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Through the examination of the styles of writing, biographies, and novels of the two modern contemporary American authors John Updike and Norman Mailer, the problem of an author's use of sport in the literary genre of the novel provides a thrust into the relationship of the sport phenomenon to a literary art form. Sport inferences employed by the two authors as each developed the novelized elements of plot, characterization, and setting, directed the organization of the study. As an author and his style are synonymous, the congruency of the authors' sport backgrounds and the allusions to sport in their novels also received examination.

Sport inferences were studied by first examining the biographies and styles of the two authors. Each of Updike's six novels and Mailer's five were then reviewed with particular emphasis on the pattern of usage in each novel. From these patterns, concepts which seemed to structure the sport philosophies projected by each author were drawn for general comparisons of the two.

John Updike, whose purpose in writing is to create illusions of reality to describe middle class American life, employed concepts of reality in relation to organized sport and life concepts in relation to sport activity as he strived to answer his philosophical question, "Why was I, I?" Norman Mailer utilized agonistic sport inferences as he projected his American existential philosophy through the American existential hero of his novels. Personality development and socio-cultural connotations categorized Mailer's sport concepts. The general

comparison of sport inferences of the two authors appeared as sharp in contrast as the purposes of their writings and their styles. However success and failure, life and life concepts, reality, virtues of character, gender roles, socio-cultural environment, and literary inferences served as categories for comparison of the variations of the concepts of the two authors.

The three hypotheses projected for the thesis were upheld. The author's personal sport backgrounds, experiences, and pervading philosophies were reflected in their novels. The purpose of the characters' performances in sport reflected the authors' backgrounds. Distinct patterns of sport inferences as they were employed by each author were consistent throughout the novels by the same author.

Through the scope of the study examined a small segment of sport inferences in literature, the use of the sport phenomenon in literature revealed the relationship of an author's sport knowledges and experiences to his use of sport in his works established the contribution of the sport phenomenon to the style of an author and the structure of a literary genre.

JOHN UPDIKE AND NORMAN MAILER:

"

SPORT INFERENCES

by

Kathryn Jane Upshaw

'''

A Thesis Submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
in Physical Education

Greensboro  
September, 1972

Approved by

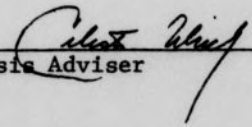
  
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## PREFACE

Physical educators have begun to take an active interest in the relationship between physical education and other disciplines. Sport sociology, history of sport, and sport as an art form are all areas within the complex structure of the sport division of physical education which have received increasing attention among physical educators. With this expansion of interest, it seems appropriate that sport in literature be included as an area of study. Literature is an art form; literature reflects the society of the age in which it is written. Therefore, the body of sport knowledge which is applied through technique to the creation of a literary art form should also contribute to the reflections of a particular age. The process of how an author uses sport in this way has fascinating implications. For the purpose of this research, the literary genre of the novel has been chosen for examination. Obviously, this is only one segment of possible studies to determine the relationship between sport and literature.

I would like to express here my gratitude to Dr. Celeste Ulrich, advisor for this research, who, through her dedication to her profession, has generously offered assistance beyond the duties and expectations of her position. I would also like to acknowledge the members of my family whose patience, aid, and support through the frustrations and ideologies involved in the writing of this thesis have greatly facilitated its completion.



## Chapter 1

### INTRODUCTION

The use of sport in the development of a novel is a literary technique used by numerous authors. Ernest Hemingway, noted novelist and a sportsman, used sport as an important characteristic of many of his better works. The works of Hemingway have been analyzed extensively, citing fascinating implications for sport and literature. Because the relationship of sport and literature seems significant, an investigation to select two modern contemporary authors who also might utilize sport as a novelized tool was undertaken. At the time of this quest, Norman Mailer had just appeared on a television show in which he discussed how he exchanged writing lessons with boxing champion José Torrez. Within the past ten years, John Updike's ex-basketball hero, Harry Angstrom, featured in the novel Rabbit, Run, has been of notable literary examination. Biographical findings indicated a sport background in the lives of both authors and suggested each had a continuing interest in the sport phenomenon. From the initial reflections on the use of sport in the development of a novel, it was decided to expand the scope of the study to include the relationship of the authors' backgrounds to the sport forms alluded to in their novels and to investigate the way in which sport was employed in the development of a novel.

Literary experts have said "A novelist writes about what he knows . . ." (Frohock, 1961:14). The problem for this research has

evolved from the above statement. How do Updike and Mailer incorporate the sport phenomenon into their illusions of reality in their novels? How congruent are the authors' personal sport interests with the sport usages in their respective novels? The design for this study includes the examination of the respective styles of the two authors, a survey of the lives of the two authors, a study of the sport inferences within each novel written by each of the two authors, and an analysis of the relationship of the above findings.

#### SIGNIFICANCE OF THE STUDY

An author may turn to sport allusions in his writings to aid in the representation of a universal or complex perspective of life. Rarely are these allusions to sport studied specifically as they relate to the development of the work. The significance of this study is its focus on the use of sport in literary works.

Most authors draw from their own experiences and knowledge as they develop a work. The sport background of an author would, then, influence the sport allusions used in his works. As the biographical information for both John Updike and Norman Mailer indicates some association of these men with sport, the study of the use of sport in their works in relation to their own experiences with sport is, also, significant. In addition, there is some merit in an attempt to synthesize unique areas of knowledge in a holistic art form; in this case, sport and literature.

#### Statement of the Problem

Through the analysis of the lives and writings of modern contemporary American authors John Updike and Norman Mailer, the allusions

to sport were studied with a view toward understanding the inferences of that phenomenon on the development of the novel's elements of plot, character, and setting. Furthermore, sport inferences were studied in light of style.

#### Design for the Investigation

Investigation of authors John Updike and Norman Mailer as individuals, as novelists, and as sportsmen provided background information for each of the two authors. Each of Updike's novels were read in sequence of publication. The novels and their dates of publication are

The Poorhouse Fair 1959

Rabbit, Run 1960

The Centaur 1963

Of the Farm 1965

Couples 1968

Rabbit Redux 1971.

The same was done for Mailer's works. The novels and the dates of publication are

The Naked and the Dead 1948

Barbary Shore 1951

The Deer Park 1955

An American Dream 1965

Why Are We in Vietnam? 1967.

Allusions to sport were extracted with the reading of each novel. The achieved content of each novel was analyzed as it was developed by the style of the author. Sport allusions as they were incorporated into the elements of the novel were included in a review of each novel. The

broad incorporation of the use of sport in the novels was then investigated to determine concepts of sport which were evidenced throughout the author's style as a novelist.

Sport concepts were studied for significance in the projection of the following hypotheses:

A. The use of sport in the development of the novel will reflect the author's personal sport background and experiences and his pervading philosophy of sport.

B. The performer's purpose in sport will reflect the author's background.

C. Consistent patterns may be discerned in the utilization of sport allusions throughout the respective novels of each author.

A comparison of these findings along with a comparison of the styles and sport backgrounds of the two authors provided the basis for the summary and concluding comments of the study.

#### DEFINITION OF TERMS

In order to analyze the literature in relation to the stated problem, it was necessary to adopt the following definitions:

Play . . . a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is "different" from "ordinary life" (Huizinga, 1950:28).

Game play organized in flexible association forms.

Sport a diverse set or category of activities or organizations of human behavior in which:

One or more persons, designated as performers, move about within an environmental setting which may be described in terms of time, space, and terrain, performing actions which are directed toward an attempt to induce or bring about a series of observable changes in the location and/or configuration of certain specified objects, animals or persons.

While the performers are pursuing this objective, their reactions are governed by the provisions of a set of man-made rules or personal agreements. These rules also identify the procedures to be utilized in evaluating the achievement of the objective or the extent to which the objective was achieved by each performer or set of performers (Metheny, 1969:60).

Modern contemporary American authors those authors who are living and writing in the present.

#### BASIC ASSUMPTIONS

In order to facilitate the research, the following assumptions were accepted:

- A. Available biographical information is comprehensive in coverage of the sport backgrounds of the two authors selected.
- B. Mailer and Updike are representative of modern contemporary American authors.
- C. The novels by Mailer and Updike are representative of modern contemporary American novels.
- D. Both authors' writings include extensions of their own life styles.
- E. Man's interpretation of his society is based on whatever is prevalent: sport allusions are based on sport in its contemporary emphasis.

## Chapter 2

### THE NOVEL AS A GENRE

Man tells stories. The believability in the relationship of the story to life has been observed to follow a specific pattern. Characters who approach the divine in the plausibility of their feats gradually become credible. "Myths of gods merge into legends of heroes; legends of heroes merge into plots of tragedies and comedies; plots of tragedies and comedies merge into plots of more or less realistic fiction" (Frye, 1966:29).

The evolution of the novel and the credibility of its illusions have followed this observed progression in the believability of characters as they act out a story. The term "fiction" implies deception in the creative imaginings of the author as opposed to historical or factual truth. The element of deception comes not from the avoidance of reality; rather, the reality of the novel is the illusion to reality as it is interpreted by the author. But however deceptive or imagined the illusions of reality might be, they must maintain a recognizable relation to life (Warren, 1966:6). Changes in the acceptance of what is believable are changes of social context rather than changes in the literary forms of the novel (Frye, 1966:29).

Early novelists lived in and wrote about an ordered world which contained an all-embracing moral order within its structure (Lehan, 1963:64), stories and characters being centered around the highest levels. The characters could do anything and the laws of nature were

extended and often defied. The early hero bordered on being considered a deity. The superiority of the hero diminished with the rigidly ordered world. The essence of the loftiest potentials of mankind which preoccupied the idealism of early prose declined as the laws of nature became more rigidly upheld and the heroes fell from divine powers to the human faults permitted in the concepts of realism in the novel. Though the believability of the illusions of modern contemporary authors is still considered within the realm of realism, existentialism prevails today as the dominant philosophy. The new existential novels revolve around man in search of the

meaning of identity in the modern world, the nature of good and evil, the possibility of fulfillment in the contemporary society, the course of values in a world without God, and the possibility and meaning of action in an ethical vacuum (Lehan, 1963:64).

Illusions of the new novelists bear relationship to contemporary concepts of life.

In the new novel of existentialism, the existence is considered above the essence, the "existence precedes essence" (Lehan, 1963:79). Robbe-Grillet, a French existential novelist, has comprehensively discussed the trend of the new novel. The path which seems inevitable is animated by the passion to describe (Robbe-Grillet, 1965:14). The novelist, however, must do more than merely describe. "Between the dream (of the early novelists and the reality of the more modern novelist) is the realistic description, without comment of the thing, an embracing of what is" (Weinberg, 1970:132). The description concentrates on man's existence in his place in the environment of the novel. Man's place in his environment takes priority over his actions. The author holds interest with concentration on the movement of the description of man's place, thus enhancing the significance of mere description (Robbe-Grillet, 1965:148).

The movement of the description is the substance which is crafted by the modern contemporary novelists. Description has penetrated the genre of the novel and instigated its evolution from the modes of the past.

From day to day, we witness the growing repugnance felt by people of greater awareness for words of a visceral, analogical, or incantatory character. On the other hand, the visual or descriptive adjective, the word that contents itself with measuring, location, limiting, defining, indicates a difficult but most likely direction for a new art of the novel (Robbe-Grillet, 1965:24).

#### THE ELEMENTS OF THE NOVEL

Description may be the trend for the new novel. However, that which the novelists describe remains the elements through which the description moves. "Analytical criticism of the novel has customarily distinguished three constituents, plot, characterization, and setting" (Warren, 1966:10), and the interpretation of the constituents of the three basic elements has altered in conjunction with the changes in modes of reality.

#### Plot

The narrative structure of the novel has traditionally been called the plot (Warren, 1966:10). The main story often has been narrated as the central message from the author but subdivided into various episodes or incidents. The subdivisions or plot-elements are referred to as motives; the composition of the motives is referred to as motivation. Motivation, then, has a double meaning as the structure for the narrative composition and as the inner structure which is the author's interpretation of the psychological, sociology or philosophy of why men behave as they do in a given culture (Warren, 1966:12). The



plot of earlier novels has dealt with the sequence of the characters' actions which were responsible for relating or symbolizing an inner depth of the structural order of the world. The plot has "long since ceased to constitute the armature of the narrative" (Robbe-Grillet, 1965:33). In the new novel, the existence of the characters in a world that "is" sets the stage for the conflicts originating from their own passions and crimes as the foundation for the depth and breadth of the author's message (Robbe-Grillet, 1965:34). The story and the acts still exist; however, they concentrate less on the actions of conflict than on the inner sanctions of the conflicts within man's mind. Significance switches passions from the sequence of actions of conflict to passions of conflict which result in an act.

#### Characterization

Whether actions or passions dominate the narrative structure, it is the characterization through which the conflict moves. The author invents his characters in accordance with the movement of the conflict in the plot. If actions dominate the conflict, the character must be of a stature consistent with the demands on the potential of the character to act. Likewise, if passions or crime dominate, the character must behave consistently and reliably within the believability of the passion or drive and the effect it has on him.

The hero is the central character. Many of the new novels include multi-hero characterizations of intricately developed personalities. The hero may be superhuman in his powers and in the defiances of natural laws he must overcome. He may be more believable as superior to most humans, therefore their leader, who encounters the laws of nature sometimes with success and sometimes with failure. However, the

heroes of the new novel are either of low mimetic or ironic mode. If the hero is neither superior to his audience, the reader, nor his environment so that he incites the sense of humanity and pays tribute to realistic probability of the reader's own realm of experiences, the hero is considered to be of the low mimetic mode found in most realistic fiction. If the hero is inferior in power or intelligence so that the reader places him in condescension and passes judgment, looking down on the hero as being in a state of bondage, in a state of frustration, or absurdity, the mode of the hero is ironic. The elements of probability of experience may or may not be present (Frye, 1966:24). As an element of existential fiction, one of these degrees of hero classification is involved with personal identity within the structured world of the novel.

The existential hero is the source of his own being (Lehan, 1963:65); his fate tends toward self-destruction, irrationality. The existential theories to which the character belongs provide the external forces of fate.

The fate of the character is either positive or negative to the result of the conflict. Setting is the environment in which the outcome of the conflict is resolved (Robbe-Grillet, 1965:27).

#### Setting

Traditionally, the environment surrounding the characters has set the stage for their conflict, providing them the necessary tools for their actions. Symbolism of the elements in the setting has greatly contributed to the interest of the movement of the description. The new novel does not reject symbolism; but it has been said that the symbolism has developed into atmosphere or tone (Warren, 1966:10).

The setting or atmosphere saturates all aspects of the novel and often is manifested as the state of mind of the characters rather than the mere space, scenery, or objects of the environment of the characters' existences.

The elements may be subdivided into three basic parts, plot, characterization, setting. This trichotomy is a superficial division, however, in that the three are blended into the world of the story which the author creates.

This world or Kosmos [sic] of a novelist--this pattern or structure or organism, which includes plot, characters, setting, world-view, 'tone'--is what we must scrutinize when we attempt to compare a novel with life or to judge, ethically or socially, a novelist's work (Warren, 1966:8).

#### CONTENT OR STYLE

All which the author wishes to convey to the reader must be self-contained within the world he creates. The content of the world of the novel must be sufficient to encompass the illusion of the infinite possibilities of that world besides those which are literal for the novel. The story serves to report the events, the actions of the characters, their motivations, morality implied or revealed (Robbe-Grillet, 1965:42). However, content extends beyond the story.

Modern criticism has shown us that to speak of content as such is not to speak of art at all, but of experience; and that it is only when we speak of the achieved content, the form of the work of art as a work of art, that we speak as critics. The difference between content, or experience, and achieved content, or art, is technique (Schorer, 1966:141).

Analysis or criticism is an examination of technique, style. The style of the author is his own being applied to the elemental tools of the novel to achieve a finished product. Capturing a style within the confines of a novel makes the work an art, an achieved content.

Buffon's definition has been widely accepted as one of the best attempts to capture in words what a novelist does to his talent to capture it within the structure of a novel.

The writer and the reader would phrase it differently, though the thought of each can be exactly translated into that of the other. The writer, eyeing the primary problem of his craft, would say: "Style is a substitute for the man himself, for my person is absent when I am read. Therefore in print I must compensate for my absent qualities; I must somehow make words and phrases convey what I can ordinarily convey by posture and gesture, by dress and the circumstances of a given situation, by tone of voice and facial pantomime, by actions, and, in short, by my whole living personality. Hence, I give much thought to tone and to rhythms, to preparatory scaffolding and connective tissues, to insure so far as I can that the reader shall experience me as if I were indeed present." The reader would reply: "We know people by their behavior. Writing is necessarily one form of behavior. We watch the style of that form of behaving, and thus we come to know what the author is like. In truth, style is the man himself" (Munson, 1969:12).

From the writer's point of view, words are the author's tools and his style or craft is the means through which he must convey an experience to the reader, and sometimes to an art in the process. Having only the words of the author to represent his entirety and all that he has been, the reader receives the experience, processes it within his own realm of experiences and, from the combination of the two, acknowledges the achieved content and recognizes a whole new experience. It is the relationship which the reader focuses upon ". . . the relationship between life and art: that the greater the craft of the novelist, the greater justice he will do to the experience" (Scholes, 1966:140).

For the function of art is never to illustrate a truth . . . or even an interrogation . . . known in advance, but to bring into the world certain interrogations (and also, perhaps, in time, certain answers) not yet known as such to themselves (Robbe-Grillet, 1965:14).

### Chapter 3

#### JOHN UPDIKE

A discussion of John Updike as an individual, a sportsman, and a novelist, and a review of each of his six novels constitute the body of information from which Updike's usage and concepts of sport are drawn.

#### BIOGRAPHY

John Updike, in reviewing his life, mused, ". . . in fact-- let it be said now--I was not a very daring boy" (Updike, 1962:161). No biographical records show statements to contradict these words. Born in 1932, and reared an only child of a school teacher and respected community citizen, Updike had no crippling family circumstances nor extraordinary life experiences to set him apart from the American middle class. Reared in a small town, Shillington, Pennsylvania, in the security of stable home, complete with a set of grandparents under the same roof, and a strong Lutheran upbringing, Updike justified being accorded family pride by virtue of his journalistic achievements as editor of his high school paper rather than as a hometown athletic hero. He continued his collection of literary awards at Harvard where he was president of the "Lampoon." Graduating summa cum laude in 1954, he expanded the breadth of his talents studying art on a Knox fellowship at Ruskin School of Drawing and Fine Art, Oxford University (Geller, 1961:67). He continued to be recognized for his talent and

was supported in his ambitions as he received the Richard and Hilda Rosenthal Foundation Award for writing the Poorhouse Fair, his first novel. Later he was awarded a Guggenheim grant to allow him to write Rabbit, Run. In his mid-forties, with a background typical of the middle class, a living example of the American of whom he writes, Updike is Democratic in his governmental tendencies and supports the organized religion of the Congregationalists.

Interviews with Updike and comments on his personal life are scanty; he chooses, instead, to speak through his work. However, having a preoccupation with youth and his own experiences in his writings, he has published an account of his boyhood memories. From the brief autobiography, Updike provides insights regarding his own recreational sport activities and his use of sport in his writing. Perhaps his philosophy of playground participation says it best, "Reality seemed slightly more intense at the playground. There was a dust, a daring" (Updike, 1962:68).

Etched in his memory are the earliest days Updike spent on the community playground.

Up from the handball diamond, on a plateau bounded on three sides by cornfields, a pavilion contained some tables and a shed for equipment. I spent my summer weekdays there from the age I was so small that the dust stirred by the feet of roofball got into my eyes (Updike, 1962:178).

At the local playground, the neighborhood children of Updike's boyhood developed ball handling skills through one of his favorite games, roofball. He vividly portrays the heirarchy of skills he developed as he progressed toward the prominent position at the head of the playing line. His review of roofball is Updike's only comment or reference, by himself or by others, to the degree of skill he developed in any sport.

Though the playground area is central to his early play activities, other sports areas in the community are included in Updike's childhood memories. "The softball field with its triptych [three paneled] backstop, was nearest us" (Updike, 1962:158). The school's cinder track and football field with the tennis courts just beyond were also visible from his home (Updike, 1962:158).

In remembering his younger days as a schoolboy, recess and the introduction to the game of soccer early in his life are more lasting than the lessons of the classrooms. "Whoever, at soccer, kicked the ball over the fence into the Snitzzy's yard had to bring it back. It was very terrible to have to go into Snitzzy's yard, but there was only one ball for each grade" (Updike, 1962:173).

As a young boy, Updike was typically American in his loyalties to the nearest professional baseball team (Updike, 1962:170-171). This spectator interest in baseball was evidenced by Updike again in adulthood after leaving his job with the "New Yorker." One of his prose works, "Hub Fans Bid Kid Adieu," is a first person report of Ted Williams' last baseball game. Updike refers to the work as a "five day labor of love" and fondly relates the lead-up to the work.

For many years, especially since moving to greater Boston, I had been drawing sustenance and cheer from Williams' presence on the horizon, and I went to his last game with the open heart of a fan. The events there compelled me to become a reporter (Updike, 1965a:viii).

His boyhood days show early beginnings of Updike's continuing interest in tennis. "On one side of the house I spent hours with a tennis racket, banging a tennis ball against the wall of white-painted brick while Mr. Kegerise, an invalid up the street, watched from his porch" (Updike, 1962:157). Updike's portrait for the cover of Rabbit

Redux, his most recent novel, catches him in the follow-through of a tennis serve.

In a biographical sketch of Updike, he himself lists golf and touch football as hobbies (Ethridge and Kopola, 1962:257). In his book Assorted Prose, he satirized the intricacies of the step-by-step golf lessons found in many golf manuals (Samuels, 1969:8).

Sport appears to be a recreation or diversion for Updike. Reflections from his boyhood also indicate his regard for individual sports as symbols of affluence. There was an estate, the Dives estate, for which he has memories to support the indications. "There were tennis courts, and even--can it be--a few golf flags. In any case there was a great deal of cut lawn, and gray driveway, and ordered bushes. I got the impression of wealth as a vast, brooding absence, like God Himself" (Updike, 1962:165).

Although Updike's background shows much evidence for interest in sport, Samuels, a noted critic of Updike, has observed the physical status of Updike's major characters to be the antithesis of the health and vitality ostensibly obtained through exercise. "In Updike's autobiographical fiction, the gifted, sensitive young men are usually isolated from their peers and deficient in health. (Updike himself failed his army induction physical because of allergies, . . .)" (Samuels, 1969:13).

Nowhere in Updike's sport background does there appear any indication of a desire for intense competition in sports. All indications tend to favor Updike's support of participation in sport as being superior to striving for a win. Appropriately, in keeping with the emphasis on participation, the title of one of the rare interviews with Updike alludes to victory and defeat; Updike's status as an author



is questioned by the interviewer. "Can a Nice Novelist Finish First?" (Howard, 1966:74).

Examination of Updike's biographical information provides insight into the experiences of the author's life and the experiences related through his works. However, "Nothing in John Updike's life seems adequate preparation for the private terrors of his characters" (Time, 1960:108). Updike's notoriety as an author, it is generally agreed, is derived from his vibrant descriptions of the emotions, feelings, and moods, mostly feelings, which carry his characters through a day (O'Connor, 1964:209). He specializes in the development of a character's inner thoughts and reactions as the conflicts of the plot motives are encountered. Detailed description is Updike's modality for tracing the attitudes and emotions through actions and reactions of characters in plot situations. Updike suggests that the reflection of the private ego is essential in examining the question, "Why was I, I?" (Ethridge and Kopola, 1962:257). Updike has personally considered this question as the base from which his work stems.

Though the philosophical basis of this question involves the essence of man, Updike's characters pursue answers through the existential element of existence. The characters explore the existential concerns of identity, fulfillment, and value structure as ironic representatives of American people surrounded by absurdities of life. Further evidences of Updike as a new novelist come with his concentration on the attitudes of the characters as they act rather than deliberation of action and the significance of an act. Updike distinguishes himself most explicitly as a new novelist by avoiding the projection of answers for his characters who may be praised or condemned. Any

moralistic implications or determinates of good and evil are the imposition of the reader's standards on the character as they pursue their quest for the philosophical significance of being through the episodes of the novel.

As Updike and his characters are bound to action in their search for answers to the philosophical question "why," freedom comes from understanding occasional glimpses of reality rather than from the action which surrounds a quest for realistic revelation. With the resulting freedom life, then, is redefined by a change in attitude which is the result of freedom (Samuels, 1969:23).

Concepts of attitude, freedom, and reality are vague and often dependent on the reader's interpretation of the characters' existence which circumvents a complete understanding of "why I was I." Updike readily admits the ambiguities which are evident in his works. He also adds his reason for the obscurities. "'I don't wish my fiction to be any clearer than life'" (Time, 1960:108). Such a statement suggests an admittance from Updike that he does not see himself as a prophet with answers for the process of obtaining freedom from soul searching nor solutions for social ills by avoiding judgment of his characters' acts as good or evil.

Action is not the primary means for gleening philosophical insights from the characters as they plod through their conflicts. Though there is a point to the action, for Updike, the creation of action rather than the establishment of the point is primary.

More exactly he trusts that action, if described truthfully enough, will establish its own point, make us aware of some possibility inherent in human behavior. And since he believes that human behavior is always ambiguous, Updike wants his stories to reflect this fact (Samuels, 1969:10).

Critics have viewed Updike as one with an eloquent craft for expressing the intricacies of life, seeing in him the potential as the greatest literary figure of his age (O'Connor, 1964:205). Updike describes brilliantly every aspect of the cosmos he creates, overlooking no detail. His mastery of language for description has awarded him consistent recognition, some more favorable than others. "Though occasionally drawing attention to itself, his prose is always precise and supple, equally adapted to fine emotional nuance and the painterly objectivity with which he limns [delineates] the world" (Samuels, 1969:5), Updike's mastery of language has kept him high in the ranks of notable authors.

Few question Updike's ability to manipulate words. However, there are varying degrees of skepticism for the value of his content and purpose.

John Updike is a brilliant writer who has so far failed to write a brilliant book. Admiring readers who have watched him warm up for the last several years, exhibiting his perfect half volleys and cable-knit sweater, soon may begin to wonder when he is going to get on with the match (Time, 1962:86).

Other critics are not so kind as to acknowledge a spark of potential for Updike as a writer. Norman Mailer thrusts Updike with a stabbing degradation for his literary efforts. "'Updike tends to become confused when the action passes, and so he cultivates his private vice; he writes'" (Ethridge and Kopola, 1962:257).

No matter what degree of appreciation one holds for Updike's prose, general trends indicate that he is noteworthy as a modern contemporary author.

REVIEW OF THE POORHOUSE FAIR

The conflict in The Poorhouse Fair is between the lethargy of old, retired inmates and aspirations of the young caretaker who adds his own meddling efforts to the rigid bureaucratic policies dictated for the county-supported poorhouse retirement farm. The inmates have no interest in any changes or intrusion of the habits and patterns in the daily lives they have sculptured for themselves over a lifetime. Their interest in death is matter-of-fact rather than morbid. Utmost in their concerns is the desire to be left alone, to remain as individuals in every respect, as they proceed through another day toward dying.

Conner, the unperceiving young adult supervisor, cannot recognize the inmates' basic need to be left alone in their aged existence. Conner is the personification of youth, idealistic in his utopian illusion of vigor and health for the inmates. He desires to be their hero, leading them through recreational leisure to perpetual vitality. His dreams conjure up pictures of his charges in health, tossing a ball and frolicking, "legs and torsos scissoring in sport" (Updike, 1959:125). Like all else, the pleasures of health, strength, and activity of Conner's imaginings disinterest the aged who are only occupied with waiting for death.

Taking too literally the title and authority of his position, Conner exerts his sovereignty over the lives of the aged as well as the maintenance of the poorhouse confines. In the primary stages of the build-up of hatred for Conner and all he represents, the elderly residents are sorely antagonized by Conner's attempts to equalize each

resident by his gift of giving a chair to each inmate, personalized with a metal plate. It is an act interpreted by the old people as similar to the issuing of army identification tags.

The preliminary events for the annual Poorhouse Fair catalyze the bitter resentment of the inmates into the physical attack on Conner. The foreboding atmosphere is enhanced by rainy weather and the screech of the band hired for the day. A delivery truck crumbles a corner of the stone fence as it leaves the imprisonment of the farm. Some of the men rush to help Conner collect the stones. The peak of antagonism approaches as Conner characteristically tries to protect the feeble bodies of the men who are merely lingering in life by rejecting their help. "Before he could protest the small wiry man had seized the ends of the stone in his own two hands with an angry sound and carried it to the wall. Showing off. [Conner's sentiments.] Most of the male inmates had been laboring men" (Updike, 1959:130). Not to try to help would have been a repudiation of all that had justified their lives, their contributions to society. The climax of the conflict is reached when the inmates turn on Conner, heaving stones at him as if performing feats of strength for the old men similar to those of weight-lifting competition.

The fair goes on in the face of the internal animosities of the farm. Updike skillfully brings life of the town community inside the poorhouse farm walls during the course of the fair. In a carefully structured panorama of dialogue tidbits of local gossip, teenage sexual curiosity, and the playful energy of children become familiar to the inmates once again. The scope and rapidity of the survey of fair-goers provides a sharp contrast to the plodding trivia of the inmates' lives.

Through the alleged wisdom of years of the aged, the young Updike practices his first exercises in painting the middle class American scene. His observations are keen; his portrayal is penetrating; his views of social injustice to the aged are ponderous. His first novel is of literary notoriety in its smoothness of style and believability in his description of being old and unwanted, and not caring.

#### REVIEW OF RABBIT, RUN

The boundaries of the basketball court are gone; the screaming demands of a wife, a child, and a job have replaced the cheers of the crowd. Harry Angstrom clings to his basketball nickname, Rabbit, and the glories of his past as he searches for meaning in the events of Updike's Rabbit, Run. No referees judge him right or wrong as he tries to escape Janice, his pregnant alcoholic wife, and the vulgarity of his job as a salesman of Magic Peelers for the local five and dime. Updike cleverly designates Angstrom's vacillating neuroses and security with the use of the nickname Rabbit and the given name Harry.

For the opening stages of the novel, Angstrom is an ordinary man walking home from the five o'clock world. Harry enters the background of tennis shoes and basketball of a neighborhood scrimmage. He is unnoticed by the boys who are engrossed in their sport. "They're doing this for their own pleasure, not as a demonstration for some adult walking around town in a double-breasted cocoa suit" (Updike, 1960:3). Unable to resist the temptations of the feel of the ball in his hands once more, Harry joins the game. At first he, too, is unaware of anything but the challenge of putting the ball through the hoop. "That old stretched-leather feeling makes his whole body go taut, gives

his arms wings. It feels like he is reaching down through years to touch this toughness" (Updike, 1960:4).

The mastery of a round ball launches visions and memories of the times when his skill was the manifestation of the best he could be and his best entitled him to prestige in the town. Everyone knew his name; everyone applauded his skills. Harry remembers each step, each basket, each victory that made him a town hero. "You climb up through the little grades and then get to the top and everybody cheers; with sweat in your eyebrows you can't see very well . . ." (Updike, 1960:5). Updike draws a double meaning from vision hampered by the sweat of effort. Sweat makes the basket and other teammates difficult to see. The same sweat also veils reality off the court and out of the spotlight for the ex-hero, Rabbit Angstrom. He longs to remain in the secure confines of the basketball court where he knows and understands the rules and limitations within which he must move rather than to accept the hopes and challenges in the vastness of reality and responsibility.

Now he is married to a once lovely young woman who is burdened with a cheap salesman's salary to support her illegitimate first born, her rampant drinking habits, and the unborn child she is now carrying. Happiness and gratification do not come from this second-rate marriage. Rabbit no longer receives fulfillment from his trite memories of basketball. Unwilling to release the worn-out images of the past, Rabbit, nevertheless, is cognizant of the inability of past memories and reputation to occupy the present vacuum of his life. Without the security of basketball, Rabbit can see no hope, no purpose for the future. "He imagines himself about to shoot a long one-hander, but he feels he's

on a cliff, there is an abyss he will fall into when the ball leaves his hands" (Updike, 1960:14).

Reaching a peak of frustration, Harry recalls the wisdom of his old coach and seeks him out in his attic room above the local bar. Marty Tothero, second only to Rabbit's mother in the power he has held over Rabbit's life, is still Rabbit's vision of strength, the one who will give him the answers now as he had in the past. But, ousted by scandal from his pedestal as coach, Tothero has degenerated into the wallows of wine and women. As Rabbit turns to him for guidance and advice, Tothero only twists tighter the corkscrew of Rabbit's confusion by leading him to the pleasures of Ruth, a prostitute, and further away from the responsibilities of Janice, his son Nelson, and the unborn child. Rabbit blindly follows Tothero's lead, explicitly trusting his wisdom and knowledge for life in the same way he trusted his knowledge about basketball.

Not betraying his faith in his ex-coach's greatness when Ruth refers to the old drunkard as a bum, Rabbit retaliates with, "'He's not a bum he's my old coach'" (Updike, 1960:56). The vehemence of his comeback to Ruth reinforces the strength of past memories and the esteem which he holds for the withered idol. Rabbit listens to what Tothero tells him. Characteristic of a coach, "he was always telling you something" (Updike, 1960:53).

Updike allows Tothero a brief spotlight to elucidate the rectitudes of coaches. Throughout a meal, Tothero expounds on the dedication of a coach to the development of a player's head, body, and heart. Taken out of context, this speech on a coach's concern for the development of a person's "three tools of life" (Updike, 1960:60),



is a majestic oration to the superhuman image of coaches. According to Tothero, a coach's solemn opportunity in life is to instill in his players, "the will to achieve. I've always liked that better than the will to win, for there can be achievement even in defeat. Make them feel the, yes, I think the word is good, the sacredness of achievement, in the form of giving our best'" (Updike, 1960:61). The valor of such undaunted guidance, however, ironically is delivered to the audience of Tothero's has-been hero and the two prostitutes indulging in half-drunken stupor preceding a long night of togetherness.

Rabbit's worshipful coach-player relationship is upheld even as Tothero is dying of a degenerative disease. Tothero manages to mumble heroics of his guiding influence on the great Rabbit Angstrom from his hospital bed. "'When I'm dead and gone remember how your old coach told to avoid suffering'" (Updike, 1960:279). Again, there is irony in the appearance of wisdom and the reality of the suffering and failure of both men.

Tothero has precipitated the aimless race for Rabbit by introducing him to Ruth. He moves from the chains of responsibility of Janice to a short-lived escape with Ruth. Living together within the make-believe realm of love for each other, the two share many experiences. Quite by coincidence one evening, Rabbit and Ruth encounter an ex-teammate of Rabbit's and customer of Ruth's. Now it is Rabbit's turn to be the fool, the hero turned sour just as Tothero was exhibited as a fallen idol before. Perhaps the most cutting blow comes from Harrison's barb to Rabbit's lack of manliness for not playing football in order to protect his delicate basketball skill. Suffering jabs to his image, Rabbit's retaliation takes a biting hunk from Harrison's

recollections of his own rough, hot-shot heroics for the team. "On a basketball team, you see, whenever you have a little runty clumsy guy that can't do anything he's called the play-maker" (Updike, 1960:177). Rabbit's urge to compete does not allow him to drop Harrison from his mind until Ruth has assured him there is no comparison between the two as sex partners. She lies to him. "You're not at all the same. You're not in the same league" (Updike, 1960:186).

Ruth herself, as a part of Rabbit's run, is surrounded by the antithesis of the intrinsic values from sport which Rabbit suffers to find again. Unskilled, unattractive, overweight, the other, more popular girls ran circles around her in hockey. Demerits were more agreeable than the anguish of appearing in that "baby suit of a blue uniform" (Updike, 1960:147). The other girls, the appealing ones, readily found their boyfriends and their fun. She, Ruth, has turned to the streets to supply her with men. Time and attention have not improved her skills nor her soft, lumpy physique. Rabbit cannot restrain judgment of her skill. "Ruth was funny. Her bowling was awful; she just sort of paddled up to the line and dropped the ball" (Updike, 1960:114). She does not fulfill Rabbit's search for the high level, the satisfying life he runs in circles to find.

In the past, basketball has assumed a spiritual role in his life as an ambition and motivation. For basketball, he could give his best effort. Now the drive and the effort are gone. An episode with an Episcopal minister borders on the answers Rabbit seeks to find, or at least, slows his running pace. The golf course where Rabbit used to caddy is the field for replanting Rabbit's conscience and sense of responsibility. On their first trip to the golf course, Rabbit

experiences a suppressed desire to relate to someone. "He wants to bring something of himself into the space between them. The excitement of friendship, a competitive excitement that makes him lift his hands and jiggle them as if thoughts were basketballs . . ." (Updike, 1960:126-127). The something which Rabbit can offer refers to his first-rate basketball playing and his second-rate marriage (Updike, 1960:105).

The deep confidence and respect which the two men establish on the golf course is a slow process, one whose benefits are incomprehensible to others. To Reverend Ecckes, "Playing golf with someone is a good way to get to know him" (Updike, 1960:151). To Rabbit's mother-in-law the golf afternoons are an ineffective waste of time; Rabbit has not returned to Janice and Nelson (Updike, 1960:154). To a fellow minister, Ecckes is "selling his message (of God) for a few scraps of gossip and a few games of golf" (Updike, 1960:170). Yet, when Janice is in labor, it is Ecckes who reaches Harry and Ecckes who has faith in the stability of Harry's return to Janice, Nelson, and the new baby Rebecca.

Harry is faithful until his restlessness causes him to run once more. Janice gets drunk and accidentally drowns Rebecca in a tub full of bath water. Now Rabbit's running has murdered his daughter and reality of life and death can no longer remain illusions. Updike reveals the meaning of life and death to Harry in a dream preceding Rebecca's funeral. Harry is alone on a large sporting field. Two disks, a light and a dark, maneuver in a pattern explaining life and death to Harry. "With great excitement he realizes he must go forth from this field and found a new religion" (Updike, 1960:281-282). At this point in the novel, Updike achieves the symbolism and aspirations of an idealist.

Harry Angstrom holds within his vision the potential for finding meaning outside of the faded spotlight of his days as a basketball hero. The realization of hope comes as though Harry were saying in full revelation to himself what he previously said to Eccles: "I once played a game real well. I really did. And after you're first-rate at something, no matter what, it kind of takes the kick out of being second-rate" (Updike, 1960:105). Harry possesses the clarity of vision and aspiration to be first-rate again, in life this time rather than in dusty memories of basketball. He has not given up; he is still fighting.

But whatever potential shone through momentarily in the dream, blurs before Rabbit's eyes as, standing by the little grave, Janice overtly accuses him of killing Rebecca. Rabbit runs, again. While he is running his thoughts shift from the hopes and understanding of the previous night back to the muddled searching of his soul.

Funny, how what makes you move is so simple and the field you must move in is so crowded . . . . It's like when they heard you were great and put two men on you and no matter which way you turned you bumped into one of them and the only thing to do was pass. So you passed and the ball belonged to the others and your hands were empty and the men on you looked foolish because in effect there was nobody there (Updike, 1960:306).

Because basketball means so much more than a game, a fulfillment of spiritual and moral needs, of an ordered, specific defined and understood structure, the realities and responsibilities of life off the court baffle Harry. He does not know how or where to find a part of life to substitute what he cannot relive. Instead of answers, he finds questions. Instead of an end to his running, he is trapped in an unending unfathomable maze through which he runs and runs, never stopping, never winning.

REVIEW OF THE CENTAUR

Stories of father-son relationships tend to praise the father, respecting his strength and wisdom. However, the father-son relationship in The Centaur is not an idealistic, heroic presentation of George Caldwell, a high school science teacher, teaching in the school his son Peter attends. Caldwell is portrayed as a mild-mannered man who is battered by the demands of the school system. His son Peter, an immature, physically frail teenager during his high school days, narrates the story from his present lifestyle of a poet. Through Peter's recollections is gleaned the pervading concept for the book: What is effort worth? The plot motives, presented from Peter's viewpoint, involve tedious trials of his father's subservient roles and the pressures which wear him down with each seeming failure.

The title of the novel refers to Updike's use of the mythological story of Chiron, the half horse, half man centaur, who was inflicted with an unhealable wound from a poisoned arrow. This analogy is used to heighten the frame of the school situation and emphasize the suffering of Caldwell's martyrdom. The analogy serves to "lift us over the accidents of the affluent world . . . or, better, to stay there and yet be able to view it from a distant time and place" (O'Connor, 1964:212). Caldwell is the maimed Chiron. The wound is analogous to the personal injury his sensitive nature suffers from those who do not acknowledge nor respect the love and dedication of the man as a teacher. The unjust circumstances endured by Caldwell restrict the heroics of the man, and, in such an environment, Peter fails to recognize and value his father's attributes. Looking back to his days as

a high school student in a materialistic world where money and the tough all-American image reign, Peter sees his father as a man who succumbs to the demands of his low-paying, overloaded teacher's position to provide the opportunities he believes necessary for the development of his students' character.

A man who plays squarely by the rules, Caldwell never seems to win. He is subservient to the principal, Zimmerman, whose hypocrisy and shrewdness are evidenced by his stealing of basketball game tickets for the church. The principal is quick and crafty in his exertion of authority over the teachers as he was in his own high school career. "Zimmerman's first fame had been as a schoolboy track star. Strong shouldered, lithe limbed, he had excelled in all tests of speed and strength--the discuss, dashes, endurance runs" (Updike, 1963:33). Having experienced success in the past, Zimmerman must seek always to win. As a school principal he has the authority, and he needs to feel justified in all his decisions. Intolerable of weakness or defeat, Zimmerman demands rigid discipline.

Caldwell's assignment as swim team coach is no random appointment from the powerful Zimmerman.

Olinger was a very land kind of town. It had no public pool, and the poorhouse dam's bottom was lined with broken bottles. My father was, by one of those weird strokes whereby Zimmerman kept the faculty in a malleable flux of confusion, the team's coach, though his hernia prevented him from ever going into the water (Updike, 1963:104).

To the schoolboy Peter, the athletic victory was among the greatest gifts his father could receive. But he, encrusted with psoriasis and clumsy, cannot contribute to such a victory and, therefore must endure Caldwell's protective and fatherly concerns for his sleep and diet, his maladjustment and self-consciousness over his diseased, immature physique.

In accordance with the tone of the novel, the swim team is unmercifully defeated. Caldwell reveals his attitudes of himself following the meet, taking the failure of the team as his personal failure as a coach. "What does it feel like to win? . . . Jesus, I'll never know" (Updike, 1963:142). He extends his degradation of self to wishing Peter could have had a father like the winning coach (Updike, 1963:144). The same failure is ratified later that night when even the car does not start. Caldwell broadens the insight to his fate:

"This is the kind of thing," he said, "that's been happening to me all my life. I'm sorry you [Peter] got involved in it. I don't know why the damn car doesn't move. Same reason the swimming team doesn't win, I suppose" (Updike, 1963:150).

The following night, Caldwell must sell tickets to the basketball game, another of the extra assignments issued by Zimmerman. Many scandalous subplots, such as Zimmerman's affair with a school board member's wife and his stealing of game tickets for the church children, are unraveled by the observant Caldwell. Updike uses the vehicle of sport to portray some of the characters in more detail. One is Vera, who previously has been acknowledged as Venus, the mythological goddess of love. Her role in the school is that of physical education teacher and coach of the girls' basketball team. She enters the scene after the girls' loss to a rival school; she is an empathetic character since she and Caldwell have failures as coaches in common. Caldwell muses over her love of the sport as she walks off. Thus, Updike distinguishes the difference between the two as coaches: the degree of their dedication to the sport itself as well as to the members of the team. Later, Vera returns to the gym scene with two of the local citizens. Updike provides insights to the past successes of the townsmen in his description of the two ex-athletes.

They are the ex-heroes of the type who, for many years, until a wife or ritual drunkenness or distant employment carries them off, continue to appear at high school athletic events, like dogs tormented by a site where they imagine they have buried something precious (Updike, 1963:233).

In a small town such as Olinger, that precious "something" was likely lost when they left the confines of the school. Most of the spectators at one time or other had graced the courts or the field and were enshrined in the photographs adjoining the entrance halls.

As a teacher, Caldwell had observed the coming and going of the students, such as the two ex-athletes, for many years. From his observations, his eye for character has sharpened in its perceptiveness. "There were things--itchiness, intelligence, athletic ability--that his years of teaching had given him absolute pitch in gauging" (Updike, 1963:101). He had had, also, the opportunities to observe the changes in the moral fiber and value structure of the students who had passed through his classroom. In reminiscing with a fellow teacher who "had once been a semi-pro shortstop" (Updike, 1963:18) Caldwell brings a former student, Ache, into the discussion. He was "A bright and respectful and athletic and handsome student from the late Thirties, the kind that does a teacher's heart good, a kind once plentiful in Olinger but in the universal decay of virtue growing rare" (Updike, 1963:222). Ache, recently killed in a plane crash, was one of the well-coordinated students who had become like a son to Caldwell, his own being clumsy and insufficient in fulfilling the pride of a father in his son. Peter recalls that this close relationship of his father to the students presented a threat to him as Caldwell's son. During his high school days he felt inferior to the students such as the skilled Ache with anxiety that his father would reject him or pity



him. He, Peter, understands the virtue and skill as his deficiency which alienates him from his father.

Any degree of devotion is lacking from Peter in the father-son relationship. Caldwell's failures do not promote Peter's adoration. Witnessing the dedication his father has for his job only intensifies Peter's longing for his father to express a similar dedication and pride for him. Updike employs the dream motif, Peter's vision of Caldwell's funeral oration, to reveal to Peter a summary of the deeds of Caldwell's devotion to other people and their children. The orator paints a colorful enriching life for Caldwell beginning with the cheerful boyhood of one who is skilled in friendships and sports. Praise is due Caldwell as he earned a varsity football scholarship to help him with the dual responsibilities of scholarly endeavors and full support of his mother. Jobless because of the depression, Caldwell assumes his teaching position. The quality of his teaching dominates the latter portion of the oration. The praises are not appreciably eloquent to relate the community's esteem for teacher Caldwell. In Peter's dream, Caldwell is of heroic stature. "Though there was sometimes--so strenuous and unpatterned was his involvement with this class--confusion, there was never any confusion that indeed 'Here was a man'" (Updike, 1963:174). Momentarily, Peter understands the worth of his father's efforts. He sees that, although neither he nor his father can fully recognize the value of continual effort, there are people who do appreciate the time spent and wisdom imparted to their children.

Continuing in the dream motif, Peter's own vision of his teenage tortures come as he is playing baseball. The wholesomeness of the

sport evolves into a nightmare as the ball transforms into a volley-ball, continuing to grow into a monster. The torments of competition with his peers in sport ability and his own lack of skill are incased in the vivid horrors of that one dream (Updike, 1963:176). Frustrated and tearful, Peter remembers awakening with the understanding that his father desires him to be of strong character more than of strong body, and Peter sees his father's presence and approval. He catches his father's full attention long enough to tell him, simply, he has hope. An intimate kinship is briefly established between the two.

The mythological analogy occurs again to clearly state the value of Caldwell's suffering. The reader joins Peter in witnessing Caldwell's own revelation "that in giving his life to others he entered a total freedom" (Updike, 1963:296). Peter has related his recollections of his father. Peter himself is a poet, one who has insight into the complexities of life and the talents to relate them to others. Using the examples of his father, Peter Caldwell, poet, reveals the value of dedication in life.

#### REVIEW OF OF THE FARM

Brief to the brink of novelette classification, Updike's Of the Farm focuses on the stress and conflict of a city man and his country rearing. A weekend on the farm of his youth stages the discord common to the relationship of an aging widow and her only son. Joey has chosen the complexity of the big city life over the simplicity of country life. Yet, seeing the favorite spots of his boyhood and doing the tasks which used to fill his days cause him to feel the weight of his decision regarding the fate of the farm and of the

lifestyle of Granny, his mother. Granny's concerns over what will happen to her home have precipitated the visit and remain foremost in her mind for the duration of the weekend. Her wishes include the return of her son to his childhood home, to farm the land, putting him in her clutches once more. Her desire to have Joey home again provokes disagreements with Joey's second wife, Peggy.

Updike deals with the struggle of the past and present through the details of the daily work of mowing hay and gardening. Joey is constantly reminded of the days he himself spent cultivating the land, and his life with his deceased father. The flavor of his weekend visit is similar to the melancholy dreams of a drunk. The most back-breaking work is smoothed to pleasure by Updike's skillful description.

Richard, Peggy's son by her first marriage, magnifies the differences between city rearing of children, which favors caution and overprotection, and country rearing, which encourages breadth of experiences for enrichment. Peggy and Granny bitterly argue over Richard's ability to drive the tractor by himself to help with the weekend chore of mowing. The contrast of the two mothers' strength of character is vivid. Granny "used to be very athletic. In college she was on the hockey team" (Updike, 1965b:127). She was tough, possessing the stamina to endure the rigorous racing up and down an open field. Organized competition has instilled deeply the desire to win as elemental to her nature. And win the argument, she does; Richard learns to drive the tractor alone. Granny has scored a victory over the socialite Peggy.

Peggy, seen by Richard as being a matchless tennis player, has developed a less open drive to win than has Granny. Her tennis is a

social tool for her in the big city world of New York. She is skilled, but she has never pitted her skill against a stake larger than a pleasurable afternoon. She has no desire for intense competition. Maneuvers rather than brute strength draw her points. Peggy ultimately wins; Joey decides to remain loyal to his life with her in New York.

Granny's reward is Joey's fond memories of his boyhood as he relives in part some of the pleasures of the past, including games of his youth. To Richard he says,

"This afternoon I'll try to find my old softball bat and we can hit some fungoes. I used to hit a tennis ball against the barn and then try to catch it before it hit the ground. If it bounced once it was a single and so on" (Updike, 1965b:65).

In facing the reality of the decision as to the use of the farm, Joey forsakes a long held dream to convert the land to a golf farm. The unrealistic dreams have been carefully plotted in Joey's mind, even to the conversion of the tobacco shed to a pro shop (Updike, 1965b:13). Practicality crushes Joey's dream. In answering Granny's skepticism as to the sincerity of his intentions to make the conversion, he retorts, "'Of course not. It takes thousands of dollars to make one green, and then who'd run it? I live in New York'" (Updike, 1965b:34).

Joey clinches his decision to remain in New York. The farm will remain agricultural. Granny will live out her life in her old home. The drama, poignant with sentiments of youth, is over as unobtrusively as it was begun.

#### REVIEW OF COUPLES

The multi-hero characterization of Updike's Couples comprises ten couples which fabricate an upper middle class neighborhood of

suburban Tarbox. Updike depicts the neighborhood through numerous occurrences and combinations of the interacting and intertwining lives of these individuals; patterns shuffling through various twosomes. The novel is a description of the life found in the Tarbox environs, the purposeful scanning of the lives of those in the assemblage of couples. Like the designs of a kaleidoscope, changing with every movement, every circumstance, every situation, the characters of the novel continually interact.

Upper middle class leisure allows the congregation of couples; but, novelty of the recreation which fills leisure hours and throws the couples into relatively free, unpaired situations runs thin as the reality of lost jobs, querulous individuals, and broken marriages perforate the utopian social leisure.

Recreational sport is used to describe all aspects of the novel from scenery to personalities to facial expressions to clothing and home furnishings. Few corners of the microcosm escape a sport-guided inspection. Focus is on the leisure lives of the couples, on the pointless games they play, on their not-so-successful attempts to lead meaningful lives, on the degenerative thrusts of the society which supports them.

Indelicate and shameless in the lives it sponsors, the Tarbox confines provide a luring topography for the sport recreation of the inhabitants. Designed for the leisure class, golf courses, tennis courts, and baseball diamonds decorate the area. Bowling lanes in the Armvets Club, the Congregational Church which shares a rise with the baseball backstop and a band pavilion, the convertible gym-auditorium of the school, incorporate sport into the local setting.

Vivid pictures with a sporting flavor for detail add aesthetic value to numerous facets of description. A sailboat race is suspended on the horizon. Autumn comes with the last green grass of the cemeteries and golf course rather than falling leaves. Sport description carries into the Tarbox view of the national situation. The United States becomes a ship, the golf course its green deck threatened by a Russian air strike. Lyndon Johnson has the misfortune of taking office during the time span of the novel. Georgene describes his inauguration. "It was like the high school shot putter accepting the class presidency, all humility and rotten grammar" (Updike, 1968:314).

The characters enter the Tarbox community and the sport realm of couples. Matt Gallagher establishes a contracting business and draws Piet Hanema to the community as a business partner.

With these two men, the Irishman and the Dutchman shaped together like Don Quixote and Sancho Panza, began the record of sports--touch football, skiing, basketball, sailing, tennis, touch football again--that gave the couples an inexhaustible excuse for gathering (Updike, 1968:117).

Gallagher and his wife remain innocent of swapping twosomes throughout the novel and innocent in their enjoyment of the sports for recreation and casual socialization. But from the beginning, Piet Hanema is the master of exploitation of sport for lustful gratification. A stimulant for neighborhood socials through sport, he launches partner exchange.

But two summers ago the Ongs built their tennis court and they saw more of Georgene; and when, a summer ago, Piet's dreams without his volition began to transpose themselves into reality, and unbeknownst to himself he had turned from Angela and become an open question, it was Georgene, in a passing touch at a party, in the apparently unplanned sharing of a car to and from tennis, who attempted an answer, who was there (Updike, 1968:56).

There she was, to be enjoyed, to add the game of their secret affair to the tainted games of Tarbox leisure.

A ski trip affords timely opportunities for the Applebys and Smiths to completely and openly swap partners. Tennis, swimming, sailing and clam bakes have pulled them together, originally, with all of the other Tarbox couples. The simplicity of wife swapping in a ski lodge is too brazen for Janet to endure. Her discontent brought a petulant undercurrent to the muddle. Admission of her diseased emotions by her virtue of her seeking psychiatric help jolts the others to realization of their demoralized existence and eases them back to their legal partners.

The novel initiates the view of Tarbox with the arrival of Foxy and Ken Whitman. A basketball game affords them the opportunity to meet the couples and Updike the opportunity to describe the men, their jobs, their athletic abilities and their personalities. At that first contact with Tarbox sports and games Foxy conceptualizes the motivation behind all of the flirtation, involvement and indulgences which follow.

She was to experience this sadness many times, this chronic sadness of late Sunday afternoon, when the couples had exhausted their game, basketball or beaching or tennis or touch football, and saw an evening weighing upon them, an evening without a game, an evening spent among flickering lamps and cranky children and leftover food and the nagging half-read newspaper with its weary portents and atrocities, an evening when marriages closed in upon themselves like flowers from which the sun is withdrawn, an evening giving like a smeared window on Monday and the long week when they must perform again their impersonations of working men, of stockbrokers and dentists and engineers, of mothers and housekeepers, of adults who are not the world's guests but its hosts (Updike, 1968:80-81).

"Amid laughter and beer and white wine, through the odors of brine and tennis sweat" (Updike, 1968:242) the couples play. Personalities are explored by the omnipotent observer, by the other characters during their revels. Participation in sport is a means of acceptance

as a part of the group for the couples. The Saltzs do not ski nor play tennis. They attend the other social encounters, but they are never quite part of the sporting clique. The women involved in the major affairs, Georgene, Marcia, Janet, Angela and Foxy, are all described by their men through sport allusions. Marcia, strongly small, athletic and manageable, and Janet with her shapely swimmer's arms receive reference to their figures and the firmness of their bodies. Georgene, Angela, and Foxy, all of Piet's harem, are of stronger sport heritage. Georgene is his tennis partner, very adept in her abilities both on the court and in bed. His wives, Foxy and Angela, have field hockey in common. Even in their field positions they represent Angela on the defense, as center halfback, to Foxy on the offense as either right inner or wing. But Angela leads as the sportswoman, the one who seems to feel the intangibles of hockey most keenly. "'It's a lovely game,' Angela said. 'It was the one time in my life when I enjoyed being aggressive. It's what men must have a lot of the time'" (Updike, 1968:68). With the closing situation Angela, the sportswoman, concedes to Foxy and scores only a divorce. Foxy, though divorced, gains Piet, a meager prize.

The men are more developed through sport than are the women. The innocent men, Gallagher, Guerin, Whitman, join in competitive tennis. Freddy Thorne, being nothing of an athlete, compensates his skill deficiency with sporting efforts toward innocent flirting and banter. Yet it is he who arranges the abortion of Foxy and Piet's illegitimate child. Piet Hanema exploits sport. Skilled to a competent level and incorporated into every season's play, sport is his passage to his women. On one occasion Piet relates sex and sport as he makes love to



Foxy. "' . . . I honestly fear I'm second rate at this. Like my skiing and golf, I began too late'" (Updike, 1968:214). As the neighborhood crumbles, it is the two most serious sportsmen, John Ong and Ken Whitman, who suffer the greatest defeats. Ong dies of cancer. Ken Whitman divorces Foxy and suffers the ego torment of an adulterous wife whose games he cannot forgive.

The closing scene reveals Piet and Foxy merging into another community like Tarbox. The impression is strong that the revolving process of twosomes which complicated the lives of the Tarbox couples will again wield its sorrow. The games never end, no one ever wins. The greatest certainty is that the playing field will always be there.

#### REVIEW OF RABBIT REDUX

Ten years ago Harry Angstrom ran. He ran hard to find happiness and significance in life, so hard that he did not see the reality around him. That was the Harry Angstrom of Updike's Rabbit, Run. Part II of the life of Harry Angstrom, Rabbit Redux, reveals that his idealistic search for worth in life is tempered by ten years as a middle class American, ten years of steady work as a linotypist, ten years of endurance of his wife, ten years of transferring his hopes and dreams to the life of his son, Nelson.

Harry was somebody important in high school; the star basketball player. His own analysis of his past success blurs all of his shortcomings since graduation. "Having scored, you put your head down and run back up the floor; but with that feeling inside, of having made a mark that can't be rubbed out" (Updike, 1971:226). The mark has not been rubbed out; but, Harry has still not found a replacement for

the way to score off the court. He has, at least, slowed his frantic search enough to notice the changes going on around him and to realize he has continued rigidly in the ways of his past rather than changing with times.

In the opening scene of the novel, Earl Angstrom, Harry's father, unearths Harry's latent disquiet by suggesting that Janice, Harry's wife, is having an affair. With his suspicion aroused, Harry notices changes in the patterns of his married life. Paralleling his awareness of the iniquity at home, Harry opens his eyes to the changes in his sports which also appear wrong to his middle-aged viewpoint. The televised versions of his sport, basketball, show him changed. "The game's different now, everything's the jump shot, big looping hungry blacks lifting and floating there a second while a pink palm as long as your forearm launched the ball" (Updike, 1971:18). He has become an old man with regard to this jumping, powerful version of the game. His masterful one-hander is wrong for the fast moving, rubber reflex defensive work of the highly skilled players, many of whom are black.

Though not a baseball player, Harry feels akin to the athletes of the game. Attending his first professional baseball game in many years, Harry reflects the intrinsic pleasure he used to achieve while playing sandlot baseball. With this description, Updike captures in words what many athletes can only allude to vaguely; the essence of the sport unadulterated by professionalism.

Though basketball was his sport, Rabbit remembers the grandeur of all that grass, the excited perilous feeling when a high fly was hoisted your way, the homing-in on the expanding dot, the leathery smack of the catch, the formalized nonchalance of the heads-down trot in toward the bench, the ritual flips and shrugs

and the nervous courtesies of the batter's box. There was a beauty here bigger than the hurtling beauty of basketball, a beauty refined from country pastures, a game of solitariness, of waiting, waiting for the pitcher to complete his gaze toward first base and throw his lightning, a game whose very taste, of spit and dust and grass and sweat and leather and sun, was America (Updike, 1971:83).

Slowly, Harry realizes that the sport is no longer pure. Mercenary interests have altered what used to be the beauty of the play.

But something has gone wrong. The ball game is boring. The spaced dance of the men in white fails to enchant, the code beneath the staccato spurts of distant motion refuses to yield its meaning . . . . And for the players themselves, they seem expert listlessly, each intent on a private dream of making it, making it into the big leagues and, the big money, the own-your-own-bowling-alley money; they seem specialists like any other, not men playing a game because all men are boys time is trying to outsmart (Updike, 1971:83-84).

Harry is intent in his efforts to remain a boy and to outsmart time. Part of his efforts are directed toward the development of his son's life. Harry's concern for Nelson's lack of interest in sports, in any sport, persists throughout the novel.

How can he get the kid interested in sports? If he's too short for basketball, then baseball. Anything, just to put something there, some bliss, to live on later for a while. If he goes empty now he won't last at all, because we get emptier (Updike, 1971:25).

Rabbit cannot comprehend the fulfillment through sport being replaced by any other experience. Consequently, he is alienated from his son when Nelson struggles, on several occasions, to convey his own individual feelings about sports. His first excuse, "sports are square now. Nobody does it" (Updike, 1971:18) is a conventional answer from a thirteen-year-old who is beginning to test his own thinking against the dictates of a parent. As the events of the novel progress, Nelson tries, again, to express his dislike for sports. "'It's all so competitive'" (Updike, 1971:76). Nelson is of the peace and brotherhood and "do-your-own-thing" sentiments. When he does have the opportunity

to go fishing, and Rabbit discourages him with reference to the boredom of sitting at the baseball game, Nelson relates his deepest insight for the ills of big time, highly organized spectator sports. "That was a boring game, Dad. Other people were playing it. This (fishing) is something you do yourself" (Updike, 1971:150). Even as he touches on the ills of spectator sport, Nelson also gives the first indication of his desire to do something, to become proficient. As the final disaster of the novel approaches, and as Rabbit alienates Nelson by pretending to be a make-believe middle class, middle age hippie, Nelson dedicates himself to the development of soccer skills. Honing skills with his legs and feet is something no one can take from him, something no one can wrench from him, an escape no one can foil. Through the escape of soccer, Nelson achieves identity for himself independent of his father's reputation. He is the man of his own making in soccer.

Afternoons, Harry comes home to find the child kicking the ball, sewn of black-and-white pentagons, again and again against the garage door, beneath the unused basketball backboard. The ball bounces by Nelson, Harry picks it up, it feels bizarrely seamed in his hands. He tries a shot at the basket. It misses clean. "The touch is gone," he says. "It's a funny feeling;" he tells his son, "when you get old. The brain sends out the order and the body looks the other way."

Nelson resumes kicking the ball, vehemently, with the side of his foot, against a spot on the door already worn paintless (Updike, 1971:254-255).

Perhaps Harry's intrusion is a forewarning to Nelson: avoid a high degree of skill and dedication as it will only cause pain and leave a vacuum in the end. But for the meantime, Nelson has a faithful friend, the soccer ball, and Harry's aspirations for the boy to find a sport are gratified. The discussion of sport between Nelson and Harry fell prior to each of Harry's foolish exploitations throughout the novel.

Nelson is one outlet for Harry's ambitions to outsmart time. Through the arrangements of a black fellow worker, Harry visits a black bar where he picks up seventeen-year-old Jill, a runaway ex-dope addict. Beginning as a one-nighter, Jill assumes permanent residence with Harry and Nelson while Janice is off on her own affair. Jill, a young liberal from a wealthy home, is no man's innocent angel. "Her knowledge of boys was confined to boys who played tennis" (Updike, 1971:173) until she traded the comforts of her riches for a slice of "real" life. Unfortunately, she searches for reality through drugs. Snared by her habit and poverty she finds herself in the predominantly Negro slums. She has befriended Skeeter, a young black militant wanted by the police, before joining Harry. Through her encouragement, Harry provides a shelter for the criminal. Skeeter is the evil omen for Jill, feeding her back to drugs, inciting neighbor resentment to the Ku-Klux-Klan pitch of burning Harry's house with Jill trapped inside.

Ten years before, Harry had been indirectly responsible for the drowning of his baby girl. Now he is indirectly responsible for the death of a young girl unrelated to him or his conservative, small town past. Job lost, house burned, wife gone, Harry's lot has grown in complexity. The list of ills is of such illogical components and proportions as to lessen Updike's impact on the reader's moral conscience. However absurd and repugnant the turn of events might appear, the severity of the circumstances is necessary for Harry to regain a perspective lost since the time he made his mark in basketball. After the fire, Harry and Janice reunite. Harry wears "an old Mr. Judge Jock jacket" (Updike, 1971:393). He offers her an apology for the jacket because he finally "sees she is right, it was an ice cream world

he made his mark in" (Updike, 1971:393). The prospects for the permanence of their reunion hold moderate possibilities and hope. And Harry's comprehension of reality and his identity within that reality are, only "fair."

#### UPDIKE'S USE OF SPORT

Sport is a significant theme throughout Updike's six novels. Sport sponsors characterization, plot motives, and setting. Therefore, the sport world assumes major importance in Updike's style of describing life through illusions of reality. In order to examine Updike's sport inferences more carefully, concepts have been extracted from the use of sport evidenced in the reviews of Updike's novels. The sport concepts, grouped according to the universal themes of reality and life concepts, lend themselves as subdivisions of the prevailing sport theme.

#### Reality

The sport world of athletes is distinguished by Updike from the activities of sportsmen. As Updike refers to sport, especially with reference to competitive and highly organized patterns such as schoolboy athletic programs, he concentrates his emphasis on the reality of sport. Rather than direct the presentation of sport from the adolescent or early adult perspective for which sport offers components of reality, Updike approaches the theme through immature adults who have distorted their life concepts and personal growth which normally heighten the sport-in-life experience. Employing this approach Updike stresses the "ice-cream" world concept of sport. Youthful possession of sport represents sport's place in the training for life and not

its potential as a substitute for reality. Updike intimates that anyone who attempts to substitute the game for the wholeness of reality is confronted with problems in realistic acceptance of self and life.

In the sport world, the audience and the demonstration of skill are essential to the athlete who is the participant in sport. Sport participation insists upon effort, intensity, and importance although victory or defeat is not mandatory for pleasure fulfillment. When the performer's purpose shifts from participation to exhibition, the contribution of sport to reality is detrimental.

Acceptance of Reality. Sport is not real. It is play in an ice-cream world. It takes two major novels, Rabbit, Run and Rabbit Redux, for Harry Angstrom to understand this concept. He has tried to avoid the reality facing him in the world outside of the rules and boundaries of the basketball court. Harry cannot understand why the skills which served him valiantly on the court will not help him accept the responsibilities of a job, his wife, and his child. Although Harry is the dominant personification of this sport concept, there are many minor characters who have similar difficulty in accepting life out of the sport environment. Harrison, an ex-teammate of Angstrom's, has a bull-headed stubbornness and temper, a vagrancy to his ways, and an insecurity in his character. In The Centaur, both the principal, Mr. Zimmerman, and the two men who escort the girls' physical education teacher to the basketball game, and the ex-athlete townsmen in Couples are further examples of men who demonstrate insecurity in their inability to accept the realities of life.

Updike's athletes have difficulty in accepting the complexities of the real world and tend to want to return to the simplicity of their

game world long after that world has evaporated. After the rules of sport and the clear delineation between victory and defeat are past, the athletes are foiled by the ambiguity of winning and losing in society. The attempt to return to the game world may be through referring frequently to the heroics of their past, haunting the games of the present in search of that which they have once experienced, or prominently displaying trophies won in the past. The townsmen in Couples strongly portray the type of immaturity associated with the world of ex-athletes. At a town meeting, sitting together as a group, rather than with their wives, they are dressed as youths who threaten adjournment to the corner drugstore with the opening address. Even the responsibilities of citizenship are too complex for those who have failed to outgrow their letter jackets. Angstrom closes the novel Rabbit, Run with thoughts of the complexity of motivation in the real world. He sees motivation as being a simple component of an individual's life. When he was a basketball star, the motivation to win could be directed to scoring points in a basketball game. Now reality presents him with a larger court, one with no boundaries, in a game of life which has few rules. The simplicity of his motivation is engulfed by the many responsibilities which demand fulfillment.

Failure. Athletes who experience success in games have difficulty when experiencing failure in life. Angstrom himself spotlights the problem of the successful athlete. "I once played a game real well. I really did. And after you're first-rate at something, no matter what, it kind of takes the kick out of being second-rate" (Udike, 1960:105). To have had recognition from an outside source, an audience, to reinforce the idea of success, of winning, seems to increase



the athlete's desire to win in everything. If success cannot be achieved, the athlete flounders. The audience and the rules of the game have reinforced victory and defeat; the wins and losses in self-fulfillment through performance have been governed by the demonstrated reinforcement of the crowds. When there is no comparable success in reality, the failure is even more painful and difficult to accept. To Harry Angstrom, a second-rate marriage and a second-rate job are intolerable, but he does not know how to proceed toward remedying his predicament. There is no one to whom he can pass his responsibility when situations are difficult and no one to cheer for him as he succeeds and achieves.

Idealism. Sport sponsors idealistic interpretations of reality. Harry presents the idealistic interpretations of reality in reflection. He is an adult still hoping for life to require skills and to assume the patterns of his "ice-cream" world of basketball. Updike's concern about the idealism of youth is most poignantly shown in Deifendorf's promise to Coach Caldwell in The Centaur. Realistically, the Olinger swim team lacks the skill, the training, and the experience to win. Deifendorf overlooks the handicaps, seeing only victory. If the effort is great enough, there is nothing which cannot be achieved, no obstacle too great to overcome. Cultivation of the drive to put forth the maximum effort, to achieve a specified goal by winning a game or event with skill is commendable in the sport world. However, it is the victory of youth and it does not carry over into adult life.

Coaches. To Updike, coaches are preachers of morality, but they advocate moral rules which do not work outside the game. Thus,

they are losers. The relationships between the idealism of the athlete and the influence of the coach on the player is clearly demonstrated. The coach plays a vital role in the success of a competitive team. Updike seems to support a stereotyped philosophy among coaches which includes an idealistic hope for youth in years beyond school and organized sport and an intense coach-player relationship in which the coach instills his idealism in his youthful charges. In The Centaur, Caldwell focuses on the concept that coaches are more than average teachers as he examines the loss of his team and his lack of knowledges which are necessary to elicit the best effort from his boys. Coach Tothero, developed in Rabbit, Run, is the only other coach which Updike specifically develops. The winning swim coach in The Centaur is briefly mentioned; and Vera, the Olinger girls' basketball coach, is merely assigned the title. However, the two coaches who are developed suggest evidence of the father-image of coaches. The failures of the coach as an individual are the failures of all moralists who are a part of the unreal.

Neither Caldwell nor Tothero is considered to be of a high social class. Caldwell's son thinks his father's position is beneath their dignity and Tothero has degenerated to a common drunkard. However low their own status, the coaches profess the ideals and dreams of their once noble endeavor. Moralistic implications are suggested by both men, particularly strong is concern for the integrity of their players. Tothero is profound in his declarations. Yet, the coaches as men, are great philosophers of value structures which do not work in the existential societies of the novels. The surface inconsistency in the players' respect for a man who cannot give them something

permanent, is rational only in the concept of the "ice-cream" world of sports.

The coaches project honesty, integrity, and high ideals, yet they are inconsequential people. They seem to try to live their idealistic hopes and dreams through the players rather than their own lives. It is as though the skills and potential of the athletes will transform the ills of life into utopian attitudes which are concerned with morality. To Updike, coaches have overloaded the realistic possibilities which the competitive sport world can achieve for society.

Components of Reality. Sport has a component of reality found in the sponsorship of daring, verve, and drive for youthful athletes. The aggressiveness, the pitting of skill against skill, and the thrill of competing are components of reality which are part of the sport world. Sport for the pleasure of self-assertion is the reality of the sport world. This concept is established at the first of Rabbit, Run, and is consistent throughout Updike's novels. Angstrom observes a group of boys who are playing basketball for their enjoyment rather than for demonstration. It is when the demonstration becomes more important than enjoyment that sport loses its contribution to the realistic perspective of self-assertion. The professional baseball players in Rabbit Redux have perfected skilled play for financial fulfillment rather than intrinsic fulfillment. Their nonchalance in performing their skills is transmitted to Harry as he watches the game. The daring excitement is gone. When an athlete plays for the crowd, sport is lost.

Reality of sport is alluded to in a few high school locker room references. It is in the locker room, when one is stripped of

the facades of skill, attention, and uniqueness of a uniform, that the real personality of a character is exposed. Ronnie Harrison of Rabbit, Run is seen as the egotistical bully boasting of his manliness in locker room situations from his days as an athlete. Peter Caldwell's insecurity and inferiority complexes are dramatized as he tries to hide his immature body from the other boys. In contrast, Vera, the physical education teacher portrayed as Venus, is raped by Chiron, the centaur, in the locker room. She thus is forced to the depths of her womanliness in the locker room setting.

Participation. Sport is for participation, not for winning. Updike acknowledges the realistic potential for sport, and that potential comes from the process of participation rather than the final result of victory or defeat. The athlete whose ultimate objective is competition outside the rules of the game and the boundaries of sportsmanship is scorned and degraded in Updike's works. Harrison in Rabbit, Run and another minor character, Stavros, in Rabbit Redux are characterized as competitors, play-makers, poor sportsmen, and they play undesirable roles in their respective novels. Nelson Angstrom in Rabbit Redux explicitly deplores the unrestricted competition of sport. His dislike for sport is fostered by the pressure to be great, to win, to compete, to be like his father. The highly competitive element is repulsive because it represents a fear of being inferior. Jill pinpoints Nelson's problem. Harry is rightfully concerned that Nelson holds higher regard for Jill than he does for his own father. Jill emphatically states the reason, "' . . . I treat him like a human being instead of a failed athlete because he is not six feet six'" (Updike, 1971:191).

Although Nelson rejects the competitive issue of sports, he does come to the realization that sport can offer fulfillment for him in his youth. Several concepts are indicated through other characters, but they are most clearly drawn from Nelson's acquired interest in soccer.

#### Life Concepts

In Updike's philosophy, sport activity is the recreational enjoyment of sports without the high degree of organization or the attentive audience of the sport world. Participation in sport activity and the conceptualization of the activity experience constitutes a second world of description for life. Sport activity is the broader theme for life in sport as it is natural for man and appropriate throughout a lifetime. Sport activity sponsors the sportsman or leisure athlete who can learn from sport activity, strengthening his ability to adjust to life.

There appears to be a polarization of concepts between sport and sport activity. With the polarization, Updike generally relates sport to super reality and sport activity to normal reality and, therefore, to life concepts. All concepts relate to human nature as man struggles to accept his personal reality and live a fulfilled life.

Life Concepts. Sport is larger than life. It represents life concepts. Although Updike clearly supports the belief that sport is only a game, the game element does illustrate concepts of life for the sportsman. Several characters refer to the effort exerted in the process of developing skill as a concept which may be applied to the process of working toward any goal in life, toward achievement. Drawing from his schoolday memories, Angstrom summarizes the process of achieving.

"Having scored, you put your head down and run back up the floor; but with that feeling inside, of having made a mark that can't be rubbed out" (Updike, 1960:226). Angstrom's mother recalls the time, the effort, the hard work which was necessary for Harry's success. The concept of work, of effort, and of pride in a job done well is integral in sport participation. Harry is aware of the need for effort, his problem is in directing his effort properly after he has overextended the youthfulness which is receptive to sport concepts. Further support for the value of concentrated effort is offered by Georgene Thorne, one of the wives in Couples.

She prided herself, Georgene, on being useful, on keeping her bargains and carrying out the assignments given her, whether it was obtaining a guest speaker for the League of Women Voters, or holding her service in a tennis match, or staying married to Freddy Thorne (Updike, 1968:399).

Continual effort is required for any degree of success or fulfillment; this component of sport activity is transferable as a life concept.

Paradoxically, dream motives have been used to discern concepts of life for Peter Caldwell and Harry Angstrom. In each dream motif, the participant is involved in some sport activity. The absurdity and distortion of the sport implement is the symbol which has significance. For Peter Caldwell, the softball grows into a volleyball and, then, into a monster. Maleness is symbolized in the distorted emphasis on sex found in the adolescent thinking of Peter's peers. For Rabbit, the discus is symbolic of life and death and the relationship of life to death.

Fulfillment for Youth. At a certain stage of life, adolescence and early adulthood, sport offers fulfillment. Harry has projected the basis of this concept in his wish for Nelson to become interested

in a sport, any sport to fill an emptiness in one's life. Harry feels sport interest must fill the void now because a person grows emptier with years. Nelson finds the soccer ball a stability in his uncertain world. He can control the ball, the ball will not forsake him. It is in this respect that sport is a link in the maturation process, desirable but not essential.

Timeliness of Life Concepts Gleaned from Sport. Sport participation as an athlete is a pattern for the young and is not appropriate for the mature. Evidence of this concept is continually presented. The man who pursues the "ice-cream" world of sport out of the school environment, such as Harry Angstrom and the ex-athletes in Couples, appear childish and immature in the emphasis they place on the sport image. Yet, the sport world and the dedication to perfection of skill found in Nelson Angstrom and Deifendorf and the other school-boy athletes is appropriate for the emotions and drives of the young.

Once the athlete's sport life is over, it cannot be recaptured. Time and again Harry and the ex-athlete minor characters of Updike's works are faced with this particular realization. In The Centaur, the ex-athletes continue to appear at basketball games as if they are trying to find something they lost there in their own years of participation. They cannot seem to realize that their years as athletes were a step toward manhood rather than a manifestation of manhood.

Perhaps the most graphic illustration of the timeliness of sport is represented by the entirety of Updike's first novel, The Poorhouse Fair, which is void of significant sport inferences. The characters, inmates of the county retirement poorhouse, are well beyond the maturation process to which sport may contribute. They

also consider themselves existing beyond the benefits of activity as their aged bodies are shells of the biological life processes. They are waiting for death; life concepts and activity hold no value for them.

Sport Activity for Mankind. Activity is a "natural" in the life of mankind. Although sport centers its benefits on the young, sport activity is desirable throughout life. Sport activity for characters of all ages, except the inmates of the poorhouse, is supported throughout the novels. It is also seen as continuing the culture of modern America. Updike is specific in one of his descriptions in Rabbit Redux.

Beneath these awesome metal insignia of vastness and motion fat men in under shirts loiter, old ladies move between patches of gossip with the rural waddle of egg-gatherers, dogs sleep curled beside the cool curb, and children with hockey sticks and tape-handled bats diffidently chip at whiffle balls and wads of leather, whittling themselves into the next generation of athletes and astronauts (Updike, 1971:113).

Sport activity is part of man and part of his hope for the future.

Sport activity which is sponsored by leisure is desirable for all ages. The middle class American life around which Updike has chosen to concentrate his microcosms of reality is a class of moderate mobility and leisure. The time and money are available; recreation is one way in which both are spent. Swimming, baseball, touch football, golf, tennis, squash, bowling, and other sport activities are considered desirable. Couples particularly supports this concept as recreational sport activity facilitates the plot motives.

Socio-Cultural Environment. Recreational sport activity is associated with leisure, and money, and recreational diversity and lush facilities indicate the socio-cultural environment. The more leisure



or money available to an individual, the more desirable recreational activity becomes. This is evidenced by the direct association of ministers, doctors, and other professional men with golf and tennis. However, men of low income and less social status are not banned from recreational sport. Particularly, golf is made available only through the invitation from someone of higher social status. Angstrom plays golf, but only when he is with Rev. Ecckes in Rabbit, Run.

The placement of facilities within a town, usually central to the action of the novel, is standard in the opening pages of Updike's last five novels. A church across from the baseball diamond in Couples has the potential for moralistic implications for the demoralized pairs. Golf courses are usually placed so that the characters who do not enjoy affluence necessary to play the game must drive by the course, or in some way be continually reminded of their own status. The tennis courts, which decorate each novel's setting, are perhaps most expressive of the atmosphere in any single novel. The nets are missing and the lines are unmarked giving the effect of space without boundaries in Rabbit, Run, emphasizing the vastness of the reality Angstrom refuses to face. The private court of the Ong's in Couples accentuates the wealth, suggesting that none of the couples must play on the available public courts. The sport inferences for setting serve to describe the geographic location and set an atmosphere as well.

Escape from Life. Sport activity offers an escape from life. Rev. Ecckes is the strongest supporter of this concept even though the men and women of Couples use recreation as their escape from their marriages, jobs, and other responsibilities. Rev. Ecckes insists on the value of playing golf with Harry Angstrom as a means of getting

to know him and his problems. He is, in essence, saying that a person is more open, more receptive away from the pressures of the daily environment. Many characters, Janice's mother and a fellow minister for example, reject Eccke's method of contact with Angstrom. It is, however, the only contact which renders positive results in the reunion of Harry to Janice. Sport activity offers a beneficial escape from life, not a rejection of reality.

Gender Roles. Sport makes males more male, females more female. In the school boy sport world the athletes enjoy greater popularity and less problem in adjustment than do those who are not "on the team." Angstrom recalls the world being at his fingertips when he was a basketball star. The girls swooned and the townspeople knew his name. In contrast, Peter Caldwell in The Centaur is one of the unacknowledged masses, one of the boys who does not really count, one whom the girls do not flirt with, tease, or care to talk to. The men in Couples who are most appealing to the wives are those who demonstrate skill in recreational activity.

Updike's sport inferences for women are extremely interesting and consistent throughout his female characterizations. In all of his works, there is a strong connection between sport ability and the intensity of sex appeal, the physique, and the popularity of the women. Vera, the physical education teacher and girls' basketball coach in The Centaur, is portrayed as Venus, the mythological goddess of love and the ageless epitome of femininity. Couples develops the concept of womanliness and sport activity most completely as each of the women included in the partner exchange is described according to her degree of sex appeal and her level of sport skill. Peggy, Joey's wife in

Of the Farm, is seen by her son as a good tennis player. Conversely, Ruth, Janice, and Jill, the women in Harry Angstrom's life, do not have sport skills, neither are they strong in character, nor appealing sex symbols.

Perhaps more specific to the character of Updike's women is the sport in which they are skilled. Tennis is the standard sport. All of the appealing women play tennis with the exception of Vera. However, those who have particularly strong character or appeal have hockey in their background. Joey's mother in Of the Farm has the rugged stamina for hockey which is not modified by tennis. However, she is a sturdy woman. In Couples, both Angela and Foxy, Piet's two wives, have field hockey in common. Updike uses an even finer line of delineation in character for these two. Angela is the better adjusted individual. She was a defensive player in her hockey years, and she is on the defensive in the novel. She concedes the divorce to Piet with grace. Foxy, an offensive player, had the possibility of being recognized for her skills since she could score. She becomes an aggressor again as she attempts to repel the monotony of her life and overcome her inability to accept her role as Ken's wife. Entanglement in a love affair with Piet, the abortion of his child, and the complexities of divorce reveal her immaturity in contrast to Angela's strength. Angela's tennis skills are of a higher degree than Foxy's and, in contrast to Foxy, Angela appeals to several of the other men. Foxy has Piet's attention and Piet's alone. She does not have a high degree of tennis skill. But her hockey ruggedness has never been toned by the same degree of tennis skills as has Angela's. Now, power and stamina are not enough. She suffers through the abortion and divorce, but with less finesse than Angela.

Updike indulges in vivid description of the women's physiques through sport images in Couples, and to a lesser degree in The Centaur.

#### Literary Inferences

Updike uses sport inferences in the techniques of creating illusions of reality in his novels. Enhancing his utilization of the sport theme are the tools of characterization and figures of speech which allude to sport.

Character Identification. Sport offers character identification patterns. Updike seems to feel a sport reference for a minor character is the most vivid and comprehensive way to introduce him to the novel. Most of the minor characters who drift in and out of the novels are men. The workers are alluded to with competitive sport descriptions such as a paint plant supervisor in Couples who is a bullet-headed ex-athlete, and the local filling station owner in The Centaur whose build and set of neck indicate he, also, is an ex-athlete. Doctors and ministers are golfers. In Of the Farm, allusions to the men in the past of Joey's wives refer to their sports participation. An ex-Olympic skier had attended Joey's first wedding as an old lover of his first wife. Peggy's first husband had kept his fine physique by playing tennis and squash. The two men are a threat to Joey because of the manliness they project. The quick development of their personalities in sport images smoothly interjects the subtle threat from the past to Joey's manliness and responsibility to Peggy in the present antagonism between Peggy and Granny. Generally, a sport oriented description is common for the character reference of these minor characters, though sometimes other aspects of business or social position are alluded to as well.

Language Referrals. Sport sponsors language referrals. Though Updike does not often employ slang sport phrases in his dialogue, arguments between a man and a woman provide the situation for them. The baseball lingo seems to be Updike's favorite with references to "off base," leagues, and innings. In Couples, fencing and badminton are used with reference to casual banter between characters.

Updike and Sport. Updike's views, as evidenced through biographical information and his novels, indicate a personal belief in sport as a step in life on which to build. He seems to see it as a step everyone should take. His own childhood skills are those developed in the playground game of roofball, soccer at recess in school, and tennis at home. Touch football and golf are hobbies and he must have more than a passing interest in tennis to be photographed in action for the cover of Rabbit Redux. His own activities support his use of recreation and activity in his novels.

Updike seems to feel the sport implications provide aid in the search for the answers to his basic underlying philosophical question, "Why was I, I?" Just as Caldwell simplified the understanding of the inside of the earth for his science class by comparing it to the blue sack of fluid found within the rubber band of a golf ball, Updike has simplified his description of life in America through sport allusion.

## Chapter 4

### NORMAN MAILER

A discussion of Norman Mailer as an individual, a sportsman, and a novelist, and a review of each of his five novels constitute the body of information from which Mailer's usage and concepts of sport are drawn.

### BIOGRAPHY

#### "The Boxer"

I am just a poor boy.

Though my story's seldom told,  
I have squandered my resistance  
For a pocketful of mumbles,  
Such are promises  
All lies and jest  
Still, a man hears what he wants to hear  
And disregards the rest;

.....

In the clearing stands a boxer,  
And a fighter by his trade  
And he carries the remainders  
Of ev'ry glove that laid him down  
And cut him till he cried out  
In his anger and his shame,  
"I am leaving, I am leaving."  
But the fighter still remains (Simon, 1969:119).

Like the boxer, Norman Mailer is a man whose fighting instinct pierces the adversities of his colorful life. A short, stocky, egotistical man, whittled and branded by his passion for turmoil and excitement, Mailer never forsakes his convictions to live for peak experiences.

Born the son of a struggling immigrant accountant in Branch, New York, 1923, Mailer was reared amidst the crowded huddle of big city life (Moritz, 1970:271). He attended Boys High School in Brooklyn before entering Harvard at the age of sixteen. In 1943, he received his degree in engineering. In keeping with his impetuous image, Mailer enjoyed his World War II assignments as an infantryman. Having bulldozed his way through marriage as he has every other aspect of life, Mailer is now living in New York with his third wife (Ethrige and Kopola, 1965:236).

Mailer believes he has the vision to reverse the deterioration of the society of New York City. In efforts to actualize his vision, Mailer campaigned in the 1964 election for mayor of New York City with a revolutionary blueprint for restructuring the city. He lost the election. In February, 1972, he continued to support his theoretical revision of neighborhood structured according to ethnic groups and managed on a survival of the fittest principle (Mailer, 1972b).

Outside of his intense faith in himself, Mailer does profess the existence of a divine being. Instead of questioning belief or disbelief, Mailer is beset with the terms of God's existence.

"But I will say one thing, which is that I have some obsession with how God exists. Is He an essential god or an existential god; is He all-powerful or is He, too, an embattled existential creature who can succeed or fail in His vision?" (Mailer, 1964:42).

A professed egotist and male chauvinist, Mailer does not hesitate to respond to interviews. Neither does he hesitate to write his own interviews, an interesting literary device whereby one facet of his complex personality interviews another. "Paris Review" is particularly tolerant to oblige Mailer with interviews of both types.

Mailer likes to think of himself as a slightly punch-drunk fighter (Moritz, 1970:273). He is driven by his desire for power. As related by one interviewer, "He has wanted in the worst way to count, to be a man the world knows about, and even more, to borrow a phrase from the adolescence he has never wholly shaken off, to be 'king of the hill'" (Gilman, 1969:89).

As the personification of sport, Mailer has one encompassing concept--power. The concept saturates all aspects of Mailer's existence; he sees life as one big fight game. He did play intramural football at Harvard, and he does claim skiing as an avocational pasttime (Moritz, 1970:273). However, Mailer's intrigue as an athlete, or perhaps fighter is a more accurate classification, has developed along with his career as an author. Prior to the publication of his essay "The White Negro," which explains his American existential hero, Mailer went to the country. He views his efforts to quit smoking cigarettes at that time as being comparable to his struggle to get off marijuana earlier. He boxed while he tried to quit the habit. "My father-in-law had been a professional; he was always putting on the gloves with me. I thought it might not be so bad to get in condition" (Mailer, 1969:306). His concern for personal physical strength and skill centers around the publicity for himself as a tough man and a tough author, the two being complimentary to each other in Mailer's opinion. Mailer still takes pride in relating the time in 1965 when he boxed three "whimsical" rounds with champion José Torres. Mailer believes deterioration within the body's cells to be psychic more than physical, and he appears to be keeping both his psyche and physique in shape (Brower, 1965:94).



Mailer considers his writing career to have begun at the age of seven when he wrote a science fiction about a man going to Mars. He did not pick up the pen again until his college years. Reading the book Stud Lonegan made him want to write.

"I grew up in Brooklyn, not Chicago (setting for Stud Lonegan), but the atmosphere had the same flatness of affect. Until then I had never considered my life or the life of the people around me as even remotely worthy of--well, I didn't believe they could be treated as subjects for fiction. It had never occurred to me. Suddenly I realized you could write about your own life" (Mailer, 1964:31).

Mailer lives for excitement and writes for excitement, although he is an idealist in both living and writing. "Psychologically he is drawn to the conservative interpretation, intellectually and emotionally, he is liberal. This dualism is probably the result of his fascination with power as an expression of self" (Volpe, 1964:113).

Mailer's philosophy of the relationship between style and author closely follows Buffon's definition. Simply, "Style is character" (Mailer, 1964:44), and the ills and attributes of the author's character, his weaknesses and his strengths, are reflected in his style. "A really good style comes only when a man has become as good as he can be" (Mailer, 1964:44). Mailer gives no evidence of subscribing to the separation of mind, body, and style. He believes the way an author physically moves his body is reflected in his style.

"And then I think one has to develop one's physical grace. Writers who are possessed of some physical grace may tend to write better than writers who are physically clumsy. It's my impression this is so. I don't know that I'd care to attempt to prove it" (Mailer, 1964:44).

Though he is not willing to prove anything, he does proclaim his hypothesis often when speaking of literature and physical abilities. One particularly striking metaphor is emphatic support of this precept

of style. A critic has said of Mailer's concept of style, "His basic assumption about it is a rather romantic, Hemingwayesque notion that it is equivalent in writing of performance in sport, a sort of devil-may-care-grace" (Gilman, 1969:94). Mailer gives continuing support as he responds to an interviewer's question concerning workouts of the body as an athlete would use for training and similar workouts for writing.

"I don't think it's a proper activity. That's too much like doing a setting-up exercise; any workout which does not involve a certain minimum danger or responsibility does not improve the body--it just wears it out" (Mailer, 1964:48).

The simplicity with which Mailer describes his writing style and the behavior of his characters often becomes intricate and involved as other critics begin to examine his works and his philosophy. Perhaps the most comprehensive statement about Mailer as an author comes from Gilman.

He is the writer-out-with-the-boys, the jolly poet of tough talk, the philosopher of the uppercut and the metaphysician of the sixty-yard pass for a touchdown, but he is also the dying god, the stricken prophet, the St. Sebastian of modern utterance. The most savage critic of America, he is held more tightly than any of his contemporaries in the grip of one of her chief horrors and blasphemies: the cult of success. At one and the same time pinioned and time transcended, making it, and being left out, intimidating the world and being spread-eagled by its indifference. In his strange arrogance and equally strange candor, his contradictory hungers and rival ambitions, he moves, usefully for us all, at the center of a quintessentially American confusion of all the realms of being (Gilman, 1969:82).

Hemingway has been a great influence on Mailer, and Mailer reciprocates the favor by claiming the man as the champion writer of all times (Mailer, 1969:17). Much of Mailer's philosophy of style, characterization, and plot motives are similar to those of Hemingway.

Mailer is specific about his purpose for writing. Primarily, he wants to reach the people of the present times, and in reaching them, influence history. Mailer believes writing is an art, and he feels the purpose of writing is to intensify the moral consciousness of people (Volpe, 1964:113).

Mailer writes of society in its breadth as contrasted to Updike's middle class concentration. As one critic interprets Mailer's work, "what Mailer tries to do is convey a sense of strangeness of the way things are and to evoke a feeling for the overpowering reality of the invisible forces that supply a key to this strangeness" (Podhertz, 1963:192).

Mailer has extended one step beyond the proponents of the new existential novel; he has created a branch philosophy, preconceived and worked out in his vision of social or political terms. Mailer tags his philosophy "American existentialism." Whereas other writers of the new existential novel present metaphysical questions without presenting answers or conclusions to the purpose, Mailer does not allow the solutions to remain unstructured. Providing insight into the purpose of the work is in itself a transgression of the framework for the new novel. However, Mailer does not moralize through his structuring. Moralization sets limitations. To the contrary of confining thoughts or experiences, Mailer's aim is to expand the possibilities. "Ultimately, what Mailer was looking for--and has continued to look for--is not so much a more equitable world as a more exciting one, a world that produces men of size and a life of huge possibility . . ." (Podhertz, 1963:190).

To carry out his American existential philosophy, Mailer has created his American existential hero, "the hipster archetypically

found in the modern American Negro" (Weinberg, 1970:124). Like the hero of the new novel, Mailer's hero is engrossed in self. The concept of the American existential self fluctuates and responds to each experience. Though the hero is an accumulation of his past moments, he is "responsible only to the self he finds in the immediate moment of the present and to the transcendent self which is a future goal" (Weinberg, 1970:130). In keeping with Mailer's obsession with power and strength is the essential heroic trait of "courage to act on the imperatives of the self . . ." (Weinberg, 1970:121).

A casual glance at the structured solutions and the courage which is essential to the hero's character show likeness to the moralistic and chivalrous tendencies of the idealists. However, Mailer justifies his standing as a new novelist by supporting the importance of the experience in terms of modern concerns similar to those of the new novel. "A mystical awareness of death, of sex, and of God is what Mailer goes on to describe as the American existentialist experience" (Weinberg, 1970:127). Perhaps one can say Mailer took the ideas of the French new novelists and existentialists and made them American.

Regardless of the intricacies of Mailer's American existentialism there are critics who question the validity of his vision or his illusions of reality within the realms of the new novel. Because he must also strive to explain and support his American existentialism along with the structure of the novel, he threatens to become a philosopher rather than a novelist (Weinberg, 1970:123). Some critics have not been tolerant of Mailer's dual efforts as both novelist and philosopher. As a referee may judge an athlete in violation of the rules of the game and "kick him out" of the action, so some harsh

critics have kicked Mailer out of the classification of novelist. "Norman Mailer, it now appears, never had it as a novelist; he has always wanted to be a pundit, setting everyone straight" (O'Connor, 1964:207).

Mailer appears to be a pundit as he imposes his philosophy on his readers by using the structure of the novel to stage situations so powerful that the reader has no alternative but to respond. Mailer appears to enforce his ideas by jarring emotional responses which are congruent with his philosophical concepts.

#### REVIEW OF THE NAKED AND THE DEAD

The Japanese troops have been killed. There are a bare minimum of starving, emaciated holdouts who have managed to foil the American forces on the South Pacific Island long enough for Mailer to develop the characters of his first novel, The Naked and the Dead. The war environment of the novel supports a small, specialized society, eclectic in its assemblage of citizens. Mailer deals with his predilection with war and practices his talents as an existential novelist.

Mailer has the experience and love for combat to make his descriptions vivid and valid. The Army was his branch of service and the sports world, with its skill and plays and strategy, afford a suitable source for similes and analogies.

You might make a case for the Navy, where it's all maneuvering on open flat surfaces with different units of fire power, where it's all Force, Space and Time, but war is like a bloody football game. You start off with a play and it never quite works out as you figured it would (Mailer, 1948:80).

The dominant "play" with which Mailer deals is the maneuver of a scout patrol behind enemy lines.

Under the command of General Cummings, the troops land and push forward successfully. As the periods of idle waiting for action are elongated, some sign of attack from the Japanese begins to increase the restlessness and temper of the men. Mailer develops the social structure to represent the conservative, rigid command-servant relationship supported by General Cummings and Lieutenant Hearn and the efforts to allow men their own identities (even in battle) supported by the enlisted men, Croft and Valsen. Cummings and Hearn are the upper strata of the Army's caste system; they are of wealthy and socially prominent heritage. Conversely, Croft and Valsen are the common GI's; they are of the working class.

The closed caste society is developed while the soldiers wait. Cummings has always been destined for the higher ranks of the service. His aristocratic rearing does not center around the activities of most young boys. Much to his father's concern, the baseball bat and glove so vital to the play of most boys, gather dust in the attic (Mailer, 1948:405). Later, while at military school, Cummings does finally find an outlet other than books; he becomes the number three man on the tennis team. Cummings is fanatic about power and order which he must use his rank to obtain. The men and the machinery are tools for him to maneuver in order to win the battle.

Hearn is slightly less regimented in his understandings of rank. He wishes to be everyone's friend, except Cummings'. The conflict between the two men is manifested in attacks and counterattacks under the facade of military orders and duties. Hearn, responsible for cleaning the General's quarters, defies Cummings by grinding a cigarette into the floor. The General reciprocates by assigning Hearn

to lead the spy mission behind enemy lines. It is an order as ill suited to the camp oriented Hearn as Hearn is ill suited to afford leadership.

Hearn has never allowed himself to develop his potential as a man or a leader. The son of a wealthy businessman, Hearn was reared in the Chicago suburbs where the green lawns, croquet courses, and tennis courts "are all the intimate and extensive details of wealth" (Mailer, 1948:332).

Relation of peer attitude toward Hearn as a high school student gives insight to the response he receives from the enlisted men.

In the corner the football captain of the previous season is bending Hearn's ear. "I wish I could be back for this next fall, what a team we're going to have with those juniors, you mark my words, Haskell is going to be All-American in four years, and while we're on the subject, Bob, I would like to give you just a little word of advice 'cause I've kept my eye on you for a long time now, and you don't try hard enough, you don't pull, you could've made the team 'cause you're big and you got natural ability but you didn't want to, and it's a shame because you ought to pull harder" (Mailer, 1948:333).

Hearn has the potential of leadership, a talent which he has never bothered to tap. Though he is officially in charge of the scouting mission he is totally dependent on the scouting knowledge and leadership of the men which his inferior, Croft, so adeptly manages.

Croft is the epitome of the war hero. He possesses fighting skills of the highest caliber, his instincts for precision moves are almost animalistic. In one of the early skirmishes, "Croft fired and fired, switching targets with the quick reflexes of an athlete shifting for a ball" (Mailer, 1948:153). He has the natural abilities for the moves and the innate drive to win. In a flashback to his past, Croft's father relates the strength of Croft's competitive instincts. From his youth he was a local bronc buster and a good one. "'Then

one time a fella all the way from Denison came down and beat him in a reg'lar competition with judges and all. I 'member Sam was so mad he wouldn't talk to no one for two days'" (Mailer, 1948:158-159).

Croft's ability as a leader is encompassed in his natural abilities, his competitive drives, his confidence in his judgment, and the ease with which he issues orders to the men. Contrasted to the weakly Hearn, who approaches the men with a "chummy act" to gain acceptance, Croft does not have to be offered the lead position; he takes it.

The foreign jungles are challenge enough for the men, but an ambush resulting in the death of Hearn and the fatal wounding of another man allows Croft the opportunity to structure a contest of man against nature, a climb to the summit of the highest mountain of the island, which has haunted him throughout the opening days of the mission to the enemy lines.

After the ambush, there are two alternative paths leading to the proposed enemy position. The pass through the mountains, the easier route, has already been threatened by the attack. If they are to continue through the pass as originally planned, the patrol must scout ahead, then move cautiously onward. Or they could climb the mountain, the mountain which has taunted Croft with a dare to conquer its heights since their landing. Choosing the mountain, Croft is challenged to the quick of his being as he must conquer the fatigue of his men as well as the mountain.

The men's thoughts and feelings for the ascent and for Croft as their leader are vividly expressed by one of the soldiers.

And Wyman was thinking of a football game he had played once on a sandlot. It had been the team on his block against the



team from another one, and he had been playing tackle. In the second half his legs had given out and he had a humiliating memory of the opposing runners cutting through his position almost at will while he had dragged himself unwillingly throughout each play. He had wanted to quit and there were no substitutes. They had lost by several touchdowns but there had been a kid on his team who had never given up. Almost every play that kid had been in on the tackles, yelling encouragement, getting angrier and angrier at every advance the other team made.

He just wasn't like that, Wyman decided. He wasn't the hero type, and he realized it with a suddenness and a completeness which would have crushed him months before. Now it only made him wistful. He would never understand men like Croft; he only wanted to keep out of the way of them. But still, what made them tick? he wondered. What were they always going for? (Mailer, 1948:637-638).

Ironically, Croft the unconquerable is defeated by a beehive near the summit, marking the failure of the climb and the failure of the maneuver.

Though Cummings may be admired for the firmness with which he executes his commands and Croft may be admired for his strong spirit and leadership, Red Valsen is the ideal man. A miner by trade, he has the understanding for life and humanity which enables him to serve as the peace-maker throughout the novel. Never losing his temper nor his perspective of the situation at hand, Red views the anxiety of the men as they begin their mission along the back lines as "a bunch of college kids who think it's like going to a football game" (Mailer, 1948:446). Throughout the mission, Red is the one who supports Croft, who encourages the fatigued men to follow rather than to desert the mission, who minimizes the sense of failure as the men return, unsuccessfully, from their assignment.

Mailer carefully plans and smoothly incorporates the social system and individual characterizations throughout the novel. However, such intense structuring of characters is dulled by the anticlimactic

ending of the novel. The mission to the back lines is worthless to the success of the campaign which ends long before Croft's men ascend the mountain. The Japanese have faked the strength of their troops throughout the campaign, having been severed from their supply lines from the beginning. Cummings, having been officially called away from the island, is not credited with the success of the campaign. Hearn is dead. Croft is unable to conquer the mountain.

Perhaps the significance of Red Valsen's belief and support of mankind and his respect and understanding for all of the men on the mission from Croft to the fellow soldier is the ultimate truth gleaned from the story and Mailer's careful characterizations. Certainly, the social structure of the Army allows Mailer to inject his social viewpoints. The detail and development of the characters, however, are the true merits of the work. Mailer establishes his literary ability with the manipulations of character reactions to plot situations and the skillful use of the Time Machines to construct characters who are more like beings than representational individuals of a story. In developing each of the significant characters, Mailer places the man into the flashback structure of his style, the Time Machine. A particularly insightful series of episodes from the character's past is related to the reader. Though the tool of the flashback is not original with Mailer, his use of such a device for character development is masterful. By their nature and by their action, the characters facilitate the plot motives of the novel. Skillfully written, The Naked and the Dead is a significant contribution to American literature and is to Mailer's credit.

REVIEW OF BARBARY SHORE

From the battlefields of his first novel, The Naked and the Dead, Mailer moves to the musty upper rooms of a tenement to heighten the dramatic intensity of the political views which he exposes in Barbary Shore. Staged as a criminal-secret police spy episode, the deeper symbolism of Barbary Shore signifies the social-political conflicts of idealism versus the pragmatism of bureaucracy. The duel between political systems dominates the plot motives of his second novel to express Mailer's own theory of socialism.

Mailer tells the tale of Barbary Shore through Lovett, an amnesiac who is struggling as an unknown author. Pastless and lonely, Lovett has secluded himself in a shabby upper room of Guinevere's boarding house. There he encounters the two men, McLeod and Hollingsworth, who represent the opposing systems of individual idealism and bureaucratic pragmatism.

McLeod, the idealist who befriends Lovett as they expand idle socialization into philosophical discussion, is a defected Communist who has obtained a secret object or piece of paper which provides a vital link for the success of bureaucracy. Hiding from his past within the dim seclusion of the boarding house, McLeod had dedicated his present efforts to writings of theory against the ideals of the Bolshevik Communist party.

Hollingsworth, who represents bureaucratic pragmatism, is the secret policeman who has tracked McLeod. A shifty little man, he lives a more sequestered, austere life than do either Lovett or McLeod. Until Hollingsworth openly confronts McLeod and begins an interrogation

to obtain McLeod's secret, he is introduced only as a seedy character, disagreeable to Lovett. Lovett senses a slyness in Hollingsworth which is partially indicated by the impression of a trim build moving in "the kind of grace which vaults a fence in an easy motion" (Mailer, 1951:38). The shiftiness in Hollingsworth's character and his physical grace are foreboding omens of the craftiness he employs throughout his interrogation of McLeod.

No spy story could be complete without the frailty and heightened emotions of women. Guinevere and Lannie fulfill the female characterizations in Barbary Shore. Guinevere is a dowdy, painted domestic who putters with the management of her dwelling. A cheap woman with the intelligence and class of a soap opera heroine, Guinevere is discovered to be McLeod's wife. She becomes significant in the network of the episode as she runs off with Hollingsworth at the close of the novel. Symbolically, she has betrayed idealism, represented by her husband, for pragmatism, represented by Hollingsworth. Lannie is an emotionally destroyed young woman who witnesses the interrogation of McLeod along with Lovett. Having once been a significant cog in the wheels of the bureaucracy, Lannie is shattered by the memories of the tortures and injustices of the system to the masses. Throughout the confrontation, she offers Lovett insight regarding the proceedings.

Hollingsworth directly confronts McLeod with a detailed list of McLeod's past activities. Idle hopes for a quick, easily obtained confession from McLeod diminish as Hollingsworth's wit and determination are matched by McLeod, turn for turn. The two plan their strategies as if they were pitted against each other in a chess match.

Deadlocked and determined in their stands, Lannie explains their firmness, "For, you see, they are so devoted to winning they have no equipment for victory . . ." (Mailer, 1951:214). McLeod, worn down by the list of evidence against him and the pathetic Lannie, as an example of the destruction of the Bolsheviks, confesses to the list of activities with which Hollingsworth accuses him. McLeod relates his decision to leave the Communist revolution and party: "I had come to the conclusion that I was destroyed as a person" (Mailer, 1951:222). In the process of unraveling McLeod's past, the idealism of his theory is revealed. McLeod's concern for the worth of the individual, the idealistic dream of equality for the masses, was once projected through the concepts of Bolshevik communism. Then, through a series of murders and subversive activities, he realizes that the masses are being deceived by the leadership of the party whose only concern is for the advancement of their personal power. Realizing that the dedication of the masses to the Bolshevik revolution in reality would be a concession to the power of the revolution's leaders over the people, McLeod defected from the revolution. Then, before his exile to the United States, McLeod began spreading propaganda to inform the people of their eventual plight of servitude should the revolution succeed. Literally, the Bolshevik leaders who were professing the overthrow of bureaucracy were no better themselves than a highly structured bureaucracy.

Disillusioned by the actions of the bureaucrats, including the Bolsheviks, McLeod resorted to theory rather than the action of a counter-revolution. His idealism supports the belief in equality of freedom for each individual, through the strength of commitment of the masses to the concepts of idealism. McLeod sees the state

capitalism of the United States as being bureaucratic while his own absolute socialism is democratic.

Small glee for him to cry that the new democracy (socialism rather than state capitalism) had the freedom of an army and the equality of a church. No one would be listening. For, he had planted the rot (with his Bolshevik activitism) and now screamed at the weeds (the results of the Bolshevik revolution) (Mailer, 1951:218).

Confessing to all of Hollingsworth's evidence against him, McLeod refuses to surrender his secret to Hollingsworth and the bureaucracy. Rather, having appealed to Lovett's intelligence with the validity of his idealism, McLeod entrusts the secret to Lovett. Now Lovett has accepted the burden of McLeod's idealism.

At the moment of his decision, Lovett explains to McLeod, "I've thought about it," I managed to say. "I'm not a brave man, I know that . . ." It was expressed at last, "I have no future anyway. At least I can elect to have a future. If it's short, small matter," (Mailer, 1951:304).

Lovett escapes to protect someone's freedom to decide the plight of his own future just as Lovett has done by accepting the burden of the secret.

Though the primary purpose of the novel is to allow Mailer the opportunity to expound his political treatise, the elementary stages of a new type hero, Mailer's American existential hero, is evidenced. McLeod appears to possess the strength of commitment and dedication regarding his life to classify him as a hero. However, it is Lovett who claims the true heroic distinction because McLeod has attempted to uphold the imperatives of self, but he has failed by confessing to Hollingsworth. Lovett has neither failed nor succeeded in the time span of the novel. With this distinction, the failure of one versus the potential for success of the other, Lovett is the dominant hero.

Barbary Shore is written in a complex style, deeply philosophical and tedious to read, particularly for the trite plot motives through which the concepts are presented. Though it fails as a novel, it does reflect the social-political thinking of Mailer and gives evidence for the stumbling steps of a philosophical tenet which appears to direct Mailer's artistic commitment.

#### REVIEW OF THE DEER PARK

The commercial world of movie stars and motion pictures produces the microcosm in which Sergius O'Shaughnessy, the narrator and hero of The Deer Park, encounters two conflicts of morality. The pugnacious O'Shaughnessy, recently discharged from the Air Force as a World War II hero, is squandering his quick fortune from the poker table on the luxuries of the Desert D'Or resort. Surrounded by examples from the lives of the colony of motion picture people who have no morals, Sergius is compelled to reckon with his own morality regarding sex and his professional convictions. The film professionals have succumbed to the dictates of their careers in motion pictures. The contrasts suggested by the exchange of the individual will for the security of the commercial business world to the independent, freelance style by which he has lived, stage the conflicts of Sergius' quest. Submissive to the omnipotence of H. T. Teppis, owner of the Mangum Motion Picture Company and symbol of the power structure of American Commercial enterprise, the film employees have no conflicts to settle and no decisions to make. Their manipulated lives, guided by stardom and the almighty dollar, flash warnings to Sergius as he contends with the essence of his morality. Two characters, Lulu and

Charles Eitel, are significant in the two conflicts with which Sergius is faced. The conflict of love and sexual morality revolves around Sergius' affair with Lulu while the situation surrounding Charles Eitel's personal struggles lends a foundation for Sergius' professional moral conflict of commercialism and the allodial self.

No concession is too great, no demands of her fame too unbearable to redirect Sergius' time and affection away from Lulu. The Air Force career and the war have blocked the possibilities for Sergius to entertain infatuation which borders on love, and Lulu is an exquisite hostess for Sergius' latent passion. But Lulu plays. She plays with life and she plays with the emotions of Sergius, flaunting before him the fame which gives her the power to satisfy her selfish demands. Sergius is merely a trinket in her golden world of stardom. Yet, perhaps it is the constant vying for her attention which holds Sergius servant to her. "What she may have intended as a little dance was a track and field event to me, and I would snap the tape with burning lungs, knotted muscles, and mind set on the need to break a record" (Mailer, 1972a:114). Lulu is fascinated with Sergius' attentions. Although she is hesitant to acknowledge her joy in the simple pleasure of his company, Sergius is more than a promotional gimmick for her stardom. "Lulu's taste was for games, and if she lay like a cinder under the speed of my sprints, her spirits improved with a play" (Mailer, 1972a:120).

So handsome and publicly appealing is this all-American war hero of Lulu's fancies that Teppis offers Sergius a job as Lulu's latest love along with an acting career. Sergius refuses the offer. He cannot sell his love nor his life for a promotional, commercial fling. The



mechanics of the system are bared as Lulu's affection for Sergius wanes with Sergius' rejection of the offer. Although Lulu acknowledges that for once her games with Sergius are founded on deeper roots than mere publicity stunts, the system's control over her life is so strong she has no choice but to drop Sergius from her thoughts and her feelings as he loses his usefulness in respect to the system. Meanwhile, Sergius realizes he cannot forsake the essence of his being to controls of the system merely for ego gratification from a paper doll sex symbol.

Charles Eitel, an ex-commercial script writer for the Mangum Motion Picture Company, befriends Sergius. At the time of Sergius' stay at the Desert D'Or, Eitel is clinging to a past and a lifestyle he can no longer financially afford. Banned from the Mangum Company because of his suspected connections with the Communist party, Eitel's career as a commercial writer is presently arrested. Through Eitel, the distinction is made between the commercial writer and the artist author. Sergius witnesses Eitel indulge short-lived fanciful dreams of Charles Eitel, artist, free-lance writer unshackled by the dictates of the commercial society of the motion picture industry. The challenge of starting over as an artistic author rather than a commercial writer briefly stimulates Eitel's aspirations to overcome the system. However, the more intensely Eitel reflects on his personal character and the lower his bank account drops, the clearer his fate as a commercial writer becomes.

. . . Eitel felt with dull pain that he should have realized he would never be the artist he had always expected, for if there was one quality beyond all others in an artist, it was the sense of shame, of sickness, and of loathing for any work which was not his best.

Yet he knew his situation was a little unreal to him. That was true of all his life, all of it was unreal to him. Could there possibly have been a time when he had been so young as to break his nose trying out for the college football squad because he wished to demonstrate to himself he was not a coward? (Mailer, 1972a:146).

The question of appearing or not appearing before a congressional committee, the Subversive Committee, becomes another test of Eitel's cowardice or courage. His determination to write commercially, since he acknowledges his propensity toward money over his aspiration to gratify individual assertion, prompts his submission to the pounding questions of the congressional committee. Eitel endures the barrage of questions, confessing to things he knows and to some things he does not know. All done, he has pleased the Committee in return for his daily bread, not as a coward to his commercial society and to money but as the lowliest "whore" to his talents and his person.

Sergius observes the tortures of the system to which Eitel has been forced to surrender. The distastefulness of the pressures of the system, subjugating an individual until the system hears what it wants to hear and sees what it wants to see, exposes the philosophical morality of Sergius' concurrent decision for his future. Because of the glamour of his own life as an orphan self-made into an Air Force pilot and war hero, Teppis has offered Sergius financial security for the production of a movie of Sergius' life with the added bonus of an acting career, complete with the publicity as Lulu's lover. However, Sergius has acquired an increasingly stronger ambition to write. He must choose between accepting the security and the control of the commercial system or rejecting it for the poverty and the struggle of an unestablished author. With encouragement from the trapped Eitel, Sergius rejects the offer. An extension of Eitel's dreams, Sergius

holds fast to his ambitions to write. The drama of Sergius' decision to fight the system and effect his potential is heightened as he is forced to take a job as a lowly dishwasher to support himself. Acceptance of the burden of an artist's imperatives to himself confirms Sergius' role as Mailer's existential hero.

Throughout The Deer Park, Sergius relates snatches of his past. He relates pieces of his character which allow the decision to reject acting for writing to be congruent with the development of Sergius as Mailer's heroic figure, consistent if not believable, and always a fighter.

Abandoned in an orphanage by his father a few years after his mother died, Sergius had no one to rely on, no one to defend him, no security other than that which he won for himself. Even the right to his name, Sergius O'Shaugnessy, was a battle he fought early in life. Such a noble, high class name as Sergius was not particularly fitting for his pathetic, poverty ridden life in an orphanage. The name itself represents lofty aspirations beyond the expected potential of a commoner. In the rugged lifestyle of his boyhood, Sergius stuck with his name rather than forsaking to a nickname.

Naturally, I paid for it with a dozen fights, and for the first time in my life I was wild enough to win a thing or two. I had always been one of those boys for whom losing came naturally, but I was also rare enough to learn from winning. I liked boxing. I didn't know it then but it was the first thing I had found which was good for my nervous system. In the space of four months I lost three fights and then won all the others. I even won a boxing tournament the Police Department held. After that I'd earned my name. They called me Sergius (Mailer, 1972a:23).

Boxing becomes an expression for Sergius' more philosophical battles throughout the plot motives of The Deer Park. Opportunities for orphans tend to be limited, but orphan O'Shaugnessy boxes his way

to flight school and the opportunities available to an Air Force pilot. How natural, then, for him to see the relationship between boxing and his war piloting. "Fighting an enemy plane was impersonal and had the nice moves of all impersonal contests; I never felt I had done anything but win a game. I flew a plane the way I used to box; for people who knew the language I can say that I was a counter-puncher" (Mailer, 1972a:144).

With the realm of the boxing ring serving as the basis for many of Sergius' understandings, analogies, and metaphors, which add crystal clarity to his perception of his individuality, reference to his skills seem appropriate as he discusses with Eitel his future. Revealing his reasons for his short-lived boxing career, Sergius admits he was afraid of getting his "brains scrambled." Now he realizes the void of an offensive attack is something worse than being afraid all of the time.

"After a while I realized I had no punch. A counter-puncher who doesn't have a punch fights all night and he takes too much punishment . . . I can hardly tell you how I hated to admit to myself that I had no real punch. No real punch. . . . Once, I had a punch." I said to him. "It was the Quarter-Finals fight in the Air Force tournament. The word we had around the Base was that if a man reached the Semi-Finals, he had a good chance for flying school. So I was pressing for that fight, and I almost got knocked out. I don't remember a thing, but my second told me that I caught the other dupe with a beautiful combination when he was coming in to finish it off. And they counted him out, and I didn't even know it until it was all over. Then in the Semi-Finals I took a beating. I got stomped. But they say that sometimes a fighter is dangerous when all that's left is his instinct sort of, because he can't think his fight any more. It seems to come from way inside, like you're a dying animal maybe" (Mailer, 1972a:195).

Sergius canvasses Eitel for the assurance of a "punch" to his writing. By avoiding a direct answer, Eitel reinforces Sergius' decision to write regardless of the quality of his talent. Whether or not he can

write is a secondary issue; the core of the decision is whether or not Sergius will acknowledge his artist's dedication to the imperatives of self.

In the closing pages of The Deer Park, Sergius has abandoned his passion for writing. He realizes his efforts to write paralleled the counter-punch of his boxing; his attempts to write of bullfighting are a poor copy of Hemingway's style. Separated by the distance and the vices of their ambitions, Eitel's love for money and Sergius' love for independence, the unfulfilled Eitel moralizes his understandings of life. He tells Sergius, through conversations of his imagination.

"For you see," he confessed in his mind, "I have lost the final desire of the artist, the desire which tells us that when all else is lost and adventure, pride of self, and pity, there still remains that world we may create, more real to us, more real to others, than the mummery of what happens, passes, and is gone. So, do try, Sergius," he thought, "try for that other world, the real world, where orphans burn orphans and nothing is more difficult to discover than a simple fact. And with the pride of the artist, you must blow against the walls of every power that exists, the small trumpet of your defiance" (Mailer, 1972a:318).

Apocalyptic as Eitel's knowledges may seem, The Deer Park as a novel lacks greatness. More philosophical in its approach than The Naked and the Dead and more powerful in its themes of courage and commitment than Barbary Shore, The Deer Park seems an intermediary step toward the refinement of Mailer's philosophy and the unobtrusive incorporation of its concepts into the plot motives and characterizations of a novel. The Deer Park is no more or less than a step toward the perfection of Mailer's American existential hero and the validation of Mailer as a novelist.

REVIEW OF AN AMERICAN DREAM

In his essay "The White Negro," Norman Mailer talks of the kinds of death which face modern man. Death by atomic war, death because of the political power of the State, and death through social conformity are types of death specific to the modern twentieth-century man. In coping with the twentieth-century death, Mailer projects that

if the fate of twentieth-century man is to live with death from adolescence to premature senescence, why then the only life giving answer is to accept the terms of death, to live with death as immediate danger, to divorce oneself from society, to exist without roots, to set out on that unchartered journey with the rebellious imperatives of self (Mailer, 1969:313).

Mailer seems to use this formula for modern living as the format for his novel, An American Dream. Stephen Rojack, the narrator and existential hero, illustrates Mailer's theory of life through the encounters of twentieth-century deaths in his effort to live for the imperatives of self.

Rojack is a "professor of existential psychology with the not inconsiderable thesis that magic, dread, and the perception of death were the roots of motivation" (Mailer, 1965:15); he is also a television personality. He has been a war hero, a courageous young man with an "all-American" past.

I had gone into the Army with a sweaty near-adolescent style, Harvard on the half-shell ("Raw-Jack" Rojack was the sporting name bestowed on me in the House Football) and I had been a humdrum athlete and as a student, excessively bright: Phi Beta Kappa, summa cum laude, Government (Mailer, 1965:10).

He has been a hero, fighting and winning and experiencing the terms of physical death through the glossy eyes of those who knew what he could only speculate about death. Returning before the end of the

war because of injuries, Rojack, with his "all-American" image, was elected to Congress. His superstitions and the desire to shun the public image necessary for soliciting votes cut short his political career.

He married well. Deborah, the beautiful daughter of Barney Oswald Kelly and heiress to his fortunes, has been reared on the high society life style complimentary to the "bigness" of her father's business operations. Question of Kelly's connections being high in the Mafia or with the federal government is paradoxical. Regardless, Kelly is wealthy, prominent in business, and powerful. A year long separation from Deborah has reduced the direct influence of Deborah's social status and Kelly's wealth on Rojack's own life. Memories of his heroic feats, prominence as a politician, and status as husband of society's queen are not vital enough to allow Rojack to bask in the afterglow of a successful life. Void of the dash of the war and the political arena and suffering from the personal adjustment entailed in the separation from his wife, Rojack decides he is a failure; he has spiritually died. Murder and suicide engross his mind. One evening, with the moon as an enchanting temptress of his superstitions, Rojack is haunted by the invitation to suicide. Lacking the courage to let go of a fifteenth story balcony ledge, Rojack crawls back to safety having refused the moon's offer for physical death. He feels he is a coward with all nobility and worth of his being, dead. With such subjugation to the weakness of his own courage, Rojack enters the dominant plot motive of An American Dream.

Rojack murders his wife. Knowing from his superstitious beliefs the potential for murder is ready within him and suspecting the

evil of Deborah's own being make the act of murder simple and defendable at the time Rojack strangles Deborah.

She was evil, I would decide, and then think next that goodness could come on a visit to evil only in the disguise of evil; yes, evil would know that goodness had come only by the power of its force. I might be the one who was therefore evil, and Deborah was trapped with me. Or was I blind? (Mailer, 1965:40).

Evil and the devil are synonymous, and whether Deborah was the original evil or the goodness which has come in the disguise of evil, the devil of her soul and wickedness of her influence over Rojack are murdered with her physical being.

Although the mystique of spirits and evil are significant in the murder and its surrounding events, the very human quality of a jealous ego precipitate the murder. On this particular visit, Deborah taunts Rojack with the sexual pleasures she derives from the three affairs she has fostered since their separation. His ego, which Deborah has delighted in shattering throughout their married life, can no longer endure her wickedness. She has tormented and belittled him relentlessly. Rojack recalls

Once, for an instance, at a party, a friend of hers, a man I was never able to like, a man who never liked me, had proceeded to beat on me so well for "celebrity" on television that he was carried away. He invited me to box. Well, we were both drunk. But when it came to boxing I was a good Tero de salon. I was not bad with four drinks and furniture to circle about. So we sparred to the firm amusement and wild consternation of the ladies, the sober evaluation of the gents. I was feeling mean. I roughed him up a hitch or two in the clinches, I slapped him at will with my jab, holding my hand open but swinging the slaps in, he was such an ass, and after it went on for a minute, he was beginning in compensation to throw his punches as hard (and wild) as he could, whereas I was sliding my moves off the look in his eye and shift of his fists, I had settled into the calm of a pregnant typhoon, the kill was sweet and up in me, I could feel it twenty moves away, he was going to finish with three slugs to the belly and his arms apart, that is what it would take, his eye was sweaty and I was going keen (Mailer, 1965:22).



Deborah would not allow Rojack the social status of "tough guy" champion. Later, when a younger, weaker man challenges Rojack, he refuses to fight. Deborah jumps at the chance to suggest his refusal is from fear; that he is really a coward.

But now he has ended the threat to his ego by strangling her. By pushing her carcass out the window into the busy street below, Rojack temporarily side-steps his responsibility for the death by making Deborah appear a suicide victim. As he rushes to the street, a memory of a past sensation momentarily breaks the stupor which has surrounded him with the reality of Deborah's dead body.

There was one instant when the open air reached my nose and gave me a perfect fleeting sense of memory; I was eighteen, playing House Football for Harvard; it was kickoff and the ball was coming to me, I had it, and was running (Mailer, 1965:60).

Reaching the body he also reaches Roberts, the investigating detective. Subjected to rigorous questioning Rojack refuses to confess to the murder. During the lengthy bouts of interrogations Roberts continues to present evidence against Rojack and relentlessly attempts to wear him down to a confession.

It was as if we'd been wrestlers and Roberts had proceeded on the assumption it was his night to win. Then the referee had whispered in his ear--his turn to lose. So he bulled around the ring. Now we were back in the dressing room exchanging anecdotes, trading apologies (Mailer, 1965:151).

Roberts loses to Rojack's stubbornness and is forced to cease the questions. Charges against Rojack are dropped to silence the case. Because of Deborah's activities and her father's connections with the Mafia and/or the federal government, Rojack is freed from the powers of the State's law.

The night of the murder, after Roberts has struggled to wear him down, Rojack stops at a cheap bar. Cherry, the singer, infatuates Rojack, who is basking in the newly found freedom from the evil of his wife. Cherry is the angelic contrast of goodness to Deborah's wickedness. To Rojack, Cherry has the wholesome appearance of an airline hostess or the television wife of a football player. Under the lights she assumes the healthy red-orange tan of an athlete (Mailer, 1965:94). For the second time since the murder, the first being the remembered sensation of freedom of running as he rushed to Deborah's body in the street, Rojack exists in feelings of goodness and a cleanliness from evil.

Unwilling to relinquish this Cherry, woman of goodness, for the next few days Rojack pursues a relationship at her apartment. At the end of a short-lived affair with Cherry and on the night before Deborah's funeral, Rojack is confronted again with the evil of Kelly's and Deborah's past. Cherry has previously lived as one of Kelly's mistresses. The shadiness of his connections and business has altered her own status, as one befriended by Kelly, to possessing the power of killing and being killed. Frightened by his power, she has pulled out of Kelly's life and is hired for cheap entertainment. Until the fulfilling, passionate affair with Rojack, Cherry has further escaped Kelly by living with the Negro entertainer, Shago Martin. Shago is a big man with a big name for himself.

And he had a beat which went right through your ear into your body it was cruel, it was perfect, it gave promise of teaching a paralytic to walk: he was always announced at places like the Copa as "The Big Beat in Show Biz," and the worst was that some publicity man was right for once, his voice had bounce as hard as a rubber ball off a stone floor, listening to him was cousin to the afternoon one played a match with a champion at

squash--the ball went by with the nicest economy, picking up speed as it went, taking off as it blew by; so Shago Martin's beat was always harder, faster, or a hesitation slower than the reflex of your ear, but you were glowing when he was done, the ear felt good, you had been dominated by a champion (Mailer, 1965:172).

Shago, unwilling to relinquish what he considers to be his possession, Cherry, tries to kill Rojack. Rojack, the champion of the high society drunks, fights for his fair Cherry against Shago Martin, the champion of Pop Music. Shago loses.

After confronting Shago, Rojack meets with Kelly where he learns more of Deborah's past and of her suspected spy activities on the three men whose affairs with her she used to torment Rojack. In the presence of Kelly, Rojack once more confronts evil in a death walk along the balcony of Kelly's apartment, towering above the street in the windy night air. Rojack makes the treacherous walk twice. The first walk is a direct confrontation with evil which has pervaded his life. Successfully completing the first perilous walk, Rojack walks again, this time seeing the challenge as a battle for Cherry's life of goodness, the antithesis of Deborah and Rojack. He cannot physically or emotionally complete the last portion of the walk, and, as he steps from the ledge, Cherry is fatally wounded in her apartment across town by Mafia associates.

Through the murder, Rojack is symbolically freed from the chains of evil and society which he believes have held him from pursuing the imperatives of self. His freedom from evil he has wished for; the freedom from Cherry he has longed to keep. Freed by the school President from the responsibilities of his job, Rojack roams to Las Vegas. There, he has one last spiritual communication with Cherry. Having overcome the deaths of twentieth-century America and fulfilling all

requirements in Mailer's formula for life in modern America, Rojack drifts on, traveling abroad, traveling free with only the responsibility and imperatives which he demands of himself.

The events and emotions surrounding Rojack's rebirth to life and a sense of overcoming failure through the murder of his wife have elements consistent with Rojack's own existential thesis of the origin of motivation; magic, dread, and perception of death. Magic, through Rojack's superstitions, has mirrored the pointlessness and failure in his life. The sense of failure and his dread of living as a failure have been focused by magic for him. The perception of death, along with magic and dread, are centered in Rojack's own suicidal thoughts. The motivation of perception of death becomes the projection of Mailer's classification of twentieth-century death and the formula for overcoming it.

Through the murder of his wife, Rojack employs the principles of Mailer's formula. He accepts the terms of death by committing the acts of murder, the terms being the consequences of his act. For Rojack, the consequences unshackle him: he is freed from the evils of his wife, he is freed from charges of murder, he is freed from the personal death of failure. Throughout the events of the novel, Rojack is faced with the immediate dangers of death. The possibility of even greater failure, the decision of the law concerning his charge of murder, the encounter with Shago and the death walk are all immediate and crucial. The act of murder divorces Rojack from society; he is tagged as a criminal, an outcast from the social and professional lifestyle of his past, even though he is not charged with Deborah's death. Without ties to Deborah or the responsibility for his love of Cherry, Rojack

loses all roots, enabling him to set out on the unchartered journey with the rebellious imperatives of self. Yet, it is this last, this journey for the imperatives of self, which is also the motivation permeating the murder from the jealous ego to the drifting free self. Rojack cannot alter his life to include living for his own imperatives without symbolically winning the battle against the death of his success. His rebellion comes with Deborah's murder.

Rojack's emotions and actions tightly interweave Rojack's own existential theory of motivation and Mailer's four guidelines to living the death ridden lifestyle of the twentieth-century modern American. The types of death facing the modern American are exemplified through Rojack's faulted suicide, the physical death of Deborah, and Shago's attempt at Rojack's life. The political death of Rojack's former congressional position and the vagrancies of the State law which allow Rojack to go free from charges of murder, and the death of social conformity, represented by the lifestyle which thwarted Rojack's potential for greater success contribute to Rojack's symbolic death as an American middle class man and rebirth as Mailer's American existential hero.

An American Dream is a pattern of tightly woven theoretical concepts. It is a novel designed to illustrate Mailer's philosophy. Although it is not easily read, the symbolism in An American Dream is significant to Mailer's interpretation of the quest for self-gratification within the concepts of his American existential philosophy.

#### REVIEW OF WHY ARE WE IN VIETNAM?

Mailer's modern American vision is mirrored through the inner thoughts of D. J. (Disc Jockey to the world) as a trio of D. J. (whose

given name is Randal Jethroe), his dad, and his friend, Tex Hyde, experience a modern hunting trip to Alaska, "a Charley Wilson, John Glenn, Arnold Palmer, Gary Cooper kind of trip" (Mailer, 1967:51). Related through the jagged thought patterns of stream of consciousness writing, the story of Why Are We in Vietnam? epitomizes modern twentieth century life in America as Mailer sees it.

In D. J.'s first effort to "tune in" the reader, he describes his mother and father as upper class American bigots obsessed with appearance and social status, a stereotype of wealth which is standard for D. J.'s hometown, conservative Dallas, Texas. After sufficiently rejecting any establishment or tradition from his past, D. J. begins the treatise on his version of the modern American scene.

Gather here, footlings and specialists, hot shit artists, those who give head, and general drug addicts of the world, which means all you Hindus and professional football asshole buffs, and glom onto the confusion of my brain (Mailer, 1967:24).

As D. J. describes himself, his father, and Tex Hyde, he refers to past experiences. He and Tex were such close cronies that the parents became concerned. "Hunting together, playing football together on the very same team, riding motorcycles together, holding hands while they ride, studying karate together . . ." (Mailer, 1967:20) all became an alarming amount of "togetherness" causing parental concern. What would the neighbors say of such abnormal behavior?

D. J.'s description of his father, Rusty, is exemplary of Mailer's power-sport intrigue. Rusty, a past all-American football player, had performed for D. J. once on their Dallas mansion lawn.

"Randy," said Rusty afterward, "you get to be a nut about competition. That's the way. You got to be so dominated by a desire to win that if you was to squat down on the line and there facing you was Jesus Christ, you would just tip your head

once and say, 'J. C., I have to give you fair warning that I'm here to do my best to go right through your hole'" (Mailer, 1967:41).

D. J.'s rebellion to the emphasis on competition, being first, and "making it," both concepts which have reigned over the lives of his parents and their generation, is manifested on a trophy game hunt in Alaska.

The hunting situation is big time and commercial. The guide lets the trio of hunters play around on foot, killing the local variety of game animals, mostly caribou. The big trophy game, the Dall sheep and the grizzly bear, are further away. Aided by a helicopter for transportation and tracking the game, the hunters prostitute the laws of stalking for the kill by herding the sheep for a massacre.

. . . and the Cop just went circling around until the sheep were fixed, shit they were hypnotized, it was pretty to watch, cause Hail Cop was like a bullfighter twisting a bull through the limits of his neck until he just got to stand and wait and let his neck recover . . . (Mailer, 1967:103).

D. J. and his father do find and kill a grizzly bear, the danger and the challenge of overpowering the formidable animal drawing them to the bear like a magnet. D. J.'s shot is the maiming one. As he approaches the bear, experiencing a spiritual communion of life and death in the crystal glimmer of the dying bear's eyes, D. J.'s father fires the shot that kills, the shot that ends D. J.'s communion as well as the bear's suffering. This one realization that his father, who encompasses the ills of the society and wealth, will be the one to claim the kill, triggers D. J. to search for his imperatives of self against the rites of the modern American hunt.

His father, society, kills for the pleasure of seeing blood flow. The hunt is an act of violence which can only be satisfied by merciless slaying. There is no meaning, no sanctity in the murder;

there is only the sensation of power, of man conquering all of nature and his fellow man to reign the earth. D. J. questions the values and standards of his parents and modern American society. The dying bear jars him to the awareness of the exploitation of nature for gratification of a power-hungry ego.

That night, back at the base lodge, D. J. and Tex pack their gear and begin a search for another bear on foot, thus holding sacred the primitive rituals of stalking the game without man's machines. They allow power to be restored to the laws of nature.

After the bombardment of D. J.'s slang and profanity regarding every object, person, and scene in the novel; slang and vulgarities more base than the most ribald scum of the earth, drilled into every thought, every phrase; the reader is enthralled by the vivid, pure, unadulterated portrayal of the scenes D. J. and Tex behold. The process of stalking, of witnessing nature, is the essence of their pleasure rather than the modern process of killing for bloody, violent power and to fulfill an ostentatious ego trip. The two men witness conflict, the natural conflict of buck caribou against buck caribou rather than man against animal. The two bucks

stop for a second in the brisk September afternoon air and hunker down their hind legs, and then give each other a clout with their antlers like football linemen making contact, slap, snap, sharp and fast . . . and all this, especially the clear crack of antler clatter, sharp as shoulder guards hitting each other . . . (Mailer, 1967:191).

The power of the two animals is transmitted as understandably as the clear cracks of their antlers. This contest between the bucks and other glimpses of conflict in nature render insight into the modern man's obsession with competition. Meaning in life, the worth of an individual, and the power of an individual in society is seen



as measured in terms of winning, in emerging triumphant in an effort to achieve a goal. This was Rusty's message of the dominant desire to win given to D. J. on their Dallas mansion lawn. Now, on the trail through the wilderness, D. J. and Tex begin to understand the concept of Rusty's thinking; through centuries of conflict, which means progress to modern America, man has transgressed the value of the process into the pathetic misapplication of winning as the solitary source of fulfillment for an individual. Progress has shackled man in its process, blinding him in an accelerating helix of competition.

The trek is over. The two men return to the modern world which is entangled in the bonds of progress and competition. Outside the bonds are the lures and visions for dreams of satisfying the imperatives of self-fulfillment, which have been implanted in D. J. and Tex on their encounter with nature, over the imperatives of social standards.

Norman Mailer professes the American Negro as the archetype of the American existential hero. In an essay, "The White Negro," Mailer suggests the black race is better prepared for modern American life "for he has been living on the margin between totalitarianism and democracy for two centuries" (Mailer, 1969:313). Throughout the novel, D. J. verbally jeers at the reader. Are his vulgarities and views as the purest characterization of Mailer's American existential heroes truly from a Negro? Or is D. J. white with his thoughts stripped of social conformity to their debased and vulgar expression? This question is a literary technique which serves to intensify the illustration of Mailer's representation of bigotry and prejudice in the American, as does the entire structure of the novel. The paradox of D. J.'s color is an interesting literary tool in that it directly questions

the biases of the reader as well as portraying the social prejudices through the characters of the novel.

The title, Why Are We in Vietnam?, is sufficient evidence to support Mailer's intentions for the novel to be symbolic of the process of competition as he sees it permeating life in the United States, binding the society to progress and to proof of power by being "the best," the champion nation of the world.

#### MAILER'S USE OF SPORT

Norman Mailer characterizes sport almost exclusively in terms of agonistic behavior. There are many concepts and inferences which may be drawn from Mailer's use of sport. However, with only few exceptions, Mailer's sport connotations focus on the contest and conflict of one man against another. Ultimately, there is a victor, a champion, and with championship is the connotation of success. Success, in turn, affords power to the victor.

Power encompasses all concepts of life and being to Mailer. Power is a single concept. Whether demonstrated through emotional control, physical strength, wealth, or political influence, power is the basic element. In Mailer's American existentialism the expression of an individual's power or being at any particular time, in any particular situation, is the equivalent of the individual in that time and place. Each experience, each demonstration of power, is then incorporated into the future potential of the individual. Sport success in young adulthood indicates the individual will achieve success later in life.

Success or failure is, then, also power. In terms of Mailer's American existentialism, one is successful if his potential or his power to direct his abilities, advance him toward fulfilling the imperatives of self, whatever those imperatives might be.

The contest of conflict which assays one's power must result in victory or defeat. Therefore, the basic embracing concept for Mailer's use of sport is Victory or defeat in sport is significant for the participant.

Sport concepts extracted from the sport inferences in Mailer's novels and grouped within Mailer's concern with personality development, socio-cultural connotations, and literary inferences, provide supporting evidence for the basic concept of significance in victory or defeat to the power of the individual.

#### Personality Development

Mailer creates for his novels individual "beings" rather than representational characters. Explicit detail as to the personality structure of his individual characters combines with Mailer's attention to the detailed inner thoughts and symbolism of their responses to life situations which extend them beyond representational characters to existential beings. Sport concepts may be classified as they contribute to the emotional fiber and personality structure of these individuals who are Mailer's handiwork.

Success and Power. Sport means success, success means power, therefore sport means power. Many of the successful men in Mailer's characterizations have enjoyed victory in sport at some time in their lives. Sergius O'Shaugnessy, the hero of The Deer Park, has achieved success in boxing from the time he first won the Police Department

tournament to the time he won the right to attend flight school through an Air Force tournament. Although his skills are never challenged after his Air Force career, people continue to respect him for the ability he once had in the ring.

Similarly, Stephen Rojack of An American Dream recollects the prosperity of his young adulthood reflected through his college football days. When Rojack entered the social strata of the wealthy, he achieved recognition by being a boxer, a man to be respected among the men of his upper class association. In a monetary connotation of success, D. J.'s father, Rusty, in Why Are We in Vietnam? achieved all-American status as a football player in college. He has extended his power into the middle-age years of his life as a millionaire.

One of the minor characters in The Naked and the Dead, physically too small for football, enjoys the sensation of power as a cheerleader with a thousand students waiting his command.

Competitive Drive. The competitive drive is essential to sport. As evidenced in the characterization of the winning, successful men, the love for competition is directly associated with their success in sport. Rusty's message to D. J. in Why Are We in Vietnam? is the most explicit example of this concept. Competition supercedes spiritual emphasis in life as Rusty places the value of competition above respect for the Christ figure. Croft, in The Naked and the Dead, also illustrates the competitive spirit of one who is obsessed with winning. In his younger bronc busting days, he cannot tolerate defeat emotionally. With age he has achieved greater control over his emotions. However, his drive to pit his skills against the challenge of the island mountain shows him still to be enthralled with the competitive drive.

Courage. Sport is a test of courage. In The Naked and the Dead, Minetta, one of the soldiers on the spy mission with Croft, relates his lack of fear for Croft as their leader. "'You think I'm scared of him?' Minetta said. 'Listen, I been in the Golden Gloves, I ain't afraid of any of these guys'" (Mailer, 1948:289). Charles Eitel, the writer in The Deer Park, finds similarity in breaking his nose trying out for football and the test of his courage as he faces the investigation of his Communist party connections by the Subversive Activities Committee.

Effort. Sport demands effort. Exhilarating sensations from effort in sport are particular to heroes who are strong of character. In The Deer Park, Sergius and Tony Pope, a big film star, are about to fight. Sergius recalls, "All the pleasure of boxing was in my fingers" (Mailer, 1972a:202). The fight never materializes because Tony learns Sergius is an experienced boxer.

Rojack, the hero of An American Dream, recalls two specific instances in which sensations experienced in football return vividly with situations of the plot. After he has murdered his wife and pushed her into the street, he rushes downstairs to her body. The feeling of "carrying the ball," being the player who will "make or break" the play is his. In this recollection, the play is a kickoff return. Symbolically, the kickoff offers the team a new chance to score. The death of Deborah allows Rojack the freedom to a rebirth, and the value of his new beginning is dependent on the skill and ability of his character. When he was in the war, Rojack was a hero for pursuing an advance and killing a key enemy guard. He was wounded in the process. As he recalls, his sense of gallantry was daunted by the wound which

elicited a sensation similar to the feeling of disappointment of having the football squirt out of his arms as he scored a touchdown in a college football game. The points were earned but he no longer had the ball to show for it. In battle, he must be shipped away for medical attention, unable to reap fully the glory of his victory.

Hearn, the powerless lieutenant in The Naked and the Dead who is killed in the ambush while on the spy patrol, has two episodes from his Time Machine which support the demands of effort for significance in sport. Having received demerits for not making his bed at camp, Hearn redeems himself in the boxing ring. He wins after a poor exhibition of skills and ill temper and the feeling of victory has no gratification. In another incident, he is a part of a college intramural football game in which he wrenches the knee of an opponent. The honor of being named to an all-star team, partially because of such false heroics of his foul play, offers no excitement, thrill, or sense of accomplishment.

Personal Character. Winning in sport indicates nobility of character; failure indicates surrendering to vices of weakness in personal character.

Failure to achieve even a moderate degree of success in sport activity in a character's past is indicative of his failure in his role in Mailer's story. Hearn, the lieutenant who is killed on the spy mission in The Naked and the Dead, is Mailer's best developed characterization of a failure in sport. Hearn's failure to make the football team and his failure to survive the mission are evidence of the relationship of sport failure to weakness of character. Wyman, another of the men on the trek up the mountain with Croft, associates his

fatigue during the climb as similar to the fatigue he felt during a neighborhood football game. He could not exert the effort to hold his opponent in the game, nor could he muster the strength to leap successfully over a crevice on the mountainside; he fell to his death. Sergius O'Shaugnessy, the hero of The Deer Park, acknowledges his own potential for failure in his lack of offensive skills in boxing; he fought as a counter-puncher. Through the events of the novel, he learns that his efforts as a writer have the same low probability of success as a counter-puncher has for a boxing career. In both cases, he quits before the failure is reality which cannot be erased from his being.

The failure in sport is expanded to relate to a quickly developed personality structure of a minor character in An American Dream. Exemplary of this technique of presentation of minor characters is the description of Romero, an observer in the bar where Cherry performs. Romero responds to Rojack's efforts to hustle Cherry, Shago Martin's territory.

Romero laughed. He laughed with a big flat dead sound at the center of his amusement, a professional laugh, the professional laugh of a fighter who has won a hundred fights and lost forty, and of those forty, twelve were on bad decisions, and six were fixed, and for four he went in the tank. So it was the laugh of a man who has learned how to laugh through all sorts of losses (Mailer, 1965:104).

Spiritual Implications. Sport is spiritual. Early in his writing Mailer specifically alludes to the spiritual association of sport to man's beliefs. To Ridges, one of the GI's of the spy patrol in The Naked and the Dead, a football is the symbolic register of a man's sins.

Ever since he had been a child he had imagined his soul as a white object the size and shape of a football, lodged somewhere near his stomach . . . Each time he sinned an ineradicable black spot was inked onto the white soul, its size

depending on the enormity of the sin. At the time a man died, if the white football was more than half black, he went to hell (Mailer, 1948:672).

Though this is a symbolic representation for one minor character, it is significant in the later development of the spiritual concerns of Mailer's work. With the development of his existential ideas, the spiritual begins to penetrate every aspect of life for Mailer. Consequently, for those of the American existential characters for whom sport contributes to their being, sport is also a part of spiritual experience.

Life-Giving Qualities. Sport is life and life-giving. Through success or failure in sport, a character gains or loses a part of his being and a part of his presence. For the existential hero, such as Rojack, this happens as he boxes with the fellow at a social party, or for Sergius O'Shaugnessy as he earns his name and way to recognition through boxing. The success or skill exhibited in the sport arena is equal to the man, the essence and quality of his being. Insights experienced in sport render direction and incentive, particularly for Sergius whose analogy of the counter-punch and success is a guide for him as an author. For Sergius, boxing is also a health item as he acknowledges its benefits to his nervous system.

#### Socio-Cultural Connotations

Although Mailer's American existential hero strives to gratify the imperatives of self, the socio-cultural environment is a significant contributor to the establishment of those imperatives. Since Mailer's philosophy is Americanized existentialism, his own interpretation of the socio-cultural milieu necessarily influences the imperatives which he structures for the individuals of his novels. Mailer



uses sport inferences and concepts in his projections of the American socio-cultural environment.

The Victor. The victor in sport is likened to all other victors in life. Many of the similes used throughout Mailer's works suggest the idea of winning in a sport connotation. Shago Martin in An American Dream is a champion of music, his control over his singing being similar to the control an expert squash player has over the ball. The helicopter rounding up the sheep in Why Are We in Vietnam? is likened to a bullfighter as he manipulates the bull. The inference in the contest against the beasts signifies man as the champion of nature. In The Deer Park, Tony Pope, a big name actor who is a publicity highlight for the Mangum Company, poses for a picture with "his hands in the air like a prize fighter . . ." (Mailer, 1972a:80). The champion of the movie screen is readily illustrated as the champion of the ring.

Socio-Cultural Environment. Sport indicates the socio-cultural environment. Power and strength of personal character are associated with agonistic sports and middle class American status. Wealth and social status, which seem to be degraded and despised by Mailer, are associated with recreational activity. In all of his novels, the characters who are excessively wealthy and bigoted are portrayed in settings of lawn tennis courts, golf courses, and swimming pools. Those men who participate only in the recreational activities of golf and tennis are weak in physical strength. General Cummings in The Naked and the Dead and a wealthy young entrepreneur in The Deer Park are manifest of this characterization. Descriptions of mansion settings in all the novels and particularly the surroundings of the Desert D'Or Yacht Club in The Deer Park lend support to the association of golf and tennis participation with wealth, ease, and lack of power.

Existential Viewer. Sport does not hold the significance for the existential viewer that it does for the participant. Professional sport, the highly organized sport world, loses its prestige as the existential hero becomes more existential, more concerned with self. Therefore, professional and highly organized sports do not hold personal value for the spectator.

Mailer's development of this concept follows closely with the maturation of his American existential hero. In his first work, The Naked and the Dead, the existential philosophy is not as pervasive as it is in Mailer's other works. For the common soldier the sport world is awesome and powerful. The GI's lend insight to the prestige of the sport world. One had dreams of being a sports writer before World War II and his Army career interrupted fulfillment of his dream. Another is an expectant father. The man projects his highest aspirations for the child: "'If it's a boy, I'm gonna train him early. He'll be a pro-baseball player, that's where the money is'" (Mailer, 1948:478).

In The Deer Park, Mailer has developed his existential hero and diminished the worship of the athlete and the associated world of highly organized sport. Sergius O'Shaugnessy, the hero of the novel, is referred to by the movie set of writers as an athlete who can read. Sergius himself casts a condescending slant on the world of athletics in terms of his own career. "Once in a while, depending on my mood and my general estimate of my assets, I would think of becoming everything from a high school coach to a psychoanalyst" (Mailer, 1972a:124). The implication here is that not much intellect or ability is needed to be an associate of the sport world.

Mailer has purified his American existential hero to the greatest degree in Why Are We in Vietnam? The prestige of the athlete has reached its lowest level. In his call to the communion with the reader D. J. addresses specifically the general drug addicts of the world which includes in its listing the "professional football asshole buffs" (Mailer, 1967:24). Rusty, D. J.'s millionaire father, degrades the exhibitionism and entertainment of professional athletics by projecting the futuristic equation of fornication to the phenomenon. In Rusty's conservative bigoted viewpoint, which is somewhat antagonistic to existentialism, the twentieth-century is "breaking up the ball game" (Mailer, 1967:110) of life. He goes on to list seventeen ways this is occurring. Two of his reasons are the superiority of the black athlete to the white athlete and karate as a prerequisite for good street fighting.

Economic Wealth. The highly organized sport world is insignificant to the wealthy. Along with the increased development of the existential hero is an increase in the social status of the characters. Consequently, a concept concurrent with the degree to which the character supports the existential philosophy is the monetary wealth and financial security of the character. The GI's portrayed in The Naked and the Dead are of the common working class. Their esteem for big time sport is extremely high. Sergius O'Shaugnessy, a commoner trapped in the high society of the movie world in The Deer Park, vacillates in his opinion of the organized sport phenomenon, tending to lean more to its degradation. The lowest consideration for the organized sport phenomenon is found in the highly American existential ideas of Why Are We in Vietnam? The characters are of upper class America.

Gender Roles. Sport is a "rite de passage" to manhood. Most inferences of sport are of high school or college sport arena, the stage of maturation when the characters are proving their manhood and maleness. All major characters who have sport in their backgrounds refer to sport occurrences during this time sequence of their lives.

Sport is part of the normal activity of boyhood. Mailer carries the significance of sport to the playground years for some of his characters. Batting averages and the standing of professional baseball teams are significant in the Time Machine episodes for one of the members of the spy mission in The Naked and the Dead. Even more explicit in its illustration of the concept is Lovett's impression of Hollingsworth in Barbary Shore. "I had a picture of the places in which he had slept through his boyhood: a bed, a Bible, and in the corner a baseball bat perhaps" (Mailer, 1951:38). The combination of the three items lends an impression of a stable and wholesome environment. Within the freedom of existentialism a character, of his own volition, may forsake the wholesome environment later in life. Hollingsworth does turn against his conservative and stable rearing to become an agent of the bureaucracy.

Further support of normality of sport in boyhood is indicated by the antithesis of the concept as illustrated in the Time Machine of Cummings, commanding General of the troops in The Naked and the Dead. Cummings sits sewing in the corner. The irate father accuses the mother of encouraging the boy to act like a woman. "(The baseball bat and glove are gathering dust in the attic.)" (Mailer, 1948:405). The environment in the household of the Cummings' father, the wealthiest man in town, and over-protective mother is not of the

ordinary. "Odd family, people will tell you, funny kids" (Mailer, 1948:404).

Sport for Mailer is significant only to the health of a woman. Sport renders a wholesomeness and confidence to the female characters, but there is no resulting strength portrayed in their personalities. Mailer sees sport as being beneficial to a woman's body by enhancing her sexual appeal. Inferences for women in Mailer's novels are scarce. Cherry in An American Dream has a tanned healthy glow she assumes under the stage lights which supports her wholesome impression of an airline hostess or the television wife of a football player. A fascinating characterization of one sentence is given for a girl with a group of surfers on the beach. Eitel, in The Deer Park, is struck by her image. "She seemed so confident of her body and the sport of being alive" (Mailer, 1972a:41). The association of life is given with a sporting flavor, which seems to express a casualness, the limit of her understandings. It is her body rather than her intellectual capacities or strength of character which affords her even a small amount of significance in life.

Sex. Sport is associated with sexual gratification. Although Mailer does not refer to women as specific characters with sport abilities or the power of character which is associated with men in sport, women as they contribute to the sexual pleasures of men afford vivid sport inferences. A kiss as powerful as a solid punch from a boxing glove is Rojack's description of his first kiss from Cherry in An American Dream. Even more descriptive is the sexual play with the maid after Rojack kills Deborah. "It must have been five minutes before I chose to give her a kiss, but I took her mouth at last, pinched

the corner in my teeth, and our faces came together with the turn of a glove catching a ball" (Mailer, 1965:46).

In The Deer Park, Sergius is also illustrative of his sexual enjoyment of Lulu. Her little dance is a track and field event to him and he becomes a cinder track under her feet.

The antithesis of sexual power and maleness is briefly alluded to in some of the characters. A men's dormitory constructed around a gymnasium; two friends holding hands as they ride motorcycles together, play football, and study karate together; and a disinterest in sport activity during the early years of manhood are all indications of Mailer's derogatory allusions to homosexuality. He equates casual sport or physical activity with a form of perversion.

#### Literary Inferences

Sport concepts lend themselves to literary inferences. Mailer is particularly illustrative in his sport referrals for characterization. Sport inferences used in the physical description and conversational slang of the characters contribute to Mailer's literary style. Mailer is a craftsman in his use of the simile. Perhaps his most graphic and certainly his most prevalent delineation of the sport usage is through the simile.

Characterization. Athletes offer the impression of a stereotyped physique and personality. Agonistic sport athletes render an image of toughness, power, and independence.

There is something to be said for Mailer's structuring of physique for his characters and the ready impression of their personality which the reader receives. In The Deer Park, Sergius gives a quick sketch of his appearance which reflects his independence.

". . . most people assumed I was able to take care of myself, and I was careful not to correct their impression. There is that much to be said for having the build of a light-heavy weight" (Mailer, 1972a:10). Later in the novel, as the preliminary procedures of Eitel's trial are carried out, two detectives for the government are described as looking "like all-American guard and tackle posing for a photograph" (Mailer, 1972a:258). Other of Mailer's novels use the same agonistic athlete image for detectives or others whose positions require strength and power for the enforcement of a system. For example men with athletic bodies enter the apartment to investigate McLeod's murder in Barbary Shore. Mailer also seems to associate the agonistic athlete with a personality capable of quick, intense emotions. Dalleson, an officer in The Naked and the Dead, is portrayed to the reader with "red face, his bullneck, his broken nose could express mirth or rage or bewilderment, the bewilderment a transitory thing until he realized what was demanded of him. He looked like a professional football player" (Mailer, 1948:71). The power of emotion is also symbolized by the athletic physique of some of Mailer's characters who are writers. In Barbary Shore, Dinsmoore, a minor character who rented the room in Guinevere's boarding house, is described by Lovett as looking like a football lineman in the straddle position he assumes while he writes. Sergius of The Deer Park is developed extensively in the boxing metaphor. He also is a character who tries to write.

The more agile the build of the character the less powerful and perhaps the more shifty and treacherous is a character's personality. Hollingsworth in Barbary Shore is exemplary of a light, quick

physique. In The Deer Park, Elena, a mistress at various times for many of the Desert D'Or film men, has a father, "an ex-jockey with a broken leg, a vain little man, a bully" (Mailer, 1972a:105).

Language Referrals. Sport sponsors language referrals. Several colloquialisms in the dialogue of the characters are of sport origin. With one exception of a newspaper story being "par for the course," the referrals deal with agonistic sports. Mailer seems to be particularly fond of associating failure to "dropping the ball." This particular referral is made several times in The Naked and the Dead with reference to slackness on scouting patrols which allow enemy advantage. D. J. "figures if Big Luke [the guide] wants him to tag a bear, that's the ball game" (Mailer, 1967:53) of the hunt in Why Are We in Vietnam?

Similes for Action. The movement patterns and contact of agonistic sport supplies significant similes for intense action. The most extensive use of sport inferences is found in the similes of action in plot motives to action found in agonistic sport. Mailer seems to best relate power and intensity and graphic description through his use of sport sponsored similes. Machine guns blast like a boxer achieving a series of strong consecutive punches, reflexes are quick like the moves of an athlete shifting for a ball, a hunter's successful shot is like the leisurely shot-putting of a rock into a tree branch; all are indicative of the descriptive powers which the sport world offers Mailer. The movements of characters are also included in motion best related through the association with sport movement patterns.



Mailer and Sport. Mailer's own sport background of boxing and football participation have served him in his novels, particularly in the expression of power. Indications from his own background support the overall concepts that sport must be agonistic to be significant; winning is the ultimate value of sport and it pervades all aspects of life, indicative of life itself. Agonistic sport is maleness and power. Mailer himself seems to live his concepts of sport, experiencing each concept himself so keenly that he can transfer his experience to the reader.

Though both authors support the structure of the new novel, there is great variance in the style of the two men. John Updike develops the details of a microcosm of middle class American life. The brevity of his descriptions and the comprehensive coverage of life in his illustrations of reality lead familiarity and an engaging tone of each scene. The element of description remains vivid although the subject of description, particularly Updike's portrayal of the sexual involvement of his characters, is often over-indulgent. He conveys the complexity and universality of the characters and the reader achieves a comprehensive understanding of the characters' conflicts through the brevity of their descriptions. Identity and fulfillment may be revealingly absent. Updike's purpose appears to be the creation of illustrations of reality through literal illustrations of the

## Chapter 5

### COMPARISON OF UPDIKE AND MAILER

John Updike and Norman Mailer are authors of the new novel. They explore the existential concerns of identity, fulfillment, and values in modern American society. The heroes are existential characters who must contend with the conflicts and passions of their own beings, they are cast in an ironic mode so as to appeal to the condescending sympathies of the reader. The atmosphere surrounding the conflicts and passions rather than specific action of the plot motives guides the reader toward understandings of the authors' purposes.

Though both authors support the structure of the new novel, there is great variance in the styles of the two men. John Updike describes the details of a microcosm of middle class American life. The intricacy of his descriptions and the comprehensive coverage of life in his illusions of reality lend familiarity and an enduring image of each scene. The element of description remains vivid although the subject of description, particularly Updike's portrayal of the sexual involvement of his characters, is often over-indulged. So complex and comprehensive and universal are the portrayals of the characters that the reader achieves empathetical understanding of the characters' conflicts though the believability of their situations may be revoltingly absurd. Identity and fulfillment seem to dominate the themes of Updike's novels. Updike's purpose appears to be the creation of illusions of reality through literal similitudes of the

reality Updike sees and the structuring of situations which will impart insights to the understanding of his eternal question of "Why was I, I?"

Mailer differs in the direction of his purpose. Mailer is a new novelist writing in the existential philosophy. He has, however, applied existentialism specifically to his interpretations of the American society and the American citizen of the present. In so doing, he has created the American existential hero whose passions and conflicts are consistent with the concerns of existentialism. The emotional responses and physical reactions of the American existential hero to the intricacies and entanglements of a carefully structured environment formulate the core of plot motives. Mailer deals extensively with symbolism and the spiritual conflicts and passions which facilitate the creation of characters who are more than representative stereotypes. Perhaps the depth in which Mailer explores the emotional and motivational traits of his characters implies a distinction between the "beings" of Mailer's works and the characters of Updike's novels. Mailer, the philosopher, supercedes Mailer, the novelist, as he utilizes the structure of the novel to illustrate his philosophy. The progression in the refinement of his American existential hero is intriguing as it is viewed in the sequential study of his novels. However, the shock element of the vulgarities and debauchery of life which he stages for his heroes jolt such acute response from the reader that the concepts of his philosophy are often beyond discernment. The intensity of emotional response from the reader is also congruent with Mailer's purpose of imposing his philosophy on society.

The differences between the use of sport in the novels of Updike and Mailer are as distinguishably contrasted as the styles of the two men. Updike is a mild-mannered, middle class American who uses organized sport to confront the philosophical question, "Why was I, I?" Norman Mailer is an outspoken egotist who includes sport as a manifestation of power, the dominating motivator in an individual's life. Updike alludes to organized sport as he has observed it and sport activity as he seems to have experienced it. Mailer's own gratification from agonistic sport serves him well as a source for sport references. Therefore, each author appears to uphold the hypothesis that the use of sport in the development of the novel will reflect the author's personal sport background and experiences and his pervading philosophy of sport.

As illustrated by Updike's reality and life concept subdivisions of the sport theme, the performer's purpose in sport is the experience of participation which allows insight to self identity and fulfillment in an effort to accept the realities of life. Mailer's athletes use sport as a test of power, an assertion of the self to determine success or failure and the power resulting from such confrontation. Both men manifest their personal purpose in sport through the general intentions for the sport involvement of their characters. The hypothesis, the performer's purpose in sport will reflect the author's background, is thus supported.

Updike describes life of the American middle class by incorporating the details of both the intrinsic and extrinsic circumstances surrounding his characters. Heeding the socio-cultural influences of the American middle class environment, Updike blends all aspects

of life. In contrast, Mailer concentrates on the creation of a being, the depth and detail of the individual's emotions overpowering and often defying the socio-cultural standards of his environment. Updike describes, Mailer transmits a philosophy. Each author is consistent in his own purpose and in his own use of sport. Comparison of the two authors' use of sport shows sport usage which is consistent with the variance of the thrusts of the purposes of the two authors. Updike delineates sport and sport activity and focuses on the social realms of reality and life concepts as they relate to his various characters, their settings, and their sport involvement. Mailer uses agonistic sport as a standard for measuring the power and effectiveness of his individuals as they project themselves into their socio-cultural environment. Although the patterns of the sport inferences for the two authors do not coincide, there are elements within the designs of each author which lend themselves to comparison.

#### SUCCESS AND FAILURE

Updike's characters who succeed in sport during their adolescence and early adulthood tend to fail in life outside of the sport world. Mailer uses success in sport to indicate success as an existential character while those who fail in sport fail in fulfilling the existential imperatives of self; they fail in life. Perhaps Updike's use of sport activity lends itself to success as it seems to encourage a transfer of concepts from the sport world to life. Therefore, participation in sport activity facilitates success. Again, Mailer's use of sport excludes participation, disregarding the victory or defeat. It is the winning or losing which maintains the continuing effect in the lives of Mailer's characters.

## LIFE AND LIFE CONCEPTS

While Updike claims sport activity as lending itself to transfer into life and thus affording sport a greater-than-life quality, Mailer equates sport to life assessing it as life-giving. Again, the distinction between Updike's concern for self-identity and fulfillment through the acceptance of reality and Mailer's obsession with power, parallel the differences of life and life concepts derived from the authors' sport usages.

## REALITY

Comparable to the differences of the two authors with regard to life and life concepts are the difference between the two relationships of sport and reality. For Updike, sport itself is not real. The competitive sport heroes live in an "ice-cream" world and the idealism of their coaches serves to reinforce the superficiality of sport. Conversely, for Mailer, sport is real; it is perhaps one of his most distinct manifestations of the reality of a character's power. Mailer allows no escape, neither present nor future, from the reality of sport in an individual's life. Sport emphasizes the immediacy of life. For Updike, sport activity offers an escape from the pressures of life.

## VIRTUES OF CHARACTER

Updike seems to view sport as being detrimental to the virtue of the character of an individual by undermining ability to function outside the sport arena. However, sport activity contributes to the

strengthening of a person's character, his ability to acknowledge the process of participation and assertion of self as being significant over the outcome of effort. Mailer extends the virtues of effort, courage, and self-assertion which are accented by sport victory. Virtue of character may be equated to sport and to power because of the significance of power which is manifest in sport. As an existential author, Updike deals with description which is void of moralistic judgments, therefore de-emphasizing virtue of character. As a proponent of his own American existential philosophy, Mailer is intent on the assertion of American existential qualities. He, as a philosopher, moralizes according to his American existential projections of virtue, hence, the significance of the concentration of virtue and sport relationships.

#### GENDER ROLES

Both authors support the maleness which is manifested through sport. However, Updike believes sport lends to maleness; Mailer believes sport is maleness. A greater dichotomy appears in the authors' views of sport and gender identification for women. Women are portrayed by Updike as individuals who may be influenced by sport and activity to become more of what they are--women. Women are acknowledged as having competitive sport arenas, hockey and basketball, and there is no gender distinction involved in the concepts or activity and recreation. Mailer, however, characterizes women as sexual objects. Any benefit from activity is to enhance the sexual appeal of their bodies. Women are entirely excluded from the agonistic realm of sport and are therefore, without the manifestation of power through sport

which is afforded the males. Women are less than men; women are less than individuals.

#### SOCIO-CULTURAL ENVIRONMENT

There is noticeable distinction in the degree to which the realms of activity are developed by each author. Updike regards recreation and activity as an integral component in the life of mankind. There is no differentiation between the benefits of activity of the wealthy and those of any other class. The concepts governing activity apply to mankind rather than to one's economic status. Mailer makes a clearer distinction in his implication of sport activity to wealth. Participation in golf and tennis solely and without the experience of agonistic sport reveals a weak character; golf and tennis are associated only with the wealthy. Few of the handful of characters who are wealthy have any degree of strength of character.

#### LITERARY INFERENCES

Updike uses sport inferences as facilitations for major themes whereas Mailer uses sport in minor episodes. Updike tends to employ a more comprehensive description of the involvement in sport, using thoughts and feelings, the words, and description of motion to carefully illustrate the details of his microcosms. Updike describes, incorporating the subtleties which accompany the action of sport. Mailer uses the most powerful presentations of his imagination to stimulate a response from the reader, employing the dynamics of the sport related simile to enhance his statements.

There are differences in the concepts derived from the sport usage in the novels of John Updike and Norman Mailer. However, sport



allusions are incorporated in the novels' elements for clarity in communication of the authors' purposes to the reader. Sport, as the authors know it, aid them in the development of their styles. Therefore, consistent patterns which may be discerned in the utilization of sport allusion throughout the respective novels of each author, is supported as an hypothesis.

Although many interesting observations may be cited with respect to sport inferences as they are incorporated into the novels' structures, the concepts which are evidenced, and the embodiment of the sport world in the authors' styles, this study involves only modern contemporary American literature. Would the concepts deduced from the sport inferences be the same for a romanticist as for the new novelist? Do the types of sport inferences change with each new literary era? Do sport inferences support or reject the philosophical question of knowing a phenomenon without first experiencing it? Can one understand what he does not know? As literature reflects the life and philosophy of a given age, would, then, the sport inferences reflect public sentiment toward sport? Are those reflections congruent with the findings of socio-cultural observations of the sport world for that era? These questions are only springboards for the vast realm of the sport world as it relates to the literature of an era.

#### CONCLUDING COMMENTS

Modern contemporary American authors John Updike and Norman Mailer do employ sport inferences extensively in the development of their novels within the limits of their respective styles. Both

authors write in the philosophy of existential new novel and are notably recognized as modern contemporary authors. Biographical findings for each author indicate sport interest in their backgrounds. There is a distinct relationship between the sport interest of their pasts and the type of sport references used in their novels. Updike personally concentrates in the participation of individual sports in the recreational setting and also as a spectator of various organized sports. Mailer refers to the agonistic sports of his own background in his novels.

The understandings of sport as they have experienced or observed the sport phenomenon pervades the plot motives, characterizations, and settings in the structures of the novels of these two authors.

Sport inferences in the novels of John Updike and Norman Mailer render supporting evidence for the acceptance of the following hypotheses:

- A. The use of sport in the development of the novel will reflect the author's personal sport background and experiences and pervading philosophy of sport.
- B. The performer's purpose in sport will reflect the authors' backgrounds.
- C. Consistent patterns may be discerned in the utilization of sport allusion throughout the respective novels of each author.

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COX, SANDY DEAN. Industrial Motivation: Review of Empirical Research Relative to Current Motivational Theories; and Implications for Future Industrial Application of Behavior Modification Techniques. (1973)  
Directed by: Dr. Robert G. Eason. Pp. 47

A review of the contemporary motivational literature on "the economic man" concept, Maslow's "need" hierarchy, Herzberg's "two-factor" theory, and "expectancy" models of motivation was conducted. It was concluded that a general lack of predictive validity exists for each of these models with the possible exception of "expectancy" theory. The empirical evidence was then integrated, and implications for the application of Behavior Modification techniques explored.

INDUSTRIAL MOTIVATION: REVIEW OF EMPIRICAL RESEARCH RELATIVE  
TO CURRENT MOTIVATIONAL THEORIES; AND IMPLICATIONS  
FOR FUTURE INDUSTRIAL APPLICATION OF BEHAVIOR  
MODIFICATION TECHNIQUES

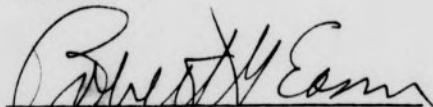
by

Sandy Dean Cox

A Thesis Submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

Greensboro  
1973

Approved by

  
Thesis Adviser



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ACKNOWLEDGEMENT

Grateful appreciation is extended to Dr. Robert Eason for his suggestion of this research topic and consistent guidance and patience. Dr. William McGehee is also to be acknowledged for his critical reading of the manuscript throughout its preparation. The benefit of his expertise in the field of Industrial Psychology was invaluable.

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## CHAPTER I

### INTRODUCTION

In an industrial environment, an employee is described as "motivated" to the degree that his energies are directed toward the objectives of the business. It is expected that each employee will demonstrate this quality or condition in partial fulfillment of the agreed-upon contract -- services in exchange for a paycheck. Economic and sociological developments since the Depression, however, are modifying traditional employee-employer relationships and are necessitating a new look at motivation from the standpoint of industry's responsible contribution.

The purpose of this paper, therefore, is to examine some of the available research evidence relative to current industrial motivation theories, (i.e. "the economic man," Abraham Maslow's "need" hierarchy, Frederick Herzberg's "two-factor" theory, and Victor Vroom's "expectancy" model); and then to integrate and interpret the best supported of these empirical findings in terms of their compatibility with Behavior Modification techniques as might be applied in industrial settings.

It appears to this writer that the governing bodies of many institutions attempt to "motivate" employees without having first established operational definitions of the variables they seek to manipulate, and without having adopted a "philosophy" of motivation, based on empirical research, which integrates and guides subsequent personnel-policy decisions. Isolated theories (for example, those of

Maslow, 1954; Herzberg, 1966; McGregor, 1960; and Argyris, 1964, etc.) are often espoused in management training seminars without reference to empirical validity or any unifying theory of motivation. As a result, "long-term" changes in supervisory behavior are seldom evident since the individual's basic "assumptions about human nature" have not been altered. Also, the structure of the work environment to which he is returned does not reinforce (beyond verbal endorsement) the implementation of what has been "taught."

Therefore, a brief description of three categorical approaches to motivation will be presented in Chapter II so that subsequent research findings (reviewed in Chapter III) may be evaluated within their appropriate orientations. A final chapter will be devoted to the writer's "eclectic" integration of the research evidence in terms of Behavior Modification findings.

## CHAPTER II

## "ASSUMPTIONS" BEHIND THE THEORIES

The traditional Frederick Taylor concept of a typical employee assumes him to be basically lazy, and motivated only by some combination of organizational control, (i.e. threats of various kinds), and/or financial incentives (Lichtman & Hunt, 1971). Although this paper is restricted to a review of relatively "current" research, the "economic man" approach to motivation is included because (a) some of our present day wage and incentive plans are outgrowths of this viewpoint, and because (b) many of its tenants are still "alive and practicing" (Lichtman & Hunt, 1971).

A second major conceptual framework stresses man's need for self-actualization (Maslow, 1954) and psychological growth (Herzberg, 1966). Human Relations and Human Resource Development approaches have been one attempt to compensate for the over-specialization and de-humanization of work which characterized the era of Scientific Management. Following the Western Electric Hawthorne Studies of the 1920's, it was recognized that employee attitudes and feelings could have a greater net effect on productivity than manipulations of the physical environment -- lighting, temperature, etc. (Roethlisberger and Dickson, 1939). Advocates of this "humanistic" approach maintain that the traditional organizational structure interferes with the satisfaction of many common needs of human beings (Argyris, 1964). As a partial result of bureaucratic restrictions, Argyris reports some of the following maladaptive "coping" behaviors: frequent absenteeism (escape from the unrewarding situation),

chronic punctuality problems, "on-the-job retirement," sabotage, lack of craftsmanship ("quality" problems), restricted output, and general waste of human and material resources ("attitude" problems). Frustration, which results from the blockage of meaningful goal achievement, may be exhibited in any number of ways (above), but regardless of its outlet, it is considered expensive for the organization as well as the individual because less energy is made available for genuine production. McGregor's Theory "Y" assumptions of human nature parallel those of Argyris and Maslow; in contrast, his description of a Theory "X" employee represents the (above) more traditional approach to "motivation" (McGregor, 1960).

A third classification of the motivational literature might be termed "personalistic" or perceptual. Its advocates generally assume that people react to an organization on the basis of their perceptions of it; therefore, it follows that organizational behavior cannot be predicted without an understanding of its members' needs and values (because their values are influencing these perceptions). The current literature on Vroom's "expectancy model" is representative of this cognitive or perceptual approach.

CHAPTER III  
REVIEW OF THE CONTEMPORARY LITERATURE ON  
FOUR POPULAR MOTIVATIONAL THEORIES

"THE ECONOMIC MAN"

The "economic man" is thought to be motivated primarily by monetary incentives. Motivation and ability are assumed to be intrinsic, and efficient organizational operations are maintained through carefully established lines of control. The discovery of "the one most efficient method" for accomplishing each task, and the establishment of the formal authority structure (or span of control), are the only components to be considered. The organization may thus be defined solely in terms of organizational charts and job descriptions.

Supportive evidence. Many of the studies that have attempted to investigate the motivational basis of incentives were conducted more than thirty years ago without benefit of control groups (reported in Opsahl & Dunnette, 1966). The initial studies were also confounded by other changes which simultaneously occurred within the organizations (such as modifications in work methods, management policies, etc.). One of the first adequately controlled investigations of the effects of incentives was conducted by Roethlisberger & Dickson (1939) in the relay assembly test room of a Western Electric manufacturing plant. The now "famous" Hawthorne studies determined that part of the increased productivity was due to the increased attention the employees had received; but further controls in a second



test situation also substantially supported the hypothesis that increased productivity results when pay is directly associated with performance (Roethlisberger & Dickson, 1939).

Additional support of the motivational value of money was provided by a 1934 English study. Wyatt substituted a competitive individual bonus system in place of a fixed weekly pay system and reported a production increase of 46% (reported in Lawler, 1971). Wyatt also conducted a study in a London candy factory which revealed a positive correlation between an employee's "like" or "dislike" for the task and the effectiveness of the incentive plan. For example, employee output increased 200% (from hourly salary to piece rate) when a task was interesting, constructive, liked, etc. ( -- such as wrapping the candy). However, performance was not effected under varying pay schedules when the task was repetitive, boring, or otherwise disliked -- such as unwrapping damaged packages -- (reported in Opsahl & Dunnettee, 1966). This study illustrates the complexity of the variables which influence an individual's motivation at any one point in time. Conflicting results are typical of the research evidence in this area; however, when all relevant variables are accounted for, the results are not as inconsistent as they might have first appeared. In general, empirical evidence suggests the following generalizations:

- (a) monetary rewards do motivate behavior when the incentives are directly tied to the performance (i.e. associated with objective measurements);
- (b) the more important pay is to an individual (i.e. the more he values it), the more effective pay will be in motivating his performance; (c) the more closely that rewards are tied to performance, the greater an individual's "satisfaction" with the rewards received (Lawler, 1971; Schuster et al., 1971).

Both Vroom (1964) and Lawler (1971) report that there is no evidence which shows increased performance to result from an arbitrary wage increase. The link between performance and reward appears to be critical if pay is to motivate an employee to increased production.

Negative evidence. Bureaucratic structures have been attacked over the years on several grounds. Lichtman and Hunt (1971) listed some of the unintentional consequences of traditional structuralization as follows: (a) strict enforcement of rules stifles creative thinking, (b) reliance upon "precedent" results in impersonal decisions which are seldom appropriate in specific individual cases, (c) and employees have little incentive to produce beyond the minimum accepted standard, even where piece-rate systems are operating.

The research evidence addresses this third generalization from the viewpoint of group bonus plans and individual incentive systems in relation to output restriction. One of the chief disadvantages with group incentives is the likelihood that there will be a low correlation between an individual worker's performance and his pay within the larger group. In fact, there is substantial evidence that individual output decreases as the size of the work group increases (Opsahl & Dunnette, 1966). Even though individual incentive plans are more directly tied to individual productivity than are group or company-wide bonus plans, there is considerable evidence of output restriction under each of these plans (Roethlisberger & Dickson, 1939; Whyte, 1955). The evidence indicates that in certain situations, employees anticipate negative consequences to result from high productivity. These perceived

consequences may include social pressures from the work group or increased quotas from management; but whatever the controlling variable or variables, it is concluded that pay oftentimes does not motivate performance. Lawler (1971) lists several organizational conditions under which pay is usually not an effective motivator: (a) when performance must be subjectively measured or when employees distrust management in general; (b) when individual performance is difficult to measure or inclusive measures of performance cannot be developed; (c) or when an organization is unable or unwilling to make sufficiently large pay rewards available to its best performers.

Comments. In this era of "participative management" and "management by objectives," there is a noticeable lack of contemporary research on the "economic man." There is, however, a great deal of evidence which indirectly disputes the generalization that man is primarily motivated by monetary gain. Much of this evidence comes from "equity" theory studies, and job satisfaction research. Although conclusive evidence is limited, several pertinent observations seem to be in order. Equity theory postulates that a state of tension is created to the degree that an individual perceives his pay to be out-of-balance (i.e. either more or less than what he feels he deserves). It is further predicted that he will increase his inputs to the job (either in quality or quantity) when he feels that he is "overpaid." Research evidence has generally failed to support this prediction in the case of overpayment; but there is some evidence that performance decreases when "underpayment" is perceived (Opsahl &

Dunnettee, 1966). "Equity" theory requires additional research, however, before it can adequately account for the complexity of variables relevant to the motivational basis of pay. Some of the factors to be considered in any theory of this nature must address the possibility that (a) persons may cognitively distort their own inputs or outputs; (b) they may escape the situation by leaving it (either physically or psychologically); or (c) they may increase or decrease their inputs.

Research has determined one of the relevant variables to be the "importance" or value one places on monetary incentives (Vroom, 1964). And yet, when this "importance" is measured in studies of job satisfaction, the data are usually of a self-report type which is open to at least two sources of error. Persons often evaluate the importance of pay in terms of their immediate need gratification state (Lawler, 1971). Therefore, higher paid occupations may minimize the importance of money. Another inherent bias in the self-report methodology is the element of "social desirability." For example, it may be fashionable or proper for certain job applicants to stress interest in the work content instead of the payment schedules. Behavioral measures might be utilized to more accurately determine value hierarchies.

In summary, the "economic man" concept is over-simplified and appears to be inadequate for predicting behavior except in cases where the intervening variables are known and there is a direct relationship between productivity and reward.

#### "NEED HIERARCHY"

Briefly, Abraham Maslow cites five "need" categories: (a) basic physiological needs (hunger, thirst, etc.), (b) safety needs (security,

health, etc.), (c) belongingness and love needs (identification, affection, etc.), (d) esteem needs (prestige, success, self-respect, etc.), and (e) the need for self-actualization (self-fulfillment, personal growth, achievement, etc.) (Maslow, 1954). In general, Maslow had postulated that all previous need levels must at least be partially satisfied before needs from a subsequent category may take on motivational properties. Although there are exceptions -- the "starving artist" or the "inventive" scientist who avoids interpersonal relationships -- this prepotency factor appears to have common-sense appeal. According to Maslow, progress is made towards the fifth level -- "to be all that one can be" -- each time a person utilizes his capabilities in a new way or is forced to develop additional skills to competently deal with a situation.

Supportive evidence. One hundred and ten bank employees at several job levels were given a questionnaire designed to investigate the existence of this multilevel hierarchy. Three distinct need categories were determined: (a) material existence needs, (b) the maintenance of interpersonal needs (i.e. interactions with significant others), and (c) the seeking of opportunities for unique personal development and growth (Alderfer, 1969). A similar correlational test of the need hierarchy concept (data collected on 187 managers) indicated a division into two levels -- basic biological needs on the bottom, and all other needs at the top (Lawler & Settle, 1972). Although these broad classifications are not identical to those specified by Maslow, it is felt that they are indicative of general need levels which may be further differentiated under more controlled experimental procedures.

Negative evidence. Admittedly, there is a dearth of both positive and negative research on this proposed hierarchy, and this fact alone is often indicative of an hypothesis which lacks a systematic theory-building approach. L. W. Porter, however, devised a questionnaire to measure "need importance" as well as "need satisfaction." He administered this questionnaire to 139 bottom and middle management individuals to determine their need fulfillment deficiencies. It was found that there exists within management levels differential opportunities for the satisfaction of needs (Porter, 1961). Following Porter's lead, Roberts et al. computed "need deficiency" scores for 380 managers from varying levels in a highly technical manufacturing firm and concluded that their results provided only "mixed support" for the usefulness of Maslow's categories in structuring the dimensions of job satisfaction (Roberts, Walter, & Miles, 1971). Payne's factor analysis of the correlations between "need satisfaction scores" and personal characteristics also failed to provide support for the existence of five inherent need levels (Payne, 1970).

In a correlational study of job satisfaction and job performance, Wofford concluded that the operation of higher-level needs are often evident even in the absence of lower need gratification (Wofford, 1971). This study was particularly significant in that it included both blue-collar (56) and white-collar (151) employees and tested several other hypotheses in addition to the prepotency question. The employees completed both a job satisfaction scale and a "need-gratification" index. The N-G scores were then divided into high, medium, and low groups in order that an analysis of variance might be conducted. The

ANOVA revealed a significant difference between the accompanying job satisfaction scores for the three levels of need gratification -- thus providing firm support for the hypothesis that job satisfaction is experienced to the extent that an individual's needs are met. A second ANOVA -- on the difference between employees whose upper level needs were satisfied and those whose lower level needs were satisfied -- revealed each of the upper level need categories to be associated with job satisfaction even when these employees had lower level needs which were ungratified. This finding directly attacks the prepotency aspect of Maslow's structured hierarchy. His second postulate - a decrease in the strength of a need following its satisfaction - was tested by Hall and Nougaim (1968). This longitudinal study showed no change in the correlation of satisfaction and need strength scores over a 5-year period. A hierarchy of needs was, therefore, not supported.

Research generated. As a matter of interest, the theory continues to generate research which neither empirically supports nor refutes the central hypothesis, but which describes organizational structures or positions on the basis of the needs they satisfy. For example, Porter administered his need-satisfaction questionnaire to 139 lower and middle management individuals and reported that higher-order needs (for psychological growth) were relatively the least satisfied and perceived as the most critical by both levels of management (Porter, 1961). He administered a similar questionnaire to 1,802 line and staff managers in a variety of companies and found that staff managers considered autonomy needs to be more important than did line managers. Equal importance, however, was attached to the other types of needs, and vertical position within the management hierarchy had a greater

effect on perceived deficiencies in need fulfillment than did line-staff distinctions (Porter, 1963 b). Along similar descriptive lines, Ghiselli also administered Porter's questionnaire, this time to 413 managers in various industries and businesses throughout the United States in an effort to examine the relationship between the degree of need satisfaction and job success. He concluded that there is no such relationship in tall organizations (with limited spans of control and authority), but that the relationship between degree of need satisfaction and success becomes higher and higher in flat organizations when higher-order needs are expressed (Ghiselli & Johnson, 1970).

Comments. The above findings may ultimately prove useful in personnel selection and placement procedures, but add little to the over-all validity of Maslow's theory. In general, threshold and adaptation-level studies, and experiments with reinforcement schedules have determined that the reward value of a particular reinforcement varies with the length of time since the activity was last engaged in. Therefore, it would appear that there is probably more vacillation between the levels than Maslow postulated due to the shifting of reinforcement "valences." For example, if an individual were functioning primarily at the "growth" level in the hierarchy and experienced a series of rewarding outcomes at this level, his unique hierarchy may be temporarily altered to place more "reward per unit value of activity" on relatedness needs (or fellowship with peers). In this regard, Maslow's theory does not predict any behavior that could not be explained by an expectancy "x" valence model (to be discussed).

Notable professionals continue to hypothesize "as if" Maslow's hierarchy had been supported (Lawler, 1971; Porter, 1962, 1963(a), 1963(b),



1963(c); Herzberg, 1966; Argyris, 1964; Myers, 1964; McGregor, 1960, etc.). However, on the basis of empirical evidence, it appears that only a three level hierarchy has actually been supported. Moreover, when the effects of reinforcement schedules, varying degrees of deprivation, and changes in environmental (incentive) stimulation are considered in relation to an individual's unique hierarchy at a given moment, the research to date indicates that Maslow's categories are too broadly defined to have any predictive utility for industrial application.

#### "TWO-FACTOR" THEORY

A "one"-factor theory of job satisfaction basically assumes that any job factor can potentially be a "satisfier" or a "dissatisfier" for an individual. On the other hand, Frederick Herzberg's "two"-factor theory of job satisfaction concludes that job satisfaction and job dissatisfaction are not opposite ends of the same continuum or factor, but are mutually exclusive factors in the work environment.

Satisfiers or "motivators" are said to be related to the content of the work itself, i.e. achievement, recognition, responsibility, advancement, etc. Dissatisfiers are thought to be "hygiene" or maintenance factors in the environment (such as interpersonal relationships with supervisors and co-workers, company policy and administration, technical aspects of supervision, and general working conditions). Herzberg states that a "hygiene" factor will not affect motivation either in its presence or its absence.

Supportive evidence. Herzberg's conclusions have been consistently replicated when the same "story-telling" methodology is used. Each

subject is asked to describe some job event or situation which made him feel "unusually good," and one which made him feel "unusually bad" (Herzberg, 1966). In response to criticism of Herzberg's results as "method bound," Gringaliunas and Herzberg collected data by a "rating scale" technique in addition to the "critical incidents" method. The two-factor theory was not confirmed by the rating scale, but the authors conclude that it is inappropriate for measuring job characteristics because ratings are required of some factors which are irrelevant to specific individuals and because the overall "social desirability" of certain responses may influence some choices (Gringaliunas & Herzberg, 1971). A rebuttal to these conclusions appears in a subsequent section under "negative evidence."

Following Herzberg's methodology, Myers interviewed 282 employees at Texas Instruments Inc. (including engineers, supervisors, and hourly workers) and reported results which support Herzberg's theory (Myers, 1964).

Halpern states that Herzberg did not deny the existence of hygiene needs, but simply stressed the proposition that only "motivators" can contribute to job satisfaction. He obtained ratings from 93 male college students on overall "job satisfaction" and on 4 "motivator" factors and 4 "hygiene" factors. Although the subjects were equally satisfied with both the hygiene and motivator aspects of their jobs, Halpern concludes that the "work itself" and opportunity for achievement accounted for the variance in overall satisfaction. He interprets his results as support for Herzberg's basic thesis that motivator variables "are primarily related to job satisfaction" (Halpern, 1966).

Additional research generated. As is the case with Maslow's theory, several studies have been conducted which are not meant to test aspects of Herzberg's concept, but which are intended to expand or clarify specific assumptions. Wolf, for example, reviewed the literature on job satisfaction and observed that satisfaction is higher when a previously ungratified need is fulfilled than when need gratification simply continues (Wolf, 1970). He concluded that motivator factors (related to work content) may be more powerful in determining job satisfaction than hygiene factors because they are more likely to lead to increased gratification of active needs. Likewise, in an attempt to reconcile the one- and two-factor theories, Soliman hypothesized that "hygiene" factors might be more powerful sources of dissatisfaction than "motivators" in an organization which deprived individuals of the satisfaction of all kinds of needs. On the other hand, when the satisfaction of all kinds of needs is provided, he notes that Herzberg's "motivators" probably become more powerful as sources of satisfaction than "hygiene" factors (Soliman, 1970). As indicated above, these conclusions reflect the prepotency hierarchy advocated by Maslow, even though empirical evidence for these assumptions is lacking.

In an attempt to identify job satisfiers and dissatisfiers, Friedlander administered two questionnaires to 80 subjects. Even though the majority of job characteristics were deemed significant contributors to both satisfaction and dissatisfaction, it was found that intrinsic characteristics were more important to both -- while extrinsic characteristics were relatively unimportant to both (Friedlander, 1964). These results are specific to the general

"needs" and values of this sample population and reflect the importance of individual differences which Herzberg minimizes.

Negative evidence. Due to the fact that Herzberg's results have not been replicated with other methodologies, the two-factor theory has been criticized specifically on the basis of (a) experimenter coding biases, (the subjective classification of events into predetermined groups of motivators), and (b) the operation of defense mechanisms, (Vroom's charge that people are prone to attribute "successful outcomes" to themselves -- thus stressing their own achievement, responsibility, etc. -- and "unsuccessful outcomes" to others -- supervision, company policy, etc. --) (Vroom, 1964). The method-bound nature of Herzberg's results become even more apparent in the light of numerous studies which utilized more objective methods and concluded that "motivators" are more important than "hygiene" factors as contributors to both job satisfaction and job dissatisfaction (Friedlander, 1964; Centers & Bugental, 1966; Dunnette, Campbell, & Hakel, 1967; Hulin & Smith, 1967; and Wernimont, 1970).

Although most of the criticism seems to be leveled at the methodology employed, Schwab et al. utilized Herzberg's favored "critical incidents" technique with 80 male accounting-managerial employees and still failed to obtain supportive results. They concluded that an hypothesis which assumes employee behavior to be determined or motivated by one category of factors ("satisfiers") rather than by another ("dissatisfiers" or hygiene factors) is equally as controversial as its methodology (Schwab, DeVitt, & Cummings, 1971). In an earlier study, Schwab and Heneman had tested both the theory's reliability in predicting individual responses and its inter-coder reliability and reported that

the "two-factor" theory is "highly over-simplified" and inadequate for predicting individual responses (Schwab & Heneman, 1970). However, they also reported that high inter-coder reliability was found among the experimenters coding these responses. One might assume, therefore, that either (a) the experimenters are consistently introducing the same bias into their coding, or (b) some other factor is responsible for this high reliability, possibly the operation of an individual's ego-defense mechanisms. An interesting English study tested this second possibility. Fourteen job applicants were interviewed on the basis of Herzberg's "story-telling" methodology. In order to establish high ego-involvement, the applicants were told that their responses in the interview would determine who would be hired. The control group consisted of employees individually matched to the applicants, but who had "nothing to be gained or lost" as a result of the interview process (thus, low ego-involvement). The responses of the high ego-involvement group corresponded to those of Herzberg's 200 initial accountants and engineers, while those of the control group failed to support the "two-factor" theory. It was concluded that determinants of job satisfaction are not qualitatively different from determinants of job dissatisfaction, and that Herzberg's results are an artifact of ego-defensive processes (Wall, Stephenson, & Skidmore, 1971).

Dunnettee et al. devised an even more sophisticated "social desirability" control. They developed two Q-sort decks of 36 statements each -- one deck describing satisfying and the other dissatisfying job situations. The statements were equated, however, on the basis of the "social desirability" of the response. Subjects in six occupational

groups indicated that achievement, responsibility, and recognition contributed to both satisfaction and dissatisfaction (Dunnette, Campbell, & Hakel, 1967). Wernimont (1966) also controlled for the social desirability of statements. He utilized a forced-choice checklist which contained pairs of equally acceptable statements. The subjects (82 engineers and 52 accountants) endorsed achievement, work itself, and responsibility, as the relevant sources for both their job satisfaction and dissatisfaction. Bobbitt & Behling (1972) investigated the "social desirability" effect and found no support for it; however, they did not take into account the "valences" and perceived outcomes of the behavior they sought to manipulate. Two groups of supervisors were asked to fill out a questionnaire describing "critical incidents." The experimental group, however, was told to sign their names so that their responses could be discussed with their supervisors. The control group was told that no names were to be associated with the results. Contrary to the experimenters' conclusions, one might question whether this is an adequate test of "social desirability." It is possible that both groups of supervisors exhibited some degree of ego-involvement with this task.

Comments. Bockman (1971) points out that different investigators of job satisfaction are often measuring different aspects of the job, with different data gathering techniques. He suggests that this may explain the lack of supportive evidence for Herzberg's theory. Likewise, King (1970) reviewed the literature and found five different varieties of the two-factor theory but reported support for none of

them. Consistent negative results cannot be ignored. Various modifications of the theory in terms of "extrinsic" and "intrinsic" factors have been suggested (Centers & Bugental, 1966). However, research evidence indicates that "hygiene" factors may very well be "motivators" for individuals having unsatisfied needs in these categories. Therefore, a theory which can account for individual differences in "needs" and values should have greater predictability and industrial utility.

#### EXPECTANCY THEORIES

One of the more recent trends in organizational theorizing attempts to integrate individual personality differences (values, needs, expectancies, etc.) and environmental or organizational structures (reward contingencies, available alternatives, etc.). It has long been recognized that job performance is a function of ability times motivation and that training courses and on-the-job experience may increase ability but not affect overall performance. Likewise, incentive rewards may increase motivation but have little effect unless the individual possesses accurate role perceptions and job knowledge. When external incentives (money, feedback, verbal reinforcement, etc.) bring about changes in performance, expectancy theory attributed this to a modification in the individual's goals and intentions (Locke, Cartledge, & Knerr, 1970). Expectancy theory, therefore, holds that an individual's work goals are determined by his "values" and "expectations" in the context of the situation as he sees it; therefore, his performance will be affected to the degree

that he perceives the attainment of important job values to be contingent upon his efforts.

Vroom (1964) defines "value" as the degree of satisfaction experienced following an outcome, and "valence" as the amount of preference for a particular outcome. It follows then that "expectancy" is one's momentary belief concerning the likelihood that a particular act will be followed by a particular outcome. "Means" will acquire valence as a consequence of their expected relationship to "ends."

There are several varieties of valence-expectancy-instrumentality theories currently receiving attention. Vroom's model, however, is sufficiently representative to demonstrate contemporary research efforts in industrial organizations.

Supportive evidence. Vroom's model claims to predict (a) effort-expenditure or force, and (b) job satisfaction. Effort is not identical to accomplishment or successful performance because of the interaction of such factors as effort-performance expectations, valences of outcomes, and perceptions of performance-outcome instrumentalities. An individual is said to choose work behaviors on the basis of the interaction between (a) the valences he perceives to be associated with the outcomes of the behavior under consideration, and (b) his subjective estimate of the probability that his behavior will indeed result in the outcomes (Vroom, 1964).

There are differing viewpoints as to how the interaction effects of these variables can best be measured (and thus predicted). Vroom's model, however, postulates effort to be a function of the algebraic sum of the products of all outcome valences and their expectancies



(Effort = Valence x Expectancy). Since expectancy theory is a derivation of economic subjective utility theory and psychological decision-making models, any study which indicates a relationship between "subjective expected utility" and overt behavior is interpreted as support for Vroom's model. Hill, Bass, & Rosen, tested the hypothesis that an individual will choose a course of action which he perceives to result in the highest positive (or lowest negative) S E U for him at that moment. Forty-eight electrical repairmen were interviewed concerning their perceptions of the consequences of "bidding" on (or applying for) the next highest level job. (In this company, employees were required to actively seek a promotion by bidding for better jobs -- this was the only way to advance.) These employees were then asked to rate the desirability or undesirability of these projected outcomes as well as their expectations of the probability that these expected outcomes would actually occur. More traditional techniques for predicting organizational behavior (two Semantic Differential scales and a "need achievement" profile) were then compared with the results obtained from the subjective expected utility maximization model. It was concluded that the S E U model was a better predictor of "bidding" behavior than the more traditional techniques (reported in Galbraith & Cummings, 1967). One of the first studies to test an expectancy or goal approach to motivation in industry was conducted by Georgopoulos, Mahoney, & Jones (1957). Utilizing a sample of 621 employees in a household appliances company, they concluded that performance is highest for those who perceive it to be

"instrumental" in leading to "valued" outcomes. In a similar study to predict level of effort, it was concluded that those employees expecting "desired" outcomes to result from hard work exerted more effort than those who expected less "desired" outcomes to result from hard work (Hackman & Porter, 1968).

Vroom's model postulates a slightly different calculation for predicting job satisfaction and job performance, but the basic thesis remains the same. Mitchell and Albright (1972) tested the model's adequacy in predicting effort, satisfaction, performance, and job tenure in two squadrons of naval aviation officers. It was concluded that the results strongly supported the prediction of job satisfaction and job retention (tenure), but only moderately supported predictions of effort and performance.

Research generated. Both Lawler (1971) and Graen (1969) have suggested extensions or modifications of the basic relationships in order to include additional relevant variables. Graen (1969) proposed a distinction between first-level outcomes (perceived work roles) and second-level outcomes (role outcomes). In addition to the valence "x" expectancy term, Graen suggested that gains in performance are predicted from (a) pressures to comply with the perceived expectations of others, and (b) some measure of the individual's internally "felt" pressures to comply with these expectations. Lawler (1971) also contends that additional variables must be included in the interaction model. He argues that an "accuracy of role perceptions" score should be multiplied by an effort "x" ability score in order to accurately predict performance. Empirical

investigation of these extensions is complicated by the complexity of the interactions. Controlled tests in industrial settings are yet to be reported.

Negative evidence. Vroom's model states that the worker's satisfaction with his job results from the instrumentality of the job for attaining other outcomes and the valence of those outcomes:  $V_j = f \sum_{k=1}^n (V_k I_{jk})$  where  $V_j$  = the valence of outcome  $j$ ;  $I_{jk}$  = the perceived instrumentality of outcome  $j$  for the attainment of outcome  $k$ ;  $V_k$  = valence of outcome  $k$ ;  $n$  = the number of outcomes; valence = amount of preference for a particular outcome; and "value" = actual satisfaction following an outcome (Vroom, 1964).

In opposition to Vroom, Locke (1970) utilizes the term "valence" for both (a) "anticipated" satisfaction, and (b) actual satisfaction. He advises that these critical job elements should be included separately in the model because one might experience greater satisfaction with an unexpected "successful" outcome than with an anticipated "successful" outcome. Furthermore, he postulates a summation rather than a multiplication function between the valence and instrumentality variables.

Sobel (1971) compared additive, subtractive, and multiplicative functions in terms of their accuracy in predicting job satisfaction. He found that high valence in combination with low subjective probability resulted in less satisfaction than low valence coupled with low subjective probability. This function would be predicted by the subtractive model but not by the multiplicative model. He also found that "high tension" coupled with high environmental return produced more satisfaction than "low tension" coupled with high environmental return. This function,

on the other hand, would be predicted by a simple multiplicative model but not by a simple subtractive model. It was concluded that any model of job satisfaction should take into account the amount of outcome expected (or received) in relation to the magnitude of the individual's desires or needs (Sobel, 1971).

Comments. It has been postulated that some of the conflicting predictions found in various job satisfaction studies may result from the inconsistent treatment of the "importance" of a job value (Mobley & Locke, 1970). Locke's contention, that job satisfaction is a function of what one "wants" from his job and what he perceives as available, encompasses this notion (Locke, 1970). Vroom's model does not distinguish between the two attributes of "value" -- i.e. (a) what and how much a person wants, and (b) how much he wants it. Additional research is required in order to dispel some of the apparent discrepancies in current definitions and methodologies. At the present, these variations make theory-building and integration difficult. The theory's redeeming quality throughout various designs is its accent on the individual and how he interacts with "his" environment. Until some of the "growing pains" are resolved, however, Vroom's model should be viewed with enthusiastic reserve.

CHAPTER IV  
INTEGRATION OF THE RESEARCH

WHAT IS MOTIVATION?

In an effort to reconcile the literature and arrive at a definition which has meaning in the work environment, "motivation" must be an integration of behavioristic, cognitive, and humanistic approaches. Psychologists generally agree that motivation is a condition of "directed" activation or arousal; the individual is energized in a "selective" direction. Exactly how responses come to be arranged in unique complex patterns -- elicited under certain conditions and not others -- is not so readily agreed upon.

Drive reduction. Drive-reduction theorists hold that innate biological needs initially arouse behavior in accordance with conditions of deprivation and stimulation. Previously neutral objects, events, conditions, etc. soon acquire independent motivational "values" because they have been associated with primary reinforcement in the past.

Goal seeking. On the other hand, expectancy theorists emphasize the incentive or goal-approach to behavior determination. "Motivation" symbolizes the individual's conception of the probability that active needs can be gratified through the perceived consequences of job-related behavior. Response hierarchies are thought to develop not so much from previous consequences as from "expected" consequences.

Although drive-reduction and expectancy theory are opposing theoretical models, they are both capable of handling most of the literature to date. (For a critical comparison of the two approaches in relation to accountability of research evidence, see Lawler, 1971.) At first glance, one might be surprised at the juxtaposition of behavior modification techniques and expectancy theory. Their compatibility, however, will become apparent.

#### CONDITIONED REINFORCEMENT AND EXPECTANCY THEORY

It was once thought that the consistent "pairing" of stimuli, such as a bell with the presentation of food, would eventually establish the ringing of the bell as a conditioned reinforcer. Recent experimental findings, however, have determined that the stimulus must precede reinforcement before it can take on any reinforcing value (Hendry, 1969). The stimulus in this instance, which may be called a discriminative stimulus, sets the stage for an instrumental response, although it does not "elicit" it (Skinner, 1969). An "operant" is defined as any behavior which is modifiable by its consequences (whereas a "respondent" is behavior elicited by a stimulus). The operant is reinforced in the presence of the discriminative stimulus.

According to the stimulus-response (S-R) hypothesis of conditioned reinforcement, the stimulus "gains discriminative control" of the reinforced response (Hendry, 1969). In other words, the presence of the discriminative stimulus "predicts" the subsequent presence of the reinforcer; this "prediction" is thus reinforcing in itself because it reduces the anxiety of uncertainty. The notion that an individual can be

reinforced by cues which predict future reinforcement is very similar to some of the "what leads to what" cognitions discussed in expectancy theory. In fact, the individual's selectivity in "attention" and "retention," (discussed later) may be explained in terms of conditioned reinforcers. For example, in the presence of competing response tendencies, an individual would "selectively perceive" stimuli which cue or alert him to the potential reinforcement of alternative outcomes. Attention would be paid to those aspects of the environment perceived to provide the most information (reduction of uncertainty) for resolving "what to do."

Instruments of change. The research evidence indicates at least two ways in which organizational behavior may be altered -- (a) the individual's perception of the instrumental relations between work-related behavior and its outcomes may be changed; or (b) undesirable behavior may be influenced by changing the value of outcomes or organizational rewards.

In the first instance (that of changing the individual's perception), several factors must be kept in mind. Man attempts to "handle" or make sense of his world by categorizing the numerous sensations which attract his attention at any given moment. A situation is analyzed on the basis of its perceived potential utility for achieving outcomes classified as desirable. The cuing function is economical in that attention is reserved for event outcomes which are deemed relevant to current needs or goals (Broadbent refers to this selectivity as "channel capacity"). Since a portion of the available stimuli are filtered out, however, it is not surprising that persons fail to "hear" theories or points of view in opposition to their preconceived

ideas, (for example, try to list the good points of "the other" political party or of an automobile you did not buy). Awareness of the channeling of attention (and retention) may help in understanding otherwise "irrational" social behavior. What first appears to be an employee's "childish reaction" may be justifiable behavior given his past experiences and perceptual scheme of things.

The second method of modifying undesirable behavior involves changing the "value" of outcomes or rewards. The structuring of perceptual events according to their consequences results in a unique, learned, hierarchy of values. These hierarchies help program choices -- thus direct performance -- as each new event is compared with some previously stored image and future actions modified according to the match. Individual hierarchies are developed through the rational evaluation of alternative courses of action and their perceived consequences in accordance with learned value systems. It should be remembered, however, that these "rational evaluations" are made from input data biased by one's cognitive field.

Even though many Behaviorists may not wish to deal in terms of incentives, goals, and purposes, it would probably be agreed that "value" is determined as a consequence of the reinforcement given a response or performance. The socialization process, therefore, is the experience of learning to value or prefer certain consequences under specific conditions. Job satisfaction then becomes defined as the degree to which job related behaviors gratify values high in the individual's unique hierarchy (Porter, 1961; Wolf, 1970; Ghiselli & Johnson, 1970; Wofford, 1971).



In this regard, "motivators" would not be restricted to a particular class of variables as are Herzberg's, but would be determined by one's cognitive value system (the valence or importance of a specific goal at any point in time), and one's perception of the probability that job-related behaviors will result in these anticipated outcomes. Whether a factor is termed a "satisfier" or a "dissatisfier" would thus depend upon the difference between how much of a value is gratified on the job and how much of it is desired within the context of an individual's value hierarchy. Six hundred and ninety-two employees at various occupational levels were interviewed with respect to job satisfaction factors in an effort to distinguish between "satisfiers" (intrinsic factors) and "dissatisfiers" (extrinsic factors). It was found that lower level occupations tended to place a higher value on extrinsic job factors (pay, security, etc.), while higher level occupations appeared to value intrinsic components more (opportunity for growth, value of work, etc.) (Centers & Bugental, 1966).

In view of these and similar findings, it may be said that Herzberg's results are partially explained as an artifact of socioeconomic positions and "need-gratification" deficiencies. Contrary to Herzberg's interpretation of "satisfiers" (motivators) and "dissatisfiers" (hygiene factors), salary level has been demonstrated to be a "motivator" when the individual perceives it as a means of satisfying his active needs (Wolf, 1970). A person's judgment of the "value" of money includes what it symbolizes to him (in terms of potential prestige, status, recognition, etc.), and the strength of his "desire" for these outcomes. In Vroom's terms, money acquires

valence as a result of its perceived instrumentality for obtaining other desired outcomes. In Skinnerian terms, responses that have had reinforcement value in the past continue to be repeated (Skinner, 1969). Therefore, when inappropriate or undesirable behavior is continually displayed or repeated in the work environment, it follows that this behavior is in some way being rewarded or reinforced.

#### CONTINGENCIES OF REINFORCEMENT

In behavioristic terms, reinforcement means more than simply "being rewarded." It involves the concepts or probability of "payoff" and contingency. Skinner includes in the contingencies of reinforcement: (a) the occasion upon which a response occurs, (b) the response itself, and (c) the reinforcing consequences. Thus, any intended modification of behavior must identify these three elements. However, this identification is often more difficult than it might seem. Behavioral engineering is derived basically from "operant conditioning." In a controlled laboratory situation, the experimenter is usually working with a deprived animal, so he is fairly confident of at least one class of reinforcers. This is not the case in industrial situations. Such concepts as conditioning, delay of reinforcement, extinction, stimulus discrimination, response differentiation, and schedules of reinforcement are receiving considerable laboratory investigation at this time. Some of these contingencies will be discussed throughout this chapter in connection with their implications for industry.

At this point, it might be recalled that monetary rewards did motivate performance when the response was objectively measured and closely tied to the reward (Lawler, 1971; Schuster, Clark & Rogers, 1971). In these cases, it appears that the contingencies of reinforcement had been adequately identified. So what does this mean for the Supervisor? It simply means that management must investigate each problem area to discover the "contingencies of reinforcement" from the employee's vantage point. Oftentimes in work situations, "corrective" steps are undertaken to modify undesirable behavior before its contingencies have been clearly defined. Management may be unable to remove the rewards furnished by others in social situations -- praise, approval, positive attention, encouragement, etc.; therefore, opportunities must be provided for engaging in competing behaviors that are "more rewarding" than the "undesired" behavior. The failure of financial incentives to motivate some employees (in the Roethlisberger & Dickson (1939) study) may be an example of failure to identify the "perceived rewards." For instance, in the case of output restriction, the individual values other outcomes (such as "social approval") above monetary reward.

The successful implementation of some wage incentive systems, on the other hand, may be explained by the fact that the "expected" relationship of performance to other outcomes has been altered, and the new system is "perceived" as equitable by the participants (Whyte, 1955).

## CONTINGENCY MANAGEMENT

If an individual's work goals are determined by his values and expectations in the context of the situation as he sees it, it follows that his performance will be affected to the degree that he perceives the attainment of important job values to be contingent upon his efforts. A good contingency manager must (a) clearly identify and define the behavior that needs changing; (b) maintain careful records of its occurrences in order to determine its contingencies; (c) provide the opportunities for the receipt of a "reward" which ranks relatively high in the individual's value hierarchy; (d) convince the employee that variations in his performance level will directly affect variations in the amount of the desired reward (Galbraith & Cummings, 1967); and each time the desired behavior is elicited, reinforce it immediately and consistently in order to alter the employee's "expectations."

Reinforcement increases the probability that the response will be repeated (Skinner, 1969). A study of the reinforcement determinants of group proficiency disclosed that group behavior responded to reinforcement schedules much as an individual would (Klaus & Glaser, 1970). There are several time schedules which may be employed (fixed interval, fixed ratio, variable interval or ratio), or combinations of these. Briefly, under a fixed interval schedule, a response is reinforced only when it occurs after the passage of a period of time (reinforcement every five minutes for instance). With a fixed ratio schedule, every nth response is reinforced, regardless of the period of time. With either a variable interval or variable ratio schedule, the interval

or number (in the above descriptions -- 5 minutes or nth response) need not be fixed but may vary over a given range around some average value. Variable ratio schedules have been shown, in general, to generate higher rates of response and more consistent performance (Yukl et al., 1972). Productivity is maintained at a higher level since predictions cannot be made as to when reinforcement will be delivered (the number of responses per reinforcement varies around a selected average ratio as in many gambling set-ups). The manner in which rewards are administered is critical. Although considerable laboratory research has been conducted in this area, very little has been done in industry to insure that rewards follow performance on an effective schedule. It has been demonstrated, however, that different reward policies effect employee perception of perceived effort-reward probabilities. Schneider & Olson (1970), for example, compared the performance of nurses in two hospitals with different reward contingencies. In one hospital, individual effort was rewarded through "merit" pay increases. The other hospital administered salary increases solely on the basis of job tenure. Even though the nurses were individually matched according to ability, significant difference in "effort expended" was observed. It was also reported that satisfaction with pay was positively related to "effort" in the hospital which rewarded effort with pay (Schneider & Olson, 1970).

In industry, very creative, or otherwise unstructured tasks might be rewarded at successive "working" stages since the product is intangible and ultimate success or failure is some time in the future. The rewarding of "successive approximations" (shaping) might also be

desirable when teaching a new job; in this respect, sub-goals could be set and progressive effort rewarded. A supervisor's verbal reinforcement is often applied in instances such as these. Expectancy theory would require, however, that the supervisor's "approval" be valued by the employee in order for it to be reinforcing.

A supervisor is also in the best position for altering the relative worth of consequences. He and his subordinates may (a) identify common goals, (b) determine each individual's major area of responsibility, and (c) set-up feedback mechanisms to assess and reward performance. This is essentially Peter Drucker's "management by objectives" and appears to be a most useful vehicle for communication and goal-setting. In a study to assess the effects of "management by objectives" on need satisfaction, Porter's need deficiencies questionnaire was administered in two manufacturing firms both before and six months after the introduction of a MBO Program. Perceived need satisfaction deficiencies were reported to have decreased in four out of the five categories following program implementation (Ivancevich, Donnelly, & Lyon, 1970). Employees reported increased job satisfaction as a result of "knowing what was expected of them" and the investigators credit success to the following: (a) the individual knows what his wants are and is given the opportunity to plan for the satisfaction of a portion of these, (b) he knows the effort involved, and (c) has accurate "expectations" of the end state in relation to his needs. The "directing" function of goals is illustrated by the following experiment. Forty-nine subjects worked on an addition task for several 20-minute trials. On half of the trials they were urged to correctly complete as many problems as possible (i.e. quantity),

and on the other half, they were to make as few errors as possible (i.e. quality). Half of the time, they were told which goal to "try for," and the other half of the trials were left up to the subject's decision (as long as his time was equally spent on "quantity" and "quality" goals). Feedback was given on both "quantity" and "quality" after each trial. Over all the trials, the subjects made fewer errors when their goal was "quality" than when it was "quantity correct." Of even more interest for MBO advocates is the finding that subjects got significantly more problems correct as a result of self-imposed goals to increase "correct" quantity than on the trials when the experimenter chose the goal direction (Locke & Bryan, 1969). In a similar study, Locke (1970) tested the motivational effects of "knowledge of results" and concluded that the subjects with harder task goals performed at a faster rate than those with easier task goals. He attributes this difference in performance to the motivational effects of conscious goals and intentions. From these few examples, it is apparent that organizational structures have much to do with the resulting motivational climate.

#### MOTIVATING MOTIVATION

The probability that a response is repeated can be increased by changing its consequences through punishment, extinction, or positive reinforcement. Punishment is the commonly, although least effective technique for modifying behavior. Actually punishment is not administered each time inappropriate behavior occurs, but only when one gets caught; therefore, the inappropriate behavior is positively reinforced (on the very effective variable ratio schedule) each time it is engaged in without being caught. When punishment is administered, it does not

insure that the correct response will replace the punished activity; it only reduces the probability of the inappropriate response while the threat of punishment exists. Also, emotional reactions -- anxiety, frustration, aggression -- usually accompany punishment, and in an industrial organization, can result in "get even" responses which cripple cooperative interaction.

Extinction of a response occurs when the primary reinforcer is removed (whether it be external or internal). In the socialized adult, however, many responses have obtained internalized reinforcing properties of their own, making it risky to rely solely on extinction for the modification of complex behavior patterns. The extinction technique is usually accompanied by the "positive reinforcement" of some competing response.

The determination of the "most effective" reinforcement schedule remains a matter for empirical investigation. At the present, expectancy theory predicts that response rates will be higher with "continuous" reinforcement (rewarding each occurrence). On the other hand, the operant conditioning literature supports the variable ratio schedule of reinforcement as most effective (Yukl *et al.*, 1972). Any comparative test of the two predictions must necessarily include an adequate measure of perceived expectancies and valences -- behaviorally defined. Alternative outcomes could be made available and subsequent choices observed. Behavior is probably the best indicator of an individual's needs and values (although need-deficiency questionnaires are also available). We do not know as yet what combination of measures yields the best prediction in a given situation, nor all of the outcomes that might have positive valence in a work environment. Clearly, further research is indicated.



It was recommended earlier that positive reinforcement be utilized in industry for rewarding "desirable" behavior. One application of this technique might be the use of a lottery to reward persons who consistently arrive at work on time, instead of threatening those who do not. Each day that an employee arrives before a specific time, he could be given the opportunity to sign a card which is then placed in a container for a drawing to be held weekly for awards which had previously been selected as desirable by the group. A person's behavior will be changed only when the value of some alternative behavior is greater than that currently received as a consequence of his present behavior. The utilization of positive reinforcement in industry is limited only by the imagination and ingenuity of management.

Restructuring organizations. The design of the "work itself" appears to be the most fertile area for built-in reinforcers (Ford, 1969). The job content can be structured so as to provide outcomes that are rewarding to the individual. More frequent, informative, feedback may be incorporated, or participation in decision-making activities may be increased. If social interaction (approval, status, etc.) is important to an individual, work group cohesiveness may be facilitated by his assignment to a group whose values are similar to his own. The work group is attractive to the extent that the rewards offered by its membership are valued (Vroom, 1964). Also, there is usually more attraction when group members work toward a common goal than when rewards are competitive. In a cohesive work group, behavior conforming to that group's norms is valued (reinforcing). The group has influence over an individual to the degree

that he desires the values which he receives by conforming. Productivity, therefore, cannot be predicted without taking group norms into account.

Homans (1961) noted that the frequency of interaction between group members depends upon (a) the frequency with which each rewards the activity of the other, and (b) upon the value to each of the outcome he receives. In this respect, the organizational groups which must interface could be rewarded in a chain -- the needs of each group being satisfied only when they cooperate with another group (Dowling & Sayles, 1971). Adequate "contingency management" should facilitate the flow of one job into another.

Job enlargement has also received attention as a method of building motivation into the content of the work itself (Ford, 1969). Industrial application of the concept has varied from simply adding a greater number of operations -- "horizontal enlargement," to actual restructuring of the task to allow the individual more control over the planning and accomplishment of job-related goals. In this manner, (provided the employee is utilizing abilities which he values), the task may be vertically enlarged as well, so that higher order needs may be gratified and some degree of individual growth may be experienced. Argyris (1964) describes this as job enrichment. The satisfaction of unique growth needs is an integral part of human resources development and may be described in terms of (a) the opportunity to accumulate knowledge and to integrate the familiar with the unfamiliar through job-related activities, and (b) the realization of self-perceived potential (Herzberg, 1966). Care should be taken, however, to insure that the features added to the job's scope are desired or valued by the employee.

## OBSERVATIONS

In summary, it appears that operant conditioning and positive reinforcement hold considerable promise for industrial application. Expectancy theory, on the other hand, might be equally as useful -- eventually. At the present, however, it provides a cognitive model of the explicit relationships between motivation and the accomplishment of organizational goals. Expectancy theory challenges the creativity of management to find out how important to the employees are their work goals, the expectancies that are held with respect to the employees' ability to control or influence these work goals, and the perceived instrumentality of organizational objectives for the attainment of these goals. Management is thus in the unique position of being able to design jobs (a) which augment internal motivation or self-reinforcement, and (b) which directly connect job performance with the attainment of both the individual's and the organization's desired outcomes.

When environmental conditions have been created such that an employee "wants" to do what needs to be done within his organization, management has succeeded in motivating motivation. If, on the other hand, "undesirable" responses are common throughout the organization, management is charged with the task of discovering the sources of these rewards. Opportunities can then be provided for engaging in competing behaviors that are more rewarding than the "undesirable" responses. Matching jobs to people -- instead of people to jobs -- appears to be critical for long-term organizational effectiveness.

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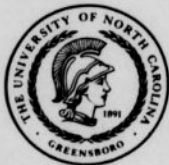


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HUBBARD, LESLIE HAMLIN. The Effects of Feedback on Attentional Responding and Response Latencies in Children. (1973)  
Directed by: Dr. Herbert Wells. Pp. 35

Forty-eight pre-schoolers, first and third graders, learned four simple concepts with one relevant cue on each of four experimental problems. Four problems were given each S, two in each experimental session. S was required to press a button to select from three possible cue windows which one he wanted to view. This was his attentional response (AR). S then guessed whether the outcome would be a shoe or a key. This was his discriminative response (DR). Three types of feedback were given: Total feedback only after error; total feedback only after correct; just the outcome box and total feedback. S's response latencies were measured from onset of the outcome until S made his next AR.

Pre-schoolers took significantly longer to reach the trial of last error of the attentional response than first or third graders ( $p < .01$ ). They took longer to choose the correct AR. Pre-schoolers also took significantly longer to reach the trial of last error of the discriminative response (TLE-D) than the first or third graders ( $p < .01$ ). Pre-schoolers had a longer reaction time (RT) than the first and third graders ( $p < .01$ ).

All groups had longer RT after errors than after correct responses. Pre-schoolers had a larger spread in RT after correct and after error than the first and third graders. There were no effects due to the feedback given Ss in different experimental problems.

None of the groups was able to use the extra information given in the total feedback conditions.

All Ss used a significantly higher proportion of positive strategies than negative strategies. The older the Ss, the higher the proportion of positive strategies that were used. Pre-schoolers used a higher proportion of responses with the same AR than did the first or third graders. All groups were more likely to respond with the same AR rather than different AR. The older the S, the more likely he was to respond with a different AR after an error. Pre-schoolers made a higher proportion of correct responses.

The pre-schoolers took more time to deal with the outcome information in each trial than the first and third graders (they had long RTs). Pre-schoolers were less efficient in handling feedback than first and third graders (More trials to TLE-A and TLE-D; and lower proportion of positive strategies).

All groups were likely to keep responding with the same cue window, rather than pick another (higher proportion of same ARs). Pre-schoolers were more likely to stick with the same AR even though they had made errors in their predictions, proving that cue choice incorrect (higher proportion of same AR after an error than other groups). Pre-schoolers often responded several times with the correct AR-DR chain, but then made an error.

APPROVAL PAGE

**THE EFFECTS OF FEEDBACK ON ATTENTIONAL  
RESPONDING AND RESPONSE LATENCIES**

This thesis was prepared under the supervision of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

1901  
by

Leslie Hamlin Hubbard

Thesis Advisor *Herbert Wells*

A Thesis Submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

Greensboro  
1973

Approved by

*December 18, 1973*  
Date of Examination

*Herbert Wells*  
Dr. Herbert Wells

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### INTRODUCTION

Selective attention has been of interest to psychologists since William James (1890) first defined it as "...the taking possession by the mind, in clear and vivid form, of one out of what seems several simultaneously possible objects or trains of thought..." Early experimenters attempted to calculate attributes of a stimulus being attended to and their direct effect on behavior. Because of the lack of ability to behaviorally define attention, the behavioral revolution cast out attention as a mentalistic concept. The only evidence of its existence was introspective.

Since 1950, there has been more concentrated interest and experimentation involving attention. This interest has been in the areas of discrimination learning, neurophysiological research and studies of rapid information processing in humans.

Cherry (1953), Broadbent (1958) and Treisman & Gelfand (1967) demonstrated selective attention occurring within the auditory system. Subjects (Ss) listened simultaneously to two messages, one message presented to each ear, or both messages recorded together on one tape. In both situations S was able to separate out one message and shadow it. S had no memory of the other message, except gross characteristics

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such as the sex of the speaker. S did not even recognize when another language was being spoken.

Selective attention within the visual system was demonstrated by having Ss attend to different aspects of the same visual stimulus, (Donchin & Cohen, 1967). The amplitude of the evoked potential changed when Ss attended to different aspects of the same stimulus. Spong, Haider, & Lindsley (1959) found with short-term attentiveness that the amplitude of cortical evoked responses, in a given sense modality, varied according to whether or not the Ss are attending to the stimuli in that or another modality.

Reynolds (1961), using pigeons, demonstrated the organism's ability to respond to part and not the total configuration presented. He reinforced a red triangle and did not reinforce a green circle. He then trained the birds to criterion and tested them on the separate stimuli. His Ss responded only to the color cue, or only to the shape cue, never to both. Thus Reynolds demonstrated the selectiveness of attention.

This experimenter assumes, as Trabasso & Bower (1968) did, that stimulus patterns are analyzed into parts, and the analyzer is sensitive to particular stimulus features (i.e. such as a certain dimension, color, shape, etc.). Attention in this experiment will be defined as the cue selected overtly by S at the beginning of each trial.

In the areas of discrimination learning and concept formation, attention has been difficult to study because of

the several cues to which S can attend before and after he makes his response. The difficulty is in determining exactly what S attends to and for how long.

Several experimenters recently have attempted to look at the attentional response (AR) more directly (Trabasso and Bower, 1968; Levine, 1966). Levine developed a "blank trial" procedure. He arranged his stimuli in such an order that the pattern of responding on four trials without feedback would indicate what hypothesis S was using. He found that he could predict with high accuracy how S was likely to respond on the fifth trial because the four previous blank trials indicates hypothesis.

A more direct approach in studying attention is to make each S's attentional response (AR) an overt response, separate from his discriminative response (DR). The S must make an overtly measurable response (AR) in order to reveal a portion of the stimulus. He then makes his discriminative response (DR) to the revealed portion of the stimulus.

Rydberg (1969), and Rydberg and Arnberg (1969) measured attentional responses by using tactile cues. They measured electrically, when and for how long Ss touched stimulus dimensions on a board. They found a significant linear increase in percentage of time spent in relevant observing over the last six precriterion trials. In other words, Ss attended longer to the relevant cue prior to correct responding. The

correct AR appeared before the correct DR, showing that the attentional and the discriminative responses were separate and distinct events.

Williams (1969) was interested in how Ss modify incoming information. She studied conjunctive concept learning and selective attention. Ss chose to view any two stimulus dimensions, made a DR and then were shown the entire stimulus. By using a technique involving an overt AR, she was able to analyze trial-by-trial changes in attention.

Eimas (1969) used third grade children in his experiment. His theory was that the AR followed by a DR was a learning chain. He tested AR and DR transfer across problems. Eimas' apparatus was similar to the one this experimenter used. The S chose which of two cue windows he wished to view (AR) and then selected a response button (DR). A light lit up over the button he had pressed if S was correct, and over the other button if he was wrong. Eimas found that overtraining produced a small strengthening of the DR originally correct. Overtrained Ss showed a decrement in mid-reversal errors due to their making no irrelevant AR observing.

Wells and Pharr (1970) analyzed AR and DR behavior of second, fourth and sixth graders on a simple concept problem. The problem had one relevant and two irrelevant dimensions. Ss received total feedback at the end of each trial, (all cue boxes were illuminated along with the outcome box). The procedure was the same as Eimas', except there were three

cue boxes and instead of a button for the DR, S predicted whether a star would or would not appear in the outcome box. Wells and Pharr found no reliable differences among the three grade levels in mean number of trials to criterion. They attribute this lack of difference to sufficient practice given Ss before the experimental problem was presented. There was a gradual increase in proportion of ARs to the relevant dimension prior to criterion performance. This increase remained at or below chance. However, when a correct AR was given, there was a higher than chance probability that the correct DR would be given. Ss responded to error as expected. After two-thirds of the error trials, Ss selected a different AR. If the same AR was chosen, the DR was usually different. Wells and Pharr found that not all Ss followed the "win-stay" policy. The older Ss were more likely to change ARs after a correct response. The second graders, however, appeared to follow the "win-stay" strategy, choosing the same AR-DR after each correct trial.

There has been little, if any, research with concept learning and response latencies with children. Erickson, Jajkowski and Ehmann (1966) tested 54 college students in a concept identification task. They measured the latencies from when Ss were told if they were correct or not, until the Ss' next choice. They found latencies following errors were greater than following correct responses. Latencies also declined significantly in the pre-solution period, especially

on trials following errors. They found that following last error, latencies showed a learning curve effect (the latencies became shorter).

Wells (1970), using college students, measured how long Ss made the interval (ITI), when they were allowed to adjust it. He found the complexity of the stimulus significantly affected the ITI. The mean ITI was longer after an error. This last statement lends support to Levine's hypothesis, that Ss are less efficient in extracting information from an error than from a correct trial.

Wells and Pharr found no reliable difference among the three grade levels in mean number of trials to criterion. Rather than attributing this lack of difference to sufficient practice as they did, this experimenter wonders if the ability to solve this type of concept problem is a skill due to maturation. Piaget (1964) found that children under age seven through nine have more and more difficulty the younger they are working with abstract concepts. If this is the case, this could account for the lack of difference in the different age levels. Children may acquire the ability to solve this type of problem at around school age. The use of preschoolers in a future experiment would test this possibility.

Expected in Wells and Pharr's (1970) experiment was a "win-stay" strategy following a correct response. Their results, however, were that older Ss were less likely to retain the same AR-DR following a correct response. The



younger Ss (second grader) were more likely to select the same AR-DR after a correct trial. Wells and Pharr, surprised by these results, hypothesized that the shift might be a deliberate one motivated by curiosity. They proposed that if the Ss were given even less feedback, (i.e. only the outcome box shown at the completion of each trial), there would be greater tendency to shift AR's after a correct response. This experimenter proposed that instead of partial feedback being distracting to older Ss, it would prevent them from monitoring more than one cue. What may be happening is this: S selects the cue shape; a triangle appears in the cue box; S predicts the outcome to be a star. With total feedback, when the outcome box is shown, S sees the star and knows he is correct. However, he also sees that the color red appears with the star. He next picks the color cue, thus shifting his AR after a correct trial. With total feedback, as in Wells and Pharr's experiment, it is possible for Ss to monitor more than one cue because he sees all the cue boxes when the outcome box is illuminated. There is no way to know what he is doing, unless different types of feedback are given Ss on different experimental problems. The younger Ss may stick to the "win-stay" policy because shifting and monitoring more than one cue is too difficult for them.

Wells and Pharr (1970) used a star or no star condition in the outcome box. This experimenter used pre-schoolers and felt that a star might have been chosen over the no star condition because the star may have had more reward appeal. Two distinct

objects were, therefore, presented in the outcome box and the child had to predict which one he would see.

This experimenter was interested in AR latencies and how they were affected by: the age of Ss; correctness of the preceding response; and different feedback conditions. It was hypothesized that the older the S the shorter would be his response latencies. Older Ss were predicted to solve the experimental problems in fewer trials in the total feedback conditions. This experimenter hypothesized that RT would be longer after an error than after a correct response and longer on the pre-solution trials. It was predicted that the older the S the higher proportion of positive strategies he would use (strategies helpful to solving the problem).

#### METHOD

##### Subjects

The subjects were pre-schoolers drawn randomly from American Day School in Winston-Salem, North Carolina. First and third grade subjects were drawn randomly from Summit school in Winston-Salem, North Carolina. Sixteen Ss from each age group were tested in two separate sessions. A total of 48 Ss were used. All Ss within each age group were no more than six months apart in age.

### Apparatus and Recording Procedures

The apparatus was a vertical panel 28" x 14" with four windows, each 3.5" x 4". Three windows presented the

#### Apparatus for Concept Formation Experiment

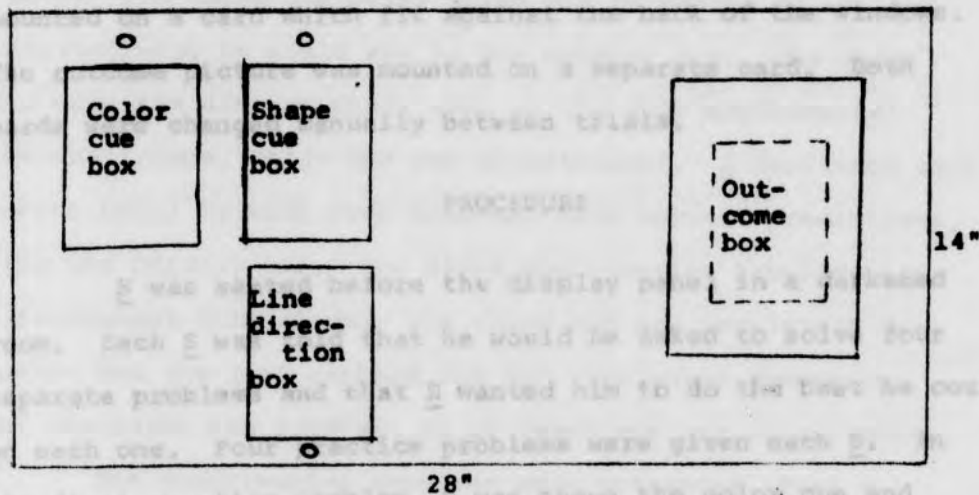


Fig. 1 Drawing of apparatus and its dimension.

cues and the fourth window presented the outcome to Ss. Each window was covered with one-way plastic and behind each window was a light operated by a switch. When the light was on, the Ss would see the stimulus behind the window. Next to each window, on the S's side was a small white button. These three buttons were connected in series and would stop an electric timer. The timer was started by the experimenter (E) pressing a button simultaneously with the outcome box light. In this manner, S's response latencies were measured.

The stimuli were three binary cue dimensions. Each dimension was shown through a separate window. The dimensions were color (red or blue), shape (triangle or circle), or orientation of a pair of black bars (vertical or horizontal). In the outcome window the stimulus was either a picture of a key, or a picture of a shoe. For each trial three cues were mounted on a card which fit against the back of the windows. The outcome picture was mounted on a separate card. Both cards were changed manually between trials.

#### PROCEDURE

S was seated before the display panel in a darkened room. Each S was told that he would be asked to solve four separate problems and that E wanted him to do the best he could on each one. Four practice problems were given each S. In the first practice problem, S was shown the color cue and asked to tell E if he expected to see a key or a shoe in the outcome box. After he guessed, E left the cue box lit and turned on the outcome box to show the correct answer. S was then shown the next trial and was helped along until he could give four consecutively correct outcome predictions. The second practice problem was also with only one cue window. This time, line direction was the cue window used. S was given no help with this problem and had to continue to guess until he solved it. In the third practice problem, S was told he must press the white button next to the window he

wished to see. In this manner, S could choose which of two cue boxes he wanted to look at. E explained that only one box would consistently enable him to make the correct prediction. The two cues used were shape and bar orientation. S was helped with this problem until he solved it (responding correctly four times in a row). In the last practice problem, S chose from three cue boxes which cue he wanted to see and predicted what he would see in the outcome box. The three cues were the same as those used in the four experimental problems (shape, color and bar orientation). S continued this problem until he made four consecutively correct predictions, using the correct cue. The first two practice problems had no irrelevant dimensions. The third had one irrelevant dimension and the last problem had two irrelevant dimensions. Each dimension was relevant on at least one practice problem.

The experimental problems were presented after a short rest following pre-training. On the experimental problems, S pressed one of the white buttons next to each cue box to select the cue box he wanted to look at. This was his attentional response (AR). He then indicated to E whether he would see a key or a shoe in the outcome box. This was his discriminative response (DR). The four experimental problems were presented in different orders to each S. The cue which determined the correct outcome was different between Ss and treatments. The order and relevant cue were determined by a latin square design (See Appendix A).

The experimental problems involved the same concepts as the training problems. The difference was, the feedback given S was different. On problem one, all the cue boxes were turned on at the end of each trial. In problem number two, all the cue boxes were turned on only after S made an error. In problem number three, all the cue boxes were turned on only after S made a correct response. In problem number four, S saw only the outcome box and the cue box he had chosen at the completion of each trial.

The criterion for solving the problems was eight consecutively correct cue choices, paired with the correct prediction in the outcome box. If S had not begun the criterion run in 32 trials, the problem was considered unsolvable. Ss were tested in two sessions no more than three days apart. The first session consisted of the pre-training problems described earlier and two experimental problems. The second session began with one warm up problem (the last pre-training problem given in the first session), and included two experimental problems.

Throughout the experiment, response latencies were recorded. The time recorded was from the onset of the cue box, (clock started by E), until S's next AR (S pressed a button to stop the clock).

## RESULTS

Five pre-schoolers and one first grader failed to reach criterion on the pre-training problems and were eliminated from the experiment. One first and one third grader were out sick and did not get to take the second part of the experiment within the three day limit. They were not included in the experimental analysis.

Trial of Last Error

An analysis of variance, split plot design, was used to analyze age, feedback and sequence differences. Significant results were further analyzed using tests of simple effects if significant interaction effects were evident. Tukey's test of honest significant difference (HSD) with alpha set at .05 was used to make all pairwise comparisons among means.

The trial of last error attentional response (TLE-A) was the last error made by S in his choice of cue windows before beginning the criterion run. In other words, it was the trial on which he chose the correct AR, whether or not he then made the correct DR (see Table 1). The F was significant for age differences. Tukey's HSD test showed that the significance was due to the pre-schoolers taking longer to TLE-A than either first or third graders. The mean number of trials to TLE-A were 13.84, 8.09 and 8.39 for pre-schoolers, first and third graders respectively. The F was also significant for interaction effects of age and sequence of the

experimental problem solution. A test of simple effects showed the significant difference to be at the sequence: All cues with outcome box; all cues after error with outcome box; all cues after correct with outcome box; and only the outcome box and cue selected. Tukey's HSD test showed the significance to be due to a difference between the pre-schoolers and the first and third graders. The pre-schoolers took more trials to TLE-A on this sequence than either the first or third graders. There were no significant differences due to treatment effects in TLE-A, no treatment and age interaction effects. The age, treatment and sequence interaction effects were caused by the A x C mentioned above.

TABLE 1

Analysis of Variance: Trial of Last Error,  
Attentional Response (TLE-A)

Source	df	MS	F
Age (A)	2	741.435	7.931**
Feedback (B)	3	50.944	
Sequence (C)	3	125.208	
A X B	6	36.827	
A X C	6	1364.65	14.598**
B X C	9	56.03	
A X B X C	18	328.569	2.408**

\*\* $p < .01$ .

The trial of last error for the discriminative response (TLE-D) was the trial on which S made the correct AR and DR beginning the criterion run. This is the same as the trial of last error (TLE) (see Table 2). The F was significant



for age differences. Tukey's HSD test showed that the TLE-D age significance was due to pre-schoolers taking more trials to TLE-D than either the first or third graders. The mean number of TLE-D was 16.94, 10.49 and 10.2 for pre-schoolers, first and third graders respectively. There were no significant effects due to treatment or any significant interaction effects.

TABLE 2

Analysis of Variance: Trial of Last Error  
Discriminative Response (TLE-D)

Source	df	MS	F
Age (A)	2	928.787	4.382*
Feedback (B)	3	36.403	
Sequence (C)	3	102.736	
A X B	6	67.648	
A X C	6	79.643	
B X C	9	89.935	
A X B X C	18	56.973	

\*p < .05

#### Reaction Time

An analysis of variance, split plot design, was used to analyze age, treatment, after error and after correct differences in reaction time (RT). Significant results were further analyzed using the test of simple effects and Tukey's HSD test was used to make all pairwise comparisons.

RT was measured from onset of the outcome box until S selected his next AR. Because of scarcity of data for some Ss in the first and third grade groups on

different experimental problems, RT averages included the eight trials to criterion. Some Ss entered criterion on their first response and, therefore, had no latency data out of criterion. If these Ss' responses were eliminated by analyzing only pre-criterion data, a significant treatment effect might have gone unnoticed (see Table 3). The *F* was significant for age differences. This significant difference was due to longer RT by pre-schoolers as compared to the first and third graders. The mean RT was 4.43, 2.64 and 2.47 for pre-schoolers, first and third graders respectively. There was no significant difference for feedback effects or any interaction effects which were significant.

TABLE 3

Analysis of Variance: Reaction Time (RT)  
Including Trials to Criterion

Source	df	MS	F
Age (A)	2	74.95	29.51**
Feedback (B)	3	.91	
A X B	6	.21	

\*\* $p < .01$

RT was also analyzed for differences after S made a correct and after S made an error response. This analysis did not include trials within the criterion block. Ss were excluded who began criterion immediately.

This was done because, during the criterion run,  $S_e$  RT is shorter. If this criterion data was included, it would bias the analysis. In other words, the  $S$  is correct during the criterion run and has solved the problem. His RT would, therefore, be shorter during criterion, creating a significantly shorter RT after correct (see Table 4).

TABLE 4

Analysis of Variance: Reaction Time (RT)  
Until TLE, Not Including Criterion Run

Source	df	MS	F
Age (A)	2	41.86	18.12**
Correct or Error (B)	2	13.6	7.73**
A X B	2	24.67	14.02**

\*\* $p < .01$

There was a significant F for age effects. Tukey's HSD test revealed this difference to be due to pre-schoolers having a longer RT than first and third after correct and after error. The mean RT was 5.14, 3.23 and 3.1 for pre-schoolers, first and third graders respectively. The F was significant for RT differences after correct and after an error. Pre-schoolers, first and third graders had a longer RT after an error than after a correct response. There was a significant F for interaction effects of age and RT after error and after correct. These interaction effects, Tukey's

HSD test revealed, were due to significant differences between pre-schoolers and first graders and pre-schoolers and third graders. The pre-schoolers had a significantly longer RT than either of the other two groups. Also significant was a bigger spread in RT for the pre-schoolers after error and after correct than for the first or third graders.

### Strategy

Because the pre-schoolers took more trials until TLE, an analysis of variance, based on strategies, would be confounded by their higher frequency of responses. Therefore, each S's responses were converted to proportions. These proportion scores allowed this experimenter to look closely at the strategies used by each group. (see Table 5).

TABLE 5

Proportion of S's Responses In Each of Three Categories After Error and After Correct

Grade	Diff. AR		Same AR		Total
	E	C	E	C	
Pre-Sch	.12	.03	.35	.50	1.00
1	.18	.04	.32	.46	1.00
3	.23	.04	.27	.46	1.00
Mean	.18	.04	.31	.47	

These results show that the first graders were performing at about the mean. Pre-schoolers had a higher proportion of same AR after correct and same AR after error than first or third graders.

Each S's proportion of responses in each category was used as a score. An analysis of variance, split plot design, was calculated. Significant results were further analyzed using Tukey's HSD test to make all pairwise comparisons between means. (see Table 6).

TABLE 6

Analysis of Variance: Proportion of Post-Error and Post-Correct Responses for Categories, Same and Different ARs

Source	df	MS	F
Age (A)	2		
Categories (B)	1	39273.52	800.52**
Error or Correct (C)	1	39273.52	28.3 **
A X B	2	2637.29	53.76**
A X C	2	21883.26	15.77**
B X C	1	34953.56	63.62**
A X B X C	2	14817.52	26.97**

\*\*p < .01

Tukey's HSD test revealed that the significance in categories (B) was due to all groups choosing the same AR more often than a different AR. The significance due to error and correct (C) was due to a higher proportion of correct responses. The significant AB interaction effects were due to pre-schoolers changing ARs significantly less often than first or third graders. First graders changed ARs significantly fewer times than third graders. Because proportion scores were used, this means that third graders choose the same AR significantly less often than first graders

or pre-schoolers. Second graders choose the same AR significantly less than pre-schoolers. The significant AC interaction effect was due to the pre-schoolers having a significantly higher proportion of correct responses than the first or third graders, and significantly fewer error responses than first and third graders. The significant BC interaction effect was due to significance at all AC levels. Ranking these proportion scores from high (most frequently used) to low (less frequently used) they were: Same AR after correct; same AR after error; different AR after error and different AR after correct. The significant ABC interaction effects were due to pre-schoolers choosing a different AR after error significantly less often than the first or third graders did. Significant also was that pre-schoolers were more likely to choose the same AR after correct and after an error than the first or third graders.

This examiner put each Ss proportion scores into a table separating their negative and positive strategies. (see Table 7).

TABLE 7

Grade	Positive Strategies	Negative Strategies	Total
Pre-Sch	.64	.36	1.00
1	.72	.28	1.00
3	.79	.21	1.00
Mean	.72	.28	1.00
Chance	.50	.50	1.00

Older Ss used more positive strategies than the younger groups. All groups used a higher level of positive strategies than chance.

To analyze for difference in the use of positive and negative strategies, this experimenter used an analysis of variance split plot design. Significant results were further analyzed with Tukey's HSD test to make all pairwise comparisons among means (see Table 8).

TABLE 8

Analysis of Variance: Proportion of Positive and Negative Strategies

Source	df	MS	F
Age (A)	2		
Positive/negative (B)	1	45762.6	353.9**
A X B	3	49304.4	127. **

\*\* $p < .01$

Significant strategy effects, Tukey's test revealed, were due to all groups having a higher proportion of positive responses. There was a significant interaction effect of age and strategies used. Tukey's HSD test showed this significance to be due to differences between pre-schoolers and first and third graders. The first and third graders used a significantly higher proportion of positive strategies than the pre-schoolers did ( $p < .01$ ) Significant at the .05 level was the difference between first and third graders. The third

graders used significantly more positive strategies than the first graders.

## DISCUSSION

### Trial of Last Error

Wells & Pharr (1970) found no reliable differences among second, fourth and sixth graders and number of trials to TLE. This experimenter expected no difference in first and third graders and number of trials to TLE, but more trials to TLE for pre-schoolers. This experimenter broke down the data to include TLE-A (first trial on which S chose correct AR before beginning criterion run) and TLE-D (first trial S chose correct AR-DR chain and began criterion run).

As predicted, the pre-schoolers took more trials to TLE-A. There was no significant difference between first and third graders on the number of trials to TLE-A. Almy, Chiteenden and Miller's (1967) study of Piaget's theories suggests that the ability to abstract and use logical and systematic thinking is an ability dependent on maturation. Pre-schoolers had more difficulty solving the problems and some Ss were not able to solve some or all of the experimental problems. Wells and Pharr's (1970) lack of a significant difference between second, fourth and sixth graders in number of trials to TLE, they attributed to sufficient practice given Ss on pre-training problems. The lack of significant difference between first and third graders in



this present experiment could also be due to training on pre-training problems. There were no significant treatment effects. As predicted, the pre-schoolers found more difficulty solving all of the experimental problems than either the first or third graders. Neither the first nor the third graders were able to use the extra information given them on the problems with total feedback after error and total feedback at the end of each trial. The reason this available information was not used might be due to experimental set. On all the pre-training problems, only the outcome box was lit at the end of each trial. When the extra information was added in the experimental problems, the Ss might have figured out how to solve the problem using the method learned in the pre-training problems, and were not able to integrate the added information. Piaget (1964) found that children under the age of 7-9 lack mental structures enabling them to make comparisons internally, unless they had dealt with the structures in reality before. This type of problem was probably never encountered by these children before and once they learned how to solve it by doing the pre-training problem, it is doubtful that they would be able to monitor other cues on the total feedback problems.

The interaction effects of age and sequence of treatment was due to the sequence: All cues with outcome box; all cues after error with outcome box; all cues after correct with outcome box and only the outcome box. This sequence

facilitated learning by the first and third graders on selecting the correct AR. The pre-schoolers did worse on this sequence than on any other. The first and third graders found the correct AR sooner than the pre-schoolers, but that did not facilitate them going on to reach TLE-D any sooner than on any of the other experimental problems. Looking closely at this isolated significance, this experimenter is inclined to believe it is a chance occurrence. Possible explanations for these results are that the first experimental problem with total feedback in this sequence may have distracted the pre-schoolers and confused them as to what their task was. For the first and third graders, it may have helped them see all the cue windows available. This might stop them from randomly responding to see what cues were being used in the experimental problems, and if they differed from the pre-training problems. These explanations lose any real conviction, however, because there was no significant interaction effects on the analysis of TLE-D.

The TLE-D is the same as TLE. It is the trial on which S made his last error before beginning criterion by making the correct AR-DR chain. It was predicted that some of the various treatments would facilitate learning for the older Ss. It was predicted that the treatment effects would show significantly fewer trials until TLE-D on problems 2 and 4 where Ss were given total feedback after each trial (all lights lit with outcome box) and where total feedback was

given after an error. In other words, older Ss would be able to monitor other cues in these conditions and could solve the problem faster with this extra information.

As predicted, pre-schoolers took more trials to criterion (TLE-D) than first and third graders. There were no significant treatment effects. The older Ss did not perform as expected and use the extra information given them on problems two and four. The reason for this may be experimental set. All Ss learned how to solve the problems on the pre-training problems. The older Ss were not able or aware perhaps of the usefulness of the added information given on problems two and four. Therefore, they used only the minimum information given by monitoring the chosen AR cue and the outcome box.

Once S reached TLE-A, he took an average of 3.1, 2.39 and 1.81 trials to reach TLE-D for pre-schoolers, first and third graders respectively. These results show that once the correct AR was chosen, the age of the S predicted his efficiency in finding the correct AR-DR chain. While first and third graders have no significant difference in number of trials to TLE, the third graders, once making the correct AR, move quickly to the correct AR-DR chain. The pre-schoolers have even more difficulty than the first graders in responding with the correct AR-DR chain after reaching TLE-A.

### Reaction Time

Predictions concerning RT were hard to make as little research has been done measuring response latencies between onset of feedback and S's next AR response. Hopefully those S groups with more trials to TLE would show longer response latencies. They have more trouble using available information. As predicted by Erickson, Zaykowski and Ehmann (1966), latencies should be longer after error than after correct because S needs more time to decide on strategy he will use before he makes his AR response. Also, response latencies should be shorter during criterion run than on previous trials (Levine, 1966). Feedback effects should show up in RT data if Ss are using the additional information given in total feedback conditions. Their response latencies should be longer on those treatments with total feedback after error and with total feedback on every trial (problem 2 and 4).

The first and third graders had shorter RTs than the pre-schoolers. This supports the hypothesis that the pre-schoolers needed more time to use the outcome information given at the end of each trial. The first RT data included the criterion trials. The second RT analysis was for trials prior to TLE. These two analyses did not show a significant spread in RT data. There was no significant effects of feedback on RT. This supports the hypothesis that the first and third graders did not use the extra information given on total feedback trials. If they were using some of the

extra information, their RT would be expected to be longer following total feedback trials. It was not.

All groups had longer mean RTs after an error than after correct. This agrees with the findings of Erickson, Zajkowski and Ehmann (1966) and of Levine (1966) that Ss require more time to process information after an error response than after a correct response. After an error, S must decide if he should change his AR response. He must then remember what ARs he has already tried. Another alternative S has after an error is to choose the same AR and change DRs. In other words, he must change strategies after an error to facilitate problem solving. The pre-schoolers had a larger spread in response latencies between after error and after correct. This produced a significant interaction effect of age and after error and correct. The pre-schoolers needed much more time to deal with the information when they were wrong than the first and third graders needed. Results of the analysis of response latency data also supports the Erickson, Zajkowski and Ehmann (1966) results which showed a longer RT in the pre-solution period. When analysis was done, including criterion trials, the RT means were shorter for all groups. They were shorter by .71, .59 and .63 for pre-schoolers, first and third graders respectively.

#### Strategies

If treatment effects were found, it was predicted from Wells and Pharr's (1970) experiment that Ss given less

feedback at the end of each trial (only outcome box lit) would be more likely to shift AR's after correct. In fact, this was not true. None of the groups showed any tendency to shift ARs on any one particular problem. Therefore, further analysis concerning strategies was performed on each S's total strategy data.

Each S's proportion data, averaged, shows that all Ss made a high proportion of responses choosing same AR, rather than a different DR. All Ss chose the same AR after correct, a higher proportion of the time than any other response.

The analysis of variance, performed on the proportion data, showed a large difference between pre-schoolers and the first and third graders. The pre-schoolers made a higher proportion of correct responses than either the first or third graders. The reason for this might be that pre-schoolers discover the correct AR-DR chain, but made several errors after some correct responding. In this situation, they made a higher number of correct responses than chance. The pre-schoolers changed ARs less often than the first or third graders. Pre-schoolers chose a different AR after an error a lower proportion of times than the first or third graders. Pre-schoolers, a higher proportion of the time, chose the same AR after being correct or making an error than the first or third graders.

These results also indicate the pre-schoolers' uncertainty of their responses. The pre-schoolers take a long time

to change ARs, perhaps because they are not sure they had eliminated solutions in the cue box they had been choosing.

The younger the S group, the less likely that group was to change ARs after an error. The reverse is true. The older the S group, the less likely S was to choose the same AR after an error. This behavior meant that if the first AR chosen was not the correct cue, it took the pre-schoolers many wrong responses to finally change ARs and, therefore, longer to finally respond with the correct solution. The first and third graders were more likely, after an error, to change ARs and try another cue window. If the cue chosen by the first and third graders was correct, they chose that cue again. They stayed with the cue as long as it was correct. After an error, they then changed ARs again.

The first and third graders strategies were more helpful than the pre-schoolers in all but one situation. The older Ss' strategy was not helpful when they picked the correct AR, but responded with the wrong DR. Instead of staying and changing DRs, they often switched ARs, which does not facilitate finding the correct solution. The pre-schoolers were satisfied to stay with an AR even though predicting several answers showed that AR to be incorrect.

The pre-schoolers behavior points to several theories as to why they performed that way. The pre-schoolers have been unsure of what they had responded with on previous

trials. It appeared to take the pre-schoolers longer to think through information given on the previous trials. This is further supported by the longer RT for pre-schoolers after an error than for either the first or third graders.

This experimenter was interested in the proportion of positive and negative strategies used by each group. Positive strategies were: Different AR after error; same AR, different DR after error; same AR, same DR after correct. The negative strategies were all others left out. The table of mean proportions for each group shows that all groups used a higher number than chance of positive strategies. The analysis of variance revealed that this higher use of positive strategies was significant to the .01 level. The older the S group, the significantly higher proportion of positive strategies used. This difference explains why the older Ss solved the experimental problems in fewer trials than the pre-schoolers did.

#### CONCLUSION

In conclusion, pre-schoolers took much longer to solve all of the experimental problems than did first or third graders. They took longer to make the correct cue choice (AR) and the correct cue and outcome predictions (AR-DR chain). The reason pre-schoolers did not do as well as first or third graders was they used a lower proportion of positive strategies. Pre-schoolers also took longer to TLE because they often made the correct AR-DR response several times and



then made an error. In other words, it took them many more trials to complete the eight correct responses required to reach criterion. The fact that pre-schoolers were doing this, was further supported by their higher proportion of correct responses.

The RT data showed that the pre-schoolers had longer latencies than the first or third graders. The pre-schoolers needed more time to decide what their next AR would be. All Ss had longer RTs after errors. This supports previous research (Erickson, Zajkowski and Ehmann, 1966; Levine, 1966). Ss needed more time to handle the information given them after their hypothesis was proven to be incorrect.

All Ss had a high proportion of responses which were same AR after correct. This means all subjects used a high proportion of win-stay strategies. The older the S group, the more likely that group was to choose a different AR after an error. This is a lose-shift strategy and helpful to problem solving. This is another reason pre-schoolers didn't do as well as the first and third graders. Pre-schoolers were more likely to stay with the same AR after an error. In other words, if the pre-schoolers chose the correct AR to begin with, they had a higher probability of solving the problem quickly. If they did not choose the correct AR, it took them many incorrect responses to change ARs. First and third graders tended to stay with the same AR if they were correct, but switched to a different AR a higher proportion of

time after they made an error. This meant first and third graders were likely to choose the correct AR and then make the correct AR-DR chain response sooner than the pre-schoolers were likely to. First and third graders had a higher probability of beginning the criterion run immediately after making the correct AR-DR chain. The older the S group, the sooner after making the correct AR, they made the correct AR-DR chain.

The older Ss were much more efficient in processing the information given to them on each trial. They also took less time to process this information than the pre-schoolers did. Once making the correct AR, the older the S group, the more likely that group was to enter criteria sooner. None of the S groups used the extra information given in the total feedback experimental problems.

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1	24	40	2-4	2-1	2-2	2-3
2	25	41	1-0	2-2	2-2	2-1
3	26	42	2-2	2-2	2-4	2-1
4	27	43	2-1	2-1	2-1	2-2
5	28	44	2-4	1-0	2-1	2-3
6	29	45	2-1	2-2	2-1	2-1
7	30	46	2-2	2-1	2-1	2-1
8	31	47	1-2	2-1	2-1	2-2
9	32	48	2-4	2-1	2-1	2-2

Feedback given

1 = All correct  
 2 = All correct only after first error  
 3 = All correct only after two errors  
 4 = All correct only after three errors

Condition

A = Color    B = Shape    C = Line    D = Size

## APPENDIX A

Pre-schoolers	Ss numbers		Treatments			
	1st	3rd	First session		Second session	
1	17	33	A1	B-2	C-3	D-4
2	18	34	B-2	C-3	D-4	A-1
3	19	35	C-3	D-4	A-1	B-2
4	20	36	D-4	A-1	B-2	C-3
5	21	37	B-1	C-2	D-3	A-4
6	22	38	C-2	D-3	A-4	B-1
7	23	39	D-3	A-4	B-1	C-2
8	24	40	A-4	B-1	C-2	D-3
9	25	41	C-1	D-2	A-3	B-4
10	26	42	D-2	A-3	B-4	C-1
11	27	43	A-3	B-4	C-1	D-2
12	28	44	B-4	C-1	D-2	A-3
13	29	45	D-1	A-2	B-3	C-4
14	30	46	A-2	B-3	C-4	D-1
15	31	47	B-3	C-4	D-1	A-2
16	32	48	C-4	D-1	A-2	B-3

## Feedback Given Ss

- 1 = All cues with outcome box  
 2 = All cues only after error with outcome box  
 3 = All cues only after correct with outcome box  
 4 = Only outcome box

## Solution

A = Color    B = Shape    C = Line direction    D = Shape