TENNYSON AND

THE CONCEPT OF EVOLUTION

IN VICTORIAN POETRY BEFORE 1859

by

WILLIAM BRENT ELLIOTT

B.A., University of British Columbia, 1973

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

Master of Arts

in the Department

of

English

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
April, 1974

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of English

The University of British Columbia Vancouver 8, Canada

Date April 29, 1974

ABSTRACT

This thesis attempts to examine the use of preDarwinian evolutionary concepts in Victorian poetry by
concentrating on the works of Tennyson, who gave fuller
expression to them than any of his contemporaries. Works
by other poets are examined for significant comparisons
and contrasts with his; various works by Browning, Bailey,
Arnold, and Bell Scott receive particular attention.

The introduction distinguishes between Darwin's theory and pre-Darwinian evolutionary schemes, finding the latter to be characterized by the notions of teleology, progressivism, and vertical hierarchy. The historical development of evolutionism is traced from its origins in Romantic theories of the organic unity of nature, and the major varieties of considered positions on the subject available to a poet in the early nineteenth century are enumerated.

Tennyson's early work is shown to develop from a basically static, non-evolutionary world-picture to a progressive one, making use of images of development drawn from embryology, astronomy, and reincarnation. The stages of composition of <u>In Memoriam</u> reveal the impact of Lyell, who emphasized the struggle for existence and necessary extinction, and later of Chambers, who proposed a concept of

posed that Tennyson found in Chambers' theory a way of transcending the bleak world-picture offered by Lyell, by uniting it with his conception of a spiritual reality behind (not immanent in) the material world. The final arrangement of <u>In Memoriam</u> develops the idea of evolution as the progress of the natural world toward the spiritual, a position analogous to a number of poetic and philosophical trends in the early nineteenth century.

This process of evolution can be voluntarily aided by "typing" the higher, emergent forms in one's own life. Expanding on this notion, Tennyson's poetry of the late 1840's and 1850's demands the conscious participation of human society in the shaping of a higher being. With this development, Tennyson's philosophy of evolution is substantially complete. His later works reveal a gradual attenuation of his immediate hopes for the process, pushing the improvement of the species into the increasingly distant future, but remaining consistently meliorist; otherwise, his principle continues to be the one set forth in In Memoriam.

The study concludes with a brief examination of Darwin's influence on later poets, showing it to have been generally confused and the result of misinterpretation.

TABLE OF CONTENTS

Chapter		Page
I.	Introduction	1
II.	Tennyson's Early Poems and their Background	15
ZIII.	Tennyson's Poems of the 1830's and their Analogues	31
EIV.	In Memoriam: The Composition of the Poem	53
V •	In Memoriam: The Poem and its Analogues	75
VI.	From <u>In Memoriam</u> to the <u>Origin</u> : <u>The Princess</u> and Poems of the 1850's	99
VII.	Conclusion	116
Footnotes		131
Bibliography		150

Note

All references to Tennyson's poems in this study are to the edition prepared by Christopher Ricks, <u>The Poems of Tennyson</u> (London: Longmans, Green, 1969). References to poems by Charles Tennyson included in <u>Poems by Two Brothers</u> are to the reprint edition prepared by Hallam Tennyson (London: Macmillan, 1893).

This study is dedicated to the memory of Lionel Stevenson, who was originally intended to be a member of the examining committee, before his untimely death in December, 1973.

CHAPTER ONE

INTRODUCTION

Modern criticism has generally recognized the importance of the concept of evolution for Victorian poetry, and for the work of Tennyson in particular. "With the idea of Evolution Tennyson's mind was saturated. No poet of equal rank has ever been more dominated by an idea than was Tennyson by this, taking the word in its wider philosophical, and not merely its biological, sense." However, the precise nature of this "saturation" is still a subject for debate. been claimed that Tennyson "forestall ed the scientists in their own game,"2 and even that "Tennyson noted the fact, and a few years later Darwin supplied the information."3 but other critics have denied any theoretical originality in his speculations. Valerie Pitt, for example, has said that Mhe is not anticipating Darwin but recollecting Lamarck."4 and George Potter has tried to prove that he remained unconvinced of the transmutation of species until after reading Darwin. 5 Nor is Tennyson alone as a subject of this controversy; Browning, Beddoes, and even Keats have all been seen as forerunners of Darwin.6

It is the purpose of this study to examine the use of concepts of evolution in Victorian poetry before the impact of

Darwin's theories in 1859. Since Tennyson made more consistent use of scientific materials in his writings than any of the other Victorian poets, his work will form the major subject for examination, but works by other poets will also be included whenever they provide important comparisons or contrasts with his. After a brief survey of the nature of evolutionary speculation in the early nineteenth century, with a discussion of the use of such thee ories by the Romantic poets, the nature of Tennyson's thinking about science at the beginning of his career will be examined through his earliest publications and his major influences at Cambridge. From then on the study will proceed chronologically through his works from 1830 until the late 1850's. The conclusion will provide a brief notice of the treatment of evolutionary themes in his post-Origin works, as well as indicating the major trends taken by the poets of the later part of the century.

The controversy provoked by the publication in 1859 of the Origin of Species is well known, although not necessarily well understood. The debate took place not only between evolutionists and churchmen who believed in an immutable special creation, but also between evolutionists and the supporters of Darwin; the result was a confusion of terminology that has persisted to the present day. Since many problems, not only in the history of science but also in the discussion of Victorian poetry and philosophy, depend for their solution on a

knowledge of what can legitimately be described as evolutionist, an attempt at clarification is required.

The distinction between the Darwinians and the old-style evolutionists was perceptively drawn by Charles Lyell during the height of the great dispute: "writers who are most in favor of transmutation (Mr. C. Darwin and Dr. J. Hooker, for example) are nevertheless among those who are most cautious, and one would say timid, in their mode of espousing the doctrine of progression; while, on the other hand, the most zealous advocates of progression are oftener than not very vehement opponents of transmutation." The difference may be made clearer by examining the type of argument advanced by a pre-Darwinian evolutionist. Robert Chambers, writing in 1855, says: "the immediate cause of the development of each line through its various general grades of being is to be sought in an internal impulse, the nature of which is unknown to us, but which resembles the equally mysterious impulse by which an individual embryo is passed through its succession of grades until ushered into mature existence. Geology shows us each line taking a long series of ages to advance from its humble invertebrate effluents to its highest mammalian forms; and this I have ventured to call 'the universal gestation of Nature." This argument is characterized by an acceptance of four basic ideas: the hierarchy of nature, a uni-directional (irreversible) development common to all life-forms, a suggestion of inevitable progress in the analogy with gestation, and an internal impulse which directs the whole process.

Darwin's theories abandoned all four of these suppositions. He specifically maintained that "natural laws" were metaphorical expressions of human understanding, rather than actual determinants of biological events. "So again it is difficult to avoid personifying the word Nature; but I mean by Nature, only the aggregate action and product of many natural laws, and by laws the sequence of events as ascertained by us." The result was a repudiation of any attempt to establish laws of inevitable progress from lower to higher forms.

Examination of a passage from a recent theoretical work on evolution may help to reveal the implications of Darwin's position. "The evolutionary species . . . is a population system which possesses the following characteristics. (1) It is a lineage, an ancestral-descendant sequence of populations existing in space and time. (2) The lineage evolves separately from other lineages, or, in other words, from other species. (3) It has its own 'unitary evolutionary role,' that is, it fits into its own particular ecological niche in a biotic community. (4) And it has its evolutionary tendencies, being susceptible to change in evolutionary role during the course of its history." The suppositions underlying this statement are completely opposed to those of Chembers' earlier one. There is an implied equality of life-

forms, instead of a vertical distribution of higher and lower species, a lack of common direction in evolution, and an awareness of external influences determining development, subject to the power of chance. These are the features that distinguish Darwinian from pre-Darwinian theories of evolution.

The situation is not this simple, however. Today the word "evolution" is generally used to mean the Darwinian concept of species change, but when Herbert Spencer popularized the word in the 1850's and 1860's, he used it to mean a necessary law of development; in the context of the time, it would have been possible to call Darwin a nonevolutionist, and this, considering the fluidity of labels, is what Lyell did in the passage quoted above. The distinction was not always readily apparent, particularly after Darwin began using the word himself in the sixth edition of the Origin; furthermore, Darwin's work was so complex that it was capable of sustaining more traditional evolutionary interpretations if not read carefully enough. Thus many people did not see any distinction between Darwinian theory and earlier hypotheses; that this is still the case is shown by the number of earlier thinkers who are said to have "anticipated" Darwin, and by the number of basically pre-Darwinian theories of goal-directed evolution being advocated today, for example by Teilhard de Chardin. There is still no generally accepted vocabulary for making the distinction; the proposal to call Darwin's theory "natural selection" 11 is inadequate because natural selection is now understood as
only one of the methods by which evolution takes place. A
better suggestion would be to replace the word "evolution"
by "speciation," to describe the large-scale changes, and
"population genetics" and similar terms for the smallerscale processes, but the biologists who use these terms
still use "evolution" as the over-all name.

The major difficulty in understanding the nature of evolutionary thought in the early nineteenth century is the fact that it was not until after Darwin that evolution was restricted to a biological concept. Even in the work of Herbert Spencer, biological evolution is seen as part of a larger process involving inorganic matter and the composition of the entire universe. In the late eighteenth century, the notion had become common that all matter was at least potentially alive, and therefore at some level of organic development; such a belief led to theories of universal progress in nature, the most famous being Coleridge's "principle of individuation, or the power which unites a given all into a whole that is presupposed by all its parts." 12 corollary of this type of theory was the concept of organic unity, in which nature was seen as being in itself a great organism, with an implied process of maturation. 13 By midcentury, this concept had largely ceased to have a specific meaning, but had become a general honorific to be applied to

anything that exhibited unity and coherence. The human race could be personified as a great super-organism, as by Comte; periods of history could be called "organic" if they were characterized by common purpose and a sense of co-operation, as by Carlyle; works of art or literature which functioned in ways that could not be explained adequately by eighteenth-century "mechanical" standards could be said to be organically unified. 14

The background of evolutionary thinking, then, was philosophical rather than scientific. Even in Herbert Spencer's law of evolution, the transmutation hypothesis is basically a corollary to the more general idea of progression. In the early nineteenth-century context, the word "evolution" describes any theory in which the world, or its constituent parts, is seen as slowly and progressively emergent, instead of having been formed by a single, unitary act of creation. This metaphysical bias underlies a large number of philosophical systems, of which three can be selected as representative.

First, there is the position which was given its final shape by Philip Henry Gosse in 1858. He argued that the Biblical account of creation was literally true, but that the world was created in the middle of a sequence of development that took place in God's mind. Thus fossils represent creatures that never existed in time, but which were nonetheless part of earth's development as planned by God. This posi-

tion attempted a compromise between churchmen and evolutionists by accepting the latter's arguments as evidence of the divine plan while denying the temporality of the process. The theory is irrefutable, but did not win public favour.

Second, there is the position of those who accepted the idea of a temporal process of development while denying the transmutation of species. Sometimes God was supposed to have conveniently created new forms at appropriate intervals; such a series of special creation was implied by Lyell in the 1830's. Alternatively, the method of development was left vague, so that nature itself appeared to be developing in a mysterious way. In either case, evolutionary progression was seen as an attribute of nature as a whole, rather than of individual species. This position is besically a survival of the venerable principle of the chain of being, with the addition of sequential development in time. It was the most widely held of the evolutionary theories.

Third, there is the position of those who made the process dependent on the transmutation of species. The theories of Erasmus Darwin and Lamarck, in the late eighteenth century, are the earliest sustained expositions of this concept; independently of each other, they stated that all life developed from primitive beginnings, through the agency of the organism's internal needs. Thus, to use a famous example, if an animal lived in an environment where the food supply was mainly limited to tall trees, it would gradually develop a long neck for feeding, and the acquired characteristic would

be inherited by its descendants. Although each man had his followers, neither influenced public opinion greatly, at least in England. The full development of this position had to wait until the controversy over Cuvier's theories had ended.

Cuvier attempted to reconcile the Biblical account of creation with the recent discoveries of the fossils of extinct species. According to his theory, life on earth was periodically devastated by great catastrophes that rendered most, if not all, of the existing forms extinct. The most recent catastrophe was the Noachian deluge, which, of course, did not result in complete extinction. Following such a mass extermination, either the few creatures remaining repopulated the earth, or else God intervened with a new creation. 17 This theory was challenged in England, however, where there was a tradition of uniformitarianism, the idea that the geological changes of the past were identical with those observable in the present. This view, originally proposed by James Hutton in the late eighteenth century, was advanced persuasively by Charles Lyell in the 1830's. 18 Afterag period of resistance, Lyell's theories were generally accepted.

Lyell attacked Lamarck in the second volume of his work, but he himself was undecided about the problem of the origin of species, and eventually became a supporter of Darwin. But for a long time the prestige of his work may have militated against the proposal of transmutationist theories. Apart from the minor figures of W. C. Wells and Patrick Matthew, 19 almost

no theorists in this vein appeared until the 1840's, when the anonymous publication of Chambers' <u>Vestiges of Creation</u> created a storm. But after that there was a renewal of mutationism, leading to the popularity of Herbert Spencer.

An additional factor leading to the resurgence of transmutationism was the evolutionary nature of astronomical speculation in the early nineteenth century. Kant and Laplace had already developed a theory of the creation of the solar system from primal undifferentiated matter, and this theory was amplified by John Herschel in England. Herschel's discovery of the nebulae, apparently unorganized matter spread throughout the universe in great clouds, led him to propose a theory of continuous development. Instead of one creation at one moment of time, he posited a gradual transformation of primitive matter into simple stars and eventually into solar systems; he believed that all stages of development could be discovered co-existing at the present moment. The views of Herschel and his follower Nichol²⁰ gave evolutionary thinking perhaps its most forceful impetus: for a long time the word "evolution" was more a feature of astronomical than of biological writing, and later biological theories of mutationism were generally understood as part of the same process as the cosmic development. Nichol made this comparison explicit, thus in effect fixing a seal of approval on the development hypothesis. No attempt to understand evolutionary theories in the early nineteenth century can

afford to neglect the influence of astronomy.

Such was the background to evolutionary speculation in early Victorian poetry. Concepts were generally rather unclear, and it was possible for an ambiguously phrased statement to be accepted by opposing factions; thus Tennyson was hailed by Richard Owen as a "champion of Science" and by Owen's opponent Huxley as "the first poet since Lucretius who has understood the drift of science."

Actual scientific speculation formed only a part of Tennyson's background, of course; as a poet, he was equally influenced by the ideas of the poets of the preceding generation. Wordsworth and Coleridge had both contributed to the doctrine of the organic unity of nature. Wordsworth had pioneered an historical approach in poetry, seeing his ideas as a function of his personal growth, but he did not apply this new perspective to nature in anything that could be called an evolutionary manner; his nature was basically immutable in essence. The very use of images of organic growth to describe the maturation of a person's mind, however, was influential in preparing the way for more properly evolutionary ideas in other writers. 23 Coleridge, on the other hand, despite considerable vacillation, seems to have been an evolutionist of sorts, although he remained opposed to the idea of transmutation of species. 24 As early as 1795, in "The Destiny of Nations," he used an image reminiscent of Erasmus Darwin, describing a

process of creation: "she the Protoplast beheld / Stand beauteous on Confusion's charmed wave" (11. 290-291). Protoplast implies either an undifferentiated creation, or a directing power of development. 25 In his philosophical writings, Coleridge makes use of figures, such as the ladder, which imply a graded sequence of organic life-forms, but this sequence is not a temporal one, being instead a pre-existing, Platonic idea which is expressed in the individual organisms. 26 He himself makes the distinction between "a single and temporary Event, anterior of necessity to all actual experience, and an assertion of a universal progress of the Nature nowmexisting," emphatically endorsing the former. 27 However, his general concepts, when not clarified by concrete illustrations, are sufficiently ambiguous to be acceptable to a large number of evolutionary positions, and thus may have stimulated evolutionary thinking in his readers.

Both Keats and Shelley were influenced by Erasmus Darwin, ²⁸ and introduced evolutionary passages into their poetry.

Keats's <u>Endymion</u> presents a vision of the wreckage on the ocean-bed, including relics of modern man, man of "Saturn's generation," and primitive monsters (III. 123-136). His <u>Hyperion</u>, according to H. W. Piper, shows the influence of W. C. Wells, who had proposed a theory in which master races, characterized by superior beauty and mental ability, supersede less highly developed ones: ²⁹

. . . first in beauty should be first in might: Yes, by that law, another race may drive Our conquerors to mourn as we do now.

(II. 229-231)

In Keats's poems, these evolutionary speculations are tied in with a doctrine of the development of poetry, in which his own generation was a stage in an inevitable progress.

Shelley adapted Keats's sea-bed survey to a description of the contents of the earth's strate in Prometheus Unbound. The passage carries reminiscences of Cuvierian theories of cosmic destruction: the beasts of past epochs

Increased and multiplied like summer worms
On an abandoned corpse, till the blue globe
Wrapped deluge round it like a cloak, and they
Yelled, gasped, and were abolished; or some God
Whose throne was in a comet, passed, and cried,
'Be not!'

(IV. 313-318)

The whole fourth act of <u>Prometheus</u> is based on the concept of the organic unity of the universe, for all things, including the inorganic, undergo a regeneration and enter a new life.

But the most obvious, and most controversial, treatment of evolutionary ideas in Romantic poetry was that of Byron.

Cain presents the reader with a vision of the past history of the world, showing it to have been inhabited by pre-Adamite beings who were effaced by a catastrophe. At one point in the play Lucifer speculates that life, as a principle, may have existed before God (II. i. 155-156), suggesting the influence of Erasmus Darwin's phraseology. Cuvierian fantasies fill his work, being found as well in Manfred, The

<u>Deformed Transformed</u>, "Darkness," and <u>Don Juan</u> (Canto IX); in this last poem Cuvier is referred to by name. Byron's favourite way of suggesting cosmic destruction is by the image of a "wandering star" that has burned out or exploded.

These are the main sources from which Tennyson and his contemporaries would have derived their first impressions of evolutionary theory. Tennyson's interest in astronomy probably made the astronomical images in Byron, for whom he had an early enthusiasm, more prominent then would otherwise have been the case; and the progressivist concepts that led to the final vision in Paracelsus were almost certainly derived from Shelley to some degree. However, the most explicit statements about the transformation of species came from Erasmus Darwin's followers, a rather disreputable minority, and the less direct statements of other writers were ambiguous and easily overlooked. It is therefore difficult to determine the extent to which young readers like Tennyson and Browning would have been influenced by these ideas; they would most likely have come to evolutionary thinking through astronomical and cosmic speculation, encountering it as a philosophical system with moral and theological ramifications. rather than as a genuinely scientific hypothesis.

CHAPTER TWO

TENNYSON'S EARLY POEMS

AND THEIR BACKGROUND

Tennyson began his career with the publication, in 1827, of the volume Poems by Two Brothers. The Rev. George Clayton Tennyson, or some other member of the family, may have edited the book, because a body of Alfred's verse, much more innovative than anything in the published selection, was excluded on the grounds that it was too far removed from the public taste. Even as published, Alfred's contributions, so far as the attributions can be certain, already show considerable independence from then current styles of diction and description of nature. His work can frequently be distinguished from his brother's by the choice of subject; while Charles prefers heavily melodramatic exclamations, as on the death of a sister or father, Alfred prefers landscapes and historical episodes that illustrate the vastness and effects of time: "The Druid's Prophecies," "The Dell of E--."

Because of the selection, however, the volume presents a fairly conventional world-picture, despite the exoticism of many of the subjects and the Byronic stances. The poems that are most blatantly didactic are generally platitudinous, with praises for the creator ("All joyous . . ."), an entirely conventional notion of the afterlife ("'Tis the voice of the dead"),

elementary reflections on the revealing qualities of time ("The eye must catch the point . . ."), the pathetic fallacy ("Boyhood"), and an equation of the loss of religious faith and the beginnings of Vice ("Religion! tho' we seem to spurn"). Originality of thought, in the work of either Charles or Alfred, usually involves some aspect of science.

Tennyson's early interest in science is well known and documented. It shows itself regularly in his poetry, in the use of images drawn from biology, geology, and especially astronomy: "As rays of many a rolling central Star / Aye flashing earthward have not reached us yet" (from the unpublished early poem, "Among some nations"). In this instance there is even a foreshadowing of his later technique of using scientific imagery to establish analogies between the processes of nature and the activities of man--the simile is designed to illustrate the recalcitrance of some countries in producing poetry--but the analogy in this example is very faint and comparatively unrelated to the subject. The poem should be regarded as an exercise in a technique that has not yet been mastered. Science also provided him with subjects for general conversation, 2 and formed possibly the most substantial portion of his leisure reading. There is no way of knowing how many books on natural history and related subjects Tennyson read as a young man, but his careful perusal of "C. C. Clarke"'s Hundred Wonders of the World is documented, 3 and a copy of Buffon was in his father's library. (It

is tempting to think that an acquaintance with Buffon may have biased Tennyson toward evolutionary speculation from the beginning, but there is no evidence that this was the case; Buffon's hints about progressive development were placed carefully through his work in such a fashion that it was difficult to make connections between them, and the one explicit passage on the subject of species change was deliberately non-progressivist, attributing such change to "degeneration." 4)

Tennyson's scientific imagery is usually precise and accurate; Charles', on the other hand, is generally vague and questionable, as for example his reference to the "axles" of the stars ("The stars of yon blue placid sky") or his tentative adherence to the concept of the hollow sun ("Phrenology")--i.e., the idea that the flaming gases existed only on the outer edges of the sun's atmosphere, and that underneath there was a solid core with normal climate. Such astronomical images are generally introduced without implied analogies to human affairs.

The scientific ideas of the young Tennysons, as shown in this first volume, were standard. No indication of a belief in evolution is given, nor even of a system of analogies between man and the other animals (since to describe human beings as reptiles was by this time a conventional term of disparagement). Even images of organic growth are not particularly common, though fruit/flower images occur occasionally,

as in "Memory." The most extended image of natural hierarchy, in "Did not thy roseate lips outvie," is extremely tenuous and perhaps not even uniformly progressive; the sequence is: fruit, pearl-bearing mollusc, deer, angel, moon, star, star-cluster (Pleiad), and sun.

The one important exception to the conventionality of scientific imagery is the concept of the plurality of worlds, an idea popularized by Fontenelle in the previous century and attracting the attention of thinkers as different as Byron and the Scottish clergyman Thomas Chalmers. 6 Although fairly respectable by the 1820's, this concept was still not orthodox belief, particularly in the uses to which Tennyson put it. In early nineteenth-century thought, these other worlds were expected to play some significant eschatological role; they were part of God's system, and so the question of their superiority or subordination to earth in the scheme of things was much discussed. Eventually, they were hypothesized as being the resting-places of the souls of the dead. 7 In the Poems by Two Brothers there is a recurring use of the word "worlds" to describe circumstances of the afterlife. In "Yon star of eve," the just live "in happier worlds than this"; "th' eternal soul must reign / In worlds devoid of pain," and the dead see "brighter suns and bluer skies" ("Why should we weep . . ."); at some time in the future (after the Judgment?) there will be "brighter suns" ("How gaily sinks . . .").

These are admittedly tenuous examples, easily interpreted in conventional terms, but more emphatic instances can be found in

Tennyson's unpublished poems of this period. "The Dying Man to his Friend" describes heaven as a "world more bright than this," "radiant realms of day"; "The Coach of Death" takes place in a world behind the sun, where the dead see the earth as another world in "the dead, pale skies." The concept of other worlds plainly fascinated Tennyson, and he used the concept in the framework in which it was most acceptable, in connection with the standard "other world" of the afterlife.

Since scientific and religious attitudes are not easily separated in the nineteenth century, a brief examination of the religious content of Poems by Two Brothers will be useful. Despite their general conventionality, certain less than orthedox implications make themselves felt. A poem on a suicide, for example, discusses the future of the soul, but makes no reference to an afterlife of punishment ("The Grave of a Suicide"). Occasional use is made of images of separation be tween God and man, ranging from Charles' more conventional "mystic maze" of God's plan ("In summer, when all nature glows") to Alfred's "veil" ("Memory") and "mortal shore" ("Why should we weep . . ."), which imply, however vaguely, a radical gulf between human consciousness and the things described, whether the other world or this one, seen through memory. (Compare the "web of bloody haze" in "Armageddon," a forerunner of the web drawn across the skies in In Memoriam.) Some of the terms used to describe the world's hostility and indifference, such as the "waste of darkness" ("I wander in darkness") and the "black gulf of woe" ("Exile of Bassorah"), although taking

their colouring from the emotional attitudes of the speakers, serve to reinforce the impression of isolation from meaning in the world. Similar implications can be seen in the conclusion of "Friendship" - "I will deem thee Truth, so lovely is thy might!" -- although the identification of friendship and truth is not profound if, as the epigraph from Cicero might lead one to expect, the notion of friendship is taken as an absolute.

Two of Charles' contributions, "Phrenology" and "The Deity," reveal the complex of religious and scientific attitudes in all its ambivalence. "The Deity" can be read either as a simple, straightforward religious lyric or as a questioning of the argument from design. It begins by asking where God is to be found; whether this is a rhetorical question or not depends on the meaning of the epithet "immaterial" as applied to God. Perhaps the reason that God is not revealed is precisely because he is spirit, not matter; so he can surpervise his works, "suns and systems," without revealing himself except through the transfiguration of Christ. On the other hand, the poem could suggest God's absence from the natural world, and the elaborately spelled out revelation that is requested is wishful thinking; "O! that he were reveal'd to me" would then indicate the speaker's inability to confirm God's existence.

"Phrenology" is a conversational poem mocking the newlyfounded and much propagandized pseudo-science. 9 It concludes by asking whether the new discipline will unravel any of the really important mysteries of the world, mostly astronomical. The climax of the poem comes when the hypothesis of the hollow sun is dismissed: "Or may we that hypothesis explode, / Led by your science nearer to our God?" The next item in the series is the optics of the rainbow. Why is God mentioned in such close connection with the sun? It would appear that astronomy holds the most spiritually important secrets. Similarly, the devil in Alfred's early drama, "The Devil and the Lady" (II. i. 40-57), is stirred into reflection about the nature of existence, substance and accidence, and the atomic theory by looking at the stars: "O suns and spheres and stars and belts and systems, / Are ye real or are ye not?"--in the process mocking the pretensions of astrology.

In general, then <u>Poems by Two Brothers</u> shows Tennyson as fairly conventional in religious and scientific conceptions before he went up to Cambridge; the parallels to later poems and ways of thinking, such as the questioning of the deity, the gulf between man and God, do not carry the same weight in the early poems as they do later, and generally are so tenuous or hidden by context that they can only be regarded as tangential. However, an examination of the unpublished work of this period shows that this picture of the young Tennyson is not complete. An image more suggestive of progressive development than any seen in the published work occurs in the "quick-wing'd gnat" passage describing metamorphoses in the animal kingdom (pupation, sloughing of skin) and comparing them with the state

of the soul: "all low things range / To higher! but I cannot change." 10 What is described here is not, of course, evolution; but as an indication of some form of progress in nature it is revealing, and shows a type of thinking not at all in evidence in the static world-system of the Poems by Two Brothers. Furthermore, the implication of a desired growth of the soul into a purely spiritual form ("My earthly spirit . . . like a caddisworm in stone . . . an eternal prison"), while in itself conventional, foreshadows the later interest in evolution on the spiritual and moral as well as physical planes.

In 1828 Tennyson went up to Cambridge. His tutor was William Whewell, later to become famous as a Bridgewater theorist and historian of science; he was then already known for his work on tides, and during Tennyson's residence he held the chair in Mineralogy. Although this had been a subject since Shelley's time, a generation earlier, the interest of the general educated public was just beginning to be aroused by geology; Oxford, even more than Cambridge, had taken the lead in the field during the early 1820's. By Tennyson's time there was also a separate department of geology at Cambridge, with Adam Sedgwick holding the chair. Both Whewell and Sedgwick were at Trinity College, where Tennyson resided; his scientific interests would undoubtedly have been stimulated during his stay.

Much has been said about the influence of the Apostles group on Tennyson, but it has not been noted that the Apostles shared

certain ideas and ways of thought with Whewell. A Kantian in most respects. Whewell differentiated between theories and facts, or, in his more technical terminology, between ideas (the mental structures which determine our method of perceiving the world or examining it) and sensations (the purely empirical data). He recognized a certain fluidity of classification here: "Theories become Facts, by becoming certain and familiar"; 12 still, he attempted to erect the fundamental theories of all the sciences on the foundation of the categories; he wished to establish that the results of scientific method were necessarily, not contingently, true. Following Kant, he divided the sciences into two groups: those dependent on the ideas of time and space (pure sciences, i.e. mathematics), and those dependent on that of causation (mechanical sciences). 13 Thus some of his basic distinctions parallel those of the Coleridge-inspired Apostles.

The Apostles, properly known as the Cambridge Conversazione Society, had been organized by John Sterling and F. D. Maurice a few years earlier, when they were undergraduates. Through both of their founding figures, they had come under the influence of Coleridge's metaphysics, particularly that of the Aids to Reflection. Some of the attitudes, if not the specific arguments and elaborations, of that book exercised a considerable influence over Tennyson, despite his later disavowals of any interest in Coleridge's prose; for its major theme is the removal of the argument from design from the list of evidences

for God's existence, and its replacement by personal conviction and internal evidence, by "the goings-on in my own mind." 14 The affinities with the structure of argument in In Memoriam should be obvious. More important for the immediate subject of this study, Coleridge develops a sort of evolutionary theory in the book; but although his diction sometimes suggests a temporal process, it is more likely (especially in view of his rejection of the idea of the development of man from other primates) that he understands nature to onerate as a continuous chain of being, with possibly one uniform creation at one moment oftime, or perhaps the system of multiple creations that was becoming increasingly favoured in the 1820's. 15 In Aphorism XXXVI, he traces a line from metal through vegetation to animal, with each stage anticipating the next: "most wonderfully . . . doth the muscular life in the insect . . . imitate and typically rehearse the adaptive Understanding . . . of man." The analogy holds also with human institutions: "Every state . . . which is not progressive, is dead, or retrograde" (Aphorism XX). The tenth Aphorism on Spiritual Religion implies a temporal process: "Nature is a line in constant and continuous Its beginning is lost in the super-natural: and for our understanding, therefore, it must appear as a continuous line without beginning or end." But, strictly speaking, it is not a given species but rather the spiritual essence of the world which evolves, from God to the final end, of whatever sort: temporality may be implied, but is not necessarily intended. 16 The text is ambiguous, and while such reflections may have encouraged Tennyson's thinking on the subject, they do not constitute a plain statement as, say, Erasmus Darwin's writings do.

The Apostles were strongly influenced by Coleridge's moral and theological arguments. Tennyson, for example, voted in their discussions that an intelligible First Cause could not be deduced from the universe, and that there was a moral principle beyond general expediency. 17
Hallam, in his Theodicaea Novissima, which can be taken as indicatives of attitudes current before it was read in 1831, declares that man cannot discover God by searching in the universe, and proposes proofs of God's relationship to the world based on personal intuition and (implicitly) a will to believe. 18 In this essay he proposes an interesting theory of the nature of sin, according to which the human soul becomes perfect in its struggle against it, and that consequently sin must be created specifically for that purpose by God. 19 Furthermore, if God is love, as Hallam takes for granted, then God is incomplete without an object of love. namely Christ, who by reason of God's love for him becomes an approximation of God. And since men are enjoined to approach God through the love of Christ, there is a strong implication that through the power of love the individual person can become analogous to the Incarnate Christ. 20 Tennyson could have found in his friend's ideas an extension of his already apparent interest in spiritual progress.

Physical progress as well seems to have been on Tennyson's

mind at Cambridge. He propounded the theory that the "development of the human body" or "the evolution of man" (readings differ) 21 could be traced from the "radiated, vermicular, molluscous and vertebrate organisms"; a suggestion to which Hallam responded, "Do you mean that the human brain is at first like a madrepore's, then like a worm's, etc.? but this cannot be for they have no brain." A source for Tennyson's idea is a pair of articles by Southwood Smith in the Westminster Review for 1828, discussing recent findings in neurology. 22 Attention has been drawn to the discussion of fetal brain development in the second article as a source for concepts such as that of the "four changes" in the cancelled stanzas of "The Palace of Art," but this idea cannot have been what Tennyson referred to here; Smith traced the development of the embryo from a fish-like stage, with no resemblance noted to diverticulate forms at all. 23 Killham speculates that "he had somehow come to relate the discovery that the human brain seemed to develop through stages analogous to the permanent form in fishes, reptiles and birds before reaching the recognizably human form, to the very much more startling idea that the human brain had . . . evolved"; 24 but no such daring leap of thought was necessary for Tennyson, since the article specifically made the analogy between radiate ganglia and the human brain, 25 and discussed the increasingly complex brains of various animals in a semiprogressive sequence. There was ample material for a potential evolutionist to use in the article; all that was really missing

was the notion of a temporal process or of a graduated series of concrete links.

Among the Apostles, then, Tennyson was exposed not only to a form of religious and political radicalism, ²⁶ but to the beginnings of a theory of evolution. It may have been the prevailing assumption of Tennyson as well as of most evolutionists at the time, including Coleridge, that the process took place "in the mind of God" or in nature as an antecedent essence rather than in time, that living things had been created (or had appeared) showing evidence of a progressive ordering or hierarchy even though their development had not been sequential; but the phrase "at first" in Hallam's reply, quoted above, may suggest that some form of temporal development had at least been hypothesized. At any rate, Tennyson would have become extremely familiar with the idea of continuous progress as a fact of nature as well as, in Coleridge's scheme, a moral good.

The effect of these influences on Tennyson's thought may be shown by comparing one of his Cambridge poems with a related earlier one. In 1829, urged by his father, Tennyson won the Chancellor's Gold Prize with a poem on the assigned topic, Timbuctoo. The poem was noted for its "obscurity":

"If such an exercise had been sent up at Oxford, the author would have had a better chance of being rusticated, with the view of his passing a few months at a Lunatic Asylum, than of obtaining the prize." To aid his process of composition, Tennyson had sent home for an old poem of his, "Armageddon,"

on which he had worked at about the age of fifteen. He incorporated a large amount of material from the earlier poem into the later, including the central vision, a section of about 130 lines. 28

"Armageddon" is largely self-explanatory, with the speaker being shown a vision of the final battle for the universe.
"Timbuctoo," on the other hand, seems at first to have little to do with its avowed subject, although the connection becomes clear during the vision. The speaker laments the loss of the great motivating fantasies of the past, Atlantis and the Isles of the Blessed, and wonders whether Africa contains anything comparable. He is then visited by an angel who shows him a vision of a marvellous city, only to lament that discovery will soon cause it to shrink to a collection of huts. The angel is identified as the spirit of Fable.

Both poems use the familiar theme of the plurality of worlds. During his vision, the speaker sees "The Moon's white cities," and hears the "hum of men / Or other things talking in unknown tongues, / And notes of busy Life in distant worlds" (11. 99-111); "Timbuctoo" adds a description of the types of stars. In the earlier work the significance of this passage is obvious: the entire universe is coming to Judgment. In the later work, the other worlds are most probably, like the imaginary cities and islands, beautiful fantasies. His approach seems more sceptical than when he was younger.

Some of the omitted material from "Armageddon" is significant for Tennyson's interest in natural history. The devils are described as mixing the qualities of man and beast; in one of the manuscripts, the devils' pavilions contain "Mammoth and Mastodonte." Similarity between man and lower animals is reserved for the devils' side; the angel assists the speaker in a temporary process of spiritual development, removing from his soul the fetters of "bond of clay" and "dull mortality" (II. \$4-5).

The vision itself is central to both poems. In "Armaged-don" the speaker's soul grows "godlike" and stands on the "outward verge" of "God's omniscience"; he could have worshipped his own soul. The angel praises "Everlasting God, and thou not less / The Everlasting Man" and identifies the soul's life with God's, as well as hinting at reincarnation ("former wanderings in other shapes"). In "Timbuctoo" the radically unorthodox vision is toned down; the soul merely grows "mighty" and stands on the "outward verge" of "full beatitude." There is no mention of worshipping one's own soul, and no "Everlasting Man."

The probable reason for this is the extremely personal nature of the earlier poem. Tennyson was subject to a sort of trance state which he could produce by repeating his name; while under its influence, his individuality seemed to dissolve, and a conviction of immortality took over; it was "no nebulous ecstasy, but a state of transcendent wonder, associated with absolute clearness of mind." The visionary state in "Armageddon" seems to be a good description of the

feeling, so that in the writing of "Timbuctoo," the personal characteristic was suppressed, and the vision was used for an arbitrary purpose rather than a personal statement.

Tennyson would have found among the Apostles a validation of his mystic states, since, as a result of their adherence to Coleridge, they were sympathetic to internal evidence for This concept was associated with the Idealist notion of phenomenal reality. "The world is one great thought, and I am thinking it," announced John Kemble, and a similar idea can be found in one of Tennyson's unpublished poems of this period, "The Idealist," in which "the spirit of a man" creates "all I hear and see," weaving the universe. All earthly things are attributes or creations of the soul, whose dwelling place is Eternity; only God and other individual souls are external to it. This poem undoubtedly exaggerates the basic conception dramatically, but the attitude is evident in "Armageddon" and many of the later works: internal reality is the standpoint from which to judge the world; the evidence of the mind, not of nature, is conclusive for ethical and religious questions. The mystic trance, combined with the reasoning of the Apostles and their guiding spirit Coleridge, can already be seen to provide the basis for Tennyson's interpretation of the world.

CHAPTER THREE TENNYSON'S POEMS OF THE 1830'S AND THEIR ANALOGUES

Evolutionary material is gradually introduced into Tennyson's poetry during the 1830's. "The Palace of Art" and "The Two Voices" are the key poems in this respect, and the following discussion will focus primarily on them, while also examining other poems for their use of scientific concepts, and for their revelation of the complex of religious and philosophical ideas that determined the mature form of Tennyson's evolutionary thought. An analogous use of evolutionary material will be explored in Browning's <u>Paracelsus</u>, as well as in some later, possibly derivative works by other authors.

Arthur Hallam's 1831 review of Tennyson's poems provides an important indication of the ways in which Tennyson organized the scientific concepts in his work. Hallam praises Tennyson for two particularly important reasons: "his power of embodying himself in ideal characters or rather moods of character" and "his vivid, picturesque delineation of objects, and the peculiar skill with which he holds all of them <u>fused</u>, to borrow a metaphor from science, in a medium of strong emotion." The first of these, while suggesting in part a personal quality of the poet rather than of the verse, indicates

the dramatic element in Tennyson's poems; statements in the poems are not necessarily to be taken as embodying the poet's own attitudes. The second stresses mood and emotion as opposed to logical reasoning; Hallam is advocating a poetry of indirect statement, as opposed to a didacticism such as Wordsworth's, whose work is frequently "false as poetry" though "good as philosophy." In this recommended poetry, "elevated habits of thought" can only be "implied," not expressed; ideas are communicated only in terms of images. "These men had no need to seek; they lived in a world of images; for the most important and extensive portion of their life consisted in those emotions which are immediately conversant with sensation." 2

On the basis of this essay, then, it is safe to predict that Tennyson's early poems would be concerned not with direct, didactic statement, but with the use of concepts as analogies to mental or emotional conditions. This is not to say, however, that the ideas presented in the poems are unimportant. Hallam and the other Apostles placed special emphasis on the role of the poet as seer, as can be seen in this quotation from F. D. Maurice: "The mind of a poet of the highest order is the most perfect that can belong to man. . . . The poet is the great interpreter of nature's mysteries, not by narrowing them into the grasp of the understanding, but by connecting each of them with the feeling which changes doubt to faith. . . . He cannot be untrue, for

it is his high calling to interpret those universal truths which exist on earth only in the forms of his creation."3 The Platonism, however diluted, of this statement is also evident in some of Tennyson's poems, such as "The Poet" and "The Poet's Mind," which rely on images drawn from organic nature to suggest the poet's grasp of truth. In the former poem, the poet's seeds (poems) are "Like to the mother plant in semblance"; the mother plant is not precisely defined, but is connected by a series of interlocking images to the poet's thoughts and to truth, which are thus identified. This poem further uses a complicated system of imagery to describe the action of the imagination. The poet's thought either produces or comprises "viewless arrows" which simultaneously operate on three levels of meaning: first, they suggest love -- Cupid's arrows; second, they introduce a martial significance which reappears later in the poem in the form of Wisdom shaking the world; third, they carry an organic significance, since they are compared with "the arrow-seeds of the field flower" which propagate new plants. All these metaphors are drawn together in the image of the poem spreading "The winged shafts of truth."

This poem, in addition to demonstrating the manner in which organic--and by extension scientific--images function in Tennyson's early poetry, also exemplifies the notion of the poet's unique relation to truth. Two of the other poems in the 1830 volume add further insights on this subject. "A

Character" is a satirical sketch of the false poet, whose philosophical pronouncements are contrasted with his narrowness of understanding:

. . . he said, 'The wanderings Of this most intricate Universe Teach me the nothingness of things.' Yet could not all creation pierce Beyond the bottom of his eye.

The false poet is distinguished from other men not by inherent differences but by his own pride: "And stood aloof from other minds / In impotence of fancied power."

"The Mystic," on the other hand, offers a description of true intellectual power. This man is separated from others by his nature: ""he was not one of ye." Subject to states resembling Tennyson's, "lying broad awake, and yet / Remaining from the body," the mystic comprehends in his mind the Platonic Ideas of all creation, "The imperishable presences serene"; the only stated limit to his understanding is the last circle, which "Investeth and ingirds all other lives"--and on the other side of which is "an ether of black blue," suggesting the Ptolemaic primum mobile, beyond the limits of the physical universe. His perception is equally extensive in time; the implication of the lines describing "Time flowing in the middle of the night, / And all things creeping to a day of doom" is that he can foresee the day of Judgment.

These poems offer a consistent summary of the role of the poet. He perceives and expresses the truths of the muniverse, becoming in his role of creator analogous to God. The poet's

mind is "holy ground" ("The Poet's Mind"). The analogy between God and the creative imagination was of course neither new nor original, but had received a new impetus from Shelley's "Defense of Poetry" and Coleridge's concept of the secondary imagination; it became a means of saving the theory of values from the subjectivism opened up by Kant, and in this sense it was soon taken up by Carlyle, in his description of the divine inspiration operating in man. In Tennyson's work the concept does not develop fully all these various implications, but the basic idea is still present in the early poems.

This fact is important because it has been suggested that Tennyson conceived of evolution by analogy with the action of the creative imagination. But by 1832 there was already an apparent shift in his idea of the poet's function, and it is in "The Palace of Art," the most explicit representation of this shift, that the first substantial references to evolutionary theories occur in Tennyson's verse. "The Palace of Art" was specifically announced as an allegory in the dedicatory poem attached to it, and was presumably inspired by Richard Chevenix Trench's words, "Tennyson, we cannot live in Art." As many critics have argued, Tennyson was in fundamental agreement with Trench on this matter; the poems from the 1830 volume already discussed show an important conflict between the pleasures of aesthetic isolation and a more serious commitment to truth. "The Palace of Art" deals with the

problems faced by an exclusive adherence to the aesthetic claims of a private art.

The soul is given a "lordly pleasure-house" by the poetspeaker. Most of the poem describes the contents of the palace, in which each of the rooms and corridors has a special symbolic decor, altogether comprising a wide, though purposely selective, range of imaginative constructions. The problem with this private world is that the soul attempts to be self-sufficient. The decorations of the palace, because they are a substitute for the real world, are an inadequate support for the imagination; estranged from reality, the soul must suffer. Both the isolation and the attempt to become like God precipitate the crisis of the last eighty lines, as a result of which the soul leaves the palace to purge her guilt in the world outside. The palace is not repudiated, simply left until the soul is worthy to return to it, with others; the poem reflects the need for poetry to exercise a moral or social consciousness. It is noteworthy that an astronomical image is used to describe the soul during her period of suffering; she resembles a star that stands alone instead of moving in accordance with "one fixed law" (1. 256).

In the published text of the poem, there are, with the exception just noted, no specifically scientific images—a fact which can be interpreted as another demonstration of the inadequacy of the soul's private world; she is impervious to the discoveries of science: "Full oft the riddle of the painful

earth / Flashed through her as she sat alone" (11. 213-14), without responding. In a footnote to the 1832 volume, however, Tennyson explained that if the poem had not been too long already, he would have added a set of lines, which he then reproduced. These lines, describing an observatory tower where the soul goes to watch the heavens, would have served to emphasize the soul's superficial attitude toward science, since such astronomy would not have brought her any closer to the real world; in building the palace, the poet-speaker had mimicked heaven with "hollowed moons of gems" (1. 188).

Interestingly, one of Tennyson's notebooks contains a deleted passage (reproduced by Ricks in a footnote to 11. 186-189) which, if it had been included, would have made the soul seem more serious-minded than she appears in the revised and published version. In these lines, the soul sees the "secret entities of Faith" "shadowed" in the form of abstractions that have not yet entered the phenomenal world: "But always waiting in a dusky place / To clothe themselves in creeds." The next stanza describes various types of philosophy, which are implied to be only part-truths by the following sequence of geological and biological observations:

Yet she saw the Earth laid open. Furthermore How the strong Ages had their will, A range of Giants breaking down the shore And heaving up the hill.

And likewise every life that Nature made, What yet is left and what is gone To where the classes vanish, shade by shade, Life and half-life, to none.

"Strong Ages" and "a range of Giants" are not very specific phrases: it is difficult to determine whether gradual or catastrophic change is implied, or whether, more likely, the language was deliberately made capable of sustaining either interpretation. If the astronomical passage, reproduced in the footnote in the 1832 volume, had directly followed from these lines, the observation of the heavens would have seemed more serious than when detached from their original context. Probably the reason that Tennyson deleted the passage is that it tended to weaken the impression of superficiality and arrogance on the part of the soul. The presence of the nebular hypothesis in the footnoted passage -- "Regions of lucid matter taking forms"--indicates a concern with important and controversial scientific issues, since this hypothesis was used by Chambers and others to provide an analogy for biological evolution, and was for a long time before that the most prominent evolutionary theory in general discussions.8

A similar process of revision can be observed elsewhere in the poem. In the 1832 edition, a passage followed line 128, but was deleted in the 1842 revised version. The passage culminated in a description of organic development:

'From change to change four times within the womb
The brain is moulded,' she began,

Derived from embryology, and to a large extent borrowed from Southwood Smith's article in the Westminster Review for 1828,9

^{&#}x27;So through all phases of all thought I come Into the perfect man.'

they are designed to show the basis of the soul's misconceived pride. The four changes refer to the recently observed phenomenon of embryonic recapitulation, in which vestigial traits of previous evolutionary stages can be observed in the embryo at different stages of its development, for example, gills and the vestigial tail. 10 The first line of the stanza was later revised to "From shape to shape at first within the womb " probably reflecting Tennyson's wider reading, 11 which would have shown him that the process cannot be divided into four neat stages, but that the vestigial traits overlap sequentially and furthermore do not affect the entire body structure. The changes in the brain, although less easy to observe than the others, probably came to Tennyson's attention first, through the Westminster article; but even there the process of development is not divisible into specific stages analogous to earlier or "lower" life-forms. 12

Using this concept as an analogy for the growth of the human mind, the soul launches into self-adulation:

'All nature widens upward: evermore
The simpler essence lower lies.
More complex is more perfect, owning more
Discourse, more widely wise.'

Although some commentators have misinterpreted these lines, ¹³ the concept expressed is not difficult to explain. Nature is conceived of as an inverted pyramid, widening out at the top, with the simpler forms at the bottom and the more complex, with the soul presumably among them, toward the upper reaches.

In short, the soul is using the developmental image as an analogy to her own increase in knowledge. If "All nature" refers to the entire system of living things, then the image is a genuinely evolutionary one; but if it merely refers to each individual species, it is not necessarily so. Since the link between the embryological image and the totality of nature is unspecified, the passage remains ambiguous.

The soul's conclusion is that she is uniquely fitted for detachment, being above all things as a result of the process of development. Her final statement in this passage, "I dwell apart, holding no forms of creeds, / But contemplating all," constitutes the fundamental act of pride. After the 1850 revision, the line was transferred to another part of the poem (1. 211), without any preceding argument to establish a rational context, and altered to: "I sit as God holding no form of creed, / But contemplating all." The soul is thus made more arrogant than in the earlier version.

The effect of the revision, then, was to increase the impression of the soul's superficiality and isolation from reality; by removing a passage which was becoming too much a part of Tennyson's own thought to be ascribed to the soul. The further development of this idea can be seen in "The Two Voiess," ces," which was begun before the death of Hallam, although completed afterward and not published until 1842. The poem is a dialogue between a potential suicide and a "still small"

voice" that tempts him on and destroys his rationalizations in favour of life; a second voice enters after the decision for life has been made.

As a poem about religious doubt and faith, it is a profound advance from the earlier "Supposed Confessions." In that work, the doubts afflicting the speaker were left vague, being expressed in terms of separation from God and inability to believe. The speaker contrasts his youthful beliefs with his older disillusionment; when young, he had desired to "look into the laws / Of life and death . . . and analyse / Our double nature, and compare / All creeds" (11. 172-76), while now he is worried that "everywhere / Some must clasp Idols." The 1830 edition also had some lines, deleted later, which expressed the hope of immortality in interesting terms:

To stand beside a grave, and see
The red small atoms wherewith we
Are built, and smile in calm, and say-'These little motes and grains shall be
Clothed on with immortality.'

These atoms appear to be blood corpuscles, and the immortality described is basically an elaboration of the traditional
"dust to dust." The context makes it clear that the speaker
is merely wishing that he could feel that this type of future
is hopeful; he does not realize, or has lost his belief in,
the immortality of the individual soul.

"The Two Voices" attempts a resolution of the problem of the walue of life. The problem must be solved entirely on the basis of internal evidence (faith), without external interference. The ending has been misinterpreted as implying that the speaker has to rely on the sight of the people going to church to restore his faith, but actually the scene outside the window is merely a coda, a confirmation. The speaker wins his case when he decides for "More life, and fuller" (1. 399), and the scene outside and the "hidden hope" offered by the second voice come as a fulfilment of his wish. Theistruggle takes place inside the man.

The voice of despair frequently makes use of images derived from organic nature, such as the metamorphosis of the dragonfly (11. 8-15) and the emergence of the flower from the bud. These images tell against the speaker by degrading his status as a unique creation and suggesting that his ideals are merely adaptational mechanisms, designed to motivate him into staying alive into maturity. The voice also uses images of generalized developments "Nor art thou nearer to the light, / Because the scale is infinite" (11. 92-3). This image is not in the fullest sense evolutionary, because Tennyson had not by this time experimented with the use of organic metaphors to describe the development of society, a theme he was to explore in many poems of the 1850's. Again, the description, "owning but a little more / Than beasts . . . Calling thyself a little lower / Than angels" (11. 196-99), being merely a joining of two Biblical images, makes no inherent connection between men and other animals.

The most interesting aspect of the poem, for the purposes of this discussion, is the number of alternative, or contradictory, world-systems the speaker uses; the combination of cosmological speculation and ethical, or existential, argument makes it a brief model for In Memoriam. The speaker begins with a fairly conventional liberal cosmos: "Young Nature through five cycles ran, / And in the sixth she moulded man" (11. 17-18). The idea that the six days were actually six epochs was fairly standard in the 1830's; 14 the identification of nature and God was also by this time basically orthodox. A more startling notion, but one that Tennyson had used before, is that of the plurality of worlds, as in "his peers / In yonder hundred million spheres" (11. 29-30), and "Some yearning toward the lamps of night" (1. 363). A more ambiguous reference is to the "Intelligences fair" which range above the human state, mentioned in the cancelled passage following 1. 349; they could be spirits, or the inhabitants of other planets. or perhaps both, considering Tennyson's early use of the idea of other worlds as habitations of the dead.

A third world-view follows from the discussion of individuality earlier in the poem. In response to the voice's doubt about the value of the individual in comparison to the species (11. 31-33), the speaker asserts that absolute uniqueness confers importance upon the individual life. Since this argument does not further his cause, he later virtually re-

verses it, arguing that perhaps no life is merely individual. but that all lives are somehow linked (11. 346-48). view does not imply a developmental linkage to other species, although it does recall an eighteenth-century concept of the continual development of souls, found in the poetry of James Thomson. 16 Instead, it posits a theory of reincernation and the transmigration of souls, in which one is reborn after forgetting the present life (11. 352-54). The idea was undoubtedly due in some degree to the "Intimations" Ode, and can be found tentatively stated elsewhere in Tennyson's early "Recollections of the Arabian Nights," for example, opens with the narrator carried back along "The forwardflowing tide of time" and becoming a "True Mussulman," which though primarily an elaborate description of a dream state, suggests by its diction a remembrance of a former life. "The Day-Dream," again, uses a simile involving "spirits folded in the womb," dimly perceiving the outside world. But the unambiguous elaboration of the idea comes only in "The Two Voices." The speaker suggests two alternatives: he may have "lapsed from nobler place," or he may have arisen "through lower lives." This last possibility is seized on as providing hope of spiritual progress.

All of these alternative world-views are proposed by the speaker merely as hypotheses which may affirm the value of existence. The resolution of the poem comes about, not because any one of them is accepted as true, but because, by

means of his manipulation of them, the speaker is led to his final affirmation of life. They are included in the poem, not as Tennyson's statements about the world, but as the stages whereby the speaker recovers his faith.

Scientific material, then, is introduced into Tennyson's early poetry in the form of analogical imagery, reinforcing the main currents of thought rather than providing new ones in their own right. A contrasting use can be found in Browning's <u>Paracelsus</u>, published in 1835, which reaches its climax in a direct and explicit statement of evolutionary development.

The five acts represent five stages of Paracelsus' life. He is first seen "aspiring," then ironically "attaining," as he discovers that his way of life thus far has been incomplete. His attainment consists of the realization of his defects, which he will presumably remedy; but instead he is next seen predicting his own downfall, which soon follows. His final attainment comes only on the point of death, when he has a vision of the development of the world, which, by emphasizing man's role as a link in a long progressive series, reconciles him to his own failures. Paracelsus' original wish--"Make no more giants, God, / But elevate the race at once!" (I. 779-80)--is fulfilled by the realization that all nature is developing toward Godhead by slow stages.

The closing vision is paralleled by the poet Aprile's de-

scription of his ideal in the second part of the poem (II. 420-487). In an explicit comparison between the poet and God, who, as the perfect poet, "in his person acts his own creations," Aprile describes the sequence in which he would create: first, "The forms of earth," second, an inhabitable world ("Woods, valleys, rocks and plains"), third, speech ("no thought which ever stirred / A human breast should be untold"), and finally, mysic ("to perfect and consummate all"). The precision of the analogy becomes apparent at the end of the poem, when Paracelsus realizes that this is in fact God's own sequence of creation.

Since, shortly before the vision, Paracelsus' friend Festus has made a comparison between the scientist's thoughts and "subterraneous fire" (V. 395), it is clear that the evolution of the world is presented as analogous to the development of the soul. The evolutionary sequence is as follows: first volcanic activity--"The centre-fire heaves underneath the earth, / And the earth changes like a human face" (V. 653-54)--and other forms of geologic change, represented by the "wroth sea's waves"; then the emergence of life.

Then all is still; earth is a wintry clod; But spring-wind, like a dancing psaltress, passes Over its breast to waken it, rare verdure Buds tenderly upon rough banks . . . (V. 665-68)

Various animals are described in a progressive order: insects, birds, mammals, and finally man, "the consummation of this scheme." This process is more than simply a recital of the creation myth of Genesis. In an almost deistic fashion, once God has initiated the process, he merely "tastes a pleasure" in each successive stage; the method of development is left vague, and is nowhere stated to be continually under God's direct management. It is, however, a recapitulatory process; man's "attributes had here and there / Been scattered o'er the visible world before, / Asking to be combined" (V. 685-87). Each stage anticipates the next, and man, although the highest stage in creation so far, shows "August anticipations, symbols, types" (V. 775) of the higher stage to come; "in completed man begins anew / A tendency to God." Christ may have been the perfect man, but the process will continue even after all men reach perfection, when "begins man's general infancy."

Progress is defined as the law of life; "these things tend still upward" (V. 742), and the mode of progress is shown as the progressive incarnation of God in living things, with man as the closest approximation so far. In a letter to Furnivall, Browning held up Paracelsus as containing, in its progressive development "from senseless metter to organized," all that had been proven in Darwinism. 17 "At the back," he emphasizes, is still the hand that starts the ball rolling; but the process seems to operate without further outside interference.

The historical Paracelsus, whom Browning claimed to be

portraying accurately, described the formation of the world in terms of a chemical reaction. Progressive separations of the prime materials from each other brought about the different stages through which creation passed. Although extremely controversial in the sixteenth and seventeenth centuries, this concept was, by Browning's time, somewhat out of date, because of its reliance on alchemical ideas such as the quadrature of the elements, which were gradually being abandoned. For this reason, Browning left the precise mechanism unexplained, and attributed it to a general law of progress, rather than to specific acts of God.

Such evolutionary speculation is not confined to Tennyson and Browning, however, even though they make use of it in a much more highly developed form than their contemporary poets. Philip James Bailey, for example, in his cosmological drama Festus, published in 1839, makes use of Cuvier's catastrophism, and of a progressive sequence of animal life (pp. 130-131), though without any implication of transmutation of species; the newer, more controversial astronomical ideas, such as the destruction of worlds--"Systems arise / Or a world dies / Each constant hour in air"--conflict with the orderly, basically eighteenth-century universe he presents. 19 He also adopts the organic metaphor for cosmic destruction: "as the fruit / Matures, and world by world drops mellowed off / The wrinkling stalk of Time" (p. 27). In this he was followed by John Stanyan Bigg, who described the universe as

growing from "seedlings into suns; from suns to systems," and refersatio "embryotic suns and nebulae" which are the product of "the great thought / That rayed out into constellated worlds." These authors demonstrate the increasing familiarity with which evolutionary concepts came to be treated during the middle of the nineteenth century, but do not make use of them in poetically important ways, as Browning and Tennyson do; their imagery generally serves a simply illustrative function, becoming an accessory to the thought, rather than its prime vehicle.

Browning, it has been seen, thought of evolutionary development as the progressive incarnation of God in the world. No such explicit concept has yet been seen in the early poems of Tennyson, however; and the new poems published in 1842 generally use images drawn from the sciences either for witticism, for illustrative examples in character sketches, or in order to suggest the importance of science in modern life. The few exceptions to this tendency reveal an entirely different attitude toward evolutionary progress from Browning's.

Extinction of species and its polar opposite, progressive development, are drawn upon for their social and psychological applications. "Nature brings not back the Mastodon," says Hall in "The Epic," explaining why he has destroyed his epic poem, and the unpublished "New Timon, and the Poets, Part II," dating from the same general period, forecasts In

Memoriam and the "Epilogue" to "The Charge of the Heavy Brigade" in its emphasis on the possibility of human extinction:

This London once was middle sea,
Those hills were plains within the past,
They will be plains again--and we,
Poor devils, babble, we shall last.

"Love thou thy land," on the other hand, makes an analogy between political freedom and the development of the body: "For Nature also, . . . devising long, / Through many agents making strong, / Matures the individual form."

The tension between progress and extinction is felt in "Morte d'Arthur," where Arthur's last words imply the possibility of progression despite, or because of, the destruction of Camelot. "The old order changeth, yielding place to new, / And God fulfils himself in many ways, / Lest one good custom should corrupt the world (11. 240-42). "The Vision of Sin" presents an analogous situation. poem has traced the decline, physical as well as moral, of a sinner; at the end the symbolic landscape of section 3, which showed God's rose of dawn being ignored, is changed to a scene of decay: "Below were men and horses pierced with worms, / And slowly quickening into lower forms." The "lower forms" recall the "lower lives" of "The Two Voices," and suggest a reversal of the developmental process. 21 At this stage, God appears to have withdrawn from the physical world, and the answer to the question, "Is there any hope?" is "in a tongue no man could understand." More than the plight of

a single man is implied; the speakers in the last stanza, who are not stated to have been corrupted by sin themselves, find God's answer incomprehensible. Hallam Tennyson was right in suggesting that the whole human race is involved; the problem of sin assumes cosmic proportions. 22

The examination of these early poems has shown the gradual introduction of evolutionary ideas and images into Tennyson's poetry, but none of the published works up to this point offer any unambiguous statements on the subject. The psychological attitude, however, can be more precisely observed. An early unpublished poem, "Youth" (1833), indicates an uncertainty over the choice of a course of life; one set of voices speaks of how "all things become the past," advocating self-absorption in an aesthetic world based on memory, while a "sharper voice" calls the speaker on to an uncertain goal. "Confused, and ceasing from my quest, / I loitered in the middle way . . . the present." For a while he contemplates the world:

Now idly in my natal bowers,
Unvext by doubts I cannot solve,
I sit among the scentless flowers
And see and hear the world revolve:

but the course of indifference cannot be held for very long, and soon, inspired by a sense that something is happening, he comes upon a resolving vision of godlike figures on the mountains. The process is similar to the pattern of <u>Sartor Resartus</u>, with the "middle way" corresponding to the "centre of indifference"; lack of commitment to an intellectual posi-

tion is portrayed as at best a temporary vacillation, at worst a betrayal of obligation. Whatever the immediate implications of the poem in 1833, Tennyson's development was to take the form of an increasing commitment to facing and understanding the realities of the world. "The Poet's Sons," a tailpiece to the 1842 volumes, shows this commitment quite clearly: the poet sings "of what the world will be / When the years have died away"; his theme is at once the future, and the underlying realities of the world.

CHAPTER FOUR

IN MEMORIAM:

THE COMPOSITION OF THE POEM

Critical opinion has been divided on the question of the nature and appropriateness of the "natural theology" of In Memoriam A.H.H. Tennyson's own recorded statements emphasize at one time the personal, elegiac aspects and at another the more impersonal philosophical ones. A large number of his contemporaries responded favourably to the poem's qualities of faith, and even to its evolutionary speculations. Romanes praised Tennyson as a forerunner of Darwin, and scientists such as Owen and Herschel "regarded him as a champion of Science"; 1 Henry Sidgwick regarded his belief that "humanity will not and cannot acquiesce in a godless world" as a successful response to the problems nosed by Carlyle.² On the other hand, most modern critics have been dubious about the success of Tennyson's cosmological thought. The most famous comment is T. S. Eliot's, that "Its [In Mem Moriam's faith is a poor thing, but its doubt is a very intense experience,"3 a judgment that has been followed by a large number of critics, including Christopher Ricks, who characterizes Tennyson's darkest poems as his most profound.4 Even on the more pertinent question of what beliefs the poem actually shows, opinions are divided: George Potter and Graham Hough argue that the evolutionary concept that seems apparent in some sections of the poem is really just a development of the standard idea of <u>natura naturans</u>—developing nature, rather than evolving species; 5 John Killham and James Harrison are more favourably inclined to the possibility of transmutationism being used in the poem, whether or not Tennyson granted the idea full acceptance. 6

Potter's contention seems to rely too much on his assumptions about the popularity of evolutionary speculation in the early part of the century: if it can be shown that the proponents of mutationism were an obscure minority, then Tennyson could not have been using their theories. 'mutationists' . . . were not the men with the highest reputations in their respective fields of study. Erasmus Darwin, Lamarck, Goethe, Lorenz Oken, Geoffroy Saint-Hilaire, W. C. Wells, Patrick Matthew, and Robert Chambers . . . were not the most famous men in scientific work of their day, and were by no means the most learned or intelligent . . . If any wellinformed Englishman had in the year 1850 been asked to name the best minds among workers in the natural sciences . . . he would probably have mentioned none of these names, but rather Cuvier, Richard Owen, Lyell, the Herschels, Sedgwick, Henslow, and Louis Agassiz -- not one of whom had the slightest belief in the mutability of species before Darwin published his Origin." Apart from the curious inferiority by association assigned to some of the figures on the earlier list, there are

several misleading statements here. First, Eyell was not as opposed to the concept of transmutation as his public statements made out. After his initial rejection of Lamarck, despite considerable vacillation, he became a mutationist of sorts, spending years speculating on the problem of whether species were the fixed and real entities he had thought they were. He continued to use the vocabulary of "creation," but only for lack of a better one; he denied the idea of a series of separate divine interventions in the natural process. 8 Second, although none of Potter's second group publicly endorsed a mutationist doctrine, some of them contributed ideas which were not inconsistent with it; the Herschels formulated the nebular hypothesis, discussed in a previous chapter, and Agassiz popularized the notion of "prophetic types" among animal species. 9 Third. regardless of Chambers' public reputation, he was widely read, and Tennyson evidently drew important ideas from him. The ideas of some of the other mutationists were also known to Tennyson, since Lyell devoted a long section of his Principles to a discussion of Lamarck, and many of Erasmus Darwin's ideas could have been gleaned from Shelley, if not from a reading of that author himself.

Since, therefore, there is no immediate reason to deny the possibility of a transmutationist influence on Tennyson, it should be possible to examine the stages of development that In Memoriam went through, with reference to what is known

of Tennyson's readings in evolutionary theory. It is not possible to be certain of the dates of the majority of the 133 separate poems which make up this long work, but they can be arranged into various broad groups on the basis of their appearance in the surviving manuscripts. A group of eight clearly belongs to 1833. A much larger group, found in the Trinity MS., belongs predominantly to the years 1833-1837, with some pieces of later date; a group of about equal size appears in the Lincoln MS., dated 1842, along with a fair copy of most of the earlier poems. A few more sections were added by the time that the trial edition was printed in 1849, and six more still were included in the 1850 publication; these sections cannot be dated.

The first group of poems is clearly personal, dealing with the shock of bereavement and the anticipated return of the ship carrying Arthur Hallam's body. The early stage, however, three characteristics of the eventual poem stand out: an emphasis on the limits of human knowledge, an inability to draw consolation from the contemplation of nature, and the continual tendency to present alternative opinions on important subjects. This last trait can be observed in sections 30 and 31; while in the first, there is implied a well-developed belief in the afterlife, the second denies the possibility of certainty, using the figure of the uncommunicative Lazarus. The afterlife in section 30, incidentally, shows strong affinities to the plurality-of-worlds theme ob-

served in Tennyson's first published poems; the "seraphic flame" -- not the only occurrence in <u>In Memoriam</u> of Dantesque figures -- travels "From orb to orb" with "gathered power," and this image antedates the publication of Taylor's <u>Physical Theory</u> by approximately three years. Tennyson was not only drawing ideas from his reading, but also adapting ideas current at the time even before they were expressed in published works.

A Harvard Notebook draft, also dating from 1833, shows the direction Tennyson took in making parts of the poem impersonal, in order to emphasize their universality. Evidently written before the <u>In Memoriam</u> stanza had been finally decided on, it shows the world as seen under the influence of grief:

A cloud was drawn across the sky,
The stars their courses blindly run.
Out of the waste places came a cry
And murmurs from the dying sun.

When these lines were later recast to form part of section 3, their sentiment was put in the mouth of an abstract Sorrow, and presented an image of the world in general, rather than a single localized phenomenon.

The next block of sections, those collected in the Trinity MS., mostly antedate 1837, although there are some uncertainties, and internal evidence assigns some to later dates.

Tennyson's prime concern here is with the immortality of the soul. Whereas in the earlier section 85 the speaker imagined the dead man's spirit speaking to him, although aware of the unreality of the phenomenon ("so methinks the dead would say; / Or so shall grief with symbols play"), in these poems the reality of the immaterial spirit is insisted upon: "A Spirit, not a breathing voice" (13), "No visual shade of some one lost, / But he, the Spirit himself, may come / Where all the nerve of sense is dumb" (113). Sensory manifestations of ghosts are illusory, "but the canker of the brain" (112).

Speculation about the nature of the afterlife continues. The general impression is that the spirit ascends, morally and intellectually as well as physically, "As flies the lighter through the gross" (41). This idea, a development from the traditional belief in the lightness of the soul, was familiar at the time from various specific sources. Joseph Butler had speculated that the dead might enter "a higher and more enlarged state of life . . . in which our capacities and sphere of perception, and of action, may be much greater than at present." 10 From such a belief it is a natural progression to the idea that the souls of the dead inhabit other worlds, in the solar system or outside it, an idea that had already been reflected in Tennyson's early poetry, and which probably received a new strength from Isaac Taylor's Physical Theory of Another Life (1836). Taylor hypothesizes that the apostolic doctrine of bodies celestial and terrestrial reveals the "universal law of the intelligent creation" -first, a natural body, then, a development into a spiritual

This universal law, combined with the concept of the plurality of worlds, implies that after death the soul ends up on other planets, or perhaps, as a spiritual being, exists immaterially in space, its destiny involved with the "unseen economy" of the heavens. 12 Whether Tennyson found Taylor quite as consoling as Mattes thinks. 13 the extension of traditional Christian concepts of the afterlife into the physical universe certainly influenced some of the sections of <u>In Memoriam</u>. For example, in section 40, Hallam participates in "those great offices that suit / The full-grown energies of heaven," and scention 45 shows the child learning the use of his body, stating that to do so "were fruitless" if the whole learning process had to be repeated after death, so that the purpose of this life is as a preparation for the next. Again, the universality of the law is emphasized in section 82: "Eternal process moving on, / From state to state the spirit walks"; but this passage cannot be traced solely to Taylor's influence, because it is reminiscent of the reincarnational passage in "The Two Voices" and the embryological one in "The Palace of Art," both of which have been shown to derive from entirely different sources. 14 Taylor's influence can also be seen in section 24, in which the suggestion that the past will "orb into the perfect star / We saw not, when we moved therein" reintroduces the image of the plurality of worlds, with an implied analogy to the condition of the afterlife. Certain other

passages, such as those describing the "circuits of thine orbit" (63) and "tenfold-complicated change" (93), and the image of the spirit as "a finer light in light" (91), show the vestiges of a Dantesque cosmos as well as Taylor's. 15

The analogy implied, in sections 43 and 44, between the child's loss of his early memories and the departed spirit's catching a memory-trace from its mortal existence, seems reminiscent of the "Intimations" Ode, and Mattes has indicated the influence of Wordsworth on another set of passages: "My own dim life should teach me this, / That life shall live for evermore, / Else earth is darkness at the core" (34); "If Death were seen / At first as Death, Love had not been" (35). These lines offer the same argument as Wordsworth's, that the sense of immortality is necessary for the proper development of the affections, which otherwise would be stunted by a "hollowness [which] would pervade the whole system of things." 16 It may be wondered, of course, precisely how consoling a point this is; if the belief in immortality is programmed into the mind, if it is necessary for men to believe it, then its truth-value cannot be determined objectively. But for Tennyson and Wordsworth this criterion wouldnot have been valid; both maintained the supreme importance of subjectively determined truth. Section 34 ends by restating one of Tennyson's most firmly held beliefs, that if immortality is an illusion, then life is pointless, and annihilation would be preferable.

This subjectivist standpoint is developed in more detail in section 33, which describes the speaker's faith as having "centre everywhere, / Nor cares to fix itself to form." The experience described does not refer to Tennyson's trancestate, because the last stanza identifies it with "the law within," which must be maintained by reason; the trance was more purely a phenomenon of feeling. These lines must refer to a subjective apprehension of truth, presumably resulting from direct spiritual contact with God, but a truth that can be expressed and not merely felt, for otherwise it could not be as instructive as it is stated to be in the last stanza. The refusal to link faith to "form," while not providing a purer faith than the contrasted one ("Her faith through form is pure as thine"), opens the way for a transcendence of any single creed, and also prepares for the notion of an immaterial God, not revealed by the physical universe.

A few of the sections may perhaps show the influence of Tennyson's reading of Lyell. 17 Section 53 warns of the dangers of "divine Philosophy" transgressing her limits; 108 reverses this attitude somewhat, asking "What profit lies in barren faith, / And vacant yearning . . .?" Because the section cannot be reliably dated, it remains debatable whether it shows the beginning of the impact of Lyell. Section 54 provides the first full expression of the disillusionment and spiritual anguish that mark many of the sections produced in

the succeeding few years. The first three stanzas, and part of the fourth, list a set of hopes that are basic to the comfortable Christian world system, such as Bailey was incorporating into Festus at about the same time: that all things were goal-directed, and that the suffering on earth would eventually be compensated for. Toward the end of this list there is an interruption: "Behold, we know not anything"; this warning was originally much more emphatic, since four additional lines denied the existence of any revelation of such an afterlife -- "deleted presumably for religious reasons," says Ricks. Following this line, however, is an increased feeling of assurance, since the final image, of winter changing to spring, implies an inevitable process. But the final stanza again removes any certainty, revealing all this to have been a dream, and leaves the image of the thinker as a child, entirely helpless and dependent: "And with no language but a cry."

Geological influence can be observed in the use of scientific imagery in some of the sections; 43, for example, uses as metaphor; that emphasizes the continuity of all life: "that still garden of the souls / In many a figured leaf enrolls / The total world since life began"; the "figured leaf," together with the "traces" of the flower in the previous stanza, may derive from Lyell's discussion of fossil imprints. 18 By contrast, the "world-wide fluctuation" of section 112 may be political, or meteorological. But two sections make ex-

plicit use of Lyell's theory of erosion as the fundamental force of geological change. The streams of section 35, coming from "Æonian hills"—the important word emphasizing the immense passage of time Lyell required for significant change to take place—"sow / The dust of continents to be." The importance of this section is not merely its use of a startling new concept, but its recognition of the emotional meaning of geological time, the reduction of human existence to a brief episode in world history and the consequent piercing awareness of death. It is the chain of speculation roused by this image that results in the confirmation of the belief in immortality as a necessary stage of development.

Section 123 begins with basically the same idea; the impact of geological change: "There rolls the deep where grew the tree. / O earth, what changes hast thou seen!" The second stanza attempts to describe the changes with an image of dissolving hills. However, set in opposition to the dreamlike vision, is the speaker's dedication to another dream, which he will hold true. Geological change is being used to suggest the contrast between subjective truth and the deceiving façade of the material world. By this point in the poem's development, the speaker is reaching for truths beyond his individual, personal circumstances; as Tennyson specifically cautioned the reader, it "is not always the author speaking for himself, but the voice of the human race speaking through him." 19

The next stage in the writing of <u>In Memoriam</u> can be seen in the sections added to the Lincoln MS. in 1842.

Presumably most of these were written in 1837 or after.

The speculations about immortality continue. The passage about the "great Intelligences fair" in section 85 may have been written earlier—Ricks is unclear about the dating of the different parts of the section—but the "hundred spirits" in the "orient star" (86) date from 1839. Section 47 seems reminiscent of Tennyson's trance state when it describes the self "Remerging in the general Soul," but it quickly abandons that idea and proclaims the survival of human individuality. The Wordsworthian justification reappears (55), this time however as a question: "The wish . . / Derives it not from what we have / The likest God within the soul?" The further question, "Are God and Nature then at strife," raises directly the question of Tennyson's response to Lyell.

Lyell, rejecting both the idea of a single creation and that of a series of divine interventions, each resulting in a new species—the progressivist view, a prominent concept espoused by such men as Hugh Miller, particularly during the 1840's—adapted Hutton's earlier belief in an unchanging, continual state of conditions on earth, and advanced the hypothesis that all the geological changes which schentists were then aware of were explicable by assuming the continued action of erosion and volcanic activity, the same general

phenomena observable today, over a period of millions of years. The consequences of his scheme for the biological sciences lay in his rejection of Cuvier's system of hypothesized periodical catastrophes, which, by obliterating most existing life, caused extinction by divine fiat, as it were. If extinction 20 was to be accommodated to a uniformitarian world, then there had to be explanations for it discoverable in the typical contemporary environment. This thought was disorienting in the early nineteenth century, when the most popular view was that the world was neatly adapted to meet the needs of all created beings. Nonetheless, Lyell proceeded to prove his case.

He based much of his argument, as Darwin was to do later, on the sort of evidence Malthus had provided three decades earlier. All organisms were engaged in a struggle for existence, competing with each other for food, and incapacitating themselves for life by overpopulation. Limited geographical distribution affected the ability to adapt. But, most important of all for Lyell, a species was not inherently different from an individual. Just as there were limits beyond which an individual could not change and remain alive, so species could not adapt themselves to the point of changing their fundamental nature, which Lyell at this time regarded as a fixed entity. Consequently, species became extinct, just as individuals died. Part of the reason why Lyell rejected Lamarck's development hypothesis was that the

abolition of the concept of the species as a real entity would have thrown out his analogy; the transformation of one species into another, although an attractive idea in some ways, would have introduced too many complications into the straightforward process of extinction as Lyell 22 conceived it.

At any rate, the dominant impression made by Lyell's discussion of this problem is that of its inevitability. Geological change will inevitably produce eventual climatic change, and few species will be able to adapt themselves to this. Such is the image of the world that Tennyson would have been likely to derive from a reading of Lyell. already rejected the argument from design, under the influence of Coleridge and the Apostles: the impact of Lyell would have been all the greater in causing him to question the bases of his faith. Lyell's universe, like Laplace's, was basically one in which God was superfluous, and section 3 of In Memoriam represents a world operating at random: "The stars,' she whispers, 'blindly run," According to Alfred North Whitehead, this line goes to the heart of the problems of science: "Each molecule blindly runs. The human body isladcollection of molecules. Therefore, the human body blindly runs." But the validity of the image is limited by its being placed in the mouth of lying Sorrow. However, some of the other sections deal with the struggle for existence in a less guarded fashion.

In section 6, the fact that death is a commonplace occurrence simply adds to the speaker's grief. This fact acquires a Lyellian significance in section 55. Nature seems "So careful of the type . . . / So careless of the single life"--a position supported by illustrations of the ratio of birth to survival. This fact alone is sufficient to make the speaker, or rather the human race speaking through him, "falter where I firmly trod"; faith is described as lame. The effect of what might be called the simple Malthusian revelation is to make the sources of faith "faint." But this effect is compounded by the addition of the further Lyellian revelation, that "A thousand types are gone" (56). The possibility occurs that man might eventually perish just as individuals do now, and be "sealed within the iron hills." Although Lyell is at one point very consoling about the possibility of survival, 24 it remains inescapable that there is no certainty about the continued existence of the human spe-The problem of immortality is experienced at the species level; if man becomes extinct, what point will there have been in human existence? The answer is unencouraging; man's history makes him worse than a "dragon of the prime," morally fit for destruction. The possibility of a honeful solution is deferred indefinitely: "behind the veil."

Interestingly, the major geological images of this period, apart from fossilization, are catastrophic. Section 113 compares geological with political upheavals, the former being

more in harmony with Cuvier's than with Lyell's world: the earth changes orbit, with consequent shocks, agonies, and energies. In section 118, "They say" that the earth began and developed catastrophically, the result of "cyclic storms"; the shape of the earth is "seeming-random." Mere volcanic eruptions and earthquakes form an essential part of Lyell's system, of course, but not cyclic storms. no literal belief is implied: "They say." Perhaps Tennyson --or the speaker -- is considering all the alternatives to Lyell's ideas possible.

Section 124 offers a considered religious statement. is still very much behind the veil, but the subjective apprehension of truth is conclusive; the injunction to "Believe no more" is answered by, "I have felt." The contrast with the other sections, in which faith is being undermined, is a strong indication of Tennyson's uncertainties.

It is likely, as James Harrison speculates, that the depression evident in these sections is the result of the lack of evolutionary content in Lyell.²⁵ What is apparent is that evolutionary ideas begin to assert themselves in the poem about this time. The passage in 118 about man being "The herald of a higher race" can be interpreted simply as a prediction of moral progress, especially since the next apposite phrase is "of himself in higher place"; but the reference to "ape and tiger" is more than simply emblematic of instinctual forces. The idea that man was descended from apes was not new, 26 and Tennyson was probably aware of it; if so, the reference to the ape would be an example of his continual practice of including alternative theories. Furthermore, this progress depends on man's typing "this work of time / Within himself"--the work of time being the eventual emergence of man in the world, an event without previous analogy. The result must be something more than an intensification of qualities, such as moral virtue, that are already present. However, there is nothing in these lines that implies the transmutation of species.

The word "type" creates problems. The first references in the O.E.D. to the biological sense of the word are dated 1850, but one of them is Tennyson's "So careful of the type," which actually dates from the 1830's. The word can take radically different meanings. In the earlier section 33, for example, it carries the more conventional religious connotations of anticipation, symbolic prophecy, and even model. The same sense, roughly, appears in the epilogue. The difference is that in the early section Hallam represents a goal for Tennyson to aim at, while in the epilogue he becomes himself a foreshadowing of the eventual condition of the race. The verbal usage in 118 is derived from the connotation of modelling.

The key point here is that man differs from the other animals in his possession of a soul. The speaker of 120 is "born
to other things" than are dictated by his mere biological

nature, significantly again referred to by the figure of the ape. The soul exempts man from the ordinary fate of life; sections 27 and 63 (the latter earlier) discount the significance of animals in the eternal scheme. Man's physical nature is expressed by the phrase "magnetic mockeries," a reference to Mesmer's theory of animal magnetism as well as to more respectable scientific discoveries of electrical action in the nerves. 27

What is foreign to the modern reader is the idea that man can voluntarily take part in the evolutionary process. Section 118 predicts the development of the race through suffering and moral testing; section 131 offers the notion of a "living will" which will produce true faith, "that comes of self-control." Tennyson has not dissociated the natural and spiritual processes, seeing them instead as aspects of the same general principle.

The trial edition of 1849 contained some important additions to the body of the poem. The most important of these is the so-called epilogue, which was probably begun in 1842 but apparently not completed until 1845. By that time Tennyson had read Chambers, and his final concept of evolution was crystallizing.

Robert Chambers published his <u>Vestiges of the Natural History of Creation</u> anonymously in 1844. His book created a storm among religious groups, and earned as well the obloquy of many respectable scientists, even those of the evolution-

ist camp. Darwin was sympathetic, but Huxley was indignant at Chambers' mistakes, and his response probably determined the dominant attitude in this century, as expressed by Hough when he describes the <u>Vestiges</u> as "almost the worst kind of scientific popularizating."29 Still, the book has more than merely historical importance, although it has plenty of that, being the major source for evolutionary ideas in the public consciousness during the 1840's. It serves as a valuable compendium of scientific thought, makes the most famous connection between the nebułar hypothesis and that of biological development, and uses many of the arguments that were to become standard proofs of evolution later in the century, such as recapitulation theory and the existence of rudimen tary organs. It is equally full of mistakes and untenable ideas, such as that of spontaneous generation, but it should be remembered that that particular concept was not finally disproven until the 1860's.

The book's general argument is that there is a universal principle of development from lower into higher forms, and that this can be seen in all phenomena from the organization of nebulae to the ascent of man. The mechanism of development is basically Lamarckian; adaptation to the environment by individuals affects the nature of the young, presumably in the embryonic stage. Like Lyell, Chambers rejected the idea of complete breaks in the geological process and record, but unlike Lyell, he placed little emphasis on the struggle for

existence, regarding it as accidental to the main plan of creation. His was a teleologically organized evolutionary world.

The epilogue to $\underline{\text{In Memoriam}}$ shows strong reminiscences of the Vestiges.

A soul shall draw from out the vast And strike his being into bounds,

And, moved through life of lower phase, Result in man, be born and think, And act and love, a closer link Betwixt us and the crowning race . . .

Whereof the man, that with me trod
This planet, was a noble type
Appearing ere the times were ripe.
(11. 123-128, 137-139)

According to Potter, the phrase "moved through life of lower phase" refers to von Beer's observations on embryological development. Ochembers, however, connects such observations with an evolutionary hypothesis, producing the recapitulation theory, according to which embryonic stages are analogous to previous life-forms from which the present animal has developed. Therefore, if Tennyson's phrase refers to embryonic change, the context makes it clear that the development hypothesis is being drawn on. Furthermore, one of Chambers' key concepts is that adaptationally induced changes in the parent affect the embryo so that it develops into a new form; the development of the species and of the individual fetus are virtually identical, subject to the same laws. This idea provides the justification for the "closer link," whether it is understood as a collective human soul or as an individual

developing into the new required form during gestation.

The notion of Hallam as a "type" of the higher race draws both on the religious usage--a symbolic prophecy--and on Chambers' use: "Is our race but the initial of the grand crowning type?" 31

It seems reasonable, then, to argue that the reading of Lyell was profoundly depressing for Tennyson because of his presentation of the struggle for existence as inescapable and limiting to the powers of the species, and that the reading of Chambers solved this problem by showing a way in which evolution could enable one (whether an individual or a species) to transcend this struggle by assisting ingthe gradual development of a higher form of life. In Memoriam ends with a marriage, which is at once symbolic of the union between souls and of the mechanism of evolution; Chambers had stressed the crucial importance of the "generative system" in the development of the species. Tennyson's literal belief in the truth of Chambers' arguments was not necessary for their use in the consummating vision of the epilogue, any more than his belief in the alternative, and sometimes conflicting, theories of geological change was required for their use in other sections. Like Milton, Tennyson found his poetic purpose strengthened by the presentation of differing cosmological systems. However, despite the fact that it is the voice of the human race, and not mêmely Tennyson himself, that is speaking, his recorded state

ments give substance to the conclusion that the evolutionary concept was for him a personal belief as well as a poetic device. He thought "that the theory of Evolution caused the world to regard more clearly the 'Life of Nature as a lower stage in the manifestation of a principle which is more fully manifested in the spiritual life of man, with the idea that in this process of Evolution the lower is to be regarded as a means to the higher."32 His commitment was clearly to the concept of evolution as a spiritual process, of which the biological was only one aspect. Thus the details of the transmutation of species were secondary to the important symbolic quality of the concept, that it allowed life, and more particularly, man, the possibility of freedom from the limits of material existence, and of developing into a more spiritual form. Without such transmutation, there could be no hope of the race being able to shape its destiny into higher conditions; the concept itself, leaving the details aside, is essential to the conclusion of $\underline{\text{In}}$ Memoriam.

CHAPTER FIVE

IN MEMORIAM:

THE POEM AND ITS ANALOGUES

The discussion in the previous chapter of the stages in the composition of <u>In Memoriam</u> is only part of the analysis that must be made in order to determine the significance and meaning of the evolutionary passages in the poem. The obvious fact is that the final order of the sections, as published in 1850, is not chronological, and that the sequence of composition has been obscured. This knowledge has led some critics, for example Christopher Ricks, to claim that the "charting of Tennyson's doubts and hopes" in the poem does not provide it with essential unity. Tennyson, however, specifically cautioned that it was not an autobiography, and Morse Peckham has speculated that the reason Tennyson refused to allow his manuscripts to be published was so that the compositional sequence would not distract readers from the meaning of the completed work. 2

Many schemes have been offered for dividing the poem into sections. Tennyson himself explained that the organization was strictly chronological, with the three Christmas Eves forming the breaks between the divisions; he elaborated this plan to James Knowles, with a slight discrepancy, saying that there were nine divisions: 1-8, 9-20, 21-27, 28-49, 50-58, 59-71, 72-98, 99-103, and 104-131. Various critics,

however, have suggested other structures. Robert Langbaum has proposed 95 as the fundamental turning point; E. D. H. Johnson divided it into 1-27, 28-77, 78-103, and 104-131, elsewhere selecting 85 and 103 as the key sections; Valerie Pitt places the divisions at the "dim dawn" sections, 72 and 99. All these arrangements have some validity, in that they all show the working of specific patterns of thought and imagery throughout the poem; but none are particularly helpful in tracing the working of the evolutionary and scientific patterns. The following brief analysis will try to show the contribution these elements make to the functioning of the poem, It is understood that it can only reveal one aspect of the work's totality, and that only as much of the larger context as is necessary to establish the significance of this aspect will be undertaken.

In the trial edition of 1849, the prologue preceded the title page; in the final version, it was moved to a place immediately preceding the first section. The sizeable break in the earlier edition made the prologue a dedication, not intimately connected with the main body of the work; put into closer proximity with the rest of the poem, however, it strongly suggests the public, prophetic quality that Tennyson periodically emphasized. Probably one of the last sections to be composed, it reflects the struggles of the poem in its references to the impermanence of the material world, the transcendent nature of God, and the necessity of faith

and love as the sources of truth. The theological tone may lead the reader to expect a didactic poem, arguing the issues of faith and science; an interesting conflict is created between this and the expectation of a personal elegy, roused by the title.⁵

These two elements are kept in balance during the first section. The opening line, so often misquoted, refers to Goethe, among whose last words were "from changes to higher changes": 6

I held it truth, with him who sings To one clear harp in divers tones, That men may rise on stepping-stones Of their dead selves to higher things.

This passage introduces immediately the twin themes of personal development through suffering and the larger development of the race. By the end of the section, the focus has narrowed onto the griefs of the speaker, but the link with the more universal problems of mankind has been established from the beginning.

Section 3 further illustrates this link; Sorrow suggests the baindness and meaninglessness of the world. Nature is said to be "A hollow form with empty hands," in which God is not immanent: the first expression of a recurring theme. The next several sections are devoted to an exploration of the speaker's personal grief, with little reflection applicable to the situation of the race as a whole; however, section 6 shows that the universality of bereavement is itself

a motive for sorrow, and section 27 contrasts man with the beasts that are incapable of experiencing the higher feelings. Also, the first call to public commitment for the poet has been made, and rejected, in section 21, where a traveller has reproached him for indulging private griefs at a time "When Science reaches forth her arms / To feel from world to world."

The tension initiated in section 3 with the suggestion of the meaninglessness of the world is temporarily resolved in 33, when the speaker has reached "a purer air," conceiving of God as transcending all forms, but that this solution is only temporary is shown by the praise given to his sister for her equally pure--perhaps superior--"faith through form." The next section, 34, unites the personal and universal conditions in the consideration of immortality. The certainty derived from personal intuition is contrasted with the doubt caused by thinking on the enormous stretches of time to come, with their implication of the insignificance of man. Although 36, with its invocation of Christ, weighs the balance on the side of intuitive faith, this group of sections begins the steadily increasing impact of geological speculation on the speaker.

Section 37 again examines the role of the poet. Urania, the sacred or astronomical muse, upbraids the attempt to include philosophy in an elegy, recommending a return to more familiar matters. Melpomene, here representing elegy, admits

her unfitness for high thought, but pardons her slip by reminding Urania that the "dear one dead" studied "things divine." The poem returns to more personal concerns in the following sections, but eventually begins its more universal considerations once again, asserting the survival of individual differences after death (47). Then, as if in apology for the renewed philosophizing, the pretensions of the "Short swallow-flights of song" to intellectual certainty are neatly deflated; Sorrow does not care "to part and prove"; the poems are dramatic rather than didactic utterances.

Up to this point, <u>In Memoriam</u> has been primarily concerned with the speaker's individual experience; when the human race speaks through him, it generally does so with reference to personal feelings. But, in sections 53-56, the universal explicitly becomes the subject matter. The fear is expressed that Philosophy may overrun its limits and lead to despair; promptly, the comfortable Christian ideal of existence, in which all suffering is rewarded, and all life has meaning, is undermined. Nature seems to contradict the speaker's beliefs about God. The hope of immortality, which gave meaning to Hallam's existence, seems incompatible with the realization that the deaths of the overwhelming majority of any life form are essential for the continued existence of the species. But the further revelation of the extinction of entire species endangers what little

consolation still remains. The question is posed: what meaning is there, not only in personal existence but in the existence of the whole human race, if mankind will one day die out? Because God is behind the veil, not immanent in the physical world, the answer cannot be known.

The next two sections provide a dying fall for this temptation to despair. Section 57, with its opening words, "Peace: come away," recalls the reader to the particular situation which has called forth these outbursts; the language of the first two stanzas is full of short phrases and interruptions, as though the speaker is striving to get control of himself. The frightening implications of modern science will not return him to the world of the living: "we do him wrong / To sing so wildly"--what is unfitting to be associated with the memory of the loved one is to be rejected. Section 58 adds a consolation from the "high Muse," Urania: "Abide a little longer here, / And thou shalt take a nobler leave." Considering Urania's classical association with astronomy, it is possible that what is implied here is that if the poet will face the challenges of despair, as in the preceding sections, he will find the means of mastering them; in which case, the progress from Urania's original appearance in section 37 to this point indicates that the poet's ideas and feelings are now more mature and truthful.

The poem once again concentrates on personal themes, with many references to the nature of the afterlife, and to the

nature of poetry. The poet's reply to the upbraiding traveller in section 21 is reaffirmed: social realities, including presumably the achievements of science, are unimportant compared with the creation of songs that will be recognized and responded to emotionally by future readers (77). Among the many things that happen in this part of the poem, however, there is evident a subsidence of the earlier extreme grief, and the beginning of a period of change. This change of attitude is symbolized in section 69, in which a dream is recounted: Nature has lost its powers of stimulating growth, but an angel, glossed by Tennyson as "the Divine Thing in the gloom," brings a comfort that is difficult for the dreamer to understand. the crown of thorns, emblematic of the role of poet who writes about death and grief, he seems to "touch it into leaf." A movement has begun toward redemption, both of the poem, the poet, and mankind.

The fact of death is no longer a challenge to faith (82). Death is seen as part of the "Eternal process," analogous to metamorphosis; Hallam is tentatively supposed as triumphing "in conclusive bliss, / And that serene result of all" (85). The speaker is reaffirming his desire for life in seeking a new friendship, with Hallam's implied consent. From this point forth, the universal qualities of the poem, its application to the experience of the entire human race, become dominant, in a series of contrasts and resolutions of differ-

ent images of cosmic change, with three distinct levels of argument.

In the first stage, images of essential non-progressive change, the "cycled times" of section 85 and the "closing cycle" of 105, alternate with images suggestive of development: the nebular hypothesis drawn on in 89 for the "crimsoncircled star" and her "father," and the trance-state experience of cosmic process in 95. There "The living soul" enwraps the speaker's, and somehow communicates "Æonian music measuring out / The steps of Time--the shocks of Chance-- / The blows of Death." The paring down of syntax, the dropping of connectives, shows the difficulty of expressing in words the "deep pulsations of the world." 7 Both types of process are fused in 106, for an assertion of transition which combines the cyclical--the changing of the year--with the progressive, and not only generalized social improvement, but a long-range development toward "the Christ that is to be."

The second stage contrasts the shock and destruction of change with the drive toward improvement. "World-wide fluctuation" and "thousand shocks . . . agonies . . . energies" (112-113) graphically express the calamitous nature of cosmic change; by contrast, 110 describes the vague desire, born of love, "That spurs an imitative will," suggesting the Lamarckian impulse that regulates the development of the species into its necessary higher forms. Both of these concepts

are combined in section 118, where the development of the earth, through "cyclic storms," is paralleled with the development of man as a result of suffering into a higher race.

. . . life is not as idle ore,

But iron dug from central gloom,
And heated hot with burning fears,
And dipt in baths of hissing tears,
And battered with the shocks of doom

To shape and use.

The section concludes with the moral imperative to "work out the beast, / And let the ape and tiger die." The context establishes that this advice is directed not merely to the individual, but to the race as a whole. Thus catastrophic destruction and the internal drive toward progress are reconciled.

The third@stage develops from the synthesis already reached, which is restated in 127, where Hallam smiles at overwhelming destruction on earth--"the great Æon sinks in blood"--because the process is going well. The possibility of regression is faced, and mastered; even the "vast eddies in the flood" co-operate toward the final end (128). The insubstantiality of the physical world is the last remaining contrast; "The hills are shadows, and they flow / From form to form" (123). Here, geological change becomes quiet and gentle, dreamlike, as opposed to the earlier images of storm and disaster. The concluding section (131) recalls this passage when it identifies the physical world with illusion:

O living will that shalt endure When all that seems shall suffer shock, Rise in the spiritual rock.

The evolutionary process, identified with the will of God, has taken the place occupied in Platonic systems by static archetypes. The true informing principle of the world is progressive and dynamic.

The epilogue sums up the entire development in its final image of the marriage--life depends on reproduction--and the closing vision, in which the perfection of mankind, as typed beforehand by the development of an individual who serves as a link with the "crowning race," is seen as the ultimate purpose of the universe: "one far-off divine event, / To which the whole creation moves."

This analysis has shown the importance and function of evolutionary passages in In Memoriam, at the risk of neglecting most of its tremendous range and depth. These passages, however, do contribute an essential part of the poem's total power, and make it the great evolutionary poem of its century. From a twentieth-century point of view, there are incongruities in it which Tennyson was probably not aware of; for example, the fact that Hallam appeared as a type "ere the times were ripe" (epilogue) suggests that nature can make fundamental mistakes. However, if one tries to see it on its own terms, it develops a consistent philosophical position based on evolutionary theory, even if this position is held only by the speaker in the fiction of the poem, not by the

poet himself. But that this last supposition is true is doubtful; although the elaboration may be essentially fictive and poetic, the general belief becomes the motivating force in much of Tennyson's other work, and agrees in substance with his recorded statements.

ii

In order to demonstrate the uniquely effective way in which <u>In Memoriam</u> utilizes evolutionary material, a comparison can be made with similar works by three other poets, all dating from the same period or shortly after: <u>The Year of the World</u> (1846) by William Bell Scott, <u>Empedocles on Etna</u> (1852) by Matthew Arnold, and three works by Philip James Bailey--MThe Angel World" (1850), "The Mystic" and "A Spiritual Legend" (1855). In addition, this brief survey will show the ways in which evolutionary conceptions were being absorbed by other members of the culture of the 1840's.

The Year of the World announces its dominant conception in its title. Greek and Eastern philosophies made emphatic use of the image of a great celestial year compared with which human years are like seconds. The reader is thus prepared, not only for a poem with a long vista of time, but for a thorough saturation in pagan and primitive philosophical concepts. He is not disappointed. The poem is basically a narrative about a youth in ancient Greece who goes on a quest for truth and in the process crosses many countries and learns much ancient wisdom; furthermore, the explanatory sub-

headings of the five divisions set forth a series of doctrines which the youth learns in his journey or acts out in his own person.

To look simply at these subheadings creates the impression that one is about to read the verse equivalent of a Hegelian treatise. Like Hegel, it begins with pure consciousness, "Instinctive Life," then separates the active understanding from the transcendental faculty, thus making the same point that Tennyson does in his separation of empirical knowledge from the subjective apprehension of truth. Then, doctrines of contemplative absorption, self-elevation, and divine love follow in sequence -- that is, withdrawal into the self, worship of the self or "comparative best," and worship of the absolute best, as revealed. The historical sequence is that of the rise of man from primitive conditions to the foundation of historic nations, to the Incarnation-a continual progress toward unity, presumably achieved at the advent of Christ. Although the sequence is applied only to historical phenomena, it is essentially an evolutionary one, based on the meeting of opposing tendencies, "unity, diversity, / Antagonism, life (p. 103). This long strife / Through darkness, and in mythos, and in faith / And in the aggrandizement of self, and in / The weary work of knowledge" (p. 6) introduces the concept of cultural evolution into poetry. Moreover, Scott suggests, as Tennyson does not, that faith itself is determined by a stage in the process: "This

Will with co-existent force, a creed / Lends to the mind,
--men call it Faith" (p. 55). The will in question is
Lamarckian, as "Involuntary as the acts of Nature,"

This fact suggests why the sequence just described is only part of the total progress. The Incarnation does not end the story; Part V ("The Future") begins with the modern mind, under the influence of revelation, discovering Science: "A true Beginning." The result has been confusion:

Theories of spirit without basis-Theories of death and reasonless creeds-Reasoning where mere knowledge should be guide, -Seeking knowledge in the sphere of reason, -Corrosive cogitations manifold.

(p. 140)

But this confusion is inevitable at the beginning of an era. The disturbing element is that poetry may decline under the influence of fact, so that "hate / And sorrow are the muses after whom / He follows to the shades, or into heaven" (p. 98), but even here, there is hope inherent in the process.

The view of progress is not, however, simply linear.

"Each age repeats, productive not the less" (p. 7); history is basically cyclical, although it is unclear whether this cyclicality is present in each stage of the progression, or whether the whole thing will be eventually repeated. "Dim memories of faded cycles" (p. 38), describing classical fables, implies the latter. However, the Lamarckian element—"the Will to rise / Shall be creative of the power" (p. 48)—is still present, and is synthesized with recurrence into a single allegorical vision.

Arnold's Empedocles on Etna nowhere specifically mentions evolution, but the tone of the poem implies an awareness of the concept and its repercussions. The choice of central figure is significant. Empedocles was not only a philosopher living in a sceptical and troubled time, but perhaps the first philosopher to propose a theory of organic development in nature. One of his surviving fragments describes the spontaneous generation of unconnected parts which come together and unite under the pressure of a driving internal force derived from God: ""On Earth many foreheads without necks sprang forth, and arms wandered unattached, bereft of shoulders, and eyes strayed about alone, needing brows . . . But as the one divinity became more and more mingled with the other, these things fell together as each chanced, and many other things in addition to these were continuously produced . . . Many creatures were created with a face and breast on both sides" along with various other mismingled creatures. 9 Unrealistic thought this theory is, it still qualifies as the earliest known developmental theory, and so the choice of Empedocles as a protagonist suggests a concern for evolutionary speculation hidden beneath the surface of the poem.

Empedocles' long song in Act I, Scene ii--for the purposes of this discussion the most important section of the poem--suggests the atmosphere of religious doubt resulting from the revolutions in the natural sciences in the early nineteenth

century. The general symptoms are the same as have been observed in Tennyson after his reading of Lyell. Man is a toy blown about by the winds (l. 81), incapable of seeing reality whole (85), inhabiting a world far older than himself (181, 208), made for other purposes than his own (184-186). The moral consequence is that man "hast no right to bliss, / No title from the Gods to welfare and repose" (160-61); the spiritual consequence is WThat we must feign a bliss / Of doubtful future date . . . And relegate to worlds yet distant our repose" (402-6). The same type of spiritual problem is dealt with here as in sections 54-56 of In Memoriam. Callicles' song provides the framework in which Empedocles' attitudes are to be seen, by denying them: he emphasizes "The rest of immortals, / The action of of men" (463-4).

Empedocles' attitude toward knowledge also somewhat parallels Tennyson's. He asserts that "Mind is the spell which governs earth and heaven" (27), to which Pausanias answers, extrapolating from Empedocles' own words, that "Mind is a light which the Gods mock us with, / To lead false those who trust it" (32-3), a position Empedocles' song in part supports: "the thirst for bliss / Deep in man's heart is born" (168-69), "we bring / A bias with us here" (192-93). The intellectual result of this realization is scepticism about the existence of the Gods. "We . . . Make Gods to whom to impute / The ills we ought to bear" (278-80); "that in man's brief

term / He cannot all things wiew, / Affords no ground to affirm / That there are Gods who do!" (347-50). Even granting hypothetically that there are "Gods we cannot see" (286), Gods whose separate existence is somewhat invalidated by the monism Empedocles preaches--"All things . . . Of but one stuff are spun" (287-88)--their power is limited and failure-prone. Empedocles' moral injunction, to be "neither saint nor sophist-led, but be a man" (136), although consistent enough to teach to Pausanias, is not emotionally satisfying, even to himself, as he reveals in Act II, for privately he still feels despair. Arnold's analysis differs from Tennyson's in that he does not avow any faith in evolutionary process which could lift one out of the torments of the indifferent Lyellian world.

Philip James Bailey, who has been discussed earlier, was enjoying a revival when he wrote the three works discussed here; substantial portions of all three were later incorporated into <u>Festus</u>, as that work became more encyclopedic.

Bailey was an orthodox Christian poet within rather broad limits; the ultimate basis of his works is a theory of atonement similar to McLeod Campbell's. 10 In order to assure a decent universe, all the hopes of Tennyson's section 54 must be fulfilled, and every living thing must partake of eventual salvation. In <u>Festus</u>, even the devil is saved. Bailey's encyclopedic approach required him to include every conceivable idea into his works, subsuming them all under Christianity. His

three principal works of the early 1850's do just this.

"The Angel World" is basically a simple allegory of fall and redemption, taking place on another world, where the angels, not men, are the centre of creation. Obvious Christian symbolism, such as the cross into which the demonic starsis transformed, is mingled with classical myth, such as the Perseus myth, and with organic images of cosmic destruction:

Thick with chaotic matter and unformed-Like the volcanic blood which bounds unseen
In veins of lightning through earth's cavernous
heart-Mid ruined orbs, like broken ice-lumps, rolled,
Melting . . (p. 57).

Cosmic destruction becomes part of God's scheme, and the destruction of the angel world when it becomes corrupted is just one instance of a wider benevolent system. The redemptive process, seemingly a failure because the hero has had to abandon the corrupted planet, is achieved when the hero turns out to be an other-worldly manifestation of Christ, and secures everybody's salvation by prayer.

"The Mystic" does not deal explicitly with Christian ideas at all, but presents a world-system based on progressive reincarnation. The mystic goes through seven progressive stages of existence, each more fantastic than the preceding; by the end of the poem, he is resurrected, outstares all the stars, and appears to have become master of the universe-in other words, he achieves Godhead. Bailey probably intended this work as an example of the hidden truth which could be communi-

cated by myth; its literal details conflict on almost every score except the ethical with his own beliefs. Its primary significance for this study lies in its vast conception of time, beginning with the pre-Adamic kings, and its progressive sequence, in which God leads man through stages of spiritual development, and the powers of the mystic are shaped by each of the environments he is born into.

"A Spiritual Legend," a much slighter work, is connected with "The Angel World" in its basic conception. In this version of the creation story, God delegates the job of creation to his lower angels, who instigated the project in the first place, reserving his own intervention for the creation of man. However, the angels are seduced by the material world, and, setting themselves up as idols, fall away from God; the poem represents Bailey's attempt to salvage the ideas of classical Gnosticism—the devil as creator of this world—and incorporate them into his system. The interesting thing is the extent to which his thought remains static and non-evolutionary, even though at one point a great progression is referred to (p. 104). The hints at evolution scattered through Bailey's work are simply the result of his desire to make his poetic corpus comprehend all possible systems.

Despite the fact that they arrive at strikingly different conclusions, Tennyson and Arnold deal recognizably with the same world-picture that Lyell prompted; Scott's evolutionism is derived from classical and Eastern sources, rather than from the encounter with nineteenth-century science. Unlike

Scott and Bailey, Tennyson does not express his ideas in language obviously derived from contemporary idealist philosophy, but rather in terms which already carry several layers of association in customary use. Thus, in expressing a scientific concept such as the cumulative effects of geological change, he uses language which suggests not the process of analysis that the geologist must go through in order to reach his conclusions, but instead the direct experience of an onlooker. 11 To express religious doubt, he does not say specifically that his faith in the concept of immortality is weakened, but instead uses images derived from physical activity: "I falter where I firmly trod" (55). translates scientific facts into the vocabulary most familiar to his readers: dinosaurs become "Dragons of the prime" ((56), and the word "æonic" is constantly used to suggest incomprehensible stretches of time. Tennyson's key terms, such as will, type, and move, remain ambivalent, charged with varieties of possible meaning, allowing multiple patterns of thought to bemforwarded through a single image. It is this use of ordinary language which caused the poem's tremendous impact, which it could not have had had it handled the same ideas in the highly technical vocabulary of a Bailey. readers felt that their own knowledge and experience were being developed in directions previously unknown to them.

Many critics have felt similarities between the philosophi-

cal approach of In Memoriam and those of other works. Both Morse Peckham and Robert Langbaum have suggested a parallel with Kierkegaard. 12 There are obvious affinities, as with Kierkegaard's identification of God with the unknown, and his continual emphasis on subjective standards of belief: but such concepts are not exclusive to his writings, and his important emphasis on the paradox of an historical basis for Christianity moves in the opposite direction from Tennyson. 13 Kierkegaard's truth is determined by a single revelation in time, which becomes for later generations absurd because of its psychological demands, and therefore must necessarily be believed; Tennyson's truth must be intuitable by the spiritual consciousness, and must find a correlative in a universal, dynamic process, as opposed to a divine intervention in history. His rejection of the type of historical dialectic envisaged by Kierkegaard is obvious in a change made in the 1875 edition of In Memoriam. Following the publication of The Descent of Man, apparently feeling that the Eden myth could no longer be used in an historical context, he he altered the line "Since Adam left his garden yet" (24) to "Since our first sun arose and set."14

Eugene August has made an even less appropriate comparison with Teilhard de Chardin, whose synthesis of the sciences is a straightforward application of twentieth-century theology to biological data, the imposition of a scheme rather than the intuition of one. 15

A rather more illuminating comparison can be made with

figures whom Tennyson was in personal contact with, such as Carlyle and Maurice, whose analyses of the human condition have a concrete bearing on Tennyson's. Carlyle's description of what might be called a conversion experience in Sartor Resartus is too well known for a detailed examination to be necessary. It should be readily apparent that each of his three stages appears in In Memoriam: the "Everlasting No," in the defiant question about the significance of human life in the Lyellian world (56), the "Centre of Indifference" in the calmer though spiritually uncertain sections from 65 to the "celm" Christmes Eve in 78, and the "Everlesting Yea" in the final celebration of progressive development, in which the terrifying aspects of world convulsion are answered by Hallam's smile. It is well known how Sartor became the virtual bible of innovative thinkers of the '40's and '50's, from Maurice to Froude and Francis Newman; that Tennyson was also influenced is apparent from the <a>Idylls, if not from his personal statements. Carlyle's assertion of the fundamental importance of faith which springs from the divine in man, would have met with strong agreement from Tennyson.

Maurice, whom Tennyson defended at a time when his teaching was getting him into trouble (see "To the Reverend F. D. Maurice"), similarly dwelt on the importance of subjective certainty, but with different implications. Whereas Carlyle, for all his cultural evolution through the medium of "organic filaments," remained unalterably opposed to the thought of

biological development, Maurice was ambivalent, and some of his comments allow for an evolutionary process in nature. God's communication to man is not only to the individual consciousness but to the consciousness of the entire race, "its ground in an originating Will." 16 However, there is a double implication in his discussion of the proper forms of knowledge. Although he declared the individual's direct and presumably unmediated contact with the holy spirit -- wee "know that we know God . . . to know this is . . . eternal life" 17 -- he nevertheless opposed this "fact of God's Revelation" to scientific fact, and simultaneously to a vague, generalized "God consciousness." 18 This absolute distinction comes perilously close to what has been called a "doublerealm" theory, the notion that the different aspects of man's consciousness do not derive from a single source. 19 Maurice, however, by asserting the primacy of subjective certainty over empirical, remained committed to a "single-realm" theory, like most intellectuals in the nineteenth century; he felt the need for all types of thought to come from a single, "organic" unity somewhere in the mind, 20 His great opponent, Henry Mansel, is almost the first consistent advocate of the double-realm theory, maintaining that faith and scientific reason are mutually exclusive and independent. 21 Maurice's fruitless duel with him in numbers of tracts bears witness to his difficulty in comprehending the difference between the two arguments, for he could never admit that they were talking two different languages.

At this point, one remembers that a disciple of Mansel, Herbert Spencer, sent Tennyson a copy of his Principles of Psychology with the suggestion that it closely corresponded to some of Tennyson's ideas, namely, the development of man, or of man's mind, through "lower lives." 22 The doubt occurs, since Tennyson seems at times ambivalent on the question of the value of scientific knowledge, and since a follower of Mansel found similarities between them, of whether hemaccepted the double- or single-realm theory. The first answer, of course, is that Spencer is not a consistent follower of Mansel; while using his arguments to demonstrate the fundamental mysteries, or incomprehensions, underlying all knowledge and belief, he nonetheless makes it his enterprise to determine the single ground for all thinking. 23 This ground he finds in the principle of belief, which, as he points out, all knowledge can be reduced to. 24 This much of his argument is congruent with Tennyson's ideas; Spencer, however, makes his criterion of truth the inability to conceive the negation of any proposition. 25 He ends his argument by formulating a universal law of evolution as the "advance from the simple to the complex, through a process of successive differentiations."26

It is obvious that Tennyson adhered to the single-realm theory. Reason and faith may be distinguished from each other in method, but they must be worked into a single whole in order to constitute a satisfying truth; and the fact that the

truth is expected to satisfy, to be inneccond with one's expectations, shows that subjective need is, as in Maurice, taken to be a sufficient criterion of the truth-value of any idea. Tennyson attempted to find a point in which all his disparate conceptions could be united, and he conceived of this point not as a rationalization, a deliberate creation of his own, but rather as the deep inner truth, the awareness which had underlain his actions from the beginning. His attempt to find this central point in a theory of spiritual evolution constitutes a difficult intellectual breakthrough, not only for Tennyson, but for his period.

CHAPTER SIX

FROM IN MEMORIAM TO THE ORIGIN:

THE PRINCESS AND POEMS OF THE 1850'S

The advanced intellectual response to In Memoriam in the years immediately after its publication may be indicated by an anonymous poem published in 1851, entitled The Middle Its debt to Tennyson is readily apparent in its use of the In Memoriam stanza, and in the three stanzas of section 106 of that poem ("Ring out the care, the want, the sin . . . ") affixed as epigraph. It deals with the problems of faith which are familiar from many other sources; the preface explains that it had originally been designed as a sort of philosophical poem about "the stirring events of the times," but that the author had given up that project because of its difficulty and putative "unpoetical" quality. The poem as it stands consists instead of a series of basically religious meditations, in which one can see the events of the age reflected, usually in a rather abstract way. The preface makes it clear that the poem is to be read for its social commentary as well as for its psychological analysis of the author.

As is perhaps to be expected, metaphors drawn from organic nature are used to describe social or political phenomena. Referring to the first fifty years of the century, a metaphor which may draw either on Lyell or on the Lyellian sections of

In Memoriam is used: "We see the growth of many seeds / Which fifty suns have brought to fruit . . . but at the root / An insect tribe destruction breeds" (section 4).

Also dominant in the early sections of the poem is the fear of the decline or regression of the human race, a concept which was to gain power during the last half of the century. This decline is generally figured in moral terms: "the slow signs of swift decline, / The calm indifference of despair" (10) characterize both individuals and the condition of a sceptical age; the thought of each man "hoard ing the largest heap of pelf" (6) provokes the question "But can you think mankind so base?" (7). However, a more physical metaphor is also used, that of the sun having passed its zenith and "In growing heat" (4) beginning to set.

Balanced against these indications of decline, however, are images of progress. The predictable metaphor of planting seeds is used (27), and the more abstract prospect of "gathering Knowledge by the grain" (13); possibilities of individual growth are illustrated by birds learning to fly and orators learning to speak (15). The most emphatic expression of belief in progress comes in section 3, when it is suggested that the nineteenth century will provide the basis for future growth: "The heavenward stairway men shall climb, / And aiming higher blessings live." It is not indicated whether this figure applies to the race as a whole, or

merely to the greater worth of individuals in the future. The poem, in short, uses the abstract concepts of progress and decline without giving them the concrete evolutionary significance that Tennyson does, and employs organic metaphors without suggesting the possibilities of growth on more than an individual level.

The Middle Night thus shows that it was possible to take Tennyson's poem to heart without examining its deeper concepts, but it also shows the applicability of In Memoriam's patterns of thought to social and political problems. Already in sections 113 and 117 of that work, geological and political cataclysms are presented as aspects of the same process, the long-term improvement of humanity in a roughly biological sense. This tendency becomes more evident in the work that follows the virtual completion of In Memoriam in 1845, in which evolutionary thinking is increasingly connected with thinking about the nature of society and its proper management.

Although published in 1847, more than two years before <u>In</u>

<u>Memoriam</u>, <u>The Princess</u> appears to have been written later.³

Its subtitle, "A Medley," is apt because, as the first of Tennyson's "modern" long poems, it mixes genres in an unprecedented way, mingling satire, medieval romance, "verse-novel," lyric, and philosophical poem. Its subject, an imaginary attempt to found a women's university during the middle ages, provides a means of suggesting remedies for contemporary

is a complicated reflection about the future evolution of the human race. Since the sources for Tennyson's thought in this poem are already well known and documented, what is said in this chapter need only be a summing-up, relating the material in this poem to the development of Tennyson's evolutionary speculation as a whole.

Like many others in the second quarter of the nineteenth century, Tennyson was influenced by the social philosophies of Saint-Simon and his followers. Saint-Simon, deriving from the eighteenth-century philosophe tradition, adopted the basic formulations of Newtonian mechanism and tried to discover the operations of universal and unalterable laws in human behaviour, especially in historical development. His followers, such as Enfantin and Fourier, tended to look more favourably on the concept, given currency by Burke and Herder, of an "organic" society, and used their master's vocabulary of alternating "organic" and "critical" periods with a considerable bias in favour of the organic. The distinction, introduced into English culture by Carlyle, allowed a convenient way of explaining the possible action of evolution at the social-political level. Saint-Simon, together with his renegade follower Comte, also helped the evolutionary mode of explanation by personifying mankind as "the collective organism" or "the Great Being," 5 since if the species is seen as a real entity rather than as a collection of individuals, it is

easier to imagine historical events as a form of progress that in some way affects the whole species. It is probable that a belief in literal social evolution is not possible without some such personification of the species or society.

Tennyson's sympathy with the Saint-Simonian movement may be inferred from a youthful letter of his, in which he says that "the existence of the sect of the St. Simonists is at once a proof of the immense mass of evil that is extant in the nineteenth century, and a focus which gathers all its rays." In this uncommitted sympathy, he can be compared with Frederick Maurice, who expressed similar opinions; but whatever his precise feelings about the French socialist movements, Tennyson's debt to Carlyle is undeniable, and Carlyle drew many of his ideas from Saint-Simonian sources.

The Princess draws on these socialist doctrines, although largely for the questions posed rather than for the answers suggested. The main issue in the poem, the role of women in society, was of great concern to the Saint-Simonians, and could be considered as an extension of evolutionary theory as well. The curriculum of Princess Ida's university includes the sciences as well as more standard subjects. The main elements of a medieval curriculum, however, are conspicuously absent, and this anachronism, like most others in the poem, suggests the application of the story to contemporary problems. Certainly the content of women's studies was to some extent a concern of the socialists; the learning of

scientific laws--"Electric, chemic laws, and all the rest" (II, 1. 362)--formed the basis of any Saint-Simonian program. 10

Princess Ida consistently demonstrates an interest in biological and geological change. "There sinks the nebulous star we call the Sun, / If that hypothesis of theirs be sound" (IV, 11. 1-2), she says, carefully evading a definite opinion. Probably the intellectual centre of the poem is the discussion of creation that follows the discovery of a fossil skeleton. Already, the Princess has wished that human life might be prolonged enough that one might "watch / The sandy footprint harden into stone" (III, 11. 253-54) and see the future consequences of her actions: presumably, because of the time-scale, biological as well as social consequences are implied, insofar as there is a distinction. 11 The sight of the fossil sparks the reflection that, "As these rude bones to us, are we to her / That will be" (III, 11. 279-80). This hypothesis is untenable to the Prince, who rejects the idea of a God subject to development: "Dare we dream of that . . . Which wrought us, as the workman and his work, / That prectice betters2" (III, 280-82). Ida responds with a paradigm of creation, reminiscent of Raphael's excuses for telling the story of the war in heaven in chronological sequence: the workman, God, created the world as a totality, all at once; men who are parts of that totality and have only partial vision must perceive things sequentially that are simultaneous in eternity, thus making "One act a phantom of succession" (III, 1. 312). This paradigm shows clearly the pattern that has been observed taking shape in previous Tennyson poems, that evolution is seen as the result of the entry of God into the world, a view similar to Browning's paradigm for human life in <u>Sordello</u>, based on the fundamental assumption of "Soul on Matter being thrust." If it also reminds one of Gosse's ill-fated attempt to reconcile geology and Scripture, 13 this fact shows the ways in which a rather vague and flexible concept could be adapted to all intellectual positions, and may account for Tennyson's popularity at all the cultural levels of his time.

The theory of evolution is made evident early in the poem. The argument of the women is that man's current superiority over women is the result of conditioning: "Besides the brain was like the hand, and grew / With using; thence the man's, if more was more" (II, 11. 134-35). Women, however, also have distinct natural advantages: "But women ripened earlier, and her life / Was longer" (II, 11. 138-39). The events of the poem support this view, and the particular weakness of the Princess' system is that it fails to take into account the means of directing the evolutionary process, through sex and marriage. Thus the poem ends with the reconciliation of the Princess and Prince, who has declared himself her helper---"The woman's cause is man's" (VII, 1. 243). The quality of the race depends on its female members---"If she be small,

slight-natured, miserable, / How shall men grow?" (VII, 11. 249-50). From a twentieth-century point of view, there is a curious confusion in Tennyson's arguments; mental and emotional qualities are largely irrelevant from the point of view of reproduction, on which evolutionary change depends. Tennyson's moral approach to evolution causes him to mix the two independent conditions, since he views the evolution of man as necessarily involving spiritual development, and never really distinguishes between that and biological change. The result of the whole process in The Princess is described in language filled with sexual implications:

Then comes the statelier Eden back to men:
Then reign the world's great bridals, chaste and calm:
Then springs the crowning race of humankind.

(VII, 11. 277-79)

The reader is left with the typical problems of eugenics. Tennyson thought he had good reason to argue that some form of female emancipation was necessary for the proper evolution of man, but the temptation to personify the human race can be seen in these lines, with the resulting confusion. It is then said that this whole process should be "typed" "In our own lives" (VII, 11. 281-82) as a means of bringing it about; the implied connection between individual and species has already been observed in In Memoriam. In post-Darwinian biology, species change is a function of "random," undirected changes in the gene pool, rather than a special process with an obeservable direction; but when Tennyson was writing, not only

was evolutionary theory generally inseparable from ethical and religious concerns, but ideas on social reform were seriously offered in biological treatises. 14

One further aspect of The Princess is relevant to this discussion because it offers the most highly elaborated expression of one of Tennyson's evolutionary concepts. the socialist circles of the time, the idea of the higher form of man--who of course was now beginning to emerge in accordance with the unalterable laws of history--as androgyne was very much in the air. 15 Tennyson, at least part. of the time, seems to have conceived of society as developing in the direction of a Christ-like man ("the Christ that is to be"), and he regarded Christ as combining the qualities of both sexes. 16 It is no surprise, therefore, to find that in The Princess one of the directions evolution will take is a mingling of sexual characteristics: "liker they must grow; / The man be more of woman, she of man; / He gain in sweetness and in moral height . . . She mental breadth" (VII, 11. 263-67). The description may lack something in definition, but the whole argument leads to the conclusion that in true marriage -- in which the partners type the evolutionary process within themselves -- "Purpose in purpose, will in will, they grow, / The single pure and perfect animal, / The two-celled heart" (VII, 287-89). This concept of the mingling of sexes is never again stated so emphatically in Tennyson's writings, although its presence occasionally makes itself felt in later works.

The Saint-Simonians, of course, exercised a powerful influence on many other writers, but nowhere in the large number of socialist poems dating from the 1840's and '50's is there such a development of the importance of evolution for social development as in The Princess. In fact, the most significant biological passage in such poetry denies the possibility of voluntary control over growth, the concept Tennyson elaborated. In Clough's Amours de Voyage, Claude speculates that growth depends on unconsciousness of higher possibilities: would a grain be able to develop to adulthood "Could it compare, and reflect, and examine one thing with another?" (III. ii).

While Tennyson was exploring the social and political implications of evolution, Robert Browning was taking a somewhat different approach. He had already used politically radically ideas in Sordello, although they are not expressed in organic terms; there, however, he had been concerned, not with the universal law of progress, but with the "everlasting minute of creation," as Luria called it (Act V), that lies behind. Sordello, after expressing a theory of political progress into a brotherhood of man, achieves a consummating vision that, unlike Paracelsus', is basically non-progressive—or rather, since he is abstracted "Quite out of Time and this world," leaves no further stage to progress to. In the moment before his death, Sordello learns

that all temporal events, including those in Paracelsus' vision, are only "Time's concern."

Once having achieved this stage, the problem of evolution appeared no longer to interest Browning until after the outbreak of the Darwinist controversy. But one of his poems of the 1850's contains an important reflection on the subject, and was specifically referred to by Browning in his letter to Furnivall as "anticipating" all that was proven in Darwin's theory. 17 The poet Cleon expounds a theory of progression in nature, but ironically he cannot perceive the logical consequences of his own ideas. The development of life is sequential: "all earth's tenantry, from worm to bird, / Ere man, her last, appeared upon the stage." It is furthermore a logical and inevitable development, in which it is possible to deduce the next step in the series--"Thou wouldst have seen them perfect, and deduced / The perfectness of others yet unseen." Man represents the addition of consciousness-in-oneself to nature, thus transcending "life's mechanics" by the introduction of the spirit. At this point, Cleon's understanding of the process breaks down, and he concludes that the creation of man was irrational, because "In man there's failure, only since he left / The lower and inconscious [sic] forms of life." The absence of the possibility of continued growth puts an end to human aspirations; without the certainty of a life after death, human struggle is meaningless for Cleon, as it was for a large number of

people in the nineteenth century. The poem ends with Cleon's scornful dismissal of Christianity as a doctrine which "could be held by no same man." The irony indicates that Christian revelation is the next stage of the process, allowing for the possibility of continued human growth. Cleon can intuit the higher stage, but cannot accept it when it is revealed to him.

Thus Browning, like Tennyson, draws a sort of social conclusion from the notion of evolutionary process: Christianity is the consummation of human development, as man is the consummation of natural development. However, unlike Tennyson, Browning appears to have become progressively less concerned with the workings of the process, until, in "Cleon," it is virtually an alternate version of the story in Genesis. His later claim to have anticipated Darwin shows that he did not understand the essential difference between Darwinian and pre-Darwinian models of evolution. Nonetheless, his adoption of what he thought of as Darwinian terms in his works following 1871 shows the continuity between the early progressivist vision of Paracelsus and the more apparently conventional creationist viewnoint of the works of his maturity.

Although Tennyson's period of concentration on the direct presentation of evolutionary thought had largely come to an and with <u>In Memoriam</u>, it is not true to say that his later works downot deal with evolutionary themes. 18 The applica-

tion of evolution to social problems, seen in <u>The Princess</u>, showed the trend of his development, and the basic concepts to be found in that work underlie the social and political ideas of a number of his later works. This trend reached its high point in the 1850's, when Tennyson wrote his largest amount of directly political poetry—much of it sparked by the possibility of war with France—and when the theme of political progressivism entered his major works.

By the completion of In Memoriam, it has been shown. Tennyson had come to conceive of evolution as the entry of God into the world, as Browning had done during the 1830's. The continuance of this model can be seen in the short poem "Will" (1855). After In Memoriam, the word "will" implies not only individual will-power, but also a more general human will to develop; the individual and the species are by now interconnected in Tennyson's thought by the mysterious correspondence which is called "typing" in both In Memoriam and The Princess. The man whose will is strong can endure the world's "random shock"; the man whose will is weak "better s not with time, / Corrupts the strength of heavendescended Will." The important phrase is "heaven-descended," showing the divine element in man, and it is a phrase that becomes important in some of the later works.

The "Ode on the Death of the Duke of Wellington" (1852) makes use, in its concluding section, of images of geological

change to emphasize the eternal qualities of the soul. Both erosion--"Giant Ages heave the hill / And break the shore"--and the plurality of worlds--"world on world in myriad myriads . . .@each with different powers, / And other forms of life" (259-64)--signify change and uncertainty, but the immortality of the soul is affirmed in the face of these.

The narrative poem "Sea Dreams," not published until 1860, although written three years earlier, reaches its climax with a dream-vision in which the mingling of social and geological motifs occurs with a literalness that could not be found outside a dream. The main image is of waves breaking against a set of cliffs, eroding them, but when the dreamer sees clearly, she sees that the cliffs are actually a set of cathedrals of every period and style. These symbols of past religions crumble, while men and women, their voices always in tune with the musical note which accompanies the whole scene, try to re-erect them. The obvious implication is that the collapse of systems of faith is inevitable and part of the necessary order of nature, even at the cost of the people whose faith has been destroyed, and who are swept away by the return of the destructive wave. The question is whether this inevitable collapse includes Christianity. The dream ends with the image of the Virgin Mother tottering, with her child clinging to her. Carlyle had long since declared that Christianity was a worn-out system, badly in need of patching if not of total replacement. Tennyson's poem, however, leaves it uncertain whether it is institutional Christianity, Roman Catholicism, or Christian belief in general that was tottering. An interesting aspect of the poem, commented on after the narration of the dream has ended, is the harmony of the music with the "wild cries" of the people: "'Why, that would make our passions far too like / The discords dear to the musician'" (249-50), says her husband. One of the characteristics of the late poetry is the increasing emphasis on the violence entailed by the evolutionary process, but here, as in In Memoriam, the violence is harmonized with the belief in progress.

More emphatic doubts about the nature of human develonment are put in the mouth of the speaker of Maud. He is obsessed with the evils of the Lyellian world, which he sees exemplified in the social practices of the day. "Nature is one with rapine, a harm no preacher can heal" (I. iv); the ensuing images of predation form the natural counterpart to the fascination with war which forms one of the main themes of the poem, as well as to the speaker's fantasies of the destruction of the human race: "At war with myself and a wretched race" (I. x), "Strike dead the whole weak race of venomous worms, . . . We are not worthy to live" (II. i). Ever since Dr. Mann's Vindication, published a few months after the poem itself, 19 it has been a critical com-

monplace to regard the narrator as unbalanced from the beginning, and to see his obsession with the inadequacies of the world as the main source of his madness; but Mann himself pointed out the salient fact that the hero's concerns reflect the realities of the world, so that more than an individual maladjustment is involved. The personification of society as a whole, and the concern with the violence of change, unite the political and biological spheres of development:

For the drift of the Maker is dark, an Isis hid by the veil.

Who knows the ways of the world, how God will bring them about?

Our planet is one, the suns are many, the world is wide.

Shall I weep if a Poland fall? shall I shriek if a Hungary fail?

Or an infant civilisation be ruled with rod or with knout? (I. iv)

Two stanzas earlier, the directly evolutionary comparison is made between man and the "monstrous eft," the dinosaur, who once ruled the world. The ideas of <u>In Memoriam</u> are inverted by describing the dinosaur as once "Nature's crowning race" and by suggesting, not the evolution of a higher form of man, but his eventual replacement by a higher species: "He now is first, but is he the last? is he not too base?"

The narrator resolves his conflicts by leaving to take part in the Crimean war. In this he may seem to be a case of failed development, becoming a part of the Lyellian world on its own terms. Tennyson's own description, however,

states emphatically that the conclusion is a sign of spiritual progress: "when he has at length passed through the fiery furnace, and had recovered his reason, giving himself up to work for the good of mankind through the unselfishness born of his great passion." The war may perhaps, then, represent a spiritual quest on the part of the speaker, the fulfilment of his early wish, "ah for a man to arise in me, / That the man Isam may cease to be!" (I. x). However, the strong element of national concern in this war leads to the conclusion that the war itself is a means of progress for mankind, perhaps one of the "thousand shocks" that society must experience.

This poem is particularly interesting for its anticipations of the later development of Tennyson's poetry, in his increasing emphasis on the violence of the evolutionary process, and in the gradual fading of the hope for the higher race into the indefinite future, despite his essential meliorism. This gradual attenuation of the hopeful vision followed the advent of Darwinism, but by the end of the 1850's Tennyson's evolutionary thought was complete in its essential forms; the last stage of this development was the assimilation of the political and social worlds into the cosmic process.

CHAPTER SEVEN CONCLUSION

The Origin of Species was published in 1859, and immediately became the centre of a controversy that was neither clear-cut nor well understood. Churchmen of the Wilberforce type attacked it because it denied the Genesis account of creation; evolutionary scientists like Owen and Agassiz objected to it because it denied progressivism, which was the central doctrine in their metaphysic. Probably the largest portion of the public saw the work as simply a confirmation or restatement of the evolutionary creeds which were already in existence. It took an unexpectedly long time for the Origin to make an impact on poetry, and even when it can definitely be shown as an influence on a poet's thinking, it is frequently difficult to distinguish the results from those of pre-Darwinian metaphysical theories.

The first poem after 1859 to deal concretely with evolutionary problems was a virtually forgotten Biblical epic by Edwin Atherstone, entitled <u>Israel in Egypt</u> (1861). Because of Atherstone's religious bias, the heretical speculations are given to Satan, thus inadvertently making him a more sympathetic character than he would otherwise have been; the suggestions, however, are nothing new, and could have been written at any time since Byron. Satan proposes a first cause

antecedent to God, a process of development which will make the devils into deities eventually, and the identity of organic and inorganic matter. 1 It might have seemed to a contemporary reader that Atherstone was cashing in on the recent Darwinian controversy, but if the section was written with Darwin in mind, it cannot be said that he was a particularly perceptive reader.

The first poems which seem definitely to have been influenced by a study of Darwin are to be found in Browning's Dramatis Personae, published in 1864. "Caliban upon Setebos," although obviously deriving its central conception from Shakespeare, appears to have been written with the contemporary debate on the antiquity of man in mind, and gives an impression of how a primitive human creature might think. Caliban has formed his conception of deity in his own image: Setebos is cruel and spiteful, partly out of loneliness and envy of the contentment of the stars, partly out of pure He is, furthermore, a limited god, since he only sadism. made the earth and solar system, not the heavens. Caliban's thinking shows the early traces of a Platonic concept--"Makes this a bubble-world to ape you real" -- and of a sort of progress in nature, since Setebos "hath made things worthier than Himself." There is also the beginning of a less anthropomorphic, or in this case Calibomorphic, deity, in the idea of the Quiet which dwells beyond the stars, an apparently omnipotent being which may come into a Manichean conflict with

the lesser cruel deity. Caliban worships by sympathetic magic and self-torture as a form of penitence; his developing trains of thought are hindered by his superstitions. The poem partly satirizes eighteenth-century concepts of natural theology, but also suggests the innate quality of the basic religious ideas, even though misunderstood by the primitive creature.

Lyell, however, is as likely a source for Browning's poem as Darwin, who refrained from direct speculation about man's ancestry for over a decade. However, it was understood from the onset of the controversy that Darwin's views implied the evolution of man, and the famous debate between Huxley and Wilberforce took place on that issue. Still, however much Browning may have been provoked by the Darwinian controversy, his ideas remained basically unchanged. "Mr. Sludge, 'the Medium,'" in the same volume, states the doctrine of a spiritual world which is independent of the material but nonetheless acts upon it, a conception which Browning saw as conformable to Darwinism. He plainly believed that Darwin was simply offering scientific confirmation of the evolutionary metaphysic which he had presented in his own poetry.

In his later works, particularly <u>Prince Hohenstiel-Schwangau</u> and <u>Fifine at the Fair</u>, which appeared during the controversy over <u>The Descent of Man</u>, Browning elaborated hypotheses of evolution in more detail, without altering significantly his already established conceptions. In one of

his last works, the "Parleying with Francis Furini," Furini is made to propose an alternate, but complementary, way of approaching the problem of man's development, beginning with the single personal fact of self-consciousness, from which he deduces God. He foresees, or at least suggests, a future stage of development in which man will have advanced to the condition of "Prime Mind," but this stage will not be reached without a radical change in the nature of the developmental process--"some fresh kind of sun and moon." Man's cause is de-anthropomorphized into an "initiator-spasm," but the temporal process is still conceived of as a manifestation of the original "eternal moment" of creation.

Poetry inspired by Darwin, rather than by pre-Darwinian theories, does not really appear until the 1870's, after The Descent of Man had spelled out the implications of natural selection. Swinburne was to use the concept of man's progressive development in "Hertha" to suggest the necessity of political evolution; "Hertha" is one of the central poems in his Songs before Sunrise, and thus becomes part of a gigantic hymn to republicanism. Meredith was to put Darwinism to equally metaphysical purposes in his poetry, suggesting the essential goodness of nature underlying its ambivalent and sometimes terrifying surface; for the person who sees the true significance of natural processes, the encounter with nature is healthy and self-affirming, while

for those who approach it with the fears engendered by traditional beliefs and their breakdown, it is disorienting: "Enter these enchanted woods, ye who dare." Mathilde Blind was to provide a meliorist view of evolution for the 1890's, in which love was the guiding power behind the process, and the current inhumanities of nature—slaughter, war, and personal cruelty—were temporary stages, to be transcended as the true power of love became manifest over unstated periods of time. 5

All these, although influenced by Darwin, were little different in substance from the progressivist views available before 1859. The later nineteenth century, however, also saw some more genuinely Darwinian views appearing in poetry, in the pessimism of Thomas Hardy, whose works stress the supreme importance of chance in human lives, and in the attempt of John Davidson to establish a materialist religion in which power was the highest value. The poetry of these men could not have been written before Darwin's emphasis on the action of apparently random causes on the process of survival and speciation. Already, in Davidson's work, can be seen the influence of "Social Darwinism," the movement which saw Darwin as providing a confirmation of the capitalist system, exploitation being equated with the survival of the fittest.

By the end of the century, new forces were appearing in evolutionary theory, and simple Darwinism gradually ceased

to exercise a single influence, becoming mingled with the anthropological theories of Frazer and the related schools of folklorists, themselves influenced by Darwin, and with the genetics of Bates. The last works one can point to as being influenced by "pure" Darwinism are by men who were growing up when the Origin was published. Charles Doughty and Robert Bridges, late in their careers, both wrote epic poems using an essentially meliorist metaphysical evolution like that of Swinburne or Meredith, although with different results. Doughty's wartime epic, The Titans, shows primitive man trying to cope with natural forces beyond his control, but being sided by a sort of divine intervention. until they symbolically harness the defeated Titans for their ends. Bridges' Testament of Beauty affirms the progressivism of the evolutionary process in the face of the events of the world war and modern cynicism. 7 By the time these works were written, however, Darwinism, as known in the nineteenth century, had merged in the minds of the younger generation with relativity theory and the philosophical movements inspired by Nietzsche, so that Darwin himself was fast becoming a name rather than a concrete influence.

Tennyson had arrived at his basic evolutionary position by the publication of <u>In Memoriam</u>. After the overtly political poetry of the 1850's, evolutionary thinking remained implicit in his work, but is rarely elaborated in detail; having established his premises, he was able to use them poetically with-

out needing to repeat the entire process of thought which had led to them. Thus one finds in his later poetry continued references to the æons required for development, to the frightening implications of the sciences--"Astronomy and Geology, terrible Muses!" ("Parnassus")--and to the spiritual process underlying the physical one, but little that is really a new advance.

Whether Tennyson perceived the essential differences between Darwin's theory and the progressivist evolution he had come to believe in is difficult to determine. When Darwin visited him, he asked whether "'Your theory of Evolution does not make against Christianity*: and Darwin answered, 'No. certainly not."8 The emphasis on "your theory" may imply that Tennyson appreciated its radical novelty, but it may simply have been a way of asking for confirmation of what he suspected was a view similar to his own. A reading of the later poems brings out strongly an emphasis on the difficulties of the process, but, as has been shown, this development could be seen as beginning with Maud. Poems such as "Despair," "Lucretius," and "The Dawn" all portray, in their different ways, the problems of faith in confronting the apparent meaninglessness of the world; in the first two, the problem is an individual one, arising from a lack of recognition of the spiritual basis of the world, but in "The Dawn" the problem appears to be Tennyson's. The continuing evidence of man's inhumanity, perhaps coupled with the emphasis on chance in

Darwin's theory, had the effect of pushing the date of the achievement of man's higher stage of being farther into the future:

The Ghost of the Brute that is walking and haunting us yet, and be free?

In a hundred, a thousand winters? Ah, what will our children be,

The men of a hundred thousand, a million summers away?

("The Dawn")

The poem's implication is that civilization is going to get worse before it gets better. Still, despite this sense of doubt that increases in his later poetry, Tennyson remained a meliorist. In a cancelled passage of "To E. Fitzgerald," for a list of the depressing developments immediately in store for the world, "years with lawless voices torn," there is still

Perchance--if this small world endures--Our heirs may find the stormy Past Has left their Present purer.

A more individual, indeed strikingly personal, variation on the same theme is found in "By an Evolutionist," which he wrote while severely ill: pain and age free the soul from its limitations and prepare it for "a height that is higher," in a process that is compared with evolutionary development:

The Lord let the house of a brute to the soul of a man,
And the man said 'Am I your debtor?'
And the Lord--'Not yet: but make it as clean as you can,
And then I will let you a better.'

At the same time as this emphasis on the anguish of transition, there is an experimentation with newer faiths and theories based on evolutionary progress. Spiritualism, in which Tennyson entertained a brief interest, provided a means of suggesting, as the concept of the plurality of worlds had done in the early poems, a development into higher forms after death, as in "The Ring" and "De Profun-"From death to death through life and life." 10 The writings of James Hinton interested him extremely for their closeness to his own thought; Hinton's Life in Nature, 17 for instance, uses the same concept of the organic and material world as simply one manifestation of the spiritual as is to be found in "The Higher Pantheism." The search for a "Faith beyond the forms of Faith" ("The Ancient Sage", 1. 69) led Tennyson to an increasing tolerance and respect for all religions, which he regarded as more or less imperfect forms of Christianity, and led him to propose, as in "Akbar's Dream," a virtual union of all faiths.

"Locksley Hall Sixty Years After" provides an interesting comparison between the younger man's ideas and those of the old, rather disillusioned old man. "Cosmos, Chaos!" is his repeated theme; there is an uneasy balance between the forces of evolution and reversion, the temptation to return to the beast. The possibility is advanced that "Many an Æon too may pass when earth is manless and forlorn," but is defeated by the confidence that "That which made us, meant us to be

mightier by and by." The political ideals, liberalism, gradual as opposed to revolutionary change, the triumph of the Christian faith, still remain little changed despite the worsening times. The major difference is that the faith in immediate progress, or in man-controlled progress, is gone, and the future of mankind is to a large extent left in the hands of God.

'Forward' rang the voices then, and of the many mine was one.

Let us hush this cry of 'Forward' till ten thousand years have gone.

An interesting aspect of the poem is the concern for the suffering of animals, and the implied equality of men and the beasts they persecute, whereas earlier the great difference between them was insisted on. St. Francis is held up for admiration for having called "the very flowers / Sisters, brothers." 12

The extent to which evolution permeated Tennyson's thought can be found by examining the <u>Idylls of the King</u>, a work not explicitly concerned with evolutionary development. Tennyson's symbols draw on a wide range of sources and offer wider possibilities of interpretation, but the two basic images in the poem, those of Excalibur and of Camelot, are intimately connected with the sort of political thinking that has been demonstrated in the references to evolution in the poems of the 1850's. In "The Holy Grail," Camelot is described as having "four great zones of sculpture" in its main hall--

And in the lowest beasts are slaying men, And in the second men are slaying beasts, And on the third are warriors, perfect men, And on the fourth are men with growing wings, And over all one statue in the mould Of Arthur,

(11. 234-39)

a description glossed by Hallam Tennyson as representing human progress: "the savage state of society: the state where man lords it over the beast; the full development of man; the progress toward spiritual ideals." All four of these stages are observable in the poem. "The Coming of Arthur" opens with a land in which "there grew great tracts of wilderness, / Wherein the beast was ever more and more" (11. 10-11); Arthur's first actions are to defeat his rival kings and to open up the wilderness, subduing the beast threat. In constructing his society. Arthur moves on to the third stage, binding his men with vows of purity and loyalty in order to make them perfect warriors. Galahad represents the fourth stage, but he quickly leaves the world by achieving his quest for the Grail. Camelot's eternal quality, as an incarnation of the higher stages of man's progress, is made evident by Merlin in "Gareth and Lynette" when he describes the city as "built to music, therefore never built at all, / And therefore built for ever." Galahad can be seen as the prophetic type of the higher man, and Camelot as the symbol of progress.

Arthur's kingdom, however, is destroyed. Arthur has

dedicated himself to the task of service, 13 and confusion erupts when his knights go off on the quest of the Grail; they have apparently fixed their faith on a symbol of a level of spiritual being which it is impossible for them to attain. Arthur also has a vision of the true spirit, but, as he says at the end of the Grail Idyll, despite a mystic trance state resembling Tennyson's own, he keeps to his allotted task. However, the story is not this simple. His court collapses because of the sinful love of Lancelot and Guinevere, or, since this love is never directly presented in the poem, because of the rumour of sin; the court is corrupted because their faith is wanting. But again, it has been made clear from the beginning that Arthur's power was granted for a short time only. The sword Excelibur is symbolic of Arthur's power:

. . . on one side, Graven in the oldest tongue of all this world, "Take me," but turn the blade and ye shall see, And written in the speech ye speak yourself, "Cast me away!"

("The Coming of Arthur, 11. 300-304)

The impulse to progress, which Excalibur represents, is basic to the human condition, but it appears to be limited by the circumstances in which it operates; each effort to create a society seems doomed to fail, and it is simply the individual mode of failure that varies. What does this do to the evolutionary process? The frequent comparisons of Arthur with Christ imply that he has in some way embodied the divine

purpose during his term on earth. It should be remembered that Tennyson himself said that the work "is not the history of one man or of one generation but of a whole cycle of generations." Arthur's final lines, retained from "Morte d'Arthur" over thirty years before, carry a suggestion of Carlyle's belief in the inevitable obsolescence of human institutions, and of the need for periodic renewal: "The old order changeth, yielding place to new, / And God fulfils himself in many ways, / Lest one good custom should corrupt the world." Even an adaptation which is beneficial in itself may become harmful to the species if it is not supers seded by more advanced or perfected ones.

The collapse of Arthur's kingdom, then, is itself a stage in world progress; the poem reminds one of the systems of Carlyle and Comte, in which the alternation of "organic" and "inorganic" periods of history becomes progressive, in that each organic period is somewhat more so than the previous ones. The framework of the seasonal cycle reinforces this impression, indicating why the prospect of Camelot "reeling back into the beast" is not entirely pessimistic. However, such a brief examination can only indicate a small part of the poem's total design; the evolutionary theme is only one aspect of an extremely complex work.

The fleeting quality of the ideal remains a dominant impression in the works of Tennyson's old age. Arthur is "Ideal manhood closed in real man," according to a line added to the epilogue in the final edition; hence he cannot remain for long a potent force on earth, but must become an ideal for others

to follow. Poems such as "Merlin and the Gleam" and "Locksley Hall Sixty Years After" express the hope and the possibility of deception in the pursuit of the ideal; still it is the course that man must take. The precise nature of the spiritual reality underlying the world of appearances was always ambiguous and undefined in Tennyson; in the later years, it becomes quite simply an ideal, without elaboration. The only certain fact is its existence, and man's partaking of it in his soul. Till the end of his life, Tennyson asserted the importance of belief in immortality; without it, life would not be worth living. And bound up with the spiritual reality behind the material world, and the immortality of the soul, is the concept of man's gradual evolution into a higher form, a process in which the individual must participate, by "typing" the higher forms in his own Tennyson never made it clear whether this moral activity would produce the eventual higher form, or whether the higher form would be naturally more perfect, without man's conscious involvement in the process -- in other words, which was cause and which was effect. Probably he was never sure himself, but felt at least that the attempt to anticipate the higher form would be to the good of the world. His evolutionary metaphysic was pre-Darwinian, as defined in the opening chapter, because it was based on teleological and ethical principles rather than on scientific hypotheses, and because of its progressivism. If the concept appears vague, particularly in the later works, it should be remembered that he was trying, so to speak, to justify nature's ways to man, and that this activity entailed extreme difficulties.

Rather than in any sense "anticipating" Darwin, he grew up in a generation in which the static, immutable concept of the universe was breaking down, and he provided a progressivist solution to the religious and ethical problems generated by the new science of his period.

FOOTNOTES

CHAPTER ONE: INTRODUCTION

- William R. Rutland, "Tennyson and the Theory of Evolution," Essays and Studies, 26 (1940), 7.
- ²Lionel Stevenson, <u>Darwin among the Poets</u> (1932; rpt. New York: Russell and Russell, 1963), p. 55.
- ³G. J. Romanes, quoted in Hallam Tennyson, <u>Mafredon</u> Lord Tennyson: A Memoir (London: Macmillan, 1899), p. 186.
- 4Valerie Pitt, <u>Tennyson Laureste</u> (London: Barrie and Rockliff, 1962), p. 103.
- ⁵George R. Potter, "Tennyson and the Biological Theory of Mutability in Species," <u>PQ</u>, 16 (1937), 321-343.
- William Harrold, "Robert Browning and Evolution," Wisconsin Studies in Literature, 4 (1967), 56-65; Ramsay Colles, quoted in George R. Potter, "Did Thomas Lovell Beddoes Believe in the Evolution of Species?," Modern Philology, 21 (1923), 89-90; H. W. Piper, The Active Universe (London: Athlone, 1962), p. 193.
- 7Charles Lyell, Geological Evidences of the Antiquity of Man (London: John Murray, 1861), p. 405.
- Robert Chambers, Explanations (London: John Churchill, 1855), pp. 71-2.
- Ocharles Darwin, The Origin of Species, ed. Morse Peckham (Philadelphia: University of Pennsylvania Press, 1959), p. 165. The quotation is from the third edition (1860).
- 10 Verne Grant, Plant Speciation (New York: Columbia University Press, 1971), p. 38.
- 11Morse Peckham, "Darwinism and Darwinisticism," in The Triumph of Romanticism (Columbia, S. C.: University of South Carolina Press, 1970), pp. 187-189.

- 12Samuel Taylor Coleridge, Hints toward the Formation of a More Comprehensive Theory of Life, ed. Seth B. Watson (London: John Churchill, 1848), p. 42.
- 13Morse Peckham, in "Toward a Theory of Romanticism," in The Triumph of Romanticism, pp. 8-16, discusses the emergence of dynamic organicism and its affiliations with the evolutionary metaphysic.
- 14For the development of theories of organicism in the arts, see M. H. Abrams, The Mirror and the Lamp (New York: Norton, 1958), pp. 218-222.
- 15Philip Henry Gosse, Omphalos, or an Attempt to Untie the Geological Knot (London: John van Voorst, 1858).
- 16 Erasmus Darwin's theories were given poetical expression in The Botanical Garden (1789-91) and The Temple of Nature (1803). For a study of Lamarck's influence in France, see Franck Bourdier, "Geoffroy Saint-Hilaire versus Cuvier," in Cecil J. Schneer, ed., Toward a History of Geology (Cambridge, Mass.: M.I.T. Press, 1969), pp. 36-61.
- 17Georges L. Cuvier, Essay on the Theory of the Earth, tr. Robert Kerr (Edinburgh: Blackwood, 1815), op. 132-146.
- 18Charles Lyell, <u>Principles of Geology</u> (London: John Murray, 1830-33).
- 19 William Charles Wells developed a theory of the competition and progression of races in "An Account of a White Female, Part of whose Skin Resembles a Negro," first presented in 1813, and included in his Two Essays: One Upon Single Vision with Two Eyes; the Other on Dew (London: A. Constable, 1818). Patrick Matthew developed a theory of natural selection in On Naval Timber and Arboriculture (Edinburgh: Adam Black, 1831).
- vens (Edinburgh: William Tait, 1839), pp. 153, 203.
 - 21 Memoir, p. 250.
- 22Quoted in Hugh Walker, <u>The Literature of the Victorian</u> <u>Era</u> (Cambridge: Cambridge University Press, 1910), p. 302.
- ²³Piper, pp. 182-186, provides a summary of the influence of Wordsworth's Excursion in this respect on Keats and Shelley.
- ²⁴Some examples of Coleridge's views on the antiquity of man: "the absurd notion . . . of Man's having progressed from

an Ouran Outang state--so contrary to all History, to all Religion, nay, to all Philosophy," <u>Collected Letters</u>, ed. E. L. Griggs (Oxford: Clarendon Press, 1959), TIV, pp. 574-575; "I attach neither belief nor respect to the Theory, which supposes the human Race to have been gradually perfecting itself from the darkest Savagery, or, still more boldly tracing us back to the bestial as to our Larve, contemplates the Man as the last metamorphosis, the gay <u>Imago</u>, of some lucky species of Ape or Baboon," quoted in Alice Snyder, "Coleridge on Giordano Bruno," <u>MLN</u>, 42, no. 7, 431.

²⁵Coleridge's later marginal note on this passage, reproduced in <u>Poetical Works</u>, ed. E. H. Coleridge (1912; rpt. London: Oxford University Press, 1967), p. 140, implies that he had turned away from his original ideas, but was reluctant to admit it: "hang me, if I know or ever did know the meaning of them, tho' my own composition."

Owen Barfield, <u>What Coleridge Thought</u> (Middletown, Conn.: Wesleyan University Press, 1971), pp. 54-57. Norman Fruman, in <u>Coleridge the Damaged Archangel</u> (New York: George Braziller, 1971) is led by an apparent unawareness of the multiple meanings of the word "evolution" to label Coleridge as an anti-evolutionist.

²⁷Snyder, p. 431.

28Shelley's debts to Erasmus Darwin have been outlined, and the interpretations thereof somewhat exaggerated, in C. H. Grabo, A Newton among Poets (Chapel Hill: University of South Carolina Press, 1930). For Keats's relation to Darwin, see Bernard Blackstone, The Consecrated Urn (London: Longmans, 1959), pp. 8-25.

 29 Piper, p. 193; also his "Keats and W. C. Wells," RES, 25 (1949), 158-9.

30Brent Elliott, "The Development of Religious Ideas in Two of Byron's Plays," B. A. Honours Graduating Essay, University of British Columbia, 1973.

CHAPTER TWO: TENNYSON'S

EARLY POEMS AND THEIR BACKGROUND

Details about the publication of the <u>Poems by Two</u>
Brothers can be found in W. D. Paden, <u>Tennyson in Egypt</u>
(Lawrence: University of Kansas, 1942), pp. 1, 19-20;
and Hallam Tennyson, <u>Alfred Lord Tennyson</u>, a <u>Memoir</u>
(London: Macmillan, 1899), p. 18.

2<u>Memoir</u>, p. 16, and Lionel Stevenson, <u>Darwin among</u> the <u>Poets</u> (New York, Russell and Russell, 1963), p. 60.

³Paden, pp. 24-26.

⁴G. L. L. de Buffon, <u>Natural History</u>, tr. William Smellie (Edinburgh: W. Creech, 1780), VII, pp. 392 ff.

Sir John Herschel, Astronomy, in The Cabinet Cyclopedia, 76 (1833), p. 208: sunspots "are the dark... solid body of the sun itself, laid bare to our view by those immense fluctuations in the luminous regions of its atmosphere."

For Byron's use of the theme, see the second act of Cain; for Dr. Chalmers, see Milton Millhauser, "A Plurality of After-worlds," <u>Hartford Studies in Literature</u>, 1 (1969), pp. 36 ff.

7Millhauser, pp. 39-42.

There is still a hint of the argument from design in this poem, in the description of "some" who can "draw strange comfort from the earth" (11. 29-32). However, it is not stated whether the "earth" in question is their own world, or the earth that can be seen in the skies.

Phrenology was the first serious attempt to localize the functions of the brain, instead of assuming that organ to be one undifferentiated mass; the discipline's mistake was in assuming that the shape and location of the individual organs must necessarily be reflected in the formation of the cranium. See the account in Robert M. Young, Mind, Brain and Adaptation in the Nineteenth Century (Oxford: Clarendon Press, 1970), pp. 9-53, especially 12-14. It is also noteworthy that Spurzheim and Gall (who is not mentioned in the poem, but could have been familiar to Tennyson from Southwood Smith's Westminster Review article to be discussed below) also did pioneer work in tracing the analogy of radiate and vermicular ganglia to the human brain.

- Hallam Tennyson, Materials for a Life of A. T. (privately printed, n. d.), I, pp. 35-6.
- $^{11}\text{George R.}$ Potter, "Tennyson and the Biological Theory of Mutability in Species," <u>PQ</u>, 16 (1937), 323.
- 12William Whewell, The Philosophy of the Inductive Sciences (1847; orpt. New York: Johnson Reprint, 1967), I, p. 46.
- 13Whewell, pp. 54-78 passim, especially 66-73; pp. 82-88 (pure sciences); pp. 164-76 (mechanical sciences).
- 14Graham Hough, "The Natural Theology of <u>In Memoriam</u>," RES, 22 (1947), 254-55.
- 15Craig W. Miller, "Coleridge's Concept of Nature,"

 Journal of the History of Ideas, 25 (1964), 85-86; Owen

 Barfield, What Coleridge Thought (Middletown, Conn.: Wesleyan University Press, 1971), pp. 22-25, for the concept of natura naturans.
- 16See Miller, pp. 85-86, for Coleridge's use of saltations in his theory of life. The suggested similarity between Coleridge's thought and that of modern genetics is more likely a development of Aristotle's ladder of natural forms, or perhaps even derived from Cuvier's discovery of breaks in the geological record; unexplained variations could, in the 1820's, have been accounted for by the theory of the inheritance of acquired characteristics, although there is no indication that Coleridge accepted this.
 - 17 Memoir, p. 37.
- 18 The Writings of Arthur Hallam (New York: MLA of America, 1943), p. 201, and see also his "Prayer."
 - 19_{Hallam, p. 205.}
 - 20_{Hallam}, p. 204.
- Memoir, p. 37: "development of the human body";

 Materials, I, p. 55: "the evolution of man." Hallam's somewhat naive reply may be excused on the example of Smith's
 article in the Westminster Review, 9 (1828), which carefully
 distinguishes brain and ganglia even though rather inconsistently pointing out the analogy.
- 22John Killham, <u>Tennyson and the Princess</u> (London: Athlone Press, 1958), pp. 237-240.

- 23Westminster Review, 9((1828), 460.
- ²⁴Killham, pp. 236-37.
- ²⁵Westminster Review, p. 187.
- 26 Memoir, p. 36: "the brethren . . . I trust, are waxing daily in religion and radicalism" (Sterling).
 - ²⁷Charles Wordsworth, quoted in Memoir, pp. 38-39.
- 28 Christopher Ricks, in his edition of Tennyson's poems, discusses the textual history of "Armageddon" in the introductory note to that poem; a portion found its way into "Pierced through with knotted thorns . . ."
- 29 Memoir, pp. 268, 815-16. The remark quoted on p. 816, "to assure myself of the existence of my own body, I am sometimes obliged to grasp an object," reminds one of the devil's Berkeleian speculations in "The Devil and the Lady," Act II, Scene i.

CHAPTER THREE% TENNYSON'S POEMS OF THE 1830'S AND THEIR ANALOGUES

1 The Writings of Arthur Hallam (New York: MLA of America, 1943), pp. 191-192.

²Hallam, pp. 192, 186.

3F. D. Maurice, quoted in W. D. Paden, <u>Tennyson in Egypt</u> (Lawrence: University of Kansas, 1942), pp. 149-50.

4See Carlyle's description, in the "Old Clothes" chapter of Sartor Resartus, of man as a temple, "the visible Manifestation and Impersonation of the Divinity," and, in the chapter on "Organic Filaments," the description of man's history as "a perpetual Evangel," a symbol of the godlike.

⁵Morse Peckham, <u>Victorian Revolutionaries</u> (New York: George Braziller, 1970), pp. 17-18.

6Hellam Tennyson, Alfred Lord Tennyson, a Memoir (London: Macmillan, 1899), p. 100.

⁷This passage should be remembered in any discussion of the influence of Carlyle on Tennyson, because, despite the Carlylean overtones of eternal truths becoming half-truths or even lies as they "clothe themselves" in creeds, the poem antedates the first installment of Sartor by at least a year.

Sir John Herschel, Astronomy, in The Cabinet Cyclopedia, 76 (1833), 407: "is it nebulous matter progressively concentrating itself by the effects of its own gravity into masses, or so laying the foundation of new sidereal systems?" The passage in "The Palace of Art" obviously requires Herschel's hypothesis rather than Laplace's because the latter presents a single creation at one specified time, as opposed to a continual and progressive development.

John Killham, <u>Tennyson and the Princess</u> (London: Athlone Press, 1958), pp. 234-40.

10 Westminster Review, 9 (1828), 451-463.

11 Another example of Tennyson's revisions in the direction of greater scientific accuracy can be seen in the fact that "the snowy poles on moonless Mars" was changed, in 1877, after the discovery of Phobos and Deimos, to "the snowy poles and moons of Mars."

For example, recapitulation theory is upset by the fact that the major processes, such as the notochord and mesoderm, are derived from completely different layers of tissue in different classes; and the notochord, supposedly a recapitulation of primitive chordate stages, is partially co-extensive in time with the cervical flexure, not a feature of primitive chordates at all. For such reasons, recapitulation theory is today regarded as largely invalid.

13Andy Antippas, "Tennyson's Sinful Soul," <u>Tulane</u>
Studies in English, 17 (1969), 124, blatantly misreads the
lines to suggest that the "more widely wise" are at the
bottom of the inverted pyramid; "the poet-Soul seems again to
be placing man (or the poet) outside the natural order."

14See William Buckland, Geology and Mineralogy (Bhilles: delphia: Carey, Lea and Blanchard, 1837), I, pp. 14-15.

15For period statements on the plurality of worlds, see Isaac Taylor, Physical Theory of Another Life (London: William Pickering, 1839), pp. 56 ff: "Is there not a latent, or a half latent instinct in the mind which speaks of a future liberty of ranging at will through space?" and Herschel, p. 380: "Now, for what purpose are we to suppose such magnificent bodies scattered through the abyss of space? Surely not to illuminate our nights," and also pp. 278, 286.

16 George R. Potter, "James Thomson and the Evolution of Spirits," Englische Studien, 61 (1929), pp. 57-65.

17 Letters of Robert Browning Collected by T. J. Wise. (New Haven: Yale University Press, 1933), p. 199.

See Walter Pagel, <u>Paracelsus</u> (Basel and New York: S. Karger, 1958), pp. 91, 315; Allen Debus, <u>The English Paracelsians</u> (London: Oldbourne, 1965), pp. 24-29, traces the influence of Paracelsus' doctrine of creation, and shows the ways in which it differs from orthodox versions: "Then hee divided Waters, from Waters; that is to say, the more subtill, Airy, and Mercuriall liquor, from the more Thick, Clammy."

19 Morse Peckham, "Guilt and Glory," Diss. Princeton: 1947, pp. 169-171.

John Stanyan Bigg, Night and the Soul (London: Groombridge and Sons, 1854), pp. 103, 41.

See Milton Millhauser, "Fire and Ice," Tennyson Society
Monograph No. 4 (Lincoln: Tennyson Research Centre, 1971), p. 15.

²²Memoir, p. 269.

CHAPTER FOUR: IN MEMORIAM THE COMPOSITION OF THE POEM

¹Hallam Tennyson, Alfred Lord Tennyson, a Memoir (London: Macmillan, 1899), pp. 186, 250.

2 Memoir, p. 253.

3T. S. Eliot, "In Memoriam" in Essays Ancient and Modern (London: Macmillan, 1936), p. 187.

⁴Christopher Ricks, <u>Tennyson</u> (New York: Macmillan, 1972), p. 225.

⁵George R. Potter, "Tennyson and the Biological Theory of Mutability in Species," <u>PQ</u>, 16 (1937), 321-343; Graham Hough, "The Natural Theology of <u>In Memoriam</u>," <u>RES</u>, 23 (1947), 244-256.

⁶John Killham, <u>Tennyson</u> and the <u>Princess</u> (London: Athlone, 1958), pp. 241-43, 256-58; James Harrison, "Tennyson and Evolution," Durham University Journal, 64 (1971), 26-31.

⁷Potter, p. 327.

Charles Lyell, Scientific Journals on the Species Question, ed. Leonard G. Wilson (New Haven: Yale University Press, 1969), pp. xxxii-xxxiv; Leonard G. Wilson, Charles Lyell: The Years to 1841 (New Haven: Yale University Press, 1972), p. 440.

For a brief discussion of Agassiz' theory, see Myell, p. xxxii.

10 Joseph Butler, The Analogy of Religion (Glasgow: William Collins, 1837), p. 203.

11 Isaac Taylor, Physical Theory of Another Life (London: William Pickering, 1839), p. 38.

12Taylor, pp. 228, 263. A curious feature of Taylor's cosmology, mentioned on p. 228, is the idea that there is a "vast world around which all suns are supposed to be revolving." Perhaps this is a reference to Herschel's discovery that the solar system was moving away from the constellation Hercules, but more likely it is just an elaborate metaphor. One wonders though.

13 Eleanor Mattes, IN Memoriam: The Way of a Soul (New

York: Exposition Press, 1951), pp. 32-36.

14As has been shown in the third chapter of this study, the passage about "lower lives" in "The Two Voices" is reincarnational, and "From state to state within the womb" describes embryological change.

15_{Killham, p. 262.}

William Wordsworth, "Essay upon Epitaphs," in <u>The</u>
Poetical Works, ed. Thomas Hutchinson, rev. E. De Selincourt
(London: Oxford University Press, 1967), pp. 728-29.

¹⁷Tennyson read Lyell in 1837; see Memoir, p. 136.

Ricks, in his edition of Tennyson's poems, quotes
Lyell: "Even if the more solid parts of our species had disappeared, the impression of their form would have remained engraven on the rocks, as have the traces of the tenderest leaves of plants."

¹⁹Memoir, p. 255.

²⁰The fact that species could become extinct was periodically denied almost up to the time of the <u>Origin</u>. See the eighth chapter of that work, especially the section "On Extinction," for a first-hand account of the argument.

21Thomas Malthus, On Population, ed. G. Himmelfarb (New York: Random House, 1960); chapters 2 and 8 of the "First Essay," originally published in 1798, discuss the ratios of birth increase and food supply increase.

²²Charles Lyell, <u>Principles of Geology</u> (London: John Murray, 1832), II, pp. 18-22 especially.

23Alfred North Whitehead, Science and the Modern World (1925; rpt. New York: Macmillan, 1960), p. 113.

Lyell, Principles, II, p. 271: "Assuming the future duration of the planet to be indefinitely protracted, we can foresee no limit to the perpetuation of some of the memorials of man . . . many works of art might enter again and again into the formation of successive eras, and escape obliterations even though the very rocks in which they had been for ages imbedded were destroyed, just as pebbles included in the conglomerates of one epoch often contain the organized remains of beings which flourished during a prior era."

²⁵Harrison, p. 28.

²⁶For example, Washington Irving in his <u>Knickerbocker's</u>

History of New York (1809), Book I, Chapter iv, refers to "the startling conjecture of Buffon, Helvetius, and Darwin, so highly honorable to mankind, that the whole human species is descended from a remarkable family of monkeys!" He is of course being satirical, but the passage shows that the idea could be derived from readily available sources.

27Milton Millhauser, "Magnetic Mockeries: The Back-ground of a Phrase," ELN, 5 (1967), pp. 109-111.

Robert Chambers, Vestiges of the Natural History of Creation (London: John Churchill, 1844). Tennyson ordered a copy, saying that "it seems to contain many speculations with which I have been familiar for years, and on which I have written more than one poem" (Memoir, p. 186).

²⁹Hough, p. 251.

30_{Potter}, p. 339.

31Chambers, pp. 202, 275. Tennyson's use of the word "type," although derived basically from Christian theology, seems to owe a great deal to Chambers' influence. Contrast Hallam as a type of the crowning race with the more conventional usage, as illustrated by Robert Montgomery in The Messiah (London: J. Turrill, 1832), p. 17:

Nor sea and mountain, thunder-storm and cloud, The glorious miracles of life and form Which float the waters, or the earth command, -- These are but types of His unutter'd power.

Tennyson's use of the word is completely opposite to Montgomery's, implying a forecast rather than a static reflection.

^{32&}lt;sub>Memoir</sub>, p. 271.

CHAPTER FIVE: IN MEMORIAM THE POEM AND ITS ANALOGUES

1 Christopher Ricks, <u>Tennyson</u> (New York: Macmillan, 1972), pp. 213-214.

²Morse Peckham, <u>Victorian Revolutionaries</u> (New York: George Braziller, 1970), p. 36.

Hallam Tennyson, Alfred Lord Tennyson, a Memoir (London: Macmillan, 1899), p. 255; James Knowles, "Aspects of Tennyson," Nineteenth Century, 33 (1893), 182.

4Robert Langbaum, The Modern Spirit (New York: Oxford University Press, 1970), pp. 64-65; E. D. H. Johnson, "In Memoriam: The Way of the Poet," Victorian Studies, 2 (1958), pp. 139-40; E. D. H. Johnson, The Alien Vision of Victorian Poetry (1952; rpt. Hamden, Conn.: Archon Books, 1963), pp. 17-21; Valerie Pitt, Tennyson Laureate (London: Barrie and Rockliff, 1962), p. 99.

⁵Ricks, in his edition of Tennyson's poems, argues that the earlier arrangement "gave a more accurate impression of the relationship of the Prologue to the succeeding poem."

6 Memoir, p. 747. Goethe was, as Tennyson probably knew, an evolutionary theorist, and provided one of the first experimental confirmations of evolutionary theory by his discovery of the intermaxillary bone in man.

⁷Alan Sinfield, <u>The Language of Tennyson's "In Memoriam"</u> (Oxford: Basil Blackwell, 1971), pp. 106-107.

William Bell Scott, The Year of the World (Edinburgh: William Tait, 1846); Matthew Arnold, The Poems 1849-1867 (London: Oxford University Press, 1937), pp. 94-126; Philip James Bailey, The Angel World and Other Poems (London: William Pickering, 1850), and The Mystic and Other Poems (London: Chapman and Hall, 1855).

9Empedocles, Fragment 100, in Kathleen Freeman, Ancilla to the Pre-Socratic Philosophers (Cambridge, Mass.: Harvard University Press, 1957).

10 John McLoed Campbell, The Nature of the Atonement (London: Macmillan, 1873). Campbell's views on atonement led to his being expelled from his congregation.

Walker Gibson, "Behind the Veil: A Distinction between Poetic and Scientific Language in Tennyson, Lyell, and Darwin," Victorian Studies, 2 (1958), 60-68.

- 12 Peckham, pp. 2-4; Langbaum, p. 57.
- 13For Kierkegaard's identification of God with the unknown, see Philosophical Fragments (Princeton University Press, 1962), pp. 54-55; for the paradox of historical revelation, pp. 112-138.
- Lionel Stevenson, <u>Darwin among the Poets</u> (1932; rpt. New York: Russell and Russell, 1963), p. 98: "Tennyson had decided that the almost simultaneous publication of The Origin of Species and Essays and Reviews had invalidated the Genesis creation-myth even for incidental figurative allusions." He assumes that the line was altered in 1860, whereas Ricks dates the revision at 1875, thus making <u>The Descent of Man</u> the more likely stimulus.
- Eugene R. August, "Tennyson and Teilhard: The Faith of In Memoriam," PMLA, 84 (1969), 217-226.
- 16Frederick Denison Maurice, The Kingdom of Christ (London: Darton and Clark, 1838), I, pp. 102-104.
- Maurice, <u>Frederick Denison Maurice</u>, a <u>Life</u> (London: Macmillan, 1884), II, p. 311.
- 18 Maurice, quoted in Olive Brose, Frederick Denison Maurice, Rebellious Conformist (University: Ohio University Press, 1972), p. 271.
- The single- and double-realm theories are distinguished in Kenneth Freeman, The Role of Reason in Religion (The Hague: Martinus Nijhoff, 1969), p. 4.
- Ward Hellstrom, On the Poems of Tennyson (Gainesville: University of Florida Press, 1972), pp. 30-36, discusses other significant parallels between In Memoriam and the historical ideas of the Liberal Anglicans, especially Julius Hare.
- 21Henry Longueville Mansel, <u>The Limits of Religious Know-ledge</u>, Bampton Lectures for 1858 (Boston: Gould and Lincoln, 1859), pp. 44-66.
 - 22 Memoir, p. 347.
- ²³Herbert Spencer, <u>The Principles of Psychology</u> (London: Longman, Brown, Green and Longmans, 1855), p. 329: "the unity of composition in all intelligent phenomena."
- ²⁴Spencer, p. 12: "Our starting point must be, not any substantive proposition believed, but some canon of belief itself"; p. 14: "Every logical act . . . is a predication--an assertion that something <u>is</u>; and this is what we call a belief."

Spencer, p. 31: "a belief which is proved by the inconceivableness of the negation to invariably exist, is true." Note that a belief is true more or less in proportion to the number of people who believe it.

Spencer, p. 422; the quotation itself comes from his Essays: Scientific, Political, and Speculative (London: Williams and Newgate, 1868), I, p. 30.

CHAPTER SIX: FROM IN MEMORIAM TO THE ORIGIN

Anon., The Middle Night (London: William Pickering, 1851). A copy in the possession of Dr. W. E. Fredeman bears a presentation to Francis Newman, stating that the author had attended his lectures. This raises the interesting nossibility that the author may have been Walter Bagehot, but this is admittedly not likely.

²The belief in the possibility of racial degeneration became well-known and controversial in England, but in Germany it became a major influence on political thought, through the influence of Gobineau and Ernst Haeckel, through their follower, Houston Chamberlain. For the impact of Darwinism, and Haeckel in particular, on late nineteenth-century racist thought, see Daniel Gasman, The Scientific Origins of National Socialism (London: Oldbourne, 1969).

³John Killham, <u>Tennyson and the Princess</u> (London: Athlone, 1958), pp. 243-244.

4Killham, pp. 44-85 passim, for Tennyson's debt to the feminist controversy and its socialist background.

Maurice Mandelbaum, <u>History</u>, <u>Man</u>, <u>and Reason</u> (Baltimore: Johns Hopkins, 1971), p. 67.

Memoir, p. 84. See Killham, p. 25: "he is saying no more than that Saint-Simonism is both a product of the social evils abounding at the time and an attempt to solve them."

Olive Brose, Frederick Denison Maurice, Rebellious Conformist (University: Ohio University Press, 1972), pp. 219-223.

8Carlyle translated Saint-Simon's <u>Le Nouveau Christianisme</u>, although he never published it.

⁹Killham, pp. 263, 288, discusses the applications of Chambers' theories to the feminist problem.

10 Killham, p. 231: "We might in fact believe that he was illustrating the kind of education women might demand in the universities they would one day establish, an education which would enable them to come closer to understanding the way society was developing."

An interest in alchemical methods to prolong life was still extensive in the early nineteenth century. The alchemical

background to the thought of Goethe and Shelley is well known, and Thomas Lovell Beddoes directed much of his attention to similar problems, partly through comparative anatomy and partly through a mystical analysis of the soul. The result was a plan for comprehending the soul throughthe study of the forms of things in a progressive sequence from the crystal to man, in consequence of which he has been claimed as a forerunner of Darwin. See Jon Lundin, "Thomas Beddoes at Gottingen," Studia Neophilologica, 44 (1971), 484-499.

12 See Sordello VI: "Small, Great are merely terms we bandy here; / Since to the spirit's absoluteness all / Are like," and other references to "Fit ting to the finite his infinity." The concept is hardly new, of course, as it can be traced to St. Augustine at least.

13 Philip Henry Gosse, Omphalos, or an Attempt to Untie the Geological Knot (London: John van Voorst, 1858).

14Chambers, for instance, extended evolutionary theory into social realms, with results similar to the above. See Killham, p. 261.

15 See Goodwin Barmby, cited and described in Killham, p. 54.

16 Memoir, p. 274: "What he called the 'man-woman' in Christ, the union of tenderness and strength," and Tennyson's later epigram "On One who Affected an Effeminate Manner": "I prize that soul where man and woman meet . . . But, friend, man-woman is not woman-man."

17 Letters of Robert Browning Collected by Thomas J. Wise (New Haven: Yale University Press, 1933), pp. 199-200: "In reality, all that seems proved in Darwin's scheme was a conception familiar to me from the beginning: see in Paracelsus the progressive development from senseless matter to organized, until man's appearance . . . Also in Cleon, see the order of "life's mechanics,"--and I daresay in many passages of my poetry." What Browning regarded as "proved" in Darwin's system is precisely what Darwin rejected. For an interpretation of Browning that takes his words here at face value, see William Harrold, "Robert Browning and Evolution," Wisconsin Studies in Literature, 4 (1967), 56-65; Harrold does not distinguish between evolutionary metaphors and those of simple organic growth.

Lionel Stevenson, <u>Darwin among the Poets</u> (1932; rpt. New York: Russell and Russell, 1963), p. 94: "During the next twenty-five years he was engaged with the <u>Idylls of the King</u>, the tales of humble life, and the historical dramas, into none of which could contemporary problems readily intrude."

Robert James Mann, Tennyson's "Maud" Vindicated (London: Jarrold and Sons, n. d.). For his statement on the reality of the speaker's problems, pp. 76-7: "War does exist in the great drama of nature. Therefore it could not be shut out from the little drama, which treats, under the suggestion of the wider plan, of the meaning and purpose of moral conflict."

20Hallam, Tennyson, Alfred Lord Tennyson, a Memoir (London: Macmillan, 1899), p. 334.

CHAPTER SEVEN: CONCLUSION

- ¹Edwin Atherstone, <u>Israel in Egypt</u> (London: Longman, Green, Longman, and Roberts), 1861).
- 2<u>Letters of Robert Browning Collected by Thomas J. Wise</u> (New Haven: Yale-University Press, 1933), pp. 199-200.
- ³Algernon Charles Swinburne, <u>Songs before Sunrise</u> (1871; rpt. London: William Heinemann, 1917), pp. 72-80.
- 4George Meredith, "The Woods of Westermain," in <u>Poetical</u> Works (London: Constable and Co., 1919), p. 193; this poem was originally published in 1883.
- Mathilde Blind, The Ascent of Man (London: Chatto and Windus, 1889).
- Davidson neatly parodied theories of human participation in the evolutionary process in his novel <u>Earl Lavender</u>, but eventually turned to demanding that man emulate the powers of the universe, for example electricity, and exercise pure force and dominance of the will. See his series of <u>Testaments</u> or the two plays of the incomplete Mammon trilogy, all published in the first decade of this century.
- 7Charles Doughty, The Titans (London: Duckworth and Co,, 1916), carries the subtitle "Subdued to the Service of Man" on the half-title, but not on the title page. Robert Bridges, The Testament of Beauty in Poetical Works, (London: Oxford University Press, 1964).
- Mallam Tennyson, Alfred Lord Tennyson, a Memoir (London: Macmillan, 1899), p. 464.
- ⁹The cancelled passage is reproduced on page 1320 of Ricks' edition of Tennyson's poems.
- For an account of the Tennyson brothers' interest in spiritualism (Frederick became a convinced follower), see Katherine H. Porter, Through a Glass Darkly (Lawrence: University of Kansas, 1958), pp. 117-135.
- James Hinton, <u>Life in Nature</u> (London: Smith and Elder, 1875), p. 163. On p. 106, he asserts that "no formative power is to be ascribed to those types or standards," thus perhaps influencing Tennyson's attitude toward "Typing" the evolutionary process; in the later poems, at least, there is less emphasis on typing, and more on following the gleam, perhaps two different concepts.

- James Hinton, in <u>The Mystery of Pain</u> (London: Smith and Elder, 1870), regarded the suffering of all things as equal, and tried to justify the presence of pain as part of the evolutionary process: "if we may look beyond Lour individual pain], and see in our own sufferings, and in the sufferings of others, something in which mankind also has a stake . . ." (pp. 31-32).
- Hinton, in <u>The Mystery of Pain</u>, distinguishes three goods: pleasure, the individual good; service to others, the ordinary good; and disinterested self-sacrifice, the highest or perfect good.
- Tennyson said of Christ, with reference to "The Holy Grail," "It is enough to look on Christ as Divine and Ideal without defining more."

BIBLIOGRAPHY OF WORKS CITED

Primary Sources

- a) Tennyson
- Tennyson, Alfred Lord. The Poems of Tennyson, ed. Christopher Ricks. London: Longmans, Green, 1969.
- millan, 1893 (1827). London: Mac-
- b) Romantic and Victorian Poetry
- Anon. The Middle Night. London: William Pickering, 1851.
- Arnold, Matthew. The Poems 1849-1867. London: Oxford University Press, 1938.
- Atherstone, Edwin. <u>Israel in Egypt</u>. London: Longman, Green, Longman, and Roberts, 1861.
- Bailey, Philip James. The Angel World and Other Poems. London: William Pickering, 1850.
- <u>Festus</u>. London: William Pickering, 1839.
- . The Mystic and Other Poems. London: Chapman and Hall, 1855.
- Bigg, John Stanyan. Night and the Soul. London: Groom-bridge and Sons, 1854.
- Blind, Mathilde. The Ascent of Man. London: Chatto and Windus, 1889.
- Bridges, Robert. <u>Poetical Works</u>. London: Oxford University Press, 1964.
- Browning, Robert. <u>Letters of Robert Browning Collected by</u>
 <u>Thomas J. Wise.</u> New Haven: Yale University Press, 1933.
- _____. <u>Poetical Works</u>, ed. Augustine Birrell. London: Smith and Elder, 1896.

- Byron, George Gordon, Lord. <u>Poetical Works</u>. London: Oxford University Press, 1960.
- Clough, Arthur Hugh. Poems. London: Macmillan, 1895.
- Coleridge, Samuel Taylor. Collected Letters, ed. E. L. Griggs. Oxford: Clarendon Press, 1959.
- prehensive Theory of Life, ed. Seth B. Watson. London: John Churchill, 1848.
- Doughty, Charles. The Titans. London: Duckworth and Co., 1916.
- Hallam, Arthur. The Writings of Arthur Hallam. New York: MLA of America, 1943.
- Keats, John. <u>Poetical Works</u>, ed. H. W. Garrod. Oxford: Clarendon Press, 1939.
- Meredith, George. <u>Poetical Works</u>. London: Constable and Co., 1919.
- Montgomery, Robert. The Messiah. London: J. Turrill, 1832.
- Scott, William Bell. The Year of the World. Edinburgh: William Tait, 1846.
- Shelley, Percy Bysshe. Poems: New York: Random House, n. d.
- Swinburne, Algernon Charles. Songs before Sunrise. London: William Heinemann, 1917 (1871).
- Wordsworth, William. <u>Poetical Works</u>, ed. Thomas Hutchinson, rev. E. De Selincourt, London: Oxford University Press, 1967.

Secondary Sources

- a) Tennyson: Biographical and Critical
- Antippas, Andy. "Tennyson's Sinful Soul." <u>Tulene Studies in</u> <u>English</u>, 17 (1969), 113-134.

- August, Eugene R. "Tennyson and Teilhard: The Faith of In Memoriam." PMLA, 84 (1969), 217-226.
- Eliot, T. S. Essays Ancient and Modern. London: Mac-millan, 1936.
- Gibson, Walker. "Behind the Veil: A Distinction between Poetic and Scientific Language in Tennyson, Lyell, and Darwin." <u>Victorian Studies</u>, 2 (1958), 60-68.
- Harrison, James. "Tennyson and Evolution." <u>Durham University Journal</u>, 64 (1971), 26-31.
- Hellstrom, Ward. On the Poems of Tennyson. Gainesville: University of Florida Press, 1972.
- Hough, Graham. "The Natural Theology of <u>In Memoriam</u>." RES, 23 (1947), 244-256.
- Johnson, E. D. H. The Alien Vision of Victorian Poetry. Hamden, Conn.: Archon Books, 1963 (1952).
- Studies, 2 (1958), 139-148. Victorian
- Killham, John. <u>Tennyson and the Princess</u>. London: Athlone Press, 1958.
- Knowles, James. "Aspects of Tennyson." Nineteenth Century, 33 (1893)
- Langbaum, Robert. The Modern Spirit. New York: Oxford University Press, 1970.
- Mann, Robert James. <u>Tennyson's "Maud" Vindicated</u>. London: Jarrold and Sons, n. d.
- Millhauser, Milton. Fire and Ice. Lincoln: Tennyson Research Centre, 1971.
- "Magnetic Mockeries: The Background of a Phrase." <u>ELN</u>, 5 (1967), 108-113.
- in Literature, 1 (1969), 37-49.

 Hartford Studies
- Paden, W. D. <u>Tennyson in Egypt</u>. Lawrence: University of Kansas, 1942.
- Peckham, Morse. <u>Victorian Revolutionaries</u>. New York: George Braziller, 1970.

- Pitt, Valerie. Tennyson Laureate. London: Barrie and Rockliff, 1962.
- Potter, George R. "Tennyson and the Biological Theory of Mutability in Species." PQ, 16 (1937), 321-343.
- Ricks, Christopher. Tennyson. London: Macmillan, 1972.
- Rutland, William R. "Tennyson and the Theory of Evolution." Essays and Studies, 26 (1940), 7-29.
- Sinfield, Alan. The Language of Tennyson's In Memoriam. Oxford: Basil Blackwell, 1971.
- Tennyson, Hallam. Materials toward a Life of A. T. Privately printed, n. d.
- . Alfred Lord Tennyson, a Memoir. London: Macmillan, 1899.
- b) Scientific and Philosophical Works
- Bourdier, Franck. "Geoffroy Saint-Hilaire versus Cuvier," in Cecil J. Schneer, ed., <u>Toward a History of Geology</u>. Cambridge, Mass.: M.I.T. Press, 1969.
- Brose, Olive. Frederick Denison Maurice, Rebellious Conformist. University: Ohio University Press, 1972.
- Buckland, William. Geology and Mineralogy. Philadelphia: Carey, Lea and Blanchard, 1837.
- Buffon, G. L. L. de. <u>Natural History</u>, tr. William Smellie. Edinburgh: W. Creech, 1780.
- Butler, Joseph. The Analogy of Religion. Glasgow: William Collins, 1837.
- Campbell, John McLeod. The Nature of the Atonement. London: Macmillan, 1873.
- Chambers, Robert. Explanations. London: John Churchill, 1855.
- London: John Churchill, 1844.
- Cuvier, Georges L. Essay on the Theory of the Earth, tr. Robert Kerr. Edinburgh: William Tait, 1815.

- Darwin, Charles. Origin of Species, ed. Morse Peckham. Philadelphia: University of Pennsylvania, 1959.
- Darwin, Erasmus. <u>Poetical Works</u>. London: J. Johnson, 1806.
- Debus, Allen. The English Paracelsians. London: Old-bourne, 1965.
- Freeman, Kathleen. Ancilla to the Pre-Socratic Philosophers. Cambridge, Mass.: Harvard University Press, 1957.
- Freeman, Kenneth. The Role of Reason in Religion. The Hague: Martinus Nijhoff, 1969.
- Gasman, Daniel. The Scientific Origins of National Socialism. London: Oldbourne, 1969.
- Gosse, Philip Henry. Omphalos, or an Attempt to Untie the Geological Knot. London: John van Voorst, 1858.
- Grant, Verne. <u>Plant Speciation</u>. New York: Columbia University Press, 1971.
- Herschel, Sir John. Astronomy. In The Cabinet Cyclopedia, 76 (1833).
- Hinton, James. Life in Nature. London: Smith and Elder, 1875.
- The Mystery of Pain. London: Smith and Elder,
- Irving, Washington. Selected Writings. New York: Random House, n. d.
- Kierkegaard, Søren. <u>Philosophical Fragments</u>. Princeton: Princeton University Press, 1962.
- Lyell, Charles. Geological Evidences of the Antiquity of Man. London: John Murray, 1861.
- Principles of Geology. London: John Murray, 3 vols., 1830-1833.
- _____. Scientific Journals on the Species Question, ed.
 Leonard G. Wilson. New Haven: Yale University Press,
 1969.

- Malthus, Thomas. On Population, ed. G. Himmelfarb. New York: Random House, 1960.
- Mandelbaum, Maurice. <u>History, Man and Reason</u>. Baltimore: Johns Hopkins, 1971.
- Mansel, Henry Longueville. The Limits of Religious Knowledge. Boston: Gould and Lincoln, 1859.
- Matthew, Patrick. On Naval Timber and Arboriculture. Edinburgh: Adam Black, 1831.
- Maurice, Frederick Denison. The Kingdom of Christ. London: Darton and Clark, 1838.
- _____. <u>Frederick Denison Maurice, a Life</u>. London: Macmillan, 1884.
- Nichol, John. <u>Views of the Architecture of the Heavens</u>. Edinburgh: William Tait, 1839.
- Pagel, Walter. <u>Paracelsus</u>. Basel and New York: S. Karger, 1958.
- Smith, Southwood. Review of Anatomie Comparee, by Serres, etc. Westminster Review, 9 (1828), 172-198, and 451-480.
- Speculative. Essays: Scientific, Political, and London: Williams and Newgate, 1868.
- The Principles of Psychology. London: Long-man, Brown, Green and Longmans, 1855.
- Taylor, Isaac. Physical Theory of Another Life. London: William Pickering, 1839.
- Wells, William Charles. <u>Two Essays: One upon Single Vision</u> with Two Eyes; the Other on Dew. London: A. Constable, 1818.
- Whewell, William. The Philosophy of the Inductive Sciences. New York: Johnson Reprint, 1967 (1847).
- Whitehead, Alfred North. Science and the Modern World. New York: Macmillan, 1960 (1925).
- Wilson, Leonard G. Charles Lyell: The Years to 1841. New Haven: Yale University Press, 1972.
- Young, Robert M. Mind, Brain and Adaptation in the Nineteenth Century. Oxford: Clarendon Press, 1970.

- c) Criticism of Nineteenth-Century Poetry
- Abrams, M. H. The Mirror and the Lamp. New York: Norton, 1958.
- Barfield, Owen. What Coleridge Thought. Middletown, Conn.: Wesleyan University Press, 1971.
- Blackstone, Bernard. The Consecrated Urn. London: Long-mans, 1959.
- Elliott, Brent. "The Development of Religious Ideas in Two of Byron's Blays," unpublished B. A. Honours Graduating Essay, University of British Columbia, 1973.
- Fruman, Norman. Coleridge the Damaged Archangel. New York: George Braziller, 1971.
- Grabo, C. H. A Newton among Poets. Chapel Hill: University of South Carolina Press, 1930.
- Harrold, William. "Robert Browning and Evolution." Wisconsin Studies in Literature, 4 (1967), 56-65.
- Lundin, Jon. "T. L. Beddoes at Gottingen." Studia Neo-philologica, 43 (1971), 484-499.
- Miller, Craig W. "Coleridge's Concept of Nature." <u>Journal</u> of the History of Ideas, 25 (1964), 77-96.
- Peckham, Morse. "Guilt and Glory: A Study of the 1839

 Festus, a Nineteenth-Century Poem of Synthesis," Diss.

 Princeton, 1947.
- . The Triumph of Romanticism. Columbia: University of South Carolina Press, 1970.
- Piper, H. W. The Active Universe. London: Athlone Press, 1962.
- . "Keats and W. C. Wells." RES, 25 (1949), 158-9.
- Porter, Katherine H. Through a Glass Darkly. Lawrence: University of Kansas, 1958.
- Potter, George R. "Did Thomas Lovell Beddoes Believe in the Evolution of Species?" Modern Philology, 21 (1923), 89-100.
- _____. "James Thomson and the Evolution of Spirits." Englische Studien, 61 (1929), 57-65.

- Roppen, Georg. <u>Evolution and Poetic Belief</u>. Folcroft, Pa.: Folcroft Press, 1969 (1956).
- Snyder, Alice. "Coleridge on Giordano Bruno." MLN, 42, no. 7.
- Stevenson, Lionel. <u>Darwin among the Poets</u>. New York: Russell & Russell, 1963 (1932).
- Walker, Hugh. The Literature of the Victorian Era. Cambridge: Cambridge University Press, 1910.