CHAPTER I
THE PLAY OF MUSEMENT IN ULYSSES: AN INTRODUCTION

We are still somewhat mystified by the outré character of Ulysses. Its excessive, undo, indignant features include facts, ideas, and relationships which form an immense system of meaning, "a summa of the universe."¹ Yet it has been said that James Joyce only "approaches ideas, shows connections, and plays on references but does not make philosophy."² As we shall see, the facts, ideas, and relationships in Ulysses form the basis of a new method of thinking.

According to Karl-Otto Apel, there is a "deeply hidden nonsense in the very presuppositions of modern philosophy itself."³ Implicit in the nominalism of Descartes, Locke, Kant, and others, is the presupposition that cognition is blocked off from things by its own causal mechanism. We can, according to traditional philosophy, know only the effects of things in the container of consciousness, while external things remain incognizable. Joyce does away with this false notion. Things-in-them­selves can be known.

Joyce accomplishes in his works the same kind of transformation of traditional philosophy that has been
credited to Charles S. Peirce. With Peirce, things can be infinitely cognizable. Three modes of inference replace the Kantian concept of a priori principles of knowledge; and the concept of a community of inquirers replaces the notion about a "transcendental subject" of cognition.  

Considering Ulysses anew from this perspective provides a means of describing the nature and organization of the novel's eighteen episodes, each written in a different style. In the following section a preliminary description will be offered. The second section will establish the need to reconsider Joyce's aesthetic theories, written from 1903 to 1904. The final section establishes the need for a cognitive-based approach to Ulysses by analyzing some of the major studies on Ulysses' styles.

Facts have always been a "stickler" in attempts to make Ulysses pure art or pure life. There seems to be more facts than the traditional standards of aesthetic decorum would allow. From Thom's Directory, newspapers, personal experiences, informants who respond to Joyce's inquiries, and countless resource books they are like a massive archive, riddled with inaccuracies and telling coincidences. Robert Adams, one of the first fact-inquirers, speculates that "in all one's thinking about social reality in Ulysses . . . there glimmers before one the hope that if
one digs a little deeper or explores a little further, the special fact will emerge which draws everything together and causes all the disparate details, now hanging in suspension, to fall into sudden order." As of yet, no special fact has emerged. All the references to external reality— the novel's "reality in addition to its realism"— have been labeled collage.

But the nature and organization of facts suggest that more than the technique of collage is needed to account for them. Fritz Senn explains that Ulysses' "referential indomitability" is a strange dynamism, and a generative force not easily restricted." According to Senn's assessment: "After many years we now begin to wonder, collectively, if Molly's father was actually a major in the British Army, if Bloom really is or was a freemason, and who now, come on, moved that furniture? These are matters of fact in the most fact-obsessed novel, and in view of our factual—to say nothing of the textual—uncertainties it is even more surprising to understand the assurance with which less tangible matters are decided." Senn concludes, "We are not far, at this stage, from Finnegans Wake where it has become entirely futile to sort out reality from myth or imagination." The "generative" potential within the area of novelistic "facts" will be shown as an important characteristic of the new method of thinking demonstrated in the novel.

"Facts" are not divorced from the other two main areas
of concern of ideas and relationships. But when viewed singly, these facts seem to confront the abiding philosophical problem of absolute reality independent of a perceiving mind. Alan Perlis considers this aspect of the novel: "One need only consider the many catalogues, newspaper headlines, ledgers, and budget sheets that Joyce includes in Ulysses to appreciate the extent to which data occupy the novel. It is the role of these data, however, that reveals the extent to which Joyce evokes a Newtonian, mechanistic view of universal operation. . . . Though the typical eighteenth-century novelist attempted to be as compendious as he possibly could within whatever constraints a circuitous plot established, he had yet to confront Newton's most abiding concern: the existence of an absolute reality independent of human perception. In fact, we have to wait for the appearance of Joyce to find a novelist willing to address this concern."9 Joyce does address this concern. But the role of data which points to this traditional philosophical problem needs to be considered in relation to the ideas within the novel (such as Stephen's). And it is necessary to consider the manner in which the organization of the novel itself poses a possible solution to the philosophical problem of cognition-independent reality. If we isolate the role of data from the role of ideas and relationships we are simply left with "the awesome materiality" of Ulysses, wherein the "world exceeds the limits that the mind itself might impose on it."10
Without considering the nature and organization of *Ulysses* as it reveals a theory of cognition, we may interpret *Ulysses* as "a post-Newtonian mechanical world turned into a nightmare." But, as we shall see, once other related interpretive problems are included in a discussion of the novel's "obsession" with facts, the "limits" of the mind are radically extended.

The duplicity or isomorphism between the "facts" of the referential world and of the textual world is an important, but not isolated, characteristic of the text. It is interrelated, for example, with the problem of distinguishing the teller from the tale. The dynamic interrelationship between what is representing and what is represented involves the same kinds of epistemological issues. Does a person (character, reader) intuit reality? How does one make interpretive decisions in real life, or in reading representations? Are these different than artistic decisions confronting a potential writer? Is language a mediating factor in knowing and perceiving? Is it "real" in comparison to "facts" in the referential world and in the non-referential, possible worlds?

J. Hillis Miller states: "When Stephen walks into eternity along Sandymount strand . . . reading the signatures of all things, one would like to know . . . whether that meaning and that beauty are first made by the artist. One would like to know whether they are created or
revealed. . . . Nothing could be more important than to decide about this, but it may, after all, be undecidable."¹³ Yet it may be, after all, decidable. Stephen has realized that Berkeley, who philosophized that the visible world is the language of God speaking to an observer, "took the veil of the temple out of his shovel hat" (U 48/49). That veil which separates the temple from the holy of holies is similar to the veil which separates cognition-independent and cognition-dependent reality--and it is taken out of his "shovel hat," or mind. Stephen ponders this liberating power of the mind which can distinguish between cognition independent and cognition-dependent reality. One can know the things and the signatures of things--they are not mutually exclusive. This ability to know both allows one to use the traditional distinction itself to improve one's understanding of the process of reality, creation, and meaning.

The relationship between the represented and the representing, much like the relationship between the referential and textual signifieds, can be used as a means of making a statement about the world and about the mind. In a radical break from Kantian philosophy which makes things-in-themselves incognizable, things can become infinitely cognizable. What if the transcendental subject of cognition is found neither in the Kantian categories nor in a Berkleyan God? What of the concept of a community of
interpreters? What are the different modes of thinking that would make such cognition possible? *Ulysses* indeed presents these questions. We may consider whether it also presents "solutions."

This brings us to the second major area of "excessiveness": ideas. The nature of ideas in *Ulysses* is as problematic as that of 'facts'. Joyce does not "approach ideas" but uses ideas, much as he "uses" facts. The ideas are from theology, philosophy, literature, and science; they pervade the novel. An idea is not a simple interior monologue of a character, meant to remain within the confines of one character's mind, as in a novel by Edouard Dujardin. In *Ulysses* an idea can be variously, or simultaneously, all of the following: a form as opposed to reality--much like what is meant by the Greek ἰδέα; a mental image or picture that is the object of a thought; a conception, different from what is observed, and as such, either a governing conception or principle, or a teleological conception. Some ideas in *Ulysses* are not necessarily thought but are capable of being thought, and Circe saves their reality.

The number of ideas surely exceeds what is expected in a traditional novel. In the first paragraph of Proteus we can note the ideas of Aristotle, Boehme, Boswell on Johnson's refutation of Berkeley, Lessing, and Blake--not to mention Stephen's thought about these ideas. In addition, the "idea' of the episode itself -- the form of a
soliloquy -- is governed by "the common end" of the whole novel. The allusions in the text to ideas about how one knows, perceives, understands, and interprets things, and how one may create a world or simply marvel at what has been created make a reader highly conscious about ideas. The difference between borrowed ideas and character's thoughts, and between meanings of words and the material words themselves, is played upon in the text.

All of the allusions to ideas that have been collected and that continually appear in new notes on Joyce in journals and in books is testimony to their great number. The first we hear from Molly is a question about the meaning of the word metempsychosis. The idea in itself is important, especially after the concept has been presented in Proteus. Stephen's own first observation repeats a prior one: "Then, catching sight of Stephen Dedalus, he [Buck Mulligan] bent towards him and made rapid crosses in the air, gurgling in his throat. Stephen Dedalus, displeased and sleepy, leaned his arms on the staircase and looked coldly at the shaking gurgling face that blessed him, equine in its length, and at the light untonsured hair, grained and hued like pale oak" (U 3/5; emphasis added). The first and second "gurgling" cover the same zone of purport and usurp conventional narrative space. The same expression form combines the traditional space of representation and space of representationality, a concept we will discuss in more detail in chapter three.
This governing idea is itself contemplated within the novel.

Most important of all are the countless relationships in Ulysses. There are relationships among facts; these relationships grow into catalogues pages long. The relationships between the facts and ideas in the novel unleashes a "complete tale of its printed integers of units . . . containing succinctly the potentiality of being raised to the utmost kinetic elaboration of any power of any of its powers (U 699/684). Their relationships raise the "symbolism of circumstantial evidence, of testimonial supermanence" (U 706/691). Their relationships create what Jorge Luis Borges calls Joyce's "complex labyrinths/infinitesimal and infinite/ . . . more populous than history." 16 But this is not to forget the relationships among ideas--for example the paradigm of literal, fictional and theological ideas of creation in the novel.

Ulysses is a complex system of relationships. The network of relationships forces us to confront such questions as "what, after all, is a text?" 17 The relationships make us feel that the novel is an "uneasy crucible in which something new is happening." 18 As Eco explains, "each word, each mental event, the very form and operative technique of the work is seen in reference to a system of coordinates. This system permits the identification of connecting nodes from within a spatial-temporal continuum
in which everything has the initial right of associating with everything." Carl Jung wrote in an early review that Ulysses is "a being that may belong either to the physical or transcendental order." As we shall see, Ulysses' "crucible" of meaning presents a new kind of thinking about both the physical and transcendental orders.

In Ulysses the facts, ideas, and relationships, which jar us with "the outré character of its features," become the basis of our experience of the "Play of Musement." Charles Peirce defines the Play of Musement in "A Neglected Argument," published in Hibbert Journal, 1908.

The Play of Musement is a "petite bouchée with the Universes" of facts ideas, and relations. It is a rarely used but "agreeable occupation of mind" which has "no purpose save that of casting aside all serious purpose." It is not "reverie" but a "frame of mind so antipodal to vacancy and dreaminess such a designation would be too excruciating a misfit. In fact, it is Pure Play." And, as Peirce explains, "Now, Play, as we all know, is a lively exercise of one's powers. Pure Play has no rules, except this very law of liberty." The "particular occupation" of the Play of Musement "may take either the form of aesthetic contemplation, or that of distant castle-building . . . or that of considering some wonder in one of the Universes, or some connection between two of the three, with speculation concerning its cause. It is this last kind--I will call it
'Musement' on the whole—that I particularly recommend" (6.458; emphasis added).

Readers of Ulysses are particularly familiar with these three Universes of facts, ideas, and relationships. They are defined by Peirce as follows:

Of the three Universes of Experience familiar to us all, the first comprises all mere Ideas, those airy nothings to which the mind of poet, pure mathematician, or another might [Peirce's emphasis] give local habitation and a name within that mind. Their very airy-nothingness, the fact that their Being consists in mere capability of getting thought, not in anybody's actually thinking them, saves their Reality. The second Universe is that of the Brute Actuality of things and facts. I am confident that their Being consists in reactions against Brute forces, notwithstanding objections redoubtable until they are closely and fairly examined. The third Universe comprises everything whose being consists in active power to establish connections between different objects, especially between objects in different Universes. Such is everything which is essentially a Sign—not the mere body of the Sign, which is not essentially such, but, so to speak, the Sign's Soul, which has its Being in its power of serving as intermediary between its Object and a Mind. Such, too, is a living consciousness, and
such the life, the power of growth, of a plant. Such is a living constitution—a daily newspaper, a great fortune, a social movement (6.455; emphasis added).

The basic ideas of Peirce's theory are implicit in this passage. The realms of facts, ideas, and connections or relationships affirm reality and reveal the manner in which a "living constitution" comes into being, grows, and operates. Speculation about facts, ideas, and relationships does not lead to a transcendental philosophy but to a pragmatism wherein the role of a community of interpreters can decide issues. Thus the traditional philosophical problems of nominalism and of scholastic realism are eliminated. 22 A new method of thinking is introduced by Peirce. And with it we can consider Joyce's own revolutionary methods which transformed the novel.

The importance of Peirce's ideas in current text theory cannot be underestimated. It has been shown the Peirce's semiotic "is a theory of interpretation." 23 In fact, Eco declares that "only from Peirce's point of view can many text theories be satisfactorily solved." 24 Even Jacques Derrida states that "Peirce goes very far in the direction of what I have called the de-construction of the transcendental signified." 25 Michael Shapiro has explained how Peirce's triad of sign, object, and interpretant is a method of explaining the organization and operation of linguistic units in discourse. 26 Jakobson, who has
recognized Peirce as the pioneer of semiotics, links "introversive semiosis" (a kind of semiosis based on the relations contiguity and similarity and the relations between what is factual and imputed) with the aesthetic function; Shapiro names this type of semiosis "rhythm" in another interesting 'coincidence' for Joyceans, as we shall see in our discussion of Joyce's Aesthetic Notebook. Finally, Peirce's analysis of the sign has also been used to establish the foundations of "a global theory of style": his concept of the interpretant meets the structured dynamic between internal relations (part/whole) and the affective communication between the sender and the receiver.

_Ulysses_ embodies the spectacle of Musement. The Play of Musement beings "passively enough with drinking in the impression of some nook in one of the three Universes. But impression soon passes into attentive observation, observation into musing, musing into a lively give and take of communion between self and self. If one's observations and reflections are allowed to specialize themselves too much, the Play will be converted into scientific study; and that cannot be pursued in odd half hours" (6.459). This describes the overall nature of Musement in _Ulysses_. Individual episodes will be described separately in more detail in chapter four, but we can see that the so-called 'naturalism' of the beginning of the novel exists not to disorient readers but to allow for the attention to detail to develop into musing, and musing to develop into
what is, in the final episodes, "a lively give and take of communion between self and self." The quasi-scientific catalogues in Ithaca thus are understandable as a distinction between musing and study, the latter of which is involved and implicit in musing, which subsumes its results. And the final episodes are emphatic that musing not deny the reality of the 'facts,' ideas, and connections in the novel. Molly's monologue refuses to answer specifically any questions the novel poses but in effect encourages the reader to engage in the speculation upon facts and ideas and relationships that is Pure Play--to establish as "habit" what has been exhibited in the novel.

The novel moves from the drinking in of impressions, to observation, to musing, and to a give and take of self and self--with an emphasis throughout on what Peirce calls the primary characteristic of Musement--"speculation concerning its cause." Stephen more than any character in literature engages in such speculation. The appearance of Bloom keeps one's interest on the keenest Play of Musement as the cause of and possible effects of the potential "give and take" between Stephen and Bloom takes center stage. Their existence is included in this speculation as their awareness of being characters/writers engages the Muser of Ulysses in the most dynamic concerns such as those previously mentioned.

Ulysses has been said to have a syllogistic structure.30 And in various ways this may seem to be true.
But the syllogism is no paradigm for the novel. As Peirce explains the new kind of reasoning which operates in *Ulysses*: "there is no kind of reasoning that I should wish to discourage in Musement; and I should lament to find anybody confining it to a method of such moderate fertility as logical analysis. Only, the Player should bear in mind that the higher weapons in the arsenal of thought are not playthings but edge-tools. In any mere Play they can be used by way of exercise alone; while logical analysis can be put to its full efficiency in Musement: (6.461; emphasis added). These "higher weapons in the arsenal of thought" represent the connections in a relational universe—a Real Universe wherein the representation of facts, ideas, and relations replaces a philosophy which brackets off consideration of reality independent of the mind and makes things "incognizable"; and these "higher weapons of thought" replace the 'transcendental subject' and 'transcendental deduction of a priori principles of knowledge' with a community of interpreters/inquirers and the modes of inference that work to make cognition possible. The same is true of Joyce's *Ulysses*. The countless connections which have been found as being meaningful in *Ulysses*, and the difficulty the text presents to our ways of thinking about texts, together point to the fact that Joyce was aware of these "higher weapons in the arsenal of thought . . . which are edge-tools." They are available to any Muser.
The growth, chance, and provision for later stages of the novel in earlier ones, which have been noticed in Ulysses, are basic characteristics of Musement;

From speculations on the homogeneities of each Universe, the Muser will naturally pass to the consideration of homogenieties and connections between two different Universes, or all three. Especially in them all we find one type of occurrence, that of growth, itself consisting in the homogeneities of small parts. This is evident in the growth of motion into displacement, and the growth of force into motion. In growth, too, we find that the three Universes conspire; and a universal feature of it is provision later stages in earlier ones. This is a specimen of certain lines of reflection. . . . It is not that such phenomena might not be capable of being accounted for, in one sense, by the action of chance with the smallest conceivable dose of a higher element (6.465; emphasis added).

The novel as a whole exhibits a kind of growth -- seen in the growth of facts into catalogues which grow into pages of information. At first they, the catalogues, exhibit the Muser's speculation into the homogeneities within each universe (especially that of fact), but soon they are part of ("conspire" with) the general "growth" of the novel.
The episodes themselves become increasingly longer up to Circe. And the "growth" of Ulysses seems to combine chance with a "higher element" which is, of course, the hand of James Joyce himself. 31

The chance encounter between Bloom and Nosey Flynn, for example, results in an error which becomes an important context in Bloom's dealings with the Citizen(s) in Barney Kiernan's pub. The reader, and Bloom, have no way of predicting that "throw-it-away," a simple phrase, would be interpreted as a tip in a horse race. But chance has its important role in Ulysses, and in this case influences the plot. Chance is part of the reality of here and now. The laws of the universe (which illustrate what Peirce calls 'thirdness') do not eliminate the factor of chance but instead are based on the element of chance. Without chance there would be no difference, no change, and definitely no growth. Einstein also accepted the factor of chance and the 'higher element' -- witness the famous saying of his that "God does not play dice with the Universe."

Chance and growth operate together. And as facts, ideas, and relations grow and conspire and accommodate more and more 'Reality' one can find "provision of later stages in earlier ones." This is especially true in Ulysses. As Peirce puts it, 'a universal feature of it is provision of later stages in earlier ones." Growth is a tendency to become determined, and the "universal feature" is much like
what he elsewhere defines as symbol. "Reality is compulsive. But the compulsiveness is absolutely hic et nunc. It is for an instant and it is gone. . . . The reality only exists as an element of the regularity. And the regularity is the symbol. Reality, therefore, can only be regarded as the limit of the endless series of symbols" (1976: 261). Thus "a symbol is an embryonic reality endowed with power of growth into the very truth, the very entelechy of reality" (1976: 262).

Such an approach towards reality pervades Ulysses -- it is part of the overall philosophy which we have been describing. The concept of "retrospective arrangement" in Ulysses names the operation of how "reality" exists as "an element of the regularity." What seems to be most real about the novel is the "entelechy of reality." As we first read it, the regularity is felt, the "symbols" do seem to be endowed "with power of growth into the very truth," and the truth is confirmed by the literal referentiality that is not denied. After reading the novel we are astounded, for reality itself is remaining as "the limit of the endless series of symbols" within the novel, and the growth of symbols has led to "the truth, the very entelechy of reality." And the more the novel is pondered, the truer this becomes: "a symbol is essentially a purpose, that is to say, is a representation that seeks to make itself definite, or seeks to produce an interprentant more definite than itself . . . it is from its interprentant that
it derives the actuality of its signification" (1976: 261). The interpretant is, according to Peirce, part of
the sign. The final interpretant is the production of a
habit. And as we have mentioned with reference to Molly's
monologue, a reader is left with such a "final
interpretant"\(^{33}\) -- and an examination of the novel confirms
the self-analyzing habit that has been produced within the
novel.

We can see with the following examples of interruptive
sounds how "a symbol is a purpose . . . a representation
that seeks to make itself more definite." At first the
interruptive whistles on the first page of the novel seem
to be a Brute Actuality, an intrusion most meaningful as a
comment upon Buck's mockery and as a symbol of the doubling
process ("A symbol is something which has the power of
reproducing itself, and that essentially, since it is
constituted a symbol only by the interpretation" [1976:
260]). The two calls from the sea which Stephen hears at
the end of the first episode become a symbol of entelechy
itself: as Stephen later reflects in Scylla and Charybdis:
"he [the author] goes back, weary of the creation he has
piled up to hide him from himself . . . passes on towards
eternity in undiminished personality . . . a shadow
now . . . or what you will, the sea's voice, a voice heard
only in the heart of him who is the substance of his
shadow, the son consubstantial with the father"
(U 197/194). The whistles and the calls in the first
episode seem naturalistic in that they seem to be here and then gone ("the compulsiveness is absolutely hic et nunc. It is for an instant and it is gone"). But their impact upon Stephen's thought is shown when Stephen defines God as a noise in the street in Nestor. By Circe, both the noise and the entelechy of the symbol (and of Stephen) are more definite. A gramophone is now the "noise" which interrupts Stephen, who is analyzing the doubling principle itself: "'Interval which. Is the greatest possible ellipse. Consistent with. The ultimate return. The octave. Which' [interruption] . . . (Outside the gramophone begins the blare The Holy City.) . . . 'Damn that fellow's noise in the street. Self which it itself was ineluctably preconditioned to become. Ecco!'" (U 504-5/494). As noise has been converted into information for Stephen, information which leads to the principles of artistic 're-production', the symbol of the noise becomes an "element of regularity," represented by the gramophone. Chance, growth, and the "higher element" involve one another in Ulysses' Play of Musement.

There are the three modes of inquiry essential to the Play of Musement. Peirce is credited for introducing the concept of abduction, sometimes called retroduction, to the other two modes of inquiry -- deduction and induction. These three stages of inquiry are necessary to the new way of thinking thus far described.

The first stage of inquiry is abduction, retroduction. Peirce explains it:
Every inquiry whatsoever takes its rise in the observation, in one or another of the three Universes, of some surprising phenomenon, some experience which either disappoints an expectation, or breaks in upon some habit of expectation of the *inquisiturus*; and each apparent exception to this rule only confirms it. There are obvious distinctions between the objects of surprise in different cases; but throughout this slight sketch of inquiry such details will be unnoticeable especially since it is upon such that the logic-books descant. The inquiry begins with pondering these phenomena in all their aspects, in the search of some point of view whence the wonder shall be resolved. At length a conjecture arises that furnishes a possible explanation, by which I mean a syllogism exhibiting the surprising fact as necessarily consequent upon the circumstances of its occurrence together with the truth of the credible conjecture, as premises. On account of this Explanation, the inquirer is led to regard his conjecture, or hypothesis, with favor. As I phrase it, he provisionally holds it to be "Plausible"; this acceptance ranges in different cases -- and reasonably so -- from a mere expression of it in the interrogative mood, as a
question meriting attention and reply, up through all appraisals of Plausibility, to uncontrollable inclination to believe. The whole series of mental performances between the notice of the wonderful phenomenon and the acceptance of the hypothesis, during which the usually docile understanding seems to hold the bit between its teeth and to have us at its mercy, the search for pertinent circumstances and the laying hold of them, sometimes without our cognizance, the scrutiny of them, the dark laboring, the bursting out of the startling conjecture, the remarking of its smooth fitting to the anomaly, as it is turned back and forth like a key in a lock, and the final estimation of its Plausibility, I reckon as composing the First Stage of Inquiry. Its characteristic formula of reasoning I term Retroduction, i.e. reasoning from consequent to antecedent. In one respect, the designation seems inappropriate; for in most instances where conjecture mounts the high peaks of Plausibility -- and is really most worthy of confidence -- the inquirer is unable definitely to formulate just what the explained wonder is; or can only do so in the light of hypothesis. In short, it is a form or Argument rather than of Argumentation.
Retroduction does not afford security. The hypothesis must be tested (6.469).

Deduction, the second stage of inquiry is thus a testing of the original hypothesis by examining the experiential consequences which would follow from its posited truth:

This testing, to be logically valid, must honestly start, not as Retroduction starts, with scrutiny of the phenomena, but with examination of the hypothesis, and a muster of all sorts of conditional experiential consequences which would follow from its truth. This constitutes the Second Stage of Inquiry. For its characteristic form of reasoning our language has, for two centuries, been happily provided with the name Deduction (6.469-70).

The two steps of the second stage are the explication of the hypothesis, and the demonstration of consequences. "It invariably requires something of the nature of a diagram; that is, an 'Icon,' or Sign that represents its Object in resembling it. It usually, too needs 'Indices,' or Signs that represent their Objects by being actually connected with them, but it is mainly composed of 'Symbols', or Signs that represent their Objects essentially because they will be so interpreted" (6.471).
Finally, the third stage, induction, consists in "ascertaining how far those consequents accord with Experience, and of judging accordingly whether the hypothesis is sensibly correct, or requires some essential modification, or must be completely rejected" (6.472). The three steps in induction entail classification, probations and appraisals of these probations: "Classification, which is an Inductive Non-argumentative kind of Argument, by which general Ideas are attached to objects of Experience; or rather by which the latter subordinated to the former. Following this will come the testing argumentations, the Probations; and the whole inquiry will be wound up with the Sentential part of the Third Stage, which by Inductive reasonings, appraises the different Probations singly, then their combinations, then makes self-appraisal of these very appraisals themselves, and passes final judgement on the whole result" (6.472).

_ Ulysses _ involves the reader in these three stages of inquiry. The disruption or surprising phenomenon which begins the three stages appears on the first page of the novel -- at that unforgettable word "Chrysostomos." That word appears after Stephen notices the sun's effect upon Buck's teeth; the effects of the sun mock the mocker of the Catholic doctrine of transubstantiation. This is a surprise to Stephen's way thinking about art, and thus this is the inexplicable phenomenon which begins the process of abduction. During the first three episodes Stephen
intensely considers all aspects related to finding a point of view "whence the wonder shall be resolved." In Nestor, Stephen expresses his conjecture (that the artistic process is like the natural process) in what Peirce calls an "interrogative mood as a question meriting attention and reply"; and in Proteus Stephen (and the reader) pass "up through all appraisals of Plausibility to an uncontrollable inclination to believe" in the conjecture. It has been said that "the way of Stephen's mind is something new in fiction." \(^{34}\) Once we understand how and why this is so, we will be able to understand *Ulysses* as it presents a kind of thinking which is something new in fiction.

Episodes in Section II of *Ulysses* constitute the second stage of Musement: deduction. The appearance of Leopold Bloom engages a reader in explicating an hypothesis; the conjecture from the first stage is examined as a hypothesis. Deduction is a demonstration of the consequences of what would follow if the hypothesis were true. A reader engages in explicating an hypothesis which would account for Bloom's repetitions of some of Stephen's actions at the same time of day. A reader examines Bloom and Molly in terms of what has preceded. In short, the reader applies principles suggested in abduction to account for the new material.

The reader considers the meeting of Stephen and Bloom as an "index" that represents the object of the hypothesis, an index composed of "Symbols" or "signs that represent
their Objects essentially because they will be so interpreted," as Peirce explains. The Ulysscean theme, theological theme, and theme of artistic creation are joined to a single predicate. The hypothesis includes as its predicate "the sort of thought whose tools literally comprise not merely Ideas . . . but also the apparatus of the skilled manipulator, actually in use" (6.333). Much like the sun which Stephen considers as being out of the immediate context, but part of the contextual effects and ideas, the artist is present in the governing idea and the applied apparatus of the manipulator. The apparatus of the "skilled manipulator" is language placed in a cognitive system. This "apparatus" will be discussed in detail.

The stage of inquiry which ends the novel is a lively examination of induction, which tests whether what is presented in deduction accords with actual experience and which determines whether the hypothesis needs modification. After these tests, the probations themselves are examined, and judgement is passed on the whole. Eumaeus answers that language itself is the only difference between what is presented in deduction and actual experience. Therefore, language in Eumaeus is never unmodified, but always qualified. The difference has been played upon up until this point and is now itself confronted. The material nature of language which allows for its denotative and semiotic functions becomes the issue.
True to the examination of induction, Eumaeus confronts the problem of an absolute origin (of the text, of cognition.) Bloom asks Stephen if he has eaten "today." (Stephen has eaten with Buck and Haines in Telemachus.) The time of Eumaeus is after midnight. Stephen answers:

--Some time yesterday, Stephen said.
--Yesterday, exclaimed Bloom till he remembered it was already tomorrow, Friday. Ah, you mean it's after twelve!
--The day before yesterday, Stephen said, improving upon himself (U 560/640; emphasis added).

Stephen is 'accounting' for what he says in Circe he "Will write tomorrow" (U 518/506). A day has been added that would correspond to the day in which Stephen would have written the events of his day and of his meeting with Bloom, were he the author. This is appropriate in the Play of Musement's third and final stage, which tests whether what has been presented in the previous stages accords with our experience of it. Modifications, appropriately, are made.

How different this is from a traditional novel, such as Proust's A la Recherche du Temps Perdu. Gerard Genette states that "the whole of Recherche is in fact a huge pseudodiegetic analepsis in the name of the memories of the
'intermediary subject' -- memories which the final narrator immediately claims and takes control of." Genette concludes that "laws of Proustian narrative are, like that of narrative itself, partial, defective, perhaps foolhardy." In *Ulysses* there is no interval between the end of the story and the moment of narrating. In *Recherche* that interval is "the time it takes the hero to write this book, which is not the book the narrator, in his turn, reveals to us in a moment brief as a flash of lightning." Joyce eliminates the transcendental subject of novelistic cognition in *Ulysses* 'Play' of Musement. The time of narrating and narrated are one.

Of course the third stage of inquiry that we are considering does not end with Eumaeus. The Probations and appraisal of these probations, singly, "then in their combinations, then . . . self-appraisal of these very appraisals themselves" characterize Ithaca. Ithaca includes questions concerning the parallel activities of Stephen and Bloom, their possible futures, and their combination. We consider "Stoom" and "Blephen" (U 682/666). We consider "the difficulties of interpretation since the significance of any event followed its occurrence" (U 676/660); and the infinite possibilities of "triliteral monoideal symbols" both vertically and horizontally (U 683/667). Ithaca is a "lively give and take of communion between self and self" which subsumes the
specialized scientific study which Musement itself engenders, and considers, when it has much more time.

And Penelope, the final episode, is the "counter-sign" to the text (Letters I, 160). As such it produces a "living habit: "The deliberately formed, self-analyzing habit -- self-analyzing because formed by the aid of analysis of the exercises that nourished it -- is the living definition, the veritable and final logical interpretant" (5.491). Molly's monologue, because of the preceding series of episodes, ensures that the kind of thought of Musement of the novel be its own "living definition." This is why "we start to see the world in Ulyssean terms."38 One passes final judgment on the whole result" (6.472), at the end of Musement. And the reader who believes that "any existing regularity could be the result of chance" is actually considering the characteristic of what Peirce calls a Third of genuine law:" a genuine law or Third must ... involve a counterfactual conditional. It must be true of a Third that it would exhibit a regular order under indefinitely many unrealized conditions."39 What Joyce meant by counter-sign may be understood in these terms. Molly's actual experience is the required test of induction. It modifies; it includes unrealized conditions of the day, the present moment, and the future. And the result is the formation of a "habit" and a "belief" concerning the "regular order" the novel
exhibits "under indefinitely many unrealized conditions." Peirce on this point provides ample discussion. Joyce provides the process in operation.

It is easy to understand why Ulysses transformed the novel. It has been called the pivotal book of the century for reason. The novel exhibits a new way of thinking. Things can be infinitely cognizable. Three modes of inference replace the old concept that there are a priori principles of knowledge. The concept of a community of interpreters that can, in the long run, "under indefinitely many unrealized conditions," come to know the "truth" about things is surely an innovation.

Ulysses asserts our ability to know. Any one individual's thought process cannot at a given moment know, without error, the laws of the universe as they will possible in the future be understood. Nor will a community of interpreters now know everything perfectly. Fallibilism\textsuperscript{40} is thus written into the novel, as we are well aware of. But, the key point is that we can know, think, muse, adapt. And because of it, the traditional notions of philosophy collapse. Such notions include, as we have mentioned, the belief that reality-in-itself cannot be known, the belief that cognition separates us from things-in-themselves, the belief that there is a transcendental subject of cognition, and that there are a priori transcendental rules of deduction. These notions
themselves become objects of thought in Ulysses' Play of Musement as we shall see.

Ulysses can be understood as a Play of Musement. Its "order is simply thought embodied in arrangement" (6.490). The thought process embodied in the arrangement of Ulysses is that of Musement: abduction, deduction, and induction. These three modes of inquiry are based on facts, ideas and relationships, areas of the novel which have been noted as being excessive; and they give rise to the belief that there is a Creator independent of him. This new approach to the nature and organization of communication in Ulysses provides a means of making sense of the eighteen different styles in the novel and suggests the need to reexamine Joyce's early ideas on the cognitive aspects of aesthetic systems.

In the next section, we will briefly mention the importance of ideas in Joyce's Aesthetic Notebook. Then in the final section, we will discuss previous scholarship on the eighteen styles found in Ulysses.

Joyce wrote in his Aesthetic Notebook that "Parts constitute a whole as far as they have a common end" (CW 145). This jars the accepted notion that the whole is greater than the sum of its parts. But if we consider contemporary study into perception, we find that Joyce's
ideas are not as strange or unworkable as we have previously thought.

Studies of Joyces' aesthetic theory are usually vague on the part-whole idea or avoid it altogether. But in discourse, van Dijk has shown that the part-whole relation is "an intuitive primitive which cannot be analyzed into more basic cognitive notions," and holographic representation is based on the principle mentioned by Joyce.

The "part constitutes the whole" in neurological representation of sensory processing. A method holographic in nature operates: "each portion of that [recording] surface is encoding the whole. . . . The whole becomes enfolded in each portion of the hologram since each portion 'contains' the spread of information of the entire image." Pribam explains: "the holistic principle of the hologram is totally different from earlier views that wholes develop properties different from their parts. The emergence of properties from appropriate combinations was expressed in the Gestalt principle that 'the whole is greater than the sum of its parts.'" But in this holographic method, an entire image "becomes distributed, i.e., represented, in each part of the hologram record." Correlations and cross-correlations can be accomplished almost instantaneously as an inverse transform readily reconstructs the image.
In perception "what is a part at one level is a whole at another."⁴⁴ Hochberg has suggested that "our perceptions of figures are closer to our plans for producing them than to any simple physical description of them."⁴⁵ "Meaningfulness," according to Presiosi, "resides in the interaction and dialectical process of perception and semiosis. . . . The study of human communication and perception comprises compatible and complementary (and supplementary) perspectives on the constructive orchestration of meaning. In such a view, both semiotics and perceptual psychology rightly reject the role of viewer or observer or decoder or reader as a passive cryptographer, and affirm that semiosis and perception are cyclic temporal activities oriented toward the significative construal of information. . . . In their fundamental mechanics they are metonymically related as two sides of the same coin, and metaphorically related by their equivalence of process."⁴⁶

Joyce's idea that "the parts constitute the whole" flies in the face of previously accepted notions about the order of things. Along with the other ideas in the Aesthetic Notebook, this idea needs to be reconsidered as an important, partial basis of what we have described as the Play of Musement in Ulysses.

Peirce frequently points to the fallacy of the traditional part-whole notion; Joyce mentions it in an important entry. The overturning of Euclid's notion is an important innovation: "Euclid . . . laid it down as a
'common notion,' or axiom, evident to all men, that 'a whole is greater than its part.' For two millennia and more, this axiom was held to fulfill the ideal of an axiom better than any other, and when men wanted an example of indubitable axiom, they commonly chose this. It is plain, therefore, that they could not realize in thought the truth of the contrary, try as they might. This is curious; for since Euclid's time and earlier it had never ceased to be a familiar truth that a finite magnitude added to an infinite one did not increase the latter. So, if during nearly 2,200 years, among the millions of men who were continually declaring it inconceivable that a part should be as great as a whole, it had never occurred to a single one to think how it would be if the part were infinite, it would have been up with the fame of the axiom from that moment" (2.30; see also 4.186n, and 3.426).

Upon this principle George Cantor based his transfinite set theory which is the "foundation for virtually all contemporary mathematics." Peirce had sent Cantor his "On the Logic of Number" (3.252-289) and mentions that concepts Cantor elaborated "might have been borrowed from my paper" (4.331). As we have seen, the part can equal a whole if infinity is considered. Aleph, the first letter of the Hebrew alphabet, is the notation for transfinite numbers, and it is used in Ulysses (U 38/39; 688/672). Bloom explains the value of aleph "as ordinal and cardinal numbers" (U 688/672) -- and ordinal and cardinal numbers
are the basis of the new numbering system in transfinite set theory.

Peirce explains in detail how "a part may be equal to the whole" (3.5) in the "Logic of Relatives", published in 1847 in *The Monist*. Joyce may have read this article: not only does *Ulysses* contain the example Peirce uses to explain the doctrine of individuals -- Philip Drunk and Philip Sober, as we will discuss later in more detail -- but also the part-whole ideas in the Aesthetic Notebook adumbrate a system wherein a "part may be equal to a whole."

Peirce also discusses in the above article the "three grades of clearness in our apprehensions of the meanings of words" (3.457). Aquinas' idea of second intentions is extended to Peirce's relative logic: "it is by means of relatives of second intention that the general method of logical representation is to find completion" (3.490). Second intentions are a manner of logical reflexion, "the observation of thoughts in their expressions," which as "Aquinas remarked . . . furnish us with those ideas, which, from lack of contrast, ordinary external experience fails to bring into prominence" (3.490). This concept will be discussed in relation to the ideas on cognition and representation in Joyce's Notebook in the next chapter.

Joyce may have independently discovered the concept that "the parts constitute the whole." Or he may have been influenced by the reading of one or more of the many
articles and reviews which Peirce published. Joyce specifically refers to the philosophy of Pragmatism, which is credited to Peirce, in his review of F. C. S. Schiller's *Humanism: Philosophical Essays* (November 1903). Joyce's criticism of Schiller matches Peirce's. Joyce writes that Schiller's "emotional psychology" puts "to shame the ghostly forms of Plato and Aristotle" (CW 136). In reference to the same book Peirce writes that one of the essays, "The Ethical Basis of Metaphysics," "has a promising title but is "reduced to gibberish by the author's talking about the real, without the slightest hint of what he means by this word except that it is something the character of which is affected (and it would seem very greatly) by anybody's thinking that it possesses or does not possess that character. In short, he treats a verbal definition as a doctrine, and stoutly denying it, leaves the word a mystery. To meet some such fatal blank has more than once been my ill-luck in trying to read Schiller."

(5.533). Joyce states that "if Professor Schiller had sought to establish rational psychology as a starting-point, his position would have been well-grounded, but rational psychology he has either never heard of or considers unworthy of mention" (CW 136). Peirce is the exponent of rational psychology whom Joyce probably had in mind.

Since Joyce was aware of the doctrine of Pragmatism, there are a few sources to consider as the source of
Joyce's remarks. The secondary sources include, among others, F.C.S. Schiller's reference to it in *Personal Idealism* (1902) and William James' proper crediting of Peirce with it in *The Varieties of Religious Experience* (1902). The primary sources include Peirce's articles in the *Popular Science Monthly* (1877-78) which were also that year published in the *Revue Philosophique*, and his lectures on Pragmatism delivered in Cambridge, Massachusetts, March to May 1903, described by James as "flashes of brilliant light relieved against Cimmerian darkness" in James' *Pragmatism*. The articles are among Peirce's most important: "The Fixation of Belief," "How to Make Our Ideas Clear," "The Doctrine of Chances," "The Probability of Induction," "The Order of Nature," and "Deduction, Induction, and Hypothesis." Peirce also defines the term in J. M. Baldwin's *Dictionary of Philosophy and Psychology* (1902). It is quite possible that Joyce was familiar with the leading exponent of Pragmatism and that he could have picked up on the part-whole idea from Peirce. Both Joyce and Peirce denounced the disciples of Pragmatism.

Giordano Bruno is another source for the innovative idea that parts constitute the whole. Ernst Cassirer describes the gradual change in the post-medieval period as one wherein a new formulation of the universal and particularly occurred in the most divergent fields. Cusanus, the 'liberator' of Bruno's mind and the referent of many allusions in *Finnegans Wake*, placed the infinite
and the finite within the locus of human knowledge. Aristotle's logic, based on the principle of the excluded middle, seems to be "merely a logic of the finite, one which must always and necessarily be found wanting when it comes to contemplating the infinite." The coincidence of opposites becomes a new demand. There is no opposition between part and whole. Bruno's writings exemplify the new intellectual orientation which places the infinite and spiritual being within one's grasp.

Joyce calls Bruno "more than Bacon or Descartes . . . the father of what is called modern philosophy" (CW 133; emphasis added). The importance of Bruno is in "his vindication of the freedom of intuition" and in his "idea of an ultimate principle, spiritual, indifferent, universal, related to any soul or any material thing" (CW 134). Here are the concepts which underlie all of Joyce's works. The "ultimate principle" would allow him to write art which "is the very central expression of life" (SH 86), not a "slice of life" bit of naturalism, but life itself as it is "related to any soul or material thing." The part-whole idea is one of the first, formal steps Joyce takes in the Aesthetic Notebook toward accomplishing this end.

The part-whole idea will be described in relation to the other entries in Joyce's Aesthetic Notebook in the next chapter. At that time, the more familiar entries about the three stages of apprehension will be discussed in more detail. But already we can see that Joyce was developing
an aesthetic philosophy which reverses traditional nominalistic notions about what can and cannot be cognized.

The three stages of apprehension which Joyce discusses in the Aesthetic Notebook require a new re-consideration from a semiotic perspective. Joyce's reference to Aquinas is not misplaced, as the previous reference to Aquinas in the "Logic of Relatives" makes clear. According to Noon, from a Thomistic perspective, the three stages of apprehension are "regarded as ontological and objective qualities inherent in the thing known rather than in the knowing mind . . . they are conceived of as being known in one single simple act which cannot be divided into 'phases'." From a Joycean perspective, there is mediation between the object and the mind. This mediation is not contradicted by the Thomistic theory of cognition. The principle of mediation is much similar to the "ultimate principle, spiritual, indifferent, universal, related to any soul or material thing." And it is similar to what Peirce defines as the Power of the Sign (6.455, above).

Noon writes that Stephen, discussing these three stages of apprehension in Portrait, "confuses the Scholastic analysis of the act of apprehension with this act itself." And no further comment is made about Joyce's own nearly exact wording of the three stages of apprehension in the Aesthetic Notebook. Rather than assume that Joyce was also confused, we can now consider that Joyce was instead creating the foundation of a new
aesthetic theory. Joyce was developing the basis of a position which places truth or beauty neither in the incognizable thing-in-itself nor in the subjective quality of the mind which apprehends it, but in a relational system. Peirce's own philosophy is based on the same principle.

Applying these principles to literary works was, of course, Joyce's major concern. But first they need to be re-examined, as we have suggested. This will be done in the following chapter. But first, in the next section we will review the major studies of the styles in Ulysses. We shall see that there is a need to reconsider Ulysses in terms of the innovations just sketched out.

iii

Ulysses contains eighteen episodes each written in a different style. The relationship of these episodes to each other and to the whole text has fascinated and frustrated many since the novel was published in 1922 by Shakespeare and Company. Vladimir Nabokov writes: "each chapter is written in a different style, or rather with a different style predominating. There is no special reason why this should be."\(^5^3\) No "special reason" for the eighteen different styles has been accepted, and due to this lack of public agreement concerning why there are eighteen different styles, Nabakov is basically expressing an attitude that has been established about Ulysses.
Historically, criticism of the novel can be divided into that which considers there may be a "special reason" behind the different styles and that which assumes there could not be. Hugh Kenner is the most articulate spokesman for the former. As Kenner puts it: "If we can understand the apparent stylistic caprice that seems to invade and subvert Joyce's massive novel, we may hope for a radical understanding of numerous other matters pertaining to fiction, to language, to understanding itself -- matters on which we should do well to be less intuitive than is customary." But there are many more who believe, as we have said, that there is no "special reason" for the eighteen different styles.

Some view the final episodes as failed experiments. As Roberts Scholes says, the "transitional nature of the book has led one school of critics (call it the Goldberg variation) to see the book as a failed novel, which goes off the novelistic track in the later chapters due to Joyce's self-indulgence in various linguistic capers." One person in this 'school', for example, believes Ulysses "does not make a self-contained construct. It never will." Indeed many question whether Joyce has "become so obsessed with technique that he has weakened rather than strengthened his novel," and ask if his narrative technique is not "carried well beyond the point where it serves a legitimate function?"
On the other hand, *Ulysses* has also been criticized for what has been called the "initial style." Among others, Karen Lawrence is one who believes the first chapters do not "prepare the reader for what follows."

This concept of an initial style in *Ulysses* plagues much recent Joycean criticism. Paradoxically, the basis for understanding the 'progression' of styles is usurped by the concept of an initial style which spans the first three to nine episodes (depending on which critic you read). By erasing the boundaries between the individual styles in the episodes, the critics undercut their ability to make distinctions between the eighteen episodes each with a different 'style'. The problem related to that of the "initial style" becomes methodological -- to establish the necessary boundaries between episodes, the concept of a system is needed.

The structuralist and post-structuralist waves of criticism have emphasized literature as a whole as being a system. Maria Corti begins her *Introduction to Literary Semiotics* with a brief section on "Literature as System."

Jurij Lotman devotes a chapter of *The Structure of the Artistic Text* to the "Text and System." Julia Kristeva's concept of intertextuality is based on literature viewed as a system. A single text considered as a system is bypassed. The result, posed by Roland Barthes as "a choice . . . either to place all texts in a demonstrative oscillation, . . . or else to restore each text, not to its
individuality, but to its function, making it cohere, even before we talk about it, by the infinite paradigm of difference,"62 does not seem to be much of a choice. The writerly text which Barthes proposes allows a reader to be "a producer of the text" and "to appreciate what plural constitutes it," but it does not give modern readers anything but a means of describing an "ideal text" which "is a galaxy of signifiers" with "no beginning."63 Such a proposal does not aid our understanding of Ulysses, which includes these concepts as operational strategies. Yet, it has changed the direction of Joyce criticism. It is behind the new wave of criticizing or finding problematic the first episodes of Ulysses. The latter episodes of Ulysses are appreciated for "what plural constitutes it." A text's 'idiosyncratic' nature becomes quite acceptable. What in Ulysses was once considered a flaw is now considered acceptable; what was previously "clear" becomes deceptive. Ulysses is one text that will not be made to "cohere, even before we talk about it."

The failure of critics to sufficiently account for the eighteen different styles, especially during the trend of structuralism, caused a change in judgement concerning Joyce's writing of Ulysses. With Michael Groden's 'Ulysses' in Progress we can see that the idea of an 'initial style' is closely related to our ability to make sense of the eighteen episode changes, and also related to the manner in which a 'community of interpretation' is
historically influenced. Groden generally equates the beginning stage of the writing process with the 'initial style'. His study of the stages of the writing of *Ulysses* shows how a symptomatic reluctance to credit *Ulysses* with a 'design' or 'structure' affects our understanding of Joyce the person, the author, and, especially, his major work.

"Joyce's book was composed in ways so *idiosyncratic* as to be interesting in themselves," Groden summarizes.64 The adjective *idiosyncratic* counters any need to deal with a possible structure of the novel that may have influenced the writing process. Dividing the composition process into an "early stage," "middle stage," and "last stage," convenient as such a seemingly chronological method may be, directly stems from the belief that both the composition process and the novel are idiosyncratic. Groden states: "gradually and cautiously, Joyce moved from the interior-monologue technique of his early stage of work to the parody styles of the middle stage, and finally to the complex intermixture of realism and symbolism in both the new work and the revision of the last stage. This progression meant a shift from verisimilitude to symbolism in both the new work and the revision of the last stage."65 No reasons are given for the shifts from interior-monologue to parody to realism-symbolism. "Shift" indicates the idiosyncracy of both the text and the writing process. The statement reads like a description of the text's three
major divisions, not just the stages of composition. And it reflects the change in the 'horizon of expectations' in the critical community.

A. Walton Litz's seminal study of the making of *Ulysses* concludes "the burden of the evidence is that *Ulysses* was written 'all of a piece'."66 The difference between Groden's and Litz's studies is best revealed in their handling of Joyce's preliminary rough drafts for the last episodes, which Joyce says were written before the work on the first episodes began. Because these important rough drafts have been lost, one can interpret them according to one's notions about the text and the writing process. Litz bases his case upon them; Groden discredits them.

Litz establishes the earliest stage of Joyce's actual writing of *Ulysses* in March 1914 when "Joyce began work on *Ulysses* by 'setting down . . . preliminary sketches for the final sections'."67 Litz believes these "preliminary sketches for the final sections" were possible before the publication of *Dubliners* because as early as July 1906 "Joyce realized that a full-length work based on the Odyssey 'had to be the sequel' to the *Portrait of the Artist* (then the half completed *Stephen Hero*)." The preliminary sketches of the final chapters are important, according to Litz, because "undoubtedly he wished to clarify some general problems of structure before concentrating on the early episodes."68
Groden makes no reference to these sketches until he discusses Joyce's work on Circe. "Beginning at this time," Groden says, "Joyce repeatedly said that he had partly written the three 'Nostos' episodes at an earlier date -- he described them variously as drafted, sketched, written in part, written in rough drafts or written in a plain style (Letters, I, 143; II, 459; III, 31) -- and because of this the writing of 'Circe' meant to his great relief both the end of the long central section of Ulysses, the adventures themselves, and the end of the entire book."69 Interestingly, Groden does not discuss the effect these early rough drafts may have had upon the production of what he calls the "middle stage" or the "early stage."

Instead, during his discussion of 'Circe,' Groden continues with a discrediting of the value of the Linati schema and a discrediting, or so it seems, of Joyce's references to the early rough drafts. I will give his paragraph in full:

In September 1920, shortly after saying that he had written "Circe" five or six times, Joyce began to talk about schematic structurings of his book. On September 3, he sent a "scheme" of Ulysses to John Quinn, but this one merely lists the episodes by Homeric title and divides them in two ways, in half (a dotted line separates "Scylla and Charybdis" and "Wandering Rocks") and
in three parts (numbered I, II, and III and labeled "Telemachia," "Odyssey," and "Nostos"; Letters, I, 145). Joyce sent the first of the real scheletro-schema -- he called it "una specie di sunto-chiave-scheltro-schema" ("A sort of summary-key-skeleton-scheme") -- to Carlo Linati on September 21 (Selected Letters, pp. 270-71). The Linati schema contains much information not in the book; these ideas must have been only plans in Joyce's mind. For example, the finished "Ithaca" barely resembles the schema entries:

Time--1-2
Colour--starry, milky
Persons--Ulysses, Telemachus, Eurykleia, The Suitors
Technic--Dialogue, Pacified style, Fusion
Sense (Meaning)--The Armed Hope
Organ--Juices

This "skeleton" of "Ithaca" probably fits the rough plan, sketch, or draft that Joyce claimed he wrote in 1916 (Letters, III, 31). If anything, it shows how much work he still had to do on episodes he thought were practically finished. 70

Actually Groden seems to be not in disagreement with what "Joyce claimed he wrote in 1916" as much as he seems to be in disagreement with the implication that Joyce's rough drafts of the Nostos section influenced the writing of the novel, as Litz argues. Groden makes no mention of
Litz's belief that the rough drafts were written two years earlier and marked the beginning of the process of the actual writing of *Ulysses*. Some remarks concerning the possible importance of both the drafts and the Linati schema seem to be in order (Fusion, mentioned as a technic, may actually be a valuable description of the style of Eumaeus). Groden's conclusions may be as accurate as Litz's, but we can see that both are dealing with the issue of whether the novel is 'structured' -- "designed" versus "idiosyncratic." Litz, writing over a decade before Groden, would have been more inclined to have found a 'design', for the value of the literary work depended on its self-containedness and/or on its structured nature. Or at least such could be more assumed than during the late seventies, when Groden was under the influence and possible scrutiny of the formalists and post-structuralists. For Groden to claim the composition process (and indirectly the novel) is 'idiosyncratic' met with the approval of the 'community or interpreters' for no structure had been publicly agreed upon in the novel, and idiosyncracy, or "plurality" was no longer synonymous with "flawed."

The problem of the eighteen different styles influences our conceptions of the conception, gestation, and writing of the novel. It has been a constant in the variable nature of the movement of criticism. It is a perennial concern because the more we do know about the writing of the novel, the correspondences between the
'real' world and and textual world, and about the relationship of the elements in the communication process, the more these eighteen 'problems' become theoretical and practical challenges. The problem is a touchstone of meaning. As Goldman asserts, "if a single progression can be determined in the style, it may well amount to the most definitive comment on the action available."71

The importance of these styles to the function and meaning of Ulysses was solidly established by Stuart Gilbert in 1930. As Gilbert himself emphasizes in the preface to his 1950 edition, "obviously the value of such work as this depends on its authenticity, and 'authenticity' in the present case implies that the ideas, interpretations and explanations put forward in these pages are not capricious or speculative, but were endorsed by Joyce himself."72 Gilbert's study is a bit pedantic and overemphatic about the formal elements of the novel, but as he himself later points out, it was a response to the pre-1930 critics who found Ulysses "a violently romantic, an uncontrolled outpouring of the subconscious mind, powerful but formless." Gilbert's book caused some distress. He repeatedly emphasizes the organized, structured nature of the novel and few if any could meet -- even if they were so inclined -- the challenge it posed: to describe the way everything forms "part of an elaborate scheme."73 Many had relegated it to the dustheap when Hugh Kenner's Dublin's
Voices came along and attempted to resurrect some of its major claims.

Gilbert makes the following rather incisive comments: "The meaning of *Ulysses* . . . is not to be sought in any analysis of the protagonist or the mental make-up of the characters; it is, rather, implicit in the technique of the various episodes, in the nuances of language, in the thousand correspondences and allusions with which the book is studded." The 'technique' of the episodes becomes Gilbert's response to M. Auguste Bailly's criticism of *Ulysses*, which claims Joyce depicts consciousness 'on one plane only'. Gilbert refers Bailly to the "logical plan" of *Ulysses*: "from the point of view of the author of *Ulysses* (*ipse dixit!*), it hardly matters whether the technique in question is 'veracious' or not, it has served him as a bridge over which to march his eighteen episodes." Gilbert stresses the "symmetry of the technical structure" and the "internal rhythm" of each episode taken individually. He discusses each episode individually, attempting to show "the manner in which the appropriate symbols, arts, etc., are associated with the subject and technic of the episodes." One problem with Gilbert's study is that he stud his brief discussion of each episode with quotations for his readers who could not obtain the then censored novel. A reader receives an excellent overview of the novel's organization, but not the close analysis which would convincingly substantiate his claims for the text.
Hugh Kenner's *Dublin's Joyce* qualified the rather formulaic approach of Gilbert to *Ulysses'* styles. He included Joyce's complete "table" which, he warns, "is not a set of answers to a puzzle." Instead its "usefulness to the reader . . . should consist in helping him focus his attention." Kenner suggests the schema's proper interpretive role and places Gilbert's study in perspective:

The hundreds of interpenetrating arches in this cathedral of metaphor were reduced by Joyce, with commendable ingenuity, to a page of memoranda, a codification of his chief working notes. This guide and mnemonic was circulated among friends, and in 1930 a portion of it found its way into a book [Gilbert's], of which, as the one page of indubitable reliability, it is the only part that has been much called in question by later epigons. Much energy has been expended in ascertaining that as the word 'green' appears eight times in the first episode, the word 'gold' only once, Mr. Gilbert should have given the Colour of the episode as green. Mr. Gilbert may be absolved of responsibility . . . Since Joyce gave the Colours of the first episode as white and gold, it is worth a little trouble to find out why.75
Kenner gives examples of how the episodes can be understood in relation to the schemas, and explains: "In this manner the action of each episode proceeds in a frame of running metaphors of which the table of themes furnishes a useful concordance. The arts, colours, symbols, organs, are rubrics for modes in which the material of the episode is epiphanized." His insights into the relationship of the first and last three episodes ring true: "There is more than the prologue-epilogue relationship... Epilogue is not simply to Prologue as parody to exemplar. It is also as reductio ad absurdum to thing reduced... Dig beneath the Telemachia and discover the Nostos." Likewise his explanation of the individual episodes: "The epiphanies are achieved, as always, by allowing the introductory seeds to sprout." Kenner clearly asserts the interconnectedness of the elements in Ulysses and he maintains the importance of the individual nature of each episode.

Kenner discusses the twelve episodes of the 'Odyssey Proper' with reference to his own scheme:
He explains: "the progression of styles enacts a drama even at this tabular level of abstraction. As the technique shifts from Narrative to Hallucination the focus shifts from Bloom's household to the 'ruin of all space' in the brothel. But as the headings imply, the arena of the ultimate epiphany is neural rather than cosmic; at the moment when the rhythms have become most centrifugal, the drama is most of all concentrated within the skull." 78 Kenner elaborates his categories with only two pages of explanation. Through the concepts he introduces seem to fit Ulysses, demonstration is needed. No attempt is made, for example, to explain the relationship of episodes 7-9 with term "cognitive," which is a concept central to this present study.

Arnold Goldman's The Joyce Paradox includes a chapter titled "'Ulysses' Styles." His consideration of Ulysses impinges on a theory of cognition:

Ulysses seems to posit a noumenal level which does not deny the multiplicity of phenomenal interpretive ones, but which is behind and beyond them, necessary to them inasmuch as without it, they could not exist at all. As Ulysses proceeds, the phenomenal dimension discovers that it can enjoy itself almost, as it were, at the expense of the noumenal one, but only at the cost of relinquishing a denominative, or final
of it. This is reflected in Stephen Dedalus' problem, here adumbrated by the Bunyan parody, the contention of 'the god Bringforth' and 'the hubbub of Phenomenon' (516/389). The method of Ulysses is an accommodation of the total potentiality of a subject and the particular version(s) of it brought into being. Ulysses is most particularly an encyclopaedic fiction in this respect. . . . The plot of Ulysses is extended not so much to cosmological dimensions, but by means of an encyclopaedia of styles, each of which implies a different approach to its meaning.

While I have been insisting on the reality of a difference between 'subject' and 'style' in Ulysses, at a particular level of conception there is no difference. It is the juxtaposition of many episodes each of which cannot, as Goldberg points out of the early chapters on Stephen, be separated into matter and manner, which, taken together promote a further difference. The 'subject' cannot be projected from a scrutiny of each individual chapter, or portion of a chapter, by discounting in some manner from the style of it. 79

Goldman stops short of offering an explanation which would account for the relationship between the Kantian noumenal
and phenomenal levels. But the Kantian dilemma which relinquishes the ability of one to know "things in themselves," even though the effects of things in the receptaculum of consciousness can be known, is itself a "deeply hidden nonsense in the very presuppositions of modern philosophy." Though Goldman approaches a theory of cognition in the above passage, his remarks tend to reinforce the assumption implicit in Descartes, Locke, and Kant that "cognition is blocked off from things actually to be known by its own causal mechanism." Yet, this may be the very assumption which Joyce, like Peirce, was removing with a logic of relatives. Bloom in Eumaeus mentions the dilemma (U 633/618). Joyce showed his belief that we can know more than the effects of external things in his aesthetic theories. The manner of the mind, the apprehensive faculty in action, opens rather than closes the door of meaning. Joyce innovates an approach to life and art which places a "final interpretation" of things in the realm of the cognizable, the knowable, rather than the unknowable. Joyce places representation within the action of signification without eliminating its referential roots; he thus ensures that the community of interpreters be as concerned as he was with his arrangement of discourse material -- "order is thought embodied in arrangement" (6.490).

By zeroing in on a seeming contraction in Goldman's discussion of Circe and Eumaeus we can provide an example
of such "embodiment of thought" in arrangement and also assert the need for a new, cognitive-based approach to the text. Goldman writes about Circe:

The closer Joyce comes to specifying the 'meaning' of Ulysses, the more hedged is the mode of presentation chosen. In 'Circe', while the springs of Stephen's and Bloom's motives are laid most bare, we are prevented by the ontology of the presentation -- its relation to the Bloom and Stephen of the first chapters -- from asserting its right to control our view of the whole. While we may wish to recognize the relationship of the manner of presentation to a mode of perception congenial to Joyce, who later spent seventeen years 'mining' it, we must simultaneously acknowledge its logical function in Ulysses' spectrum of styles. The 'interpretation' it presents has no unique claim to determine the situation -- this should, by now, be clear of all the 'styles' -- but rather it belongs to the structure of suppositions which the totality of styles provides.82

Goldman accepts Circe in the "logical function" of Ulysses' "spectrum of styles." He states that Circe presents an "'interpretation'" which has "no unique claim to determine the situation." But compare Goldman's contention about
'Circe' to what he then says about the following episode: "in the logic of styles, 'Eumaeus' is a reduction of the action to a superficial account, and the manner of it only exposes its own inability to encompass the matter."\(^{83}\)

Eumaeus is exhibiting Goldman's major claim about the novel; a comparison shows that Eumaeus is exposing the fact that, as Goldman states of Circe, it "has no unique claim to determine the situation" in that "the manner of it only exposes its own inability to encompass the matter." But Goldman, rather than acknowledging the similarity between his statement and Eumaeus's demonstration of it, criticizes the episode for "not participat[ing] in the logic of styles to the same extent that other chapters do."\(^{84}\) This is most interesting because Goldman earlier stated that "the narrative stance -- or better, style -- bears obvious relation to what has proceeded,"\(^{85}\) an instance which is left unnoticed in the relation of the style of Eumaeus to what has proceeded.

Goldman finds himself, as do others, in a critical Joycean Paradox vis a vis the text. He is in an untenable position because the arrangement of *Ulysses* forces a contradiction inherent in traditional philosophy to surface. To rectify the situation, Goldman would have to posit a "structure of suppositions" which has the ability to make self-referential statements about the relation between language, cognition, and reality. But such an assumption is denied by traditional approaches to cognitive
systems. Douglas Hofstadter calls this ability for something in a system to jump out and act on the system as if it were outside of it a "strange loop." The Epimenides Paradox is an example of a strange loop in language. Bach's Musical Offering is a musical example. Escher's lithograms and Magritte's "This is a pipe" are visual displays of it in pictoral art. The "loop" is also discussed as it is exhibited in Godel's use of two different levels of meaning statements of number theory to prove that truth transcends theoremhood -- a concept called the 'incompleteness' of a formal system. Ulysses is such a system in literature.

To accept the self-reflexive organization of the novel is to confront the most challenging aspects of the novel. Some of these challenges include describing the generative nature of the text. Another is explaining the changed role of interpretation when confronted with the built-in incompleteness of the system. The most direct challenges are to our conventional ideas about "style" and "content" and other terms traditionally used to describe discourse.

Style and content require functional not static definitions, especially in a study which attempts to describe the relationships of the styles or the progression of the episodes. Marilyn French's Book as World is an example of this problem. She is unsuccessful in her intent to consider "the effect of style in each episode." She believes that "only by focusing on style can the basic
the structuring principles of *Ulysses* be revealed . . . what is necessary is a close, chapter-by-chapter reading of the text, with emphasis on discovering the point of view underlying each episode, and on considering the effect of the style on each episode.87 Such a statement reveals an assumption that a "structuring principle" is not to be a coherent process within the text's system, but a fragmented mirroring of style or point of view. Her definitions are circular: "Style in the narrow sense, refers to the particular linguistic and formal handling of the characters and events in a work. A particular style conveys a particular tone; tone expresses point of view." She assumes that the "initial style is "virtually the only one used in the first six chapters."88 How can each episode reveal a different effect of style if at least the first six are the same? But in all fairness to French, the concepts themselves -- point-of-view, style, tone -- conventional as they are, do not apply. They may work with static texts, not with *Ulysses*. A functional approach to matters of style, such as that provided by Peirce, is needed.

A more recent study of the progression of styles by Karen Lawrence is based on the concept of narrative norm, a narrative norm much similar to the early or "initial style" of French. The narrative norm is the "third-person narrative style" in the beginning of the novel, a style which is "denotative" and "non-parodic" and based on
"sympathy between narrator and character." Lawrence includes the first eleven episodes in the "narrative norm," whereas French includes only the first six episodes in the 'initial style.' Lawrence explains: "the narrative conventions established in the early chapters of Ulysses include the presence of an identifiable and relatively consistent style of narration that persists in the first eleven chapters of the book and the tendency of the narrative to borrow the pace and diction of the characters' language. In other words, the conventions include both the continued presence of a particular style and the adaptability of style to character." This seems to be an improvement over French's study because of the phrase "adaptability of style to character," which seems to have a functional purpose vis a vis the whole text. But such is not the case. The adaptability of style is a reformulation of the Uncle Charles' Principle, which we will discuss later. "Adaptability of style" is ultimately not a principle which is used to describe the relationships of the eighteen episodes to each other or to the novel as a whole. As Lawrence writes, the final seven episodes are "a succession of stylistic experiments," some of which are flawed (see the discussion of Nausicaa, pp. 122-3), but none of which have been "prepared" for by the opening of the novel.  

The concept of "narrative norm" in Lawrence's The Odyssey of Styles in 'Ulysses' is flawed from the start and
provides little explanation for the movement of the eighteen styles. She says Aeolus contains "the presence of a power outside that of the initial third-person narration which has claimed authority of the establishment of the empirical world of the novel" (p. 60), but she includes the episode in what she defines as "narrative norm." If the narrative norm is the "third-person narrative style," the presence of a "power outside that of the initial third-person narration" would seem to be a disruption, not a continuation, of the "norm." How "relative" is the "relatively consistent style" in the first eleven episodes?

Lawrence and French both assume a homogeneity in presentation, style, and details in "the empirical world of the novel" in the first eleven (or six) episodes. What is needed is an approach which would show the dynamic interaction among episodes, the interplay between that so-called "third-person narration" and the events being narrated, and even the play between the referential and textual signifieds which place the real world of Dublin and of Joyce in a relation of coincidence or noncoincidence with the textual events. To see the final episodes as "experiments" not prepared for by the earlier episodes is nothing new.

Richard Ellmann's Ulysses on the Liffey is noteworthy for its emphasis on the relationships among the episodes, each which maintains its "self-containedness." Ellmann approaches the episodes in groups of three as they illustrate a particular "supposition" of the text. Yet because
Ellmann's approach is based on knowing what "Joyce evidently had in his mind," rather than on a clear methodology, his explanation is more interesting than it is convincing. Ellmann's own schema describes each episode according to these categories: contraries, coincidences, product, antidote, presiding category, dominant symbol, and Vichian parallels. He explains: "Neither schema [Linati's nor Gilbert's] exhibits the interrelationships in the way that Joyce evidently had in mind, so the total plan has to be put together largely from internal evidence, and this is what I have attempted to do here. The design proves to be much more elaborate than Joyce every formally indicated, yet beautifully simple in its purport."92 What that "purport" is never gets explained clearly. But Ellmann's emphasis on the existence of a "triadic organization" wherein "each triad should embody thesis, antithesis, and synthesis" at least attempts to deal with "the complicated interlinking of episodes."93 Such an attempt was suggested by Gilbert in 1930. No one has named the sets of relationships that obtain among the episodes as thoroughly as Ellmann. But the triads are not well integrated, and they lack a methodology which makes them convincing.

Hugh Kenner continues his explanation of Ulysses' styles in Joyce's Voices. Kenner responds to a challenge to explain what he meant in an earlier work by the sentence "Joyce began Ulysses in naturalism and ended it in parody, understanding more profoundly than any of his followers
that naturalism cannot end anywhere else, and a law like
the hidden law that governs the unfolding of styles in
\textit{Ulysses} brought Hemingway to self-parody at last, as
though, not understanding the history of disclosed by
Joyce, he was condemned to repeat it.\textsuperscript{94} And Kenner's
response is a clever analysis of the move from naturalism
to parody but in newer terms: a move from Objectivity to
something Beyond Objectivity (the titles of his first and
last chapter).

The context of \textit{Ulysses} is given as an environment
which emphasizes Objectivity -- "attention to what was and
was not evidence might deliver the methodiz'd mind from
self-deception, this was a doctrine of which much began to
be heard in England not long after the Civil War. . . .What
acquired prestige . . . was a new mode of literary art,
eventually called fiction, in which the old conventions of
a tale being told were gradually subdued to the new disci-
plines of evidence carefully marshalled. By the beginning
of the nineteenth century the word 'Objectivity' had begun
to attach itself to such disciplines." And Kenner suggests
in his subsequent remarks that \textit{Ulysses}' styles are a
response to and a part of this context of Objectivity:

As the great age of the twentieth-century
Modernism recedes, it grows increasingly clear
that the decisive English-language book of the
century was \textit{Ulysses}, the first pivotal book in
English since \textit{Paradise Lost}. Its example
underlay *The Waste Land*, which terminated Eliot's first poetic period. And it directed the decisive reordering of the early *Cantos* which Pound undertook early in the 1920's. Pound resisted, and Eliot . . . passed over in silence, the fact that *Ulysses* commences in *tacit adherence to the canons of naturalism*, of Objectivity, and then *disorients readers* by deserting them, for reasons that have never been satisfactorily explained. Its *profusion of styles* --what are we to make of that? If we can understand the apparent stylistic caprice that seems to invade and subvert Joyce's massive novel, we may hope for a radical understanding of numerous other matters pertaining fiction, to language, to understanding itself (pp. xii-xiii).

The "profusion of styles" is related to matters which include fiction, language, and "understanding itself." And these, as Kenner asserts, are related to the context of Objectivity.

But, are we led to accept a misleading assumption about *Ulysses* at the outset? On one hand, it is not false to assume that *Ulysses* begins in "tacit adherence to the canons of naturalism, of Objectivity and then disorients readers" -- if we are discussing either the assumption of the common reader of the 1920's, of today, or the historically accepted assumption about the first episodes of
Ulysses. But, on the other hand, when the issue is the "hidden law that governs the unfolding of styles, the assumed objectivity ("tacit adherence to the canons of naturalism") is precisely what needs to be accounted for. By placing the issue of the "unfolding of styles" in Ulysses into a primary assumption that is stated as "the fact" of Objectivity, one is predisposed to accept a few rather crucial assumptions about the text that should be the focus of examination. These related assumptions concern the status of the narrator and of the represented details within the text. The 'canons of naturalism and of Objectivity' require our acceptance, from the start of his discussion, that there is a space of representation within the text which is distinct from the space of representationality (in other words the space wherein characters 'reside' is separate from the space wherein the 'narrator/author' resides or 'presides'). We are asked to accept from the start that a 'fact' is a 'fact' within the text. (We could have been asked to accept every fact as a relation between textual items, such as a relation between a character and a narrator or as a relation between a character's past and present [or present and future] way of thinking, or as the basis of an epiphany, wherein a fact is a relation involved in the process of signification.)

The following key passage from Joyce's Voices shows what becomes to the 'author', the 'narrator', and the canon of Objectivity:
...Objectivity has seemed to work with facts. In the last few hundred words of "Grace," however, we perceive as clearly as anywhere in *Ulysses* that it is working with the resources of language. The effect is impossible to miss. After many pages of dialogue we are offered eloquence, and suddenly we are not hearing the preacher's voice. The presentation is *oratio obliqua*:

He told his hearers that he was there that evening for no terrifying, no extravagant purpose; but as a man of the world speaking to his fellow-men. He came to speak to business men and he would speak to them in a businesslike way. If he might use the metaphor, he said, he was their spiritual accountant. . . .

In its deadly frigidity, this expels any reflection on God's mysterious ways; the story's manner has grown as cold as a Dublin church, and the source of its coldness, we may suddenly reflect, is not the author but the preacher, whose contrivance the author's stylistic contrivance obeys. For nothing is as dependent as Objectivity on language and the rituals of language, Objectivity which had promised to evade rhetoric and make the facts effect their own declaration. Even the opening sentence of "Grace," it grows clear, was shaped by linguistic
contrivance, a delicate oxymoron: "Two gentlemen who were in the lavatory at the time . . . ." Joyce has a way of ringing an opening sentence like a coin on a counter; we respond to the ring; our sensors lock in. And its ring proves to have been the ring of lead (p. 14; emphasis added).

Kenner credits the author with the contrivance of the opening sentence of "Grace" but not the ending sentence, not the contrivance of oratio obliqua. Kenner parallels this with the debunking of the myth of Objectivity.

The first sentence is connected to Joyce: "Joyce has a way of ringing an opening sentence like a coin on a counter. . . . And its ring proves to have been the ring of lead." And the first sentence is connected to Objectivity. Is it not the same Joyce who is responsible in the same way for the final sentence? The final words of "Grace" are emphasizedly the preacher's: "The story's manner has grown cold as a Dublin church, and the source of its coldness we may suddenly reflect, is not the author, but the preacher, whose contrivance the author's stylistic contrivance obeys." Why such a "sudden" reflection? Why is the stress not placed upon the author's achievement of having produced a "ring" of meaning which widens from the preacher to the group of men to their situation in the business of church and state and society in Dublin, in Ireland, and in the
world? Or, why, if the end leads us to believe the beginning "proves to have been the ring of lead," can we not consider the manner in which the beginning leads to an "epiphany" or an awareness at the end?

According to Kenner (in both "Grace" and in *Ulysses*) facts and language, mediated by an Objectivity, suddenly, somewhere unspecified in the text, in some unspecified manner, are no longer objective. Yet this is what we need to account for, not conclude. He writes "Objectivity has seemed to work with facts. In the last few hundred words of 'Grace,' however, we perceive as clearly as anywhere in *Ulysses* that it is working with the resources of language." And earlier, he more explicitly connected the beginning of *Ulysses* with the "tacit adherence to the canons of naturalism, of Objectivity." Once again a seeming connection is made between facts, objectivity, and the beginning. Kenner sets up an opposition between Objectivity and facts on one hand Objectivity and language on the other. Kenner then emphasizes the role of language -- its oblique nature: as Objectivity is debunked, language is asserted. As this happens, the status of the facts, which may be quite interesting, drops out of the discussion. Were the facts actually double in the beginning? Did they somehow point to what follows? Why were the "canons of naturalism" operative, and how did/do they operate in relation to language and the changes in episodes' styles? We find that facts will not be the center of interest, that language has
in the middle or the end become oblique -- and the latter becomes the new interest. The "disorientation" between the beginning and the end is still there. And as the Uncle Charles' Principle takes up the difference between Joyce's control in the first sentence and the character's source of establishing the "manner" ("whose contrivance the author's stylistic contrivance obeys") at the end, we are left with a reflection upon language. The Uncle Charles Principle is a slide rule, it seems, which converts objectivity into language material. Such an interesting analysis does not lead us to any principle which may govern the "unfolding of styles."

Details, objects, and descriptions which seem to be factual or objective are static, monosemic, and bracketed off from the movement of meaning of the text by Kenner. Kenner seems to deny the possibility that at the beginning there is an interaction between the levels of representation and signification. We should recall that the beginning "facts" -- those items in the canon of Objectivity -- were never independent of language, or independent of linguistic/semantic operations. We should keep in mind that "every fact is a relation" and that "a relation is a fact about a number of things" (3.416). We could consider how "Grace" and Ulysses end with a relation posed as "a fact about a number of things." The symmetry between beginning 'facts' seen as relations and the ending relation(s) seen as a fact about a number of things is, of
course, impossible in Kenner's perspective. If we 'suddenly' reflect upon it, an epiphany is a relation or a set of relations understood as a fact about a number of things.

Kenner introduces the Uncle Charles' Principle and the concept of the double narrator to account for the "profusion of styles" and the move from Objectivity to that Beyond Objectivity. The Uncle Charles' Principle is that "the narrative idiom need not be the narrator's" (p. 18; Kenner's emphasis). A double narrator is necessary for the operation of the Uncle Charles' Principle, which works between the two. Kenner writes that Joyce "commences Ulysses, anyhow, as a sort of duet for two narrators, or perhaps a conspiracy between them. . . . [A]top the Martello Tower, an ambiguously double narrator suffices: one voice perhaps better informed about stage-management, the other a more accomplished lyrical technician" (p. 67). One "attends to the chapter's [Telemachus'] housekeeping" and uses an idiom whose "mannerisms, not easy to catalogue, include a certain fussiness about setting and decor" (pp. 68-9). The second narrator fulfills "one office of the Muse in periodically elevating the style, this second narrator has served an apprenticeship on A Portrait of the Artist as a Young Man and become a virtuoso of the Uncle Charles Principle: the narrative idiom bent by a person's proximity as as star defined by Einstein will bend passing light" (pp. 71-2). The second narrator "flaunts skills such
as Stephen covets, hence a somewhat misleading likeness to Stephen's idiom. To perceive him clearly we must wait till Stephen is offstage and the only person present is Leopold Bloom" (p. 72).

Kenner's distinctions deal perceptively with troubling aspects of the text, but the distinctions themselves are rooted in narrative notions which the novel itself has made obsolete. The two narrators can be seen as distortions of a traditional narrator and a non-traditional character. The first is much like a traditional narrator in function, the second so similar to Stephen that we recognize him only when Stephen is absent. There is a need for a new away of talking about the novel's so-called narrator, or arranger, or ventriloquist. But, the second narrator, I believe, functions to keep Stephen's thoughts separated from narrative potential. Stephen's thoughts do not include, in Kenner's discussion, the possibility of Stephen's writing or his concern with writing. Without Kenner's distinction, Stephen's thoughts include aesthetic principles upon which the text we are reading seems to have been based. And the potential unsurpation of the space of representation by the thoughts of the character are the most difficult to explain without an approach to the text which accounts for them, as we shall see.

Two examples used by Kenner to establish the second narrator will be discussed to show the manner in which the
space of representation is maintained in a sacrosanct position.

The first example which keeps the space of representation quite uniform is probably the most disruptive passage in the first episode -- it is about the elderly man and young man who pop out of the water. Kenner writes:

> It is the second narrator who manages such passing triumphs of narrative economy as the emergence of the elderly swimmer:
>
> An elderly man shot up near the spur of rock a blowing red face. He scrambled up by the stones, water glistening on his pate and on its garland of grey hair, water rilling over his chest and paunch and spilling jets our of his sagging black loincloth [22/28].

-- How exact that *rilling* and *spilling*!

[Kenner's emphasis] (p. 72).

These details are said to have the same 'economy' and 'exactness' as the other items in the episode. This example may have been selected because it needs accounting for, because it seems to threaten the very space of 'naturalism' which has been established. Having posited an objectivity, a naturalism, as a static modus operandi within the "initial" text, any seeming deviation must be accounted for.
Kenner both reaffirms the criteria behind his examination and accommodates the challenging exceptions to it by explaining these well chosen examples. Once we challenge the basis of these criteria, especially from a perspective which asserts the operation of the sign process within the text, a perspective which challenges the static nature of textual elements, we want to know why this swimmer appears. Why does he remain speechless? Why does he never reappear? We may have before us a range in emphasis, context, or topic that introduces "higher order arguments." The elderly man will be discussed from a perspective which does not assume a static space of representation in Chapter Three. What makes Kenner one of the most respected Joycean critics is, in part, his creative handling of pressing problems in the text. For example, a possible disruption of the text is used to illustrate the uniformity of the second narrator.

But Stephen's mind is also maintained within the space of representation by Kenner. The second narrator is, according to Kenner, also "uttering passages like the following:

Woodshadows floated silently by through the morning peace from the stairhead seaward where he gased. Inshore and farther out the mirror of water whitened, spurned by lightshod hurrying feet. White breast of the dim sea. The twining stresses, two by two. A hand plucking the
harpstrings merging their twining chords.
Wavewhite wedded words shimmering on the dim tide" ([U 9/11]; Joyce's Voices, p. 71; emphasis added).

Kenner's explanation is that this second narrator is "elevating the style." As "virtuoso of the Uncle Charles' Principle," the second narrator can "assume" the voice of the character within its proximity.

But Stephen's voice is thus denied the same inner thoughts allowed Bloom. Kenner accomplishes this as follows: "the only person on the parapet now is Stephen. These thoughts of woodshadows floating are not Stephen's, not quite, but the sentences that brush them in absorb Stephen-words and Stephen-rhythms, moving us imperceptibly into Stephen's thoughts: 'A cloud began to cover the sun slowly, shadowing the bay in deeper green. It lay behind him, a bowl of bitter waters. Fergus's song: I sang it alone in the house, holding down the long dark chords'"
([U 9/15; JV, 71-2; emphasis mine]

The reason for the distinction-making by Kenner is to keep Stephen's narratorlike thoughts about the principles of artistic construction within the space of representation. And to do this, any narrator-like thoughts are amazingly said to be not Stephen's thoughts at all! No explanation is given by Kenner for why the second narrator "absorbs" Stephen's words and rhythms. Kenner believes that this sentence: "The twining stresses, two by two" is
NOT Stephen's thought; but, he believes that "A cloud began to cover the sun slowly" IS Stephen's thought. Actually the opposite seems more appropriate: Stephen thinking "the twining stresses, two by two" and a rather traditional narrator stating what Stephen may notice in the external environment. Of course the "A cloud" sentence is 'introducing' Stephen's thought, but we may notice that it is a thought about the past ("I sang it alone in the house" can thus be Stephen's). Present thoughts which place Stephen in a potential role of artist are usurped by Kenner's second narrator. The result is that the space of representation is separated from an interaction with the space of representationality.

The dynamic interaction between the space of representation and space representationality -- between represented and representing -- an interaction which is as basic to our enjoyment of Ulysses as it is thematic within the novel, is erased.

Stephen's thought process directly involves the reader in a mediation between the cognitive and communicative aspects of the text. But this has been bracketed off from discussion in previous studies with the concept of the second narrator and with the concept of the "initial style." As we shall see, the functioning of the sign process in Ulysses is actually made transparent within the novel, but this transparency of the sign process becomes a
major challenge, especially to our current notions about reading.

Wolfgang Iser describes Ulysses as "a novel whose 'minus functions' block off the reader's access to his own expectations." Iser neither describes a cognitive process within the novel nor the cognitive process of the reader in terms of what is communicated by the text; meaning is an "experience" which is removed from the communicative aspect of the text. In his discussion of Ulysses he himself asks "what can be the point" of "a novel whose 'minus functions' block off the reader's access to his own expectations." And he answers: "As each established connection gives rise to a network of multivalent interconnections between segments [or episodes], the realized connections themselves undergo a process of constant transformation -- whereas in the traditional novel . . . they served to establish fields which brought about the transformation of the segments that they had linked. But now not only segments are to be transformed by their linkage, the very linkage itself is subjected to the same transformation." Ulysses serves as a point of comparison to the traditional reading process, a contrast established by the process of constant transformation found in the linkages (of traditional novels) itself being extended to the linkages. Little is offered as a means of approaching such transformed transformations except a generalization which sounds like a restatement of undecidability:
Actualization of the text [Ulysses] unfolds itself as a constant restructuring of established connections. The whole process of transformation is thus serial in character. Its object is not to discover a point at which all the established connections may converge; on the contrary, it resists all attempts at integration into a single unified structure, and this continual, onward-moving resistance leads not to chaos but to a new mode of communication. Instead of being compressed into a super-imposed pattern, everyday life can be here experienced as a history of ever-changing viewpoints.\(^97\)

The serial "process of transformation" repeats the reader's serial process of reading. And the result is a "new mode of communication," but just what this new mode is remains unclear except for the possibility that the reader may somehow find a strategy of communication via the conditions inherent in a "history of ever-changing viewpoints."

Iser makes clear that "this does not necessarily mean that such a process is to lead to the enlightenment and reeducation of the reader; what it does primarily is to relegate each established and simultaneously transformed connection to the status of a viewpoint." And the effects of this upon the reader include the following general notions: "the openness of the world . . . is transferred
in its very openness to the reader's conscious mind"; "the reader experiences the historicity of his own standpoints through the act of reading itself"; and "this experience corresponds to the openness of the world, and so the serial variations constantly turn definitive, current, and given world-views into mere possibilities of how the world can be experienced."\footnote{98}

The novel thus seems to have, in Iser's discussion of reader-response, an effect of 'enlightenment'. But Iser denies such an effect of 'enlightenment': "this does not necessarily mean that such a process is to lead to the enlightenment" of the reader. "Leads to" are the key words; to suggest that the text inherently contains that immanent "new mode of communication" would place the burden of proof upon Iser to show within the text the manner in which such a "new mode of communication" operates. And, of course it seems that the kaleidoscopic serial changes he posits makes such a challenge will neigh impossible to accomplish. Thus Iser's assorted insights into the text and into the reading process are worth some consideration, but those insights fall short of a connection between the text and the actual reading process. The general reading process is abstracted from the text and described in isolation from other textual/interpretive problems. As Jane Tompkins explains, Iser endows the process of reading with value despite his emphasis upon the literary text as the ultimate object of attention.\footnote{99}
Brook Thomas has recently shown that "Peirce's concept of the interpreting self, at least as interpreted by Michaels, is the type of interpreter/reader implied by the text of Ulysses." Thomas's distinction between the objective paradigm and subjective paradigm in reader response theory allows him to show that the idea of an autonomous text and the idea of an autonomous reader are equally false. This he derives from the Peircean idea that "the self is already embedded in a context, the community of interpretation or system of signs." And Thomas, though he does not use the Peircean concept of the interpretant in an interpretation of the novel, makes many interesting points about the interpreter/reader that he finds "implied by the text." One such point, made in passing, is that "we rarely learn to foreground the actual words that we read in a novel. Our interest focuses on learning about characters and events. We are 'lost' in the naturalistic tale. Of course we all know that Ulysses disrupts our normal reading process, that our attention is often diverted from the naturalistic tale. But this is not as apparent in Joyce's use of his so-called 'initial style'." The mistake Bloom makes in 'Hades' when he thinks "Eulogy in a country churchyard" is cited as a "cleverness [which] belongs to some realm beyond Bloom, whether we want to call that realm a consciousness, the author, the narrator, the ventriloquist, the arranger, or whatever." Brook Thomas believes that a "mistake" becomes "a portal of discovery
for the reader because it forces us to switch from the naturalistic tale to the tale of the telling." This is quite acceptable. But, rather than explain the source of these mistakes, the phrases "portal of discover" and "tale of the telling" are themselves used to exhibit his main contention: "an appropriate description of reading a work inevitably derives its metaphors from the word described." \[102\]

The strength of Thomas's idea is in his belief that the reader of Ulysses is not autonomous. We have already described the Peircean concept of a community of interpreters in a broader context which asserts other important differences -- such as the idea that there is no autonomous narrator. There is no "transcendental subject" of cognition, for it has been replaced with the process of semiosis, which includes both the traditional narrator/author and the traditional narratee/reader.

Peirce provides us with a new concept of reading, as Thomas shows. The concept of the interpreting self, which Thomas applies to Ulysses, is central to this study. The concept is based on Peirce's belief that there is no "transcendental subject" of cognition. Thomas does not quote Peirce directly, but if we examine the article Thomas uses--by Walter Benn Michaels--we find ourselves directed to Peirce's early articles "Some Consequences of Four Incapacities" and "Questions Concerning Certain Faculties." These return us to where we began this introduction. In
these articles Peirce characterizes modern philosophy, refutes it, and offers an alternative. The "spirit of Cartesianism" is characterized as that which "teaches that philosophy must begin with universal doubt"; that which "teaches that the ultimate test of certainty is to be found in the individual consciousness"; that which replaces "the multiform argumentation of the Middle Ages... by a single thread of inference depending often upon inconspicuous premisses"; and that which "not only does not explain but renders absolutely inexplicable [many facts], unless to say that 'God makes them so' is to be regarded as an explanation" (5.264).

Peirce rejects the 'four incapacities' of the spirit of Cartesianism as follows:

1. We have no power of Introspection, but all knowledge of external facts.
2. We have no power of Intuition, but every cognition is determined logically by previous cognitions.
3. We have no power of thinking without signs.
4. We have no conception of the absolutely incognizable (5.265).

Peirce then traces out these propositions to their consequences. His discussion of hypothesis or abduction, deduction, and induction establishes the validity of his second above idea (above), that "there is no absolutely
first cognition of any object, but cognition arises by a continuous process. We must begin, then, with a process of cognition, and with that process whose laws are best understood and most closely follow external facts" (5.267).

Thus we can see how closely connected the idea of "the interpreting self [as] the type of interpreter/reader implied by the text of *Ulysses*" is to the related ideas of abduction, deduction, and induction. We have already mentioned that this study of *Ulysses* will show that the order of the eighteen episodes becomes understandable if we consider the sections of the novel in terms of abduction, deduction, and induction. The Peircean approach used in this study does not reduce the text to a model but instead allows readers to understand how the text exaults our power to comprehend it. We shall consider the manner in which the arrangement of the novel necessitates such a response because abduction, deduction, and induction are embedded in the order of episodes. We have already provided the basic description of the process of semiosis in the first section of this chapter.

Since then, we have asserted the need to reconsider Joyce's Aesthetic theories as they outline the basic ideas of a revolutionary method of communicating representations in literature. In the following chapter, "The Aesthetics of Musement," we will do just that. The sophisticated ideas on cognition, systems, and processes in the Aesthetic
Notebook will be elaborated. We will thus have a foundation in Joyce's own writings upon which to discuss *Ulysses* as a cognitive system.

In Chapter Three, "'Chrysostomos': The Process of Beginning," the first episode of *Ulysses* will be examined as it exhibits the underlying principles of the novel. The process of abduction, which is initiated on the first page, is analyzed as it relates to the system of the text.

Chapter Four, "Abduction, Deduction, and Induction in the Cognitive System of *Ulysses,*" presents a more detailed, episode-by-episode description of the three stages of inquiry in the novel. The three divisions of the novel are shown as they correspond to these three stages of inquiry in *Musement*: abduction, deduction, and induction.

We have seen that previous attempts to describe the "progression" of styles in *Ulysses*, attempts which are predecessors to this study, have not considered *Ulysses* as a cognitive system. This study will focus on the process of semiosis/cognition in the novel. Future studies of the novel's cognitive process may consider the text from a non-Peircean perspective. Other models of the cognitive process which emphasize levels of cognition rather than stages of inquiry are available, and still others will be developed. Above all, this study hopes to open up new avenues of thought concerning *Ulysses*. 
NOTES TO CHAPTER I


2Eco, The Aesthetics of Chaosmos, p. 50.


4Apel writes, "The characteristic innovation of Peirce's logic of inquiry cannot be regarded as a return to metaphysical Realism or Idealism, but rather as a meaning-critical postulate in the framework of a semiotic transformation of Kant's 'transcendental logic.' This occurs when Peirce replaces the concept of 'incognizable things in themselves' with the concept of the 'infinitely cognizable,' the concept of the 'transcendental subject of cognition with the concept of the 'infinite community' as the subject of the ultimate opinion,' and, finally, the transcendental deduction of the a priori 'principles' of knowledge through the transcendental deduction of the long range validity of the three modes of inference that make cognition possible," in Charles S. Peirce, p. ix. Such a
transformation which both Joyce and Peirce accomplish is not radical in the sense that the basis for such a position is not implicit in the writings of Aristotle and Aquinas, the latter of whom were their main influences (if Scotus can be included for Peirce), but the ideas of Joyce and Peirce are radical in comparison to the mainstream of traditional nominalistic thought.


7Fritz Senn, "Dogmad or dubliboused?" James Joyce Quarterly 17 (Spring, 1980), 243.


12The duplicity involved in communicational situations has been theorized upon frequently since Plato in Cratylus. See Scholes, Structuralism in Literature (New Haven: Yale Univ. Press, 1974), pp. 26-31; Scholes, Semiotics and

Douglas Hofstadter has shown the isomorphisms that exist between brain structures and reality, between form and content in stories, between formal systems and number theory, and between parts which are copies of a whole in Godel, Escher, Bach: An Eternal Golden Braid (New York: Vintage, 1979). Karl Pribram shows that "there is isomorphism between brain organization and the physical world. . . .Isomorphism between brain process and phenomenal experience depends on sensory organization," in "The Distributed Nature of the Memory Store and the Localization of Linguistic Competencies," The Neurological

13 "From Narrative Theory to Joyce: From Joyce to Narrative Theory," in Seventh of Joyce, p. 4.

14 "Idea," in Century Dictionary. This dictionary is mentioned in Ulysses and was the dictionary Joyce probably consulted, since the Oxford English Dictionary was not completed. Charles Peirce wrote all the philosophical and psychological definitions of the Century Dictionary.


16 "arduos laberintos,/ infinitesimales e infinitios/

17 Brook Thomas, "Not a Reading of, but the Act of Reading Ulysses," James Joyce Quarterly, 16 (Fall 1978/Winter 1979), 92.

18 Eco, Aesthetics of Chaosmos, p. 34

19 Aesthetics of Chaosmos, p. 44.

20 Carl Gustave Jung, "Ulysses: Ein Monolog," Europaische Revue, 8 (September 1932) quoted in Eco, Aesthetics of Chaosmos, p. 34.
21 Edgar Poe, "The Murders in the Rue Morgue," quoted by Charles Perice in "A Neglected Argument," (6.460). As Pierce himself notes, a word is capitalized when it is used not in the vernacular but as a term defined (6.452). Subsequent references to Peirce's Collected Works, by volume and paragraph number, are included parenthetically in the text.

22 For a discussion see Apel, Chapter 3, "Peirce and the Tradition, or, From the Critique of Knowledge to the Critique of Meaning," pp. 19-76. Peirce characterizes the nominalistic framework of modern theories of knowledge: "The common, and as I think, erroneous view of the relation of the thing known to the person knowing is as follows: -- First, there is the Subject, the Ego. The Thing Known, is known by an affection of the consciousness, consequently only by its effect. Therefore, a distinction is drawn between (2) the neumenon or thing as it exists -- which is entirely unknown (except, according to some philosophies, by reason) and (3) the Object or thing as thought. (4) There is the affection of the consciousness or Phenomenon and (5) There is the relation of Causality between the Object and the Phenomenon . . . . I [on the contrary] represent the relationship as follows: -- (1) There is the soul (2) There is the field of consciousness in which we know the soul (3) There is the thing thought of (4) There is the power it exerts on the soul (5) There is the Idea or impression it makes on the soul (6) There is the thought or

See also "Nominalism" (1.15-26); "Conceptualism" (1.27-34), "Kant and his Refutation of Idealism" (1.35-39); "Hegelism" (1.40-42). And 2.166-68, 3.4.60, 3.612, 6.93-97.


26"Peirce's Interpretant from the Perspective of Linguistic Theory" in Structure and Content: Essays in


28 Shapiro, "Peirce's Interpretant," p. 16.


30 Most recently, Thomas Sawyer, "Stephen Dedalus' Word" James Joyce Quarterly 20 (Winter 1983), 201-208. Sawyer mentions "the syllogistic system that Joyce seems to have used as a structuring device in Ulysses," p. 201.


33 A genuine sign is, in Peirce's terminology, a third (1.339, 8.332). A sign is a triadic relation between a ground, its object and its interpretant. A "final interpretant" is a "living habit": as Peirce explains, "The deliberately formed, self-analyzing habit -- self-analyzing because formed by the aid of analysis of the exercises that nourished it -- is the living definition, the veritable and final logical interpretant" (5.491). See
David Savin's exceptional discussion of the final interpretant in *An Introduction to C. S. Peirce's Semiotics: Part I*, Toronto Semiotic Circle (Toronto: Victoria Univ., 1976), pp. 48-57. Savin writes, "Any existing regularity could be the result of chance. A genuine law or Third must, in addition, involve a counterfactual conditional. It must be true of a Third that it would exhibit a regular order under indefinitely many unrealized conditions," "Introduction," *Studies in Peirce's Semiotic*, p. 2. Thus when Joyce calls Penelope the "counter-sign" to the novel (*Letters* I, 160) he is, in effect, stating that a "living habit" will be produced in this final episode. This is the reason "we start to see the world in Ulyssenan terms," as Brook Thomas asserts ("Not a Reading of, but the Act of Reading *Ulysses*," p. 90). Savan explains, "What is characteristic of this final . . . stage in the evolution of interpretants is that the guiding principles are themselves subject to deliberate critical evaluation, and that the principles governing the methods of evaluation are also subject to deliberate critical appraisal. . . . The full semiotic effect of a sign if its purpose or intention were to be achieved is the Final Interpretant of that sign. . . . The action of this standard, as it affects and influences each actual Dynamical Interpretant, is what gives life and the power of changing itself to a habit and to a belief," *Introduction to Peirce's Semiotics*, p. 49.
38 Thomas, "Not a Reading of, but the Act of Reading Ulysses," p. 90.
40 Peirce writes, "the principle of continuity is the idea of fallibillism objectified. For fallibilism is a doctrine that our knowledge is never absolute but always swims, as it were, in a continuum of uncertainty of indeterminancy," (1.171). See Buczynska-Garewicz on Peirce's doctrine of fallibility, pp. 21-23.
42 Pribram, "The Distributed Nature of the Memory Store and the Localization of Linguistic Competencies," p. 133.
43 Pribram, "The Distributed Nature of the Memory Store," p. 133.


46 Presiosi, Praxis and Semiosis, pp. 13-14.


48 Joyce may have been making a distinction between rational and empirical psychology based on Michael Maher's Psychology: Empirical and Rational which was reviewed by Peirce in The Nation 73 (3 October 1901), 267-268.

49 James, Pragmatism, p. 5 quoted in an epigraph to Book I, Vol. V of Peirce's Collected Papers. Exactly how Joyce became aware of the philosophy of pragmatism will probably remain undecided. Peirce indicated his own divergence from the other pragmatists by renaming his ideas Pragmaticism.

50 Cassirer, The Individual and the Cosmos in Renaissance Philosophy, trans. and intro. by Mario Domandi (Oxford: Basil and Blackwell, 1963). For Aristotle's law of the excluded middle see p. 12 (cf. P 208); for the part-whole relationship, pp. 178-80; for Bruno, especially pp. 186-91. Cassirer's first studies of the Renaissance appeared in 1906; Individuum und Kosmos first appeared in 1927. Of the many studies of Joyce and Bruno, one of the most recent includes Elliot B. Gose, Jr., The


52 Noon, Joyce and Aquinas, p. 45.


56 Adams, Surface and Symbol, p. 254.


60 Trans. Gail Lenhoff and Ronald Vroon, Michigan Slavic Contributions, No. 7 (Univ. of Michigan, 1977), pp. 57-77.


*S/Z*, pp. 4-5.


Groden, *'Ulysses' in Progress*, p. 204.


Litz, *The Art of James Joyce*, p. 3.

Litz, *The Art of James Joyce*, p. 3.

Groden, *'Ulysses' in Progress*, p. 168.

Groden, *'Ulysses' in Progress*, p. 175-76.


74 Gilbert, *James Joyce's 'Ulysses*', p. 11.
76 Kenner, *Dublin's Joyce*, pp. 241-42.
80 Apel, *Charles S. Peirce*, p. 25.
81 Apel, *Charles S. Perice*, p. 25.
85 Goldman, *The Joyce Paradox*, p. 86.
Craig Werner's review of this book states that Hofstadter's "conclusions concerning the relationship between the levels of 'reality' within intellectual and esthetic systems touch directly on issues of central concern to Joyceans, particularly those working with *Finnegans Wake*," *James Joyce Quarterly* 17 (Winter 1980), 223. Michel Foucault also discusses Magritte in *This is Not a Pipe*, with illustrations and letters by René Magritte, trans. and ed. James Harkness (Berkley: Univ. of California Press, 1982).


Lawrence, The Odyssey of Styles, p. 41.

Lawrence, The Odyssey of Styles, p. 208, p. 53.


Ellmann, 'Ulysses' on the Liffey, p. 2.

Kenner, Joyce's Voices, p. ix. Subsequent references with be included parenthetically within the text.


pp. 185-200. Michaels provides an excellent account of how Peirce's ideas, through Royce (who was heavily influenced by Peirce and who studied with Eliot in Harvard in 1913-14) met the literary scene, pp. 197-8.


102 Thomas, "Not a Reading of, but the Act of Reading Ulysses," p. 90.