
Any procedure can become "mechanical" and not just those that
use scientific jargon (which is more metaphorical than any-
thing else in Pike's system). The degree of "mechanicalness"
depends as much on the manner of presentation and utilization
as it does on the content of the methodology.

The Kenneth L. Pike who has devised this tagmemic system
is the epitome of humanistic concern. He has diligently
avoided any atomistic explanation of man's use of language,
and he has especially been interested in fashioning a compre-
hensive, unified theory of man's behavior. A devout Christian,
Pike is fundamentally opposed to any mechanistic view of
language or man:

> Leslie A. White, a vigorous cultural determinist
> (and formerly a colleague of mine in the Anthro-
> pology Department at the University of Michigan)
> says: "Whether a man--an average man, typical of
> his group--believes in Christ or Buddha, Genesis
> or Geology, Determinism or Free Will, is not a
> matter of his own choosing. His philosophy is

merely the response of his neuro-sensory-muscular-glandular system to the streams of cultural stimuli impinging upon him from the outside."

It has always seemed to me that a weak point in this position was precisely the fact that he bothered to write the book. There is implied, I feel, the belief that in this particular case the book's affirmations have a validity outside of the author's biography, glands and environment--a position not allowed by the book itself. B. F. Skinner mentions this problem as raised by his own brand of materialism: "I have had my lecture. I have no sense of fatherhood. If my genetic and personal histories had been different, I should have come into a possession of a different lecture. . . ."

. . .In my view, Skinner thus destroys the validity of his evident belief in the value of his conclusions; and this type of linguistic legerdemain, concealing the source of his self-confidence as to the possibility of recognizing any truth, then contaminates his views of responsible behavior--and of any potential ethics growing out of it. One's view of ethics, I maintain, has as a component a view of responsibility in the use of language. Loss of the one entails loss of the other.[48]

Of course, one could be a Christian or a humanist and still
create a mechanistic system that would ultimately limit and
handicap the person exposed to it; nevertheless, Pike's
orientation reflects the sensitivity to these kinds of questions
that he, as the originator of one heuristic, brings to the
debate.

Richard Young, in his address to the 1975 Buffalo Con-
ference on the Composing Process, said it best when he ex-
horted his fellow composition theorists not to, as it were,
bow down before any golden calf of theory. Young and other
tagmemicists are not obscurantists; if their theoretical basis
is faulty, they want to know about it, and thus Young concludes,

> There is no algorithm, no systematic decision-
> making procedure, that can dictate the choice of
> one theory rather than another. Informed choice
> will depend upon informed debate, and this requires
> that we be clear about our criteria for judgment,
> that we agree on the meaning of our terms, that we
> have evidence to support claims about the adequacy
> of one or another of the theories--the process is
> familiar to us all. But if we are to carry it out
> responsibly, much research needs to be done.[49]

It will only be by patient explanation and corroborating
research that tagmemicists and others who operate from a
traditionally "non-humanistic" base can open up the profession

to the insights they have to offer.

(4)   The Challenge of Comprehensiveness

Finally, tagmemic theory must continue to evolve in order
to develop useful methods for dealing with stylistic and
grammatical concerns in the composition classroom. In this
way it will have come full circle--meeting the current-
traditional paradigm on its own grounds: restoring the
necessary emphasis on invention and providing teachers with
an interesting and fruitful way to deal with the writing pro-
cess at the level of expression. This aspect of rhetoric is
treated only superficially in maxim six of Young, Becker and
Pike's text. Work in this area has been understandably
overshadowed by the success of the research on invention.
But there is a sense that this concern has been left to itself
or to the strictures of current-traditional rhetoric; tagmemic
research began here and it is imperative that it return here
in order to present a unified front to the profession.

Linguistics has long been expected to contribute to this
area of rhetoric but has only disappointed. Tagmemics, I believe,
is more likely to be of help here than even transformational
grammar. Becker and Young have both done extensive work in
forming a tagmemic rhetoric of the paragraph.[50] In addition,
Linda Kay Jones has written an exciting, highly suggestive
monograph which examines the relationships of sentences and

paragraphs in the development of theme in expository discourse.[51]

Tagmemics has indeed already come a long way and it continues to have exciting potential. In order to reap a more bountiful harvest, tagmemicists need to be sensitive to the profession's perception of both the content and methodology of their theory, becoming as visible and accessible as possible, while moving ahead toward the refinement of existing elements and the development of a fuller response to the writing enterprise.

Notes

[1] Richard Braddock, Richard Lloyd-Jones and Lowell Schoer, Research in Written Composition (Urbana, IL: National Council of Teachers of English, 1963), p. 5.

[2] Albert Kitzhaber, Themes, Theories and Therapy: The Teaching of Writing in College (New York: McGraw-Hill, 1963), p. 10.

[3] Ibid., p. 26.

[4] Richard E. Young and Alton L. Becker, "Toward a Modern Theory of Rhetoric: A Tagmemic Contribution," Harvard Educational Review, 35 (1965), 450-468.

[5] Thomas S. Kuhn, The Structure of Scientific Revolutions [Second Edition: Foundations of the Unity of Science Series, Vol. 2, No. 2] (Chicago: University of Chicago Press, 1970).

[6] Richard E. Young, "Paradigms and Problems: Needed Research in Rhetorical Invention," in Charles R. Cooper and Lee Odell, eds., Research on Composing: Points of Departure (Urbana, IL: National Council of Teachers of English, 1978), pp. 29-47.

[7] Ibid., p. 30.

[8] Ibid., p. 31.

[9] Ibid.

[10] William J. Kerrigan, _Writing to the Point_ (New York: Harcourt, Brace, Jovanovich, Inc., 1974), p. 4. All further references will be incorporated parenthetically in the text. _Writing to the Point_ is subtitled, "six basic steps," with each step intended to bring the student closer to evolving a theme, as it were, from the inside out. In Step One, the writer begins with an "X sentence" which ultimately serves as a thesis statement for the rest of the paper. Successive steps are designed to develop this "X sentence" into a completed theme.

[11] Kenneth L. Pike, "Crucial Questions in the Development of Tagmemics," in Ruth M. Brend, ed., _Advances in Tagmemics_ (Amsterdam: North-Holland Pub. Co., 1974), p. 36.

[12] Ibid., pp. 36-37.

[13] John Algeo, "Tagmemics: A Brief Overview," in Ruth M. Brend, ed., _Advances in Tagmemics_ (Amsterdam: North-Holland Pub. Co., 1974), pp. 2-3.

[14] Viola G. Waterhouse, _The History and Development of Tagmemics_ (The Hague: Mouton and Co., 1974), pp. 73-79 and Richard E. Young, "Discovery Procedures in Tagmemic Rhetoric: An Exercise in Problem Solving," _Studies in Language and Language Behavior_, Progress Report No. VII, September 1, 1968 (Ann Arbor, MI: Center for Research on Language and Language Behavior, The University of Michigan, U. S. O. E. Contract No. OEC-3-6-061784-0508, 1968), p. 3.

[15] Austin Hale, "On the Systematization of Box 4," in Ruth M. Brend, ed., <u>Advances in Tagmemics</u> (Amsterdam: North-Holland Pub. Co., 1974), p. 55.

[16] Kenneth L. Pike, "A Linguistic Contribution to Composition," <u>College Composition and Communication</u>, 15 (1964), 82.

[17] Ibid.

[18] Despite the fact that rhetorical concerns have overshadowed the grammatical contributions of tagmemics to composition teaching, much promising work has been done and continues to be done in this vein. See, e.g., Alton L. Becker, "Conjoining in a Tagmemic Grammar of English," in Ruth M. Brend, ed., <u>Advances in Tagmemics</u> (Amsterdam: North-Holland Pub. Co., 1974), pp. 223-233; Alton L. Becker, "A Tagmemic Approach to Paragraph Analysis," in Richard L. Graves, ed., <u>Rhetoric and Composition: A Sourcebook for Teachers</u> (Rochelle Park, NJ: Hayden Book Co., Inc., 1976), pp. 154-161; Alton L. Becker, "Symposium on the Paragraph," <u>College Composition and Communication</u>, 17 (1966), 67-72; and Alton L. Becker and Richard E. Young, "The Role of Lexical and Grammatical Cues in Paragraph Recognition," in H. L. Lane, ed., <u>Studies in Language and Language Behavior</u>, II (Ann Arbor, MI: Center for Research on Language and Language Behavior, The University of Michigan, U. S. O. E. Contract No. OEC-3-6-061784-0508, 1966).

[19] In particular, the tagmemic discovery matrix is being used successfully in stylistic and discourse analysis. See Richard E. Young, "Discovery Procedures in Tagmemic Rhetoric:

An Exercise in Problem Solving," Studies in Language and Language Behavior, Progress Report No. VII, September 1, 1968 (Ann Arbor, MI: Center for Research on Language and Language Behavior, The University of Michigan, U. S. O. E. Contract No. OEC-3-6-061784-0508, 1968); Thomas P. Klammer and Carol J. Compton, "Some Recent Contributions to Tagmemic Analysis of Discourse," in Ruth M. Brend, ed., Advances in Tagmemics (Amsterdam: North-Holland Pub. Co., 1974); and Linda Kay Jones, Theme in Expository Discourse [Edward Sapir Monograph Series in Language, Culture and Cognition] (Lake Bluff, IL: Jupiter Press, 1977).

[20] Richard E. Young, Alton L. Becker and Kenneth L. Pike, Rhetoric: Discovery and Change (New York: Harcourt, Brace and World, Inc., 1974), pp. xi-xii.

[21] Lee Odell, "Piaget, Problem-solving and Composition," College Composition and Communication, 24 (1973), 37.

[22] Ibid.

[23] Richard E. Young, Problems and the Process of Writing [Studies in Language and Language Behavior] (Ann Arbor, MI: Center for Research on Language and Language Behavior, University of Michigan, 1969) (ERIC: ED 029 040), p. 4.

[24] Ibid.

[25] Lee Odell, "Discovery Procedures for Contemporary Rhetoric: A Study of the Usefulness of the Tagmemic Heuristic Model in Teaching Composition," Diss. University of Michigan 1970, p. 13.

[26] Richard E. Young, "Notions of 'Generation' in Rhetorical Studies," Studies in Language and Language Behavior Progress Report VI, February 1, 1968 (ERIC: ED 021 238), p. 5.

[27] Rhetoric: Discovery and Change, p. 120.

[28] Young, "Notions of 'Generation' in Rhetorical Studies," p. 6.

[29] There are several syllabi available for comparison and examination, some of which were subjected to rigorous analysis and experimentation. Three of the most helpful are: Richard E. Young and Frank M. Koen, Tagmemic Discovery Procedure: An Evaluation of its uses in the Teaching of Rhetoric (Ann Arbor, MI: University of Michigan, NEH Grant No. EO-4238-71-116, 1973) (ERIC: ED 084 517); Lee Odell, "Discovery Procedures for Contemporary Rhetoric: A Study of the Usefulness of the Tagmemic Heuristic Model in Teaching Composition," Diss. University of Michigan, 1970; and Linda S. Flower and John R. Hayes, "Problem-solving Strategies and the Writing Process," College English, 39 (1977), 449-461.

[30] Rhetoric: Discovery and Change, p. xi. Further references will be incorporated parenthetically into the text.

[31] Cf., e. g., Lee Odell, "Measuring Changes in Intellectual Processes as One Dimension of Growth in Writing," in Charles R. Cooper and Lee Odell, eds., Evaluating Writing, (Urbana, IL: National Council of Teachers of English, 1977) pp. 107-132.

[32] "On Zoellnerism," College English, 30 (1969), 645-667.

[33] Richard E. Young reviews these other heuristics briefly in "Paradigms and Problems," in Charles R. Cooper and Lee Odell, eds., Research on Composing (Urbana, IL: National Council of Teachers of English, 1978), pp. 33-39.

[34] Young, "Paradigms and Problems," p. 18.

[35] James Kinney, "Tagmemic Rhetoric: A Reconsideration," College Composition and Communication, 29 (1978), pp. 141-142. Further references will be incorporated parenthetically into the text.

[36] Lee Odell, "Another Look at Tagmemic Theory: A Response to James Kinney," College Composition and Communication, 29 (1978), p. 146. Further references will be incorporated into the text.

[37] Rhetoric: Discovery and Change, p. 120.

[38] Cited in W. Ross Winterowd, rev. of Tagmemic Discovery Procedure by Richard E. Young and Frank M. Koen, Philosophy and Rhetoric, 8 (1975), p. 185.

[39] Donald C. Stewart, "Composition Textbooks and the Assault on Tradition," College Composition and Communication, 29 (1978), p. 172.

[40] Garland Cannon, rev. of Rhetoric: Discovery and Change by Young, Becker and Pike, Language, 48 (1972), 752, 754.

[41] Regina Hoover, rev. of Rhetoric: Discovery and Change by Young, Becker and Pike, College Composition and Communication, pp. 66-67.

[42] W. Ross Winterowd, rev. of Rhetoric: Discovery and Change, p. 185.

[43] Robert Zoellner, "Talk-Write: A Behavioral Pedagogy for Composition," College English, 30 (1969), 267-320.

[44] Stewart, "Composition Textbooks and the Assault on Tradition," pp. 172-173.

[45] Ann Berthoff, "The Problem of Problem Solving," in W. Ross Winterowd, ed., Contemporary Rhetoric (New York: Harcourt Brace Jovanovich, Inc., 1975), p. 93. Further references will be incorporated parenthetically into the text.

[46] Janice Lauer, "Response to Ann Berthoff, 'The Problem of Problem Solving,'" in W. Ross Winterowd, ed., Contemporary Rhetoric (New York: Harcourt Brace Jovanovich, 1975), p. 100.

[47] Susan Wells, "Classroom Heuristics and Empiricism," College English, 39 (1977), 475-476.

[48] Kenneth L. Pike, "Language and Self Image," in Charles Hatfield, ed., The Scientist and Ethical Decision (Downers Grove, IL: InterVarsity Press, 1973), pp. 70-71.

[49] Young, "Paradigms and Problems," p. 33.

[50] Cf. Alton L. Becker, "A Tagmemic Approach to Paragraph Analysis," in Richard L. Graves, ed., Rhetoric and Composition (Rochelle Park, NJ: Hayden Book Co., Inc., 1976), pp. 154-161 and Alton L. Becker and Richard E. Young, "The Role of Lexical and Grammatical Cues in Paragraph Recognition," in Studies in Language and Language Behavior, II, ed. H. L. Lane (Ann Arbor,

MI: Center for Research on Language and Language Behavior,
The University of Michigan, U. S. O. E. Contract No. OEC-3-6-
061784-0508, 1966).

[51] Linda Kay Jones, Theme in Expository Writing (Lake
Bluff, IL: Jupiter Press, 1977).

Works Consulted

Algeo, John. "Tagmemics: A Brief Overview." In _Advances in Tagmemics_. Ed. Ruth M. Brend. Amsterdam: North-Holland Pub. Co., 1974, pp. 1-9.

Becker, Alton L. "Conjoining in a Tagmemic Grammar of English." In _Advances in Tagmemics_. Ed. Ruth M. Brend. Amsterdam: North-Holland Pub. Co., 1974, pp. 223-233.

----------. "Symposium on the Paragraph." _College Composition and Communication_, 17 (1966), 67-72.

----------. "A Tagmemic Approach to Paragraph Analysis." In _Rhetoric and Composition: A Sourcebook for Teachers_. Ed. Richard L. Graves. Rochelle Park, NJ: Hayden Book Co., Inc., 1976, pp. 154-161.

Becker, Alton L. and Richard E. Young. "The Role of Lexical and Grammatical Cues in Paragraph Recognition," in _Studies in Language and Language Behavior_, II, ed. H. L. Lane. Ann Arbor, MI: Center for Research on Language and Language Behavior, The University of Michigan, U. S. O. E. Contract No. OEC-3-6-061784-0508, 1966.

Berthoff, Ann E. "From Problem-Solving to a Theory of Imagination." In _Rhetoric and Composition: A Sourcebook for Teachers_. Ed. Richard L. Graves. Rochelle Park, NJ: Hayden Book Co., Inc., 1976, pp. 277-292.

----------. "The Problem of Problem Solving." In <u>Contemporary</u>
<u>Rhetoric</u>: <u>A</u> <u>Conceptual</u> <u>Background</u> <u>with</u> <u>Readings</u>. Ed.
W. Ross Winterowd. New York: Harcourt Brace Jovanovich,
Inc., 1975, pp. 90-97.

----------. "Response to Janice Lauer: 'Counterstatement.'"
In <u>Contemporary</u> <u>Rhetoric</u>: <u>A</u> <u>Conceptual</u> <u>Background</u> <u>with</u>
<u>Readings</u>. Ed. W. Ross Winterowd. New York: Harcourt
Brace Jovanovich, Inc., 1975, pp. 100-103.

Braddock, Richard, Richard Lloyd-Jones and Lowell Schoer.
<u>Research</u> <u>in</u> <u>Written</u> <u>Composition</u>. Urbana, IL: National
Council of Teachers of English, 1963.

Brend, Ruth M., ed. <u>Advances</u> <u>in</u> <u>Tagmemics</u>. Amsterdam: North-
Holland Pub. Co., 1974.

Cannon, Garland. Rev. of <u>Rhetoric</u>: <u>Discovery</u> <u>and</u> <u>Change</u> by
Richard E. Young, Alton L. Becker and Kenneth L. Pike.
<u>Language</u>, 48 (1972), 751-755.

Cook, Walter A. <u>Introduction</u> <u>to</u> <u>Tagmemic</u> <u>Analysis</u>. New York:
Holt, Rinehart and Winston, Inc., 1969.

Cooper, Charles R. and Lee Odell, eds. <u>Evaluating</u> <u>Writing</u>.
Urbana, IL: National Council of Teachers of English, 1977.

----------. <u>Research</u> <u>on</u> <u>Composing</u>: <u>Points</u> <u>of</u> <u>Departure</u>.
Urbana, IL: National Council of Teachers of English, 1978.

Davis, Phillip W. <u>Modern</u> <u>Theories</u> <u>of</u> <u>Language</u>. Englewood
Cliffs, NJ: Prentice-Hall, Inc., 1973.

de Beaugrande, Robert. "Linguistic Theory and Composition."
<u>College</u> <u>Composition</u> <u>and</u> <u>Communication</u>, 29 (1978), 134-140.

English, Hubert M. "Linguistic Theory as an Aid to Invention." _College Composition and Communication_, 15 (1964), 136-140.

Enkvist, Nils Erik. _Linguistic Stylistics_. The Hague: Mouton and Co., 1973.

Flower, Linda S. and John R. Hayes. "Problem-Solving Strategies and the Writing Process." _College English_, 39 (1977), 449-461.

Fogarty, Daniel. _Roots for a New Rhetoric_. New York: Teacher's College, Columbia University, 1959.

Fries, Peter H. "Some Fundamental Insights of Tagmemics Revisited." In _Advances in Tagmemics_. Ed. Ruth M. Brend. Amsterdam: North-Holland Pub. Co., 1974, pp. 23-33.

Graves, Richard L. _Rhetoric and Composition: A Sourcebook for Teachers_. Rochelle Park, NJ: Hayden Book Co., Inc., 1976.

Grindal, Gracia and Ellen Quandahl. "Freshman English: A Rhetoric for Teachers." _College English_, 39 (1977), 442-448.

Hale, Austin. "On the Systematization of Box 4." In _Advances in Tagmemics_. Ed. Ruth M. Brend. Amsterdam: North-Holland Pub. Co., 1974, pp. 55-57.

Hatfield, Charles, ed. _The Scientist and Ethical Decision_. Downers Grove, IL: InterVarsity Press, 1973.

Hoover, Regina. Rev. of _Rhetoric: Discovery and Change_ by Richard E. Young, Alton L. Becker and Kenneth L. Pike. _College Composition and Communication_, 22 (1971), 65-67.

Jones, Linda Kay. Theme in Expository Discourse (Edward Sapir
    Monograph Series in Language, Culture and Cognition).
    Lake Bluff, IL: Jupiter Press, 1977.

Kantor, K. J. "Creative Expression in the English Curriculum."
    Research in the Teaching of English, 9 (1975), 5-29.

Kerrigan, William J. Writing to the Point. New York:
    Harcourt Brace Jovanovich, Inc., 1974.

Kinney, James. "Tagmemic Rhetoric: A Reconsideration."
    College Composition and Communication, 29 (1978), 141-145.

Kitzhaber, Albert. Themes, Theories and Therapy: The Teaching
    of Writing in College. New York: McGraw Hill, 1963.

Koen, Frank, Alton L. Becker, and Richard E. Young. "The
    Psychological Reality of the Paragraph." Studies in
    Language and Language Behavior, Vol. 4, Eds. H. L. Lane
    and E. M. Zale, 526-38. Ann Arbor, MI: Center for
    Research on Language and Language Behavior, The University
    of Michigan.

Krammer, Thomas P. and Carol J. Compton. "Some Recent Con-
    tributions to Tagmemic Analysis of Discourse." In
    Advances in Tagmemics. Ed. Ruth M. Brend. Amsterdam:
    North-Holland Pub. Co., 1974, pp. 377-387.

Kuhn, Thomas S. The Structure of Scientific Revolutions
    (Second Edition: Foundations of the Unity of Science
    Series, Vol. 2, No. 2). Chicago: University of Chicago
    Press, 1970.

Lauer, Janice. "Heuristics and Composition." In Contemporary
    Rhetoric: A Conceptual Background with Readings. Ed.
    W. Ross Winterowd. New York: Harcourt Brace Jovanovich,
    Inc., 1975, pp. 79-90.

----------. Invention in Contemporary Rhetoric: Heuristic
    Procedures. Diss. University of Michigan 1967.

----------. "Response to Ann E. Berthoff, 'The Problem of
    Problem Solving.'" In Contemporary Rhetoric: A Con-
    ceptual Background with Readings. Ed. W. Ross Winterowd.
    New York: Harcourt Brace Jovanovich, Inc., 1975.

Larson, Richard L. "Some Techniques for Teaching Rhetorical
    Invention." Speech Teacher, 21 (1972), 303-309.

Longacre, Robert E. Grammar Discovery Procedures. The Hague:
    Mouton and Co., 1964.

Muller, Herbert J. The Uses of English. New York: Holt,
    Rinehart and Winston, Inc., 1967.

North, Stephen. "Composition Now: Standing on One's Head."
    College Composition and Communication, 29 (1978), 177-184.

Odell, Lee. "Another Look at Tagmemic Theory: A Response to
    James Kinney." College Composition and Communication, 29
    (1978), 146-152.

----------. Discovery Procedures for Contemporary Rhetoric:
    A Study of the Usefulness of the Tagmemic Heuristic Model
    in Teaching Composition. Diss. University of Michigan 1970
    .

----------. "Measuring the Effect of Instruction in Pre-
    writing." Research in the Teaching of English, 8 (1974),
    223-240.

----------. "Piaget, Problem-solving, and Composition."
    College Composition and Communication, 23 (1973), 36-42.

"On Zoellnerism." College English, 30 (1969), 645-667.

Pike, Kenneth L. "Beyond the Sentence." College Composition
    and Communication, 15 (1964), 129-135.

----------. "Crucial Questions about the Development of
    Tagmemics." In Advances in Tagmemics. Ed. Ruth M.
    Brend. Amsterdam: North-Holland Pub. Co., 1974.

----------. Language in Relation to a Unified Theory of the
    Structure of Human Behavior. The Hague: Mouton and Co.,
    1967.

----------. "A Linguistic Contribution to Composition: A
    Hypothesis." College Composition and Communication, 15
    (1964), 82-88.

----------. "Science Fiction as a Test of Axioms concerning
    Human Behavior." Parma Eldalamberon, 1 (1973), 6-7.

Pike, Kenneth L. and Evelyn G. Pike. Grammatical Analysis.
    Dallas: Summer Institute of Linguistics, 1977.

Stewart, Donald C. "Composition Textbooks and the Assault on
    Tradition." College Composition and Communication, 29
    (1978), 171-180.

Tate, Gary, ed. Teaching Composition: Ten Bibliographical
    Essays. Ft. Worth: Texas Christian University, 1976.

Waterhouse, Viola G. The History and Development of Tagmemics.
     The Hague: Mouton and Co., 1974.

Wells, Susan. "Classroom Heuristics and Empiricism." College
     English, 39 (1977), 467-476.

Winterowd, W. Ross, ed. Contemporary Rhetoric: A Conceptual
     Background with Readings. New York: Harcourt Brace
     Jovanovich, Inc., 1975.

----------. Rev. of The Tagmemic Discovery Procedure: An
     Evaluation by Richard E. Young and Frank M. Koen.
     Philosophy and Rhetoric, 8 (1975), 183-187.

----------. "Rhetoric Down the Hall in the English Department."
     Quarterly Journal of Speech, 61 (1975), 220-230.

Young, Richard E. "Discovery Procedures in Tagmemic Rhetoric:
     An Exercise in Problem Solving." Studies in Language
     and Language Behavior, Progress Report No. VII, September 1
     1968. Ann Arbor, MI: Center for Research on Language
     and Language Behavior, The University of Michigan, U. S.
     O. E. Contract No. OEC-3-6-061784-0508, 1968).

----------. "Notions of 'Generation' in Rhetorical Studies."
     Studies in Language and Language Behavior Progress Report
     No. VI, February 1, 1968. Ann Arbor, MI: Center for
     Research on Language and Language Behavior, The University
     of Michigan, 1968. (ERIC: 021 238).

----------. "Paradigms and Problems: Needed Research in
     Rhetorical Invention." In Research on Composing: Points

of Departure. Eds. Charles R. Cooper and Lee Odell.
Urbana, IL: National Council of Teachers of English,
1978, pp. 29-47.

----------. _Problems and the Process of Writing_ (Studies in
Language and Language Behavior). Ann Arbor, MI: Center
for Research on Language and Language Behavior, University
of Michigan, 1969. (ERIC: ED 029 040).

Young, Richard E. and Alton L. Becker. "Toward a Modern Theory
of Rhetoric." _Harvard Educational Review_, 35 (1965),
450-468.

Young, Richard E., Alton L. Becker and Kenneth L. Pike.
Rhetoric: Discovery and Change. New York: Harcourt,
Brace and World, Inc., 1970.

Young, Richard E. and Frank M. Koen. _Tagmemic Discovery Pro-
cedure: An Evaluation of its Uses in the Teaching of
Rhetoric_. Ann Arbor, MI: University of Michigan, NEH
Grant No. EO-4238-71-116, 1973. (ERIC: ED 084 517).

Zoellner, Robert. "Talk-Write: A Behavioral Pedagogy for
Composition." _College English_, 30 (1969), 267-320.

----------. "Response: Mentalizing S. R. Rodent." _College
English_, 31 (1969), 215-230.

TAGMEMIC THEORY AND ITS CONTRIBUTION
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by

BRUCE LEE EDWARDS, JR.

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AN ABSTRACT OF A MASTER'S REPORT

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Abstract

This report is a study of the contribution of tagmemic
theory to composition teaching. The composition profession
has suffered from a tacit, unarticulated paradigm which
harrassed and harnessed composition research. Tagmemic
theory provides the framework for a reorientation of the
goals of the profession, its pedagogy and its research into
the composing process.

Kenneth L. Pike's tagmemic theory, first employed in
the descriptions of formerly grammatically uncharted lan-
guages, evolved into a theory designed to account not just
for man's linguistic behavior, but for non-linguistic behavior
as well. The theory was soon recognized as having significant
application to composition teaching. The core of tagmemic
theory is a heuristic discovery procedure, visually portrayed
as a matrix, which operates as a generating device for in-
vention purposes.

Richard E. Young has pioneered research in tagmemic
composition theory and, drawing upon insights from the work
of Swiss psychologist, Jean Piaget, has exposed the inadequacies
of the "current-traditional rhetoric" which currently prevails
and fails to take the composing process seriously. The
tagmemic paradigm is a successful synthesis of linguistic and

psychological insights into the complex process of composing.

The vitality and future of tagmemic theory in the profession depends upon four factors: (1) Tagmemic invention must be convincingly demonstrated to be more successful than other schemes currently available in a profession which already discounts the value of invention in composition pedagogy; (2) The tagmemic theory must be expressed in a more accessible form to the profession and a means must be found to train teachers in utilizing it successfully; (3) Tagmemic theory must overcome the anti-technological/scientific bias in the humanities; (4) Tagmemic theory must move beyond invention to establish an equally sound foundation in stylistic and grammatical concerns.