"OUR LITTLE SYSTEMS HAVE THEIR DAY": TENNYSON'S POETIC TREATMENT OF SCIENCE

by

Emily Carroll Shearer

A Dissertation Submitted in Partial Fulfillment of the Requirements of the Degree of

Doctor of Philosophy in English

Middle Tennessee State University

2014

Dissertation Committee:

Dr. Rebecca King, Department of English, Chair

Dr. Larry Gentry, Department of English

Dr. Tammy Melton, Department of Chemistry

© 2014 Emily Carroll Shearer

For Mom and Dad -

I've spent almost two years writing this "damn dissertation." It's around 38,000 words, so you'd think that a few extra for the dedication wouldn't be that much more.

It amazes me how words fail me when I want them the most.

I don't have the words to thank you for homeschooling me or for raising me to be a stubborn mule when it comes to achieving something (trust me, that's an asset in graduate school) or for teaching me not to put up with crap from anyone. I don't know how to say thank you for showing me how to listen or be kind to others, to take other people into heart as family, and to keep laughter as a constant companion.

I don't know how to say thank you for teaching me not to give up—and for not giving up on me when I felt like giving up on myself.

Then again, maybe I do have the words. I love you so much.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Dr. Rebecca King for all her work in helping me prepare this dissertation. I would also like to thank Dr. Larry Gentry and Dr. Tammy Melton for their assistance and for serving on my committee. I would very much also like to thank Shiloh Carroll for being the very best of friends and my dissertation writing buddy during this whole arduous process.

Most of all, I must thank my husband, Shane Stewart, for his unwavering support through my entire time at MTSU, especially during the writing of this dissertation. He is my bedrock, my strong foundation, and on that, this dissertation is built.

ABSTRACT

Cultural studies approaches identify all texts as arising from cultural contexts, and as such inform the methodology of this study of Tennyson's poetry as mediating conflicting truth claims by aesthetic and spiritual spheres and materialist and empirical spheres of thought. John McGowan's description of modernity suggests a way of reading Tennyson's poetry as evidence of his involvement in an ongoing discussion involving competing claims to totality by these epistemologies. Tennyson was from early days interested in science, keeping abreast of current thought at Cambridge, and being elected to the Royal Society. While critics often see aspects of Tennyson's work as the complaints of an increasingly pessimistic, personally disappointed old man, this study suggests that his poems instead display his engagement with major epistemological issues in which he and others express distrust of the totalizing claims of science and materialism.

This dissertation analyses poems written during various points in his career that deal with these issues. Chapter 1 discusses historical and cultural contexts of Tennyson's poems. Chapter 2 analyzes "The Palace of Art," an early poem, as displaying his concerns with astronomy and its implications regarding creationist accounts of the cosmos in terms associated with the great chain of being metaphor and its principles of unity and perfection. It also reflects concerns with the second law of thermodynamics regarding its theories of entropy and death. Chapter 3 analyzes *In Memoriam* as it addresses natural evolution in terms of what Darwin would later term "survival of the fittest" and in which Tennyson ultimately reaffirms the immortality of the soul in evolutionary terms. Chapter 4 examines "Locksley Hall" and "Locksley Hall Sixty Years Later," written forty years apart, and their reflections of Tennyson's adaptations of evolutionary theory to account for what the later poem marks as increasing cultural decay. Finally, Chapter 5 analyzes "The Higher Pantheism," "Parnassus," and "By an Evolutionist" as late poems that reveal persistent attempts to validate the aesthetic and spiritual as necessary contexts for understanding experience as illuminated by science.

TABLE OF CONTENTS

| CHAPTER 1: INTRODUCTION | 1 |
|---|-----|
| CHAPTER 2: "THE PALACE OF ART" AND THERMODYNAMIC CHAOS. | 28 |
| CHAPTER 3: IN MEMORIAM AND THE IMPERMANENT NATURE | |
| OF HUMANITY | 53 |
| CHAPTER 4: "LOCKSLEY HALL" AND TENNYSON'S CONCERNS FOR | |
| SOCIETY | 85 |
| CHAPTER 5: TENNYSON'S CONCLUSIONS | 120 |
| WORKS CITED | 138 |

Chapter 1

Introduction

Alfred, Lord Tennyson is generally seen as the quintessential Victorian poet for a number of reasons. Influential and beloved by the English populace, Tennyson lived through much of the nineteenth century and wrote through most of Queen Victoria's reign, experiencing all of the turmoil and change that the Victorian era brought to England. His personal turmoils over genealogy and inheritance, love and loss, coincided with tumultuous cultural and historical events such as the extension of the franchise and the expansion of the British Empire. During his lifetime, the middle class rose as an entity with its own power and morality, and spiritual beliefs were increasingly questioned as science produced both new knowledge and new epistemologies.

Tennyson is especially emblematic as a Victorian figure since he was at once a poet and an avid follower of scientific discoveries and ideas, a situation that positioned him to enter into the discourse over the so-called Victorian "crisis of faith." The seemingly endless discoveries about the natural world made in the late eighteenth century through the Victorian era gave rise to similarly endless ideas about that natural world. Though the realm of science was already beginning to show signs of the specialization that persists today, the Victorian era was still a time when the gentleman or lady scientist could dabble in everything scientific within the larger philosophical tradition of the humanities. Indeed, many early British scientific discoveries arose through the work of Anglican clergymen, many of whom were members of the Royal Society before membership to the society began being restricted to those who more closely fit the role of scientists. Thus, prose, poetry, novels, opinion columns, rebuttals, reviews, and scientific treatises were all part of the greater societal conversation that was taking place regarding these ideas and their epistemological implications.

The interdisciplinary nature of Victorian science and knowledge in general thus authorized the participation of the gentleman and lady in scientific discourse, without ever having stepped into a laboratory. Since scientific knowledge was not yet as specialized as it is now and because access to this knowledge had not been removed to libraries and specialized journals with concepts too advanced for the non-practitioner, the Victorian intellectual could, with some effort, follow the latest scientific discoveries. Victorians could follow these discoveries and ideas through the works of several science writers, as Bernard Lightman describes in his 2010 work *Victorian Popularizers of Science: Designing Nature for New Audiences*. The widespread effects of the popularization of science can also be seen as poets found new metaphors for their work in the discoveries reaching the general public, and as scientists used the vivid language of poets to describe the grandeur of the natural world.

Cultural studies approaches to literary texts identify all texts as arising from their cultural contexts, and as such, inform the methodology of this study of Tennyson's poetry. Gillian Beer notes that such "[i]nterdisciplinary work crosses over between fields: it transgresses. It thus brings into question the methods and materials of differing intellectual practices and may uncover problems *disguised* by the scope of established disciplines" (115). She also notes that "[i]nterdisciplinary studies do not bring closure." Rather, interdisciplinarity generates more questions than it answers. Furthermore,

because cultural work during the Victorian era transgressed, crossed over, and flowed over boundaries of disciplines, to study works of the Victorian era, particularly literature, also requires an interdisciplinary approach. Jerome McGann offers a further caveat for the literary scholar:

> Because historical method [of literary analysis] is strictly a form of comparative studies, its goal is not the recovery of some lost originary cultural whole. The presumption must rather be that the object of study is volatile and dynamic—not merely that it . . . *was* an unstable and conflicted phenomenon, but that it continues to mutate as it is subjected to further study; indeed that its later changes are the effects of such studies. (82)

What has involved in the past as simple approach to identifying the participants and the issues at stake within the so-called crisis between Victorian science and faith has more recently been problematized, reassessed, and reconsidered, and critical views of the Victorian era have thus changed over time as our understanding becomes ever deeper. Commenting on the scholarly benefits of cross-disciplinary analysis, Denis Bonnecase suggests: "If history, as a text, contains the threads of literature, the literary text gives us the glimpses of the many stitches, skeins and coils of the historical web" (102).

This weaving has been demonstrated in the past several decades as literary scholarship has moved beyond traditional literary criticism, which focused on text and text alone, to cultural studies, which challenges "received divisions of academic thought" (Brantlinger 34), by using methodologies from a number of disciplines in order to investigate how texts are constructed as artifacts of the culture in which they were produced. Cultural studies also allows investigation of how texts construct and represent their culture. In this study, cultural studies provides a lens through which to investigate how texts construct and represent the epistemological and axiological struggles taking place during the Victorian era. Because cultural studies examines physical texts as artifacts which exist within systems of signification and representation and which have specific cultural and historical relevance, any form of representation that can be interpreted is a text that can be read. The cultural studies shift away from formalism made by Roland Barthes and Julia Kristeva, for example, describes this interaction and representation of interpretation as intertexuality. They note that intertextuality "is not a matter of whim or will, but a metaphysical fact that all texts derive their meaning only through their relations to other texts" (Irwin 229).

Barthes indeed warns his followers about simplistic views of intertextuality, as does William Irwin, a critic of such views that limit intertextual analysis to simple source discovery. Barthes reminds his readers that

> [t]he intertextual in which every text is held, it itself being the textbetween of another text, is not to be confused with some origin of the text: to try to find the 'sources', the 'influences' of a work, is to fall in with the myth of filiation; the citations which go to make up a text are anonymous, untraceable, and yet *already* read: they are quotations without inverted commas. (160)

Irwin says that "[a]t its worst, intertextuality becomes fashionable jargon for traditional notions such as allusion and source study" (229). Finding discursive sources that influence a work, though, remains integral to intertextual analysis, in that identifying and understanding at least the most important of these sources makes it possible to understand their impact on the author's practice. Furthermore, an effective intertextual approach involves not the mere identification of discursive sources, but also the analysis of relationships between the sources and the author's work in terms of the cultural, historical, and social contexts that shaped them all. Literary criticism as cultural study, then, ranges among texts regardless of their formal genre or even the formal definition of *text* and investigates literary work within its wider cultural contexts, including its formal qualities, its content in terms of social, historical, and cultural processes, and its participation in relevant cultural discourse.

This dissertation draws on the concepts and methods of cultural studies to explore Tennyson's involvement in the scientific discourse of his era that began to construct and validate a materialist epistemology that excluded the spiritual and aesthetic. John McGowan describes how these categories began to separate from their once unified position during the 18th and 19th centuries with the impact of the Renaissance and the genesis of what he terms modernity, which "stems from its containing both the spiritualistic, religious impulses of high romanticism and the scientific, rationalistic impulses of realism, while at the same time bringing to center stage the issue of art's autonomy" (7). McGowan discusses the origins of modernity in the fact/value split occasioned by various historic phenomena, and describes the romantic project in terms that clarifies aspects of Tennyson's poetry. For McGowan,

art, since 1800 has shared a romantic ethos that manifests itself in the protest against a commercial/technocratic culture that excludes considerations beyond the cash nexus and atomistic physics from its calculus of human behavior, its use of the terms *real*, and its legitimation of social organization. Whether by expanding the *real* and *reality*, as Hegel does, or by insisting on the reality and significance of the irrational, as Blake does, or by indicating by-products of the cash nexus that classical liberal economic theory does not acknowledge, romantic artists and intellectuals try to bring back onto the stage of awareness entities that modernity neglects. (6)

McGowan restates the issue as a fear that in the separation of truth from the spiritual and aesthetic, economic, technical, and other spheres have either come to "dominate the social whole," or, worse, to claim that one or the other "constitutes the social whole," eliminating the spiritual and the aesthetic from the world entirely. Romanticism challenges such claims by "presenting an alternative vision of the totality" that these views construct, and that are "more inclusive." Yet, McGowan also describes a problem inherent in romantic artists' claims for "an autonomy of [their] own activities" that results in modernist attempts to sequester art completely from competing value systems, resulting in part in the "art for art's sake" movement. McGowan's description of this contest between spheres and ideologies allows us to situate Tennyson's work within a

vision of modernity whereby the "spheres of religion, science, and bourgeois economics continue to unfold just as the artistic tradition does, leading to attempts to mediate among these traditions " or, conversely, to indifference by artists to the other spheres through pursuing their own "activities and ignoring the activities of other spheres" (7) or by Benthamite utilitarians who ignored art as a non-useful activity.

Tennyson thus appears as a quintessential Victorian precisely as he enters the fray that McGowan describes in full poetic voice that begins with tentative articulations and progresses through attempts to mediate among competing spheres as his era unfolded before him. Tennyson spent a lifetime working through his thoughts and beliefs, and this study provides a glimpse of his artistic approaches to the epistemological problems of his day. In his poetry, the empirical and material often come into conflict with the spiritual and the aesthetic as he contemplates these issues as they played out in his personal life and larger society. His attempts at mediation result in Tennyson ultimately claiming a superior and anterior place for the spiritual and aesthetic without rejecting the empirical. While his poetic articulations resolve some of the conflicts he attempts to mediate, however, they involve other problems that his late poetry addresses, which is the focus of later chapters of this study.

The basic facts of Tennyson's life are well known. Hallam Tennyson's twovolume *Alfred, Lord Tennyson: A Memoir by His Son* and Robert Bernard Martin's biography *Tennyson: The Unquiet Heart* are definitive works that Tennyson scholars typically consult. Hallam Tennyson curated his account of his father carefully, excising details that might seem untoward. Martin's account, however, fills in some of the gaps created by Hallam Tennyson's destruction of most of his father's letters and discovers much about Tennyson that was left out of his son's idyllic memoir. In whatever version of Tennyson's life a scholar chooses to pick up, however, some facts remain the same. Tennyson was born August 6, 1809, married Emily Sellwood and became Poet Laureate of England in 1850, fathered Hallam Tennyson in 1852 and Lionel Tennyson in 1854, was created a baron by Queen Victoria in 1884, died at age 83 on October 6, 1892 and was buried in Westminster Abbey.

In these biographies, Tennyson's love of science, which would be reflected later in his poetry, appears even at the beginning of his life. Hallam Tennyson recounts a family tale in which Alfred's oldest brother, "Frederick, when an Eton school-boy, was shy of going to a neighbouring dinner-party to which he had been invited. 'Fred,' said his younger brother, 'think of Herschel's great star-patches, and you will soon get over all of that'" (*Mem.* I.20). Those star patches, the great swathes of sky in which William Herschel and his sister Caroline discovered new stars, had been one of the first clues that forced an expanded picture of the universe and put life on earth into a far different perspective than the traditional Biblical one. Also notable is Tennyson's aesthetic appropriation of the scientific, which became a feature of his later poetry.

That Tennyson grew up with science is also suggested by the contents of the library in the Somersby Rectory, where he was raised, which according to Martin, included a group of scientific books, where "individual volumes show signs of heavy use" (19). Tennyson's intellectual life particularly flourished, however, when he went to Cambridge. His tutor was William Whewell, who would eventually become the author of

the influential 1833 Bridgewater treatise Astronomy and General Physics Considered with Reference to Natural Theology, published only a few years after Tennyson had left the university. Martin notes that "although [Whewell] tried to teach Tennyson mathematics and moral philosophy, he was sufficiently aware of his pupil's eccentric genius to turn a blind eye to the fact that Alfred read Virgil under his desk when he was supposed to be working at mathematics" (56). Tennyson moved in other significant intellectual circles as well. During his time at Cambridge, he was befriended by Arthur Henry Hallam, who invited him to join a group known as the Apostles. Made up of twelve young men at a time, the Apostles represented the highest intellects at Cambridge. Each member was required to give a paper on a metaphysical topic, after which would follow discussion. Though Tennyson was too shy to remain an official Apostle for long, unable to stand and give talks before the rest of the group, he was still associated with the rest of them, in particular, his best friend Arthur Henry Hallam, even after the death of Tennyson's father forced him to leave Cambridge and take over the duties of seeing to the Tennyson household. Hallam encouraged the young Tennyson in his poetic endeavors, urging him to publish his 1832 volume, *Poems, Chiefly Lyrical*.

Arthur Hallam's influence on Tennyson can hardly be overstated, and was probably more significant in death than in life since it brought into personal perspective the conflicts between faith and science which Tennyson had primarily encountered only intellectually. Hallam had been engaged to Tennyson's sister, Emily, and after his early death in 1833, Tennyson began drafting the portions of *In Memoriam* that would take seventeen years to see into print as he grappled with science in terms of his own faith tradition. He studied science with some regularity after Hallam's death, setting himself a schedule by which to study. Chemistry was for Tuesday mornings, botany for Wednesday mornings, electricity for Thursday mornings, animal psychology for Friday mornings, and Saturdays were devoted to mechanics (Martin 190). But as Martin points out, Tennyson was not a scientist:

He has, for instance, often been praised for the exactness of his knowledge of evolution in its pre-Darwinian stages, which came from his voluminous if unsystematic reading; but it is praise that might have been extended to thousands of other educated Victorians, for he remained only an intelligent amateur of science, as he did at theology, philosophy, and politics. Where he was never anything but totally professional was in the analysis of his own perceptions through the use of exact language. (344)

Unlike many of those thousands of educated Victorians, however, Tennyson was invited to become a member of the Royal Society twice, declining the first invitation in 1864, but accepting the next year (Martin 462). The Royal Society held him in enough esteem that at his funeral in 1892, they sent Lord Kelvin to be one of his pallbearers (Meadows 117). Emily Tennyson's journal, as repeated by Hallam Tennyson in the *Memoir*, notes that Darwin himself came to Farringford to visit Tennyson "and seemed to be very kindly, unworldly, and agreeable. A. said to him, 'Your theory of Evolution does not make against Christianity': and Darwin answered, 'No, certainly not'" (II.57). Whatever else was discussed by Tennyson and Darwin during this visit is unknown, but certainly, Tennyson's studies would have allowed him to question this man of science intelligently.

In his *Memoir*, Hallam Tennyson mentions his father studying Herschel's *Astronomy*, visiting the Crystal Palace, disapproving of Whewell's *Plurality of Worlds*, watching the comet Arcturus, and teaching his sons about science perhaps to instill in them as boys the same wonder about the universe that he himself had felt and continued to feel. Tennyson also assisted James Knowles in forming the Metaphysical Society which featured illustrious members such as Thomas Henry Huxley, Darwin's great defender, and John Tyndall. Though an amateur, Tennyson explored science throughout his long life, and it infuses his poetry through images and concepts that reflect his observations and reflections on the progress of science and society over the course of the nineteenth century.

Another concept that shapes this study of Tennyson's poetry arises from what Arthur Lovejoy calls "the great chain of being" in his seminal work by the same name on the history of ideas. Lovejoy's work traces this metaphor and its implications from Plato and Aristotle through the Neo-Platonists and the Christian church fathers to the late eighteenth century. The great chain's three main components, the principle of plentitude and the principles of continuity and gradation, persisted for more than two thousand years in various conceptions of the universe, all of which considered an ideal of goodness or reason, or of God, as a given assumption for any version of the hypothesis, which also involves the ideal of unity as a corollary of the hypothesis from which all creation emanates. Lovejoy's work provides a context for examining poetic treatment of scientific discoveries in terms of how philosophy and religion, and later science, dealt with what Lovejoy saw as inherent internal paradoxes and conflicts that arose from the great chain's very origins. This idea, from the time of the ancient Greeks through the eighteenth and nineteenth centuries, shapes the course of natural philosophy, science, and poetry as thinkers in each sphere attempted either to accommodate the great chain's principles or to reject them.

The metaphor of the great chain involves concepts of plentitude and continuous gradation as the necessary structure of the universe. First, plentitude insists that the world is full of God's creation, and that everything in the universe has emanated from the ideal (goodness, reason, God) and fills the universe as a necessary condition. Continuous gradation implied a hierarchy of being, from the least perfect to the most perfect at the top of the chain, represented by God in the Judeo-Christian version. Continuity insisted that there were no large leaps to be made between life forms, no gaps between species; gradation established a hierarchy, one that echoes in God's command to Adam that man was to have dominion over the earth. This conception led to a static idea of the universe, because if something was good at one point in time, then it had always been good, and it would continue to be good. Later, this idea was temporalized, according to Lovejoy, as it was found to be incompatible with the fossil record, for example. It shifted from an idea of a world that was full and unchanging to a world that was not quite full right now, but which would be seen to be completely full if one could examine the entirety of the universe from the perspective of eternity. This shift from the concept of the universe from a static one to a dynamic one registers typical accommodations of various religious and philosophic thinkers, as well as of scientific discovery.

The principle of plentitude had another important implication for eighteenthcentury thinkers—one that insisted that man could not progress up the chain of being, since all places on the chain were filled as intended by God. This concept is reflected in philosophic optimism, the view that this world is the best of all possible worlds, leading to conflicts with assumptions that humanity should strive to become better morally, a concept of development that is also central to some later views of evolutionary change. The temporalization of the chain addressed these problems, however, through concepts that humanity could occupy more than one link in the chain, since all of eternity was available in the perfection of the chain, as opposed to static views that all the links in the chain exist simultaneously. This shift meant that it was now possible for humanity to progress up the chain of being:

Since the scale [of the chain] was still assumed to be minutely graduated, since nature makes no leaps, the future life must be conceived to be – at least for those who use their freedom rightly – a gradual ascent, stage after stage, through all the levels above that reached by man here; and since the number of these levels between man and the one Perfect Being must be infinite, that ascent can have no final term. The conception of the destiny of man as an unending progress thus emerges as a consequence of reflection upon the principles of plentitude and continuity. (Lovejoy 246).

These principles reflect philosophic optimism, articulated by Leibniz in the late seventeenth century, that humanity lives in the best of all possible worlds. Leibniz's principle of sufficient reason, based on Aristotle's concepts, stated that everything that was created has a divine (and therefore intrinsically good) reason for being created, so that humanity then lives in the best of all possible worlds for all things have a good, divine reason for being. Though this claim necessarily led to questions about the existence of evil, humanity could take comfort in the fact that the world was not as evil as it could have been without God's intervention, or that we would understand evil differently if we could perceive the whole picture.

Yet the great chain metaphor began to fall apart in the eighteenth century, according to Lovejoy. Too many contradictions had accumulated over two thousand years, despite the best efforts of thinkers and theologians to adjust epistemological concerns to fit new facts. The temporalization of the chain tried to reconcile the fossil record with the principle of plentitude. However, Lovejoy claims that the Romantics, who actually embraced all of the diversity of the universe as an example of dynamic change and evidence of God's creative goodness and plenitude, made it impossible to ignore the contradictory principles that Lovejoy saw as inherent even in the early versions of the great chain metaphor. He points out: "Any change whereby nature at one time contains other things or more things than it contains at another time is fatal to the principle of sufficient reason, in the sense which we have seen it to have had for those philosophers who understood it best and believed in it most devoutly" (Lovejoy 329-30). This dynamic construction allowed the world to have randomly sprung into existence at any point in time, rather than at one divinely reasoned point in time. It left philosophers with this startling conclusion, according to Lovejoy: "Perhaps the world may suddenly have burst into being one fine day: but if so, it is a world which just as logically might not have been, and it is in that sense a colossal accident, which no necessity of reason behind it" (330). After two thousand years, the great chain of being began to break.

Thomas Kuhn, in his work *The Structure of Scientific Revolutions*, describes the process of change involving creation of new theories as a result of accommodation of old theories to new facts as a paradigm shift. Despite the tendency of thinkers and writers in retrospect to oversimplify discoveries and provide timelines that imply that science instantly changes when new theories arise, Kuhn argues that the case is much different, and that

[a] new theory, however special its range of application, is seldom or never just an increment to what is already known. Its assimilation requires the reconstruction of prior theory and the re-evaluation of prior fact, an intrinsically revolutionary process that is seldom completed by a single man and never overnight. No wonder historians have had difficult in dating precisely this extended process that their vocabulary impels them to view as an isolated event. (*Structure* 7)

To become a new paradigm, a theory must explain the facts better than any others currently available, according to Kuhn, but it does not have to explain everything (17-18). What then occurs is that the new paradigm becomes the standard theory—the basis from which scientists start, and from which normal science can proceed. For example, once the Copernican heliocentric nature of the solar system became the predominant paradigm for solar astronomy, astronomers no longer had to begin their astronomical careers proving that the sun was at the center of the solar system. Instead, this fact was taken as a constant, and investigations of the solar system could move forward from that point.

Paradigm change occurred in Tennyson's society through such influential texts as Robert Chambers' 1844 Vestiges of the Natural History of Creation, which Tennyson asked his publisher, Edward Moxon, to send him the year it was published. The fluidity of scientific accounts of the cosmos is reflected in this work, which was influenced by the work of Lamarck's evolutionary theory. Jean-Baptiste Lamarck transmitted his nowdiscredited version of evolution throughout France. Though it was Lamarck who came up with the term "biologie" in 1802, his ideas conflicted with those of Cuvier's accounts of biological extinction (Burkhardt 46). Lamarck's theory of evolution, which was less reliant on a First Cause than Paley's natural theology (discussed below), depended on the idea of acquired characteristics that could then be inherited by further generations. His theory's most famous example is that of the giraffe, which supposed that giraffes, by habit, stretched their necks up to trees in order to forage, and in doing so, elongated their bodies in a way that was then passed on to their progeny, whereas Darwinian theory would suggest that giraffes evolved along with the landscape, and those which were shorter did not survive, leaving only the tallest, most capable of surviving to continue the species (Burkhardt 173-74). Lamarck never offered a mechanism by which the organs that a species would require to survive came into being.

Lamarck's theories are particularly significant for their influence on Robert Chambers' *Vestiges of the Natural History of Creation. Vestiges* was a unique tome, as James Secord notes: As readable as a romance, based on the latest findings of science, *Vestiges* was an evolutionary epic that ranged from the formation of the solar system to reflections on the destiny of the human race. *Vestiges*, published in 1844, was more controversial than any other philosophical or scientific work of its time. In a hugely ambitious synthesis, it combined astronomy, geology, physiology, psychology, anthropology, and theology in a general theory of creation. It suggested that planets had originated in a blazing Fire-mist, that life could be created in the laboratory, that humans had evolved from apes. Most intriguing of all, *Vestiges* was anonymous. No one seemed to know who the author was, or whether his or her references to a divine creator were just for show; the author's status, politics, and gender were a mystery. (1)

Much of what Chambers covered in his hit volume had been discussed among the Victorian intelligentsia already; Tennyson notes that he had already been familiar with many of the concepts in the book when he asked Moxon to obtain a copy for him to read. However, its comprehensive scope and readability enhanced its impact.

Vestiges became part of the conversation of the Victorian middle class, thanks to a burgeoning of the popularization of science during the era. Bernard Lightman, author of *Victorian Popularizers of Science*, points out that the book was "immensely popular," reaching a sixth edition in three years. Its reception documents the cultural contest over legitimacy between science and theology and other non-empirical spheres of thought in that

the book sparked a controversy on the issue of scientific authority. When men of science judged that *Vestiges* lacked scientific credibility and mercilessly attacked its evolutionary theory as a hasty generalization, Chambers appealed directly to the public in his *Explanations, A Sequel* (1845). (25-26)

Evolutionary theory thus exemplifies a paradigm shift that profoundly affected all elements of society in its contested claims about the cosmos. Though the paradigm shifted for most scientists in the mid-to-late nineteenth century, after Darwin published his theories, the paradigm did not sweep through the non-scientific community as quickly and the public was drawn to other theories and texts the scientific community disregarded. With the validity of Biblical accounts of creation at stake, concepts of value and meaning, and views of human immortality, all thinkers were vitally interested in these issues.

Tennyson's interest in science, then, was not just that of the gentleman thinker and writer, or even the poetic documenter of his world. Rather, he attended to scientific discoveries and discourse by way of entering into legitimacy arguments that involved the role of the poet as part of an aesthetic sphere which was threatened by scientific, materialist accounts of the cosmos, which this study addresses in subsequent chapters. One can see in Tennyson's poetry the influence of his knowledge of the scientific discoveries of the late eighteenth century, for instance, in the astronomical work of William and Caroline Herschel, the brother and sister team who built telescopes and swept the night sky looking for new celestial objects, opening the heavens up to new explorations. William Herschel embarked on a monumental task—observing every celestial object in the sky with his telescope in order to find binary stars that might appear to be single stars with the naked eye (Lemonick 61-62). By doing so, he believed he might finally be able to measure stellar parallax, a shift in an object's position relative to other objects which can be used to calculate the distance of the original object from the viewer. Herschel's theory of how to do so was wrong and neither he nor Caroline discovered evidence of parallax. What they did discover sent astronomers on the road to realizing just how large the universe might possibly be. Though astronomers already suspected that the stars were some incomprehensible distance away, no one knew quite how far that might be (Lemonick 54).

In the Herschels' survey of the night sky came many discoveries of comets, nebulae, and in 1781, the planet Uranus. William Herschel first believed that the planet was a comet, as he reported to the Royal Society, but others suspected that Herschel was wrong and had discovered something much more interesting—a planet: "Over time, more accurate measurements showed the new object's orbital radius was 19.2 AU. In discovering the first planet since the dawn of history, Herschel had doubled the size of the solar system" (Bartusiak 129). The catalogue of the stars compiled by the Herschels became the starting point for future astronomy. Herschel's 1785 paper "On the Construction of the Heavens," however, provided one more startling analogy, and the question of the age of the universe was spelled out clearly for the first time: "Herschel's crucial observation was that some galaxies were evidently older and more evolved than others. 'We are enabled to judge of the relative age, maturity, or climax, of a sidereal system, from the disposition of its component parts'" (Holmes 192). More advances occurred in 1838, when Friedrich Wilhelm Bessel detected stellar parallax for the first time. Bessel observed the stellar parallax of the star 61 Cygni, discovering that the star was 3.46 parsecs from earth (11.28 light-years or over 66 trillion miles away). This distance meant that it had taken more than eleven years for the light of this relatively close star to reach the earth (Crowe 158). How much further, then, must the rest of the stars be according to this calculation? Such discoveries posed challenges to the principles of the great chain of being and to thinkers like Tennyson who attempted to accommodate these considerations to obviously flawed, old concepts of creation.

Another influential text on astronomy which Tennyson had access to was William Whewell's *Astronomy and General Physics Considered with Reference to Natural Theology*. As Tennyson's tutor at Cambridge and the eventual master of Trinity College, Whewell is credited for coining the word "scientist." The Bridgewater treatises were a series of lectures by notable thinkers sponsored by the Earl of Bridgewater and that were, much like Milton's *Paradise Lost*, intended to justify the ways of God to man by explaining the creation in terms of the Creator. Much of Whewell's explanation of the solar system is a straightforward review of orbits and solar movements in a section appropriately titled "Cosmic Arrangements." Whewell accommodates science and religion in his chapter on Laplace's nebular hypothesis, the predecessor to modern planetary formation theory, which suggests that solar systems form from rapidly rotating clouds of gas that coalesce into a star and planets. Registering his awareness of the implications of his insights in terms of metaphysical beliefs, Whewell notes that "it is

proposed by its author, with great diffidence, as a conjecture only" (183), and he later insists that such a formation would still require a First Cause to set it into motion.

Other scientific discoveries also challenged Biblical accounts of creation, such as the invention and use of the spectrometer and the decipherment of its results, which allowed scientists to identify the nature of matter throughout the viewable cosmos. Though the spectrum had been under investigation since the days of Newton, only in 1828 did Josef Fraunhofer demonstrate significant advances in dark-line spectra, and not until 1859 did Wilhelm Bunsen and Gustav Robert Kirchhoff establish a new branch of science around spectrum analysis (Crowe 180-81). Bunsen and Kirchhoff were able to analyze the sun's atmosphere by examining the solar spectrum, finding "definitive proof that the chemistry of the Earth was identical to the chemistry of the heavens. The longstanding Aristotelian belief that cosmic matter differed from the terrestrial elements was finally abolished" (Bartusiak 212-13). Ironically, the identity of material composition throughout the cosmos affirmed principles of unity and continuity posited by the great chain metaphor, in this case shoring up arguments of those who attempted to accommodate scientific to theological accounts of the cosmos rather than placing them in doubt, while also adding evidence for the case of the nebular hypothesis.

The seventeenth century's advances in astronomy that eventually led to Herschel's discoveries and a new view of the universe were also partly responsible for new concepts about the Earth's origins and age posited by geology, another scientific field with which upholders of theological accounts had to deal: At the same time the revolutions in cosmology had removed the Earth from its fixed centrality in the cosmos and had set it loose within an apparently centreless and infinite universe. Not only did this make acute—long before the Space Age—the problem of the 'plurality of [inhabited] worlds', with all its attendant metaphysical and theological difficulties, but it also implied that whatever history the Earth had had, and would have in the future, might be only a single example of a pattern common to all bodies. (Rudwick 76)

This created problems as scientists began to wonder if those other worlds were also relatively young worlds, only six thousand years old, as Biblical accounts supposed the Earth to be at that time, if they too had experienced a worldwide Flood as described in Genesis, and if the God of Earth was also the God of other planets. For many thinkers, finding a way to describe accurately how the Flood impacted the Earth and how fossils were formed was one of the great mysteries of geology. By the eighteenth century, Georges Buffon had begun to insist that to find consistent regularity in the processes of the Earth, one would have to look at a much expanded time-scale (Rudwick 93-94).

Toward the end of the eighteenth century, palentology was also presenting theology and the great chain with significant challenges. Georges Cuvier's presentation to the National Institute of Science and Arts in Paris on living and fossilized elephants describes some of these challenges, as Martin Rudwick notes in his discussion of paleontology's and geology's own histories: Certainly in retrospect, and even at the time, it was an occasion of outstanding importance for the history of palaeontology, because for the first time the world of science was presented with detailed and almost irrefutable evidence for the reality of extinction. The fact of extinction as a general phenomenon in the history of life, and the attempt to find a satisfactory explanation for it, dominated paleontological discussion for the next two decades. (101)

This evidence of extinction forced some to adopt a temporalized version of the great chain metaphor, but despite continuing attempts to support theological or metaphysical explanations of the universe, the secularization of science was beginning its dominance— at least in France. In England, Rudwick explains, Robert Jameson brought Cuvier to the world of British science, complete with his own editorial comments alongside the translation of Cuvier's work, and the British scientific community latched on to a somewhat bastardized version of what Cuvier had meant (133-35). William Buckland, in particular, modified the theory in an attempt to prove that a Biblical flood had been worldwide, in accordance with Scripture, but his 'evidence' was soon dismissed the scientific community (135-36). Meanwhile, by the time Charles Lyell published the first volume of his *Principles of Geology* in 1830, the geological time-scale had been established in the minds of most scientists as "almost unimaginably lengthy by the standards of human history, yet documented by an immensely thick succession of slowly deposited strata" (Rudwick 156).

The claims of science, as Rudwick notes in his history, involved scientific paradigm shifts, but also cultural changes regarding attitudes about the legitimacy of science over theology as the basis of truth. Rudwick suggests that "there was by 1830 a consensus of scientific opinion that embodied a synthesis of high scientific status and explanatory power. Lyell's work was important not because it suddenly replaced this [previous scientific synthesis of opinion] with a more 'scientific' theory, but because it offered a radical challenge to the established synthesis, and forced scientists to reexamine its foundations" (164-65). Though the underpinnings of geology had been shifting for quite a while, Lyell's book required that geological theory of the time undergo what Kuhn claims is necessary for the assimilation of new theories: "the reconstruction of prior theory and the re-evaluation of prior fact" (*Structure* 7).

Lyell's *Principles* forced a significant showdown between theological and scientific accounts of the cosmos, as well as shifts in scientific paradigms. His account revealed that the same processes which the earth continuously undergoes, such as earthquakes, volcanic eruptions, and other geological and seismic upheavals, created existing geologic structures of mountains, islands, and archipelagos over a long period of time, producing continuous change. This concept supported theories of a much, much older earth than Scripture, for example, would allow. These claims had their own particular implications attached to it. If extinction of species could be explained by a one-time catastrophe like the Deluge, as Buckland asserted, then the Biblical creation story was validated and humanity had nothing to worry about in regards to their own survival. Rudwick suggests that theologians in fact accommodated geological theory by viewing

extinction and destruction as dynamics of a sinful world, which revealed God's design, claiming that new creatures could not enter the world since it is of God's creation alone. However, if extinction, like the growth of mountains, was gradual, taking place over time, then humanity might be just as vulnerable to extinction as any other species on the planet.

Another influential text of which Tennyson would have likely been aware also attempted to accommodate religious and philosophical views about the cosmos with scientific views. Before Darwin's evolutionary theories were published beginning in 1859, William Paley's *Natural Theology*, mentioned above, was the text that for many explained the foundations of the world in terms that validated both theological and scientific concepts.¹ Paley's argument relies on the analogy of the great watchmaker, arguing for a First Cause in the universe which brought all things into being for beneficent purposes according to scientific laws promulgated by the Creator. Paley's work can thus be seen as another influential defense of the great chain which would have appealed to those who attempted to reconcile science and religion. In her account of the wide-spread reception of Paley's work, Aileen Fyfe notes that this work persisted in its influence even after Darwinian theories undermined the claims of a First Cause:

> *Natural Theology* is frequently associated with the paradigm which was overthrown by Charles Darwin's *On the Origin of Species* (1859). This is rather simplistic since natural theology did not suddenly end in 1859, and natural theologies changed between 1802 and 1859 so that natural

¹ While conventional scholarly wisdom has been that *Natural Theology* was a common text at Cambridge during the years in which both Tennyson and Darwin attended the university, scholar Aileen Fyfe disagrees. However, Paley's ideas would have yet been well known at the time.

theology immediately prior to the *Origin* did not have as much in common with that of Paley as is often thought. Yet the fact that Paley *is* so often linked with the pre-Darwinian state of affairs is further evidence for the respect and longevity which his work enjoyed. Even those who no longer accepted his argument exactly as he expressed it could still respect and admire his work as one of the best in the genre. Darwin himself was of this opinion. (324)

Paley's ideas continued to influence natural theology even as other non-metaphysical accounts of the cosmos evolved.

Though Darwin's ideas would differ significantly from Chambers', one might see how *Vestiges* helped prepare the Victorian public for the paradigm-shifting *On the Origin of Species*, the argument of which Darwin set out immediately in the introduction at a time when he himself was still developing his own views on the existence and nature of deity:

> I am fully convinced that species are not immutable; but that those belonging to what are called the same genera are lineal descendants of some other and generally extinct species, in the same manner as the acknowledged varieties of any one species are the descendants of that species. Furthermore, I am convinced that Natural Selection has been the main but not exclusive means of modification. (15)

Though Darwin never denied the existence of an Almighty Creator, telling Tennyson himself that his theory did not conflict with Christianity, some of his followers, like T.H. Huxley, did take that further step. Darwin's own views were carefully modulated. In a letter to John Fordyce, he noted that "a man may be an ardent Theist and an evolutionist." As to his own belief, he noted "my judgment often fluctuates," but claimed that even at the extremes of those fluctuations, he had never been an atheist, instead, describing himself as an agnostic.

In order to investigate Tennyson's views of the contests between science, faith, and art, this dissertation analyzes poems written during various points in his career which deal with these issues. "The Palace of Art" is one of his early poems, while *In Memoriam*, the centerpiece of his work that resulted in his being named Poet Laureate, was written over the course of seventeen years. The poems "Locksley Hall" and "Locksley Hall Sixty Years After" provide a pair of poems from two separate points in Tennyson's career, both pre- and post-laureateship, and offer the opportunity to examine how Tennyson's viewpoints changed in the forty years separating their composition. "The Higher Pantheism," "Parnassus," and "By an Evolutionist" reflect his thoughts during the later years of his life and career. This study examines his poetry in terms of the scientific discourse that influenced both the culture and the art arising from that culture, and attempts to identify Tennyson's own evolving ideas, tracing his struggles to reconcile the empirical and material with the spiritual and aesthetic over the course of sixty years, a struggle that reflects a central feature of Victorian experience.

Chapter Two

"The Palace of Art" and Thermodynamic Chaos

"Tennyson, we cannot live in Art." – R.C. Trench

At some point in 1830 or 1831, R.C. Trench, a fellow Trinity undergraduate at the time and the future archbishop of Dublin, uttered the famous statement to Tennyson which became, according to Hallam Tennyson, the germ of "The Palace of Art" (Mem. I.118). "The usual assumption," A. Dwight Culler notes, "is that the future Archbishop of Dublin was rebuking Tennyson for the apparent aestheticism of the poems that would appear in the 1830 volume, and that Tennyson, accepting the rebuke, sharply altered his course in 'The Palace of Art'" (77). Culler, however, makes the case that the comment did not represent a rebuke, but was instead perhaps Trench sharing insights with Tennyson and the Apostles. Though the true origins of both the poem and the comment have been lost, sources agree that Trench's comment seems to have been connected with the composition of "The Palace of Art." Written not long after the death of Tennyson's father and his necessary leave-taking from Cambridge, "The Palace of Art" was published in 1832 and much revised before being republished in 1842, although the basic structure of the poem did not change in the revisions. The 1842 version consists of 74 quatrains with an ABAB rhyme scheme. Metrically, the first and third lines of each quatrain is in iambic pentameter, while the second lines feature iambic tetrameter and the fourth lines iambic trimeter, though the second and fourth lines are often irregular. Most of the revisions Tennyson made to the poem involved excising stanzas, removing quatrains that appealed to the physical senses and less to the intellectual, as well as

removing some stanzas that contained an overabundance of literary and classical references.²

Traditionally, critics have studied "The Palace of Art" by focusing on allegorical and moral readings of the poem; Tennyson himself described the poem as being "the embodiment of my own belief that the Godlike life is with man and for man" (*Mem.* I.118-19). Traditional readings often focus on issues related to the Romantic solipsism represented in the poem, the rejection of self-isolation, and the need to share art with others. However, these traditional readings ignore the fact that "The Palace of Art" also expresses Tennyson's continuing preoccupation with unsettling advances in scientific knowledge and the connection of those advances with an equally unsettling political and cultural situation during the time he composed the poem. In particular, nascent thermodynamic concepts of chaos and order emerge in "The Palace of Art" as a statement of Tennyson's early recognition that art can never be isolated and immunized against attacks by utilitarian and materialist critiques.

Indeed, critics have often been unkind to Tennyson's poem as a result of reading it as an allegory of the consequences of attempting to locate art and the aesthetic in a realm of private experience. Richard Cronin notes that the poem "has irritated some of Tennyson's best readers into their savagest responses," (195). Christopher Ricks, the editor of the last two definitive editions of Tennyson's works and the co-editor of *The Tennyson Archive*, refers to the poem as "a shallow charade" that provides nothing of substance (qtd. in Cronin 195). Taiji Yamada points out that F.R. Leavis and Cleanth

² Christopher Ricks' *The Poems of Tennyson* prints the 1842 version of the poem with all changes from the 1832 version footnoted in the text. All quotations used here are from the 1842 version unless otherwise noted.
Brooks were similarly dismissive critics of this early work of Tennyson's, Leavis remarking on contradictions within the poem and Brooks accusing Tennyson of failing to reconcile art and the material world (45-46). Tennyson himself assigned "The Palace of Art" to the realm of didactic allegory (Brunner 43), although A.C. Howell points out that many have felt allegory to be "the curse of Tennyson's poetry" (510). However, Howell also asserts that "no study of the poet can neglect it, since he himself urged its importance." Howell notes that even those who do appreciate the poem are often more concerned with the substantial changes that Tennyson made to the poem "as showing Tennyson's ability to take advantage of criticism and his growth in poetic power between 1833, when the poem first appeared, and 1842; nevertheless they seem to enjoy explaining the allegory, even if they dismiss it as fairly obvious" (507). However, the changes to the poem between the two versions do little to affect the overall allegory.

The allegory indeed appears to be fairly simplistic; the narrator builds a palace where he means for his Soul to reside, filling it with only the best of art: paintings, mosaics of great tales, and likenesses of giants of intellectual and moral knowledge, intending for the Soul to live apart from the worldly, everyday concerns that fill mundane life. However, after three years,

> Lest she should fail and perish utterly, God, before whom ever lie bare The abysmal deeps of Personality, Plagued her with sore despair. (l. 221-24)

The palace becomes uninhabitable, forcing the Soul to evacuate the premises. In the palace, Tennyson's feminized Soul, surrounded with art, finds herself separated from the world in a non-viable, amoral state. Cronin notes that this privileged separation from the real world causes the conflict within the poem:

The poem alerts us to the pride in [the Soul's] proud self-isolation, but does little to prompt any very intense fits of moral indignation, and it is this that has prompted Ricks, Tucker, and Sterling before them, to resent the manner in which the whole poem is dragooned into the service of a tritely pious moral. Tennyson offers the poem as a 'sort of allegory', and apparently, a rather pompous one, illustrative of the truth that any attempt to separate 'Beauty' and 'Knowledge' from 'Good' will only end in tears. (203)

Cronin suggests a more focused context for the poem, and points out

a humbler, more ordinary allegory lurking behind the solemn abstractions of the poem's introductory lines. The Soul's life in the palace, the architecture of which, as has often been noted, is based on the Great Court of Trinity, is an idealized, even a comically idealized, version of the life of a rather select group of undergraduates, whose talk is of poetry, painting, and philosophy—of just such a group as the Cambridge Apostles. (203)

Cronin goes on to suggest that the fourth year, when the Palace is no longer a welcome place to stay, is analogous to the year in which undergraduates had either to leave the university, graduate with the affirmation of their membership in the Church of England and leave, or graduate with the affirmation and join the celibate lifestyle of the university (204-05). Still, no matter how one left the university/palace, the final stanza of the poem metaphorically offered the Trinity undergraduate a chance to return to the salad days of college: "Yet pull not down my palace towers, that are / So lightly, beautifully built: / Perchance I may return with others there" (293-95). These lines suggest that Tennyson may have been particularly nostalgic for Cambridge, having been forced to leave Trinity's halls upon the death of his father in the spring of 1831. Though Tennyson had hoped to return, he was forced to take on the responsibilities of caring for the Tennyson household instead. Thus, Tennyson may have been contrasting the idealized life of the Trinity undergraduate with the unfortunate realities he found back home at Somersby, with a final realization that such a collegiate life was unsustainable in the face of the demands of his family life.

Other critics have criticized the poem on the basis of discrepancies between the poem's moral and its form. Joseph Sendry notes that some critics claim that the luxuriously detailed palace overshadows the allegorical message of the poem, because

although the moral explicitly stated in the final lines rejects the palace of art and the excesses of aesthetic indulgence that it appears to stand for, the wealth of descriptive imagery that Tennyson lavishes on this retreat from the world makes it look as if, despite a last-minute declaration of allegiance to 'a cottage in the vale' (l. 291), the palace is where the poet's loyalties really lie. (149)

However, Sendry argues that critics who focus on this seeming paradox are missing the point, because "the very excess of his description of the palace is itself subject to an ironic reading that would carry an implicit moral judgment" (149-50). This reading recognizes the poem as far more complex than other critics have suggested, because only "when the palace is first seen as the monstrosity that it is, as art abused rather than art properly used, does the elaborate description expended upon it cease to appear irrelevant and instead becomes integral to the poem's central theme. To escape from this aesthetic prison, the poet—and the reader—have to recognize it for what it is" (Sendry 162). In fact, Larry Brunner notes that much of the criticism of "The Palace of Art" appears to be "impatient, for political or cultural reasons, of any assertion of the moral absolutes Tennyson assumes in this poem . . . Intellectual pride, expressed in aesthetic arrogance, leads to inevitable judgment" (43-44). Brunner suggests his own reason for this impatience: "The poem's assumption that God will stand ultimately in judgment upon art and artist (and critic!) has not been well received by some modern critics." He notes, for example, John Woolford's reading of the poem as a critique of solipsism as being "fatal," but also "broken by God's mercy, a gracious, divine judgment which leads the soul outside herself" (53). In this reading, the self-indulgence of the Soul's egocentrism is insufficient to provide the Soul with necessary nourishment to survive.

Despite differing views of the value of "The Palace of Art," criticism typically assumes that the extensive set-dressing with which Tennyson creates the palace is central to the larger allegory of the poem. Criticism also assumes that the palace remains standing at the end of the poem and that the Soul will one day be able to return to the palace with others, assuming that the allegory has to do with the purpose of sharing art with others or the rejection of Romantic solipsism and reconnection with humanity. However, these readings ignore a significant aspect of the poem that becomes apparent when read in terms of Tennyson's subsequent poems and his life-long interest in science. The 1832 version of the poem footnoted three stanzas between lines 186-192 that Tennyson had omitted for length. These lines feature the Soul using a telescope to experience the vision of the heavens, which Tennyson qualified as "expressive of the joy wherewith the soul contemplated the results of astronomical experiment" (qtd. in Ricks 64). The romantic images of "Brushes of fire, hazy gleams, / Clusters and beds of worlds, and bee-like swarms / Of suns, and starry streams" provide an aesthetic view of the scientific ideas with which Tennyson was engaging.

Even in his early years as a poet, Tennyson began to play with the ideas and language related to later formulations of thermodynamic theory. His interest in science began as a boy, according to Hallam Tennyson's *Memoir*, and lasted throughout his life (I.18). In 1833, Tennyson's ambitious course of study included chemistry, botany, electricity, and mechanics (Gibson 61). While Tennyson was at Cambridge and writing his early poems, the nascent ideas of thermodynamics were in the air. Thomas Kuhn claims by way of the many investigators he names who were involved in related studies and findings during the era that "the two decades before the 1850s" provided a "climate of European scientific thought" that "included elements able to guide receptive scientists to a significant new view of nature" ("Energy," 69-70). Kuhn suggests that thermodynamic theory was not brought forth fully into the public eye until 1842. To be

sure, Sadi Carnot had begun to conceive of and record his thermodynamic experiments prior to 1832, when "The Palace of Art" was published, even though his 1824 publication *Reflexions on the Motive Power of Fire* had largely been ignored (Lewis 66).

Indeed, Kuhn asks "[w]hy, in the years 1830-50, did so many of the experiments and concepts required for a full statement of energy conservation lie so close to the surface of scientific consciousness?" ("Energy" 72). Kuhn's primary aim is to explore the development of revolutions in paradigms of scientific knowledge, and he answers his question by suggesting that these early experiments and concepts lay close to the surface of social consciousness as a result of several scientists recognizing and addressing a number of problems in the existing paradigm. It should not be unexpected that Tennyson was involved in these early discussions that led to later articulations of the ideas and theories that we now refer to as thermodynamics, even though the influence might not be clear if we only look at the language of modern thermodynamic theory.

To be sure, "The Palace of Art" does not reflect the sophisticated use of thermodynamic theory found in *In Memoriam*, written from 1833 to 1850 as thermodynamic theory began to develop more fully. Barri Gold argues that in *In Memoriam*, Tennyson skillfully intertwines the language of grief with both the first and second laws of thermodynamics. The first law deals with the conservation of energy, which states that energy can be neither created nor destroyed, but only transformed from one form to another. In distinct thermodynamic terms, this becomes a statement that the energy of a closed system is equal to the heat applied to that system and the amount of work derived from it. The second law states that isolated systems evolve toward

thermodynamic equilibrium, or that isolated systems will always increase in entropy until they reach a state of maximum entropy or chaos. The non-scientific character of the representations of chaos in "The Palace of Art" perhaps reflect the fact that thermodynamics, as a field, was as yet undefined while Tennyson was writing the poem, so precise language and specific ideas and concepts articulated later when the laws were formally defined were unavailable to him at the time. Only in the mid-1840s, when William Thomson, the future Lord Kelvin, began working through these ideas, did these notions begin to form the science of thermodynamics as we now know it (Lewis 48). Tennyson dealt much more with the general ideas—what might now be termed the layman's concept of thermodynamics—reflecting that these laws had not yet reached their ultimate levels of sophistication. The term 'entropy' itself did not enter the English language until 1868, according to the Oxford English Dictionary. Gold argues that Tennyson deals with these general concepts underlying both laws in *In Memoriam*. However, "The Palace of Art" more surely reflects concerns related to the second law's statement that all things move towards entropy through its representations of chaos following on the order that the narrator has imposed upon the palace.

Reading "The Palace of Art" in terms of its language and imagery of chaos and entropy, then, reveals its preoccupations with disorder. This preoccupation may have arisen from both politically and personally unsettling aspects of the poet's life at the time he initially wrote it. The poem was composed during the unsettling period leading up to the Reform Bill of 1832. The Corn Laws, which had been enacted about fifteen years previously to protect British farmers, had made importing grain prohibitively expensive, resulting in widespread struggles for food and basic survival across Britain and Ireland, according to W. N. Molesworth, in his 1865 history of the bill (78). Calls for reform of so-called "rotten boroughs" in Parliament began as some British constituencies realized the Parliament no longer truly represented them; in some cases, MPs literally represented no one, while some large, populous cities that had grown up as a result of industrialization had no representation. Furthermore, in 1829, Catholic emancipation began, partly to avoid prospects of a revolution in Ireland and partly to prevent England's Irish Catholic soldiers from rebelling (Molesworth 38-39). Some of the anti-reformers feared revolution by the general English and Irish populace, as they remembered only too well what had occurred in France only forty years previously (68). Molesworth describes the violence of 1830 when the peasantry took out their anger on agricultural machinery and began setting fire to their crops so that "through twenty-six counties, night after night, the sky was reddened with the blaze of the nation's food, going up in flame and smoke" (77). Tennyson himself had helped extinguish some of these fires, according to Hallam Tennyson, and "largely sympathized with the labourers in their demands" (Mem. I.41).

The presence of chaos and entropy amidst seeming order seems also to reflect Tennyson's personal chaos surrounding the death of his father in 1831 and the necessary exit of the Tennyson sons from Cambridge. Tennyson's father had suffered from mental illness, epilepsy, alcoholism and laudanum addiction in the ten years preceding his death (Martin 38-42). The camaraderie of Cambridge and the Apostles was suddenly stripped away. His woes continued, as Martin notes: "He felt short of money all during the next two decades; he was emotionally torn by the death of his father and that of Hallam in 1833; his family was never permanently settled in that time; nothing in his family background disposed him to think of marriage as a source of stability; he was worried about the ills of the mind and body that he thought were his heritage" (149-50). Tennyson himself fell ill after his father's death, perhaps as a symptom of his own mental distress amidst such chaos (Martin 139-40).

The poem, however, displaces the personal and political chaos surrounding its creation into concerns about the direction and status of art. The poem appears to be apolitical, since initially the Soul deliberately isolates herself from the outside world, although at the end she envisions only occasionally revisiting the aesthetic realm accompanied by others, which resolves the threat of solipsism and acknowledges the outside world of "others" (295). The narrator intentionally situates the aesthetic and spiritual as separate from the political and empirical by way of removing it from their damaging claims that art represents only the self-centered, and as such, can never serve in a utilitarian world focused on creating the most good for the most people. However, Tennyson also represents such an isolated aesthetic realm as non-viable—by terms of the poem, uninhabitable—suggesting that art can only live in connection with the material, empirical realm, even if that realm itself seems directly to threaten the status, meaning and value of the aesthetic and spiritual. To isolate art within the aesthetic realm of the palace deprives it of moral value and efficacy in the real world; to locate art in the material realm subjects it to critiques regarding its absolute value according to empiricist and use-value perspectives and risks its ultimate place on the palace's pedestals, finding

itself elevated, but ultimately marginalized by the demands of utilitarianism. In this move, Tennyson recognizes that Victorian nature often saw purely aesthetic art as too detached from humanity, as Norman Friedman notes in his claim that "Tennyson . . . rejects not art, but rather an art which is centered on the self—which seems to many in the Victorian period divorced from life" (52).

Thus, the poem reflects a more complicated view of art in an increasingly empirical and utilitarian age. The decay of the palace at the end of the poem, while reflecting Tennyson's attention to theories of entropy, suggests also a rejection of Romantic aesthetic philosophy. Tennyson lived and wrote through much of the Victorian era, a period which spanned the late Romantic and early modern eras and included movements like that of the Pre-Raphaelites and others who attempted to carve out a unique place for art as materialist epistemology and utilitarian moral calculus became hegemonic. Thus, even as "The Palace of Art" celebrates the world of imagination and the world of the aesthetic in its early representations of the palace as a "lordly pleasurehouse, / Wherein at ease for aye to dwell" (1-2), the palace by the end of the poem reflects Tennyson's qualification of the Romantic vision. In fact, in critiquing Romantic solipsism, Tennyson rejects the notion that art should be experienced only in and by the self. The art which becomes self-centered seeds its own destruction, for the "deep dread and loathing" that falls upon the Soul comes from "her solitude" (229).

The narrator's concern in first constructing his palace as an isolated aesthetic realm is that it be both comprehensive and durable, providing a stable safe-house, which, like an ancient keep, might stand against all threats by virtue of both its sturdy construction and desolate location. The beginning of the poem focuses on order as the narrator carefully and methodically constructs the palace for the Soul, which he intends to stand for ages. The foundation is built on a "huge crag-platform" (5), and the narrator declares, "[t]hereon I built it firm. Of ledge or shelf / The rock rose clear" (9-10). Upon this solid base, the narrator constructs an orderly and geometrically symmetrical courtyard in which the Soul can wander:

Four courts I made, East, West and South and North,

In each a squarèd lawn, wherefrom The golden gorge of dragons spouted forth

A flood of fountain-foam. (21-24)

These lines reflect the source of Cronin's observations about the palace's similarities to Trinity College, Cambridge, in terms of its human-constructed symmetry and order. Each court of the palace is similarly outfitted with appropriately majestic architecture in the following stanzas, along with echoes of the fountains in the courtyard evoking all the senses that the palace allows the Soul to indulge in. With the "sonorous flow" (27) of the "fountain-floods" (28) whispering through the courtyard, from which the mist "[1]it up a torrent-bow" (36), the air in the palace is perfumed by "[a] cloud of incense of all odour" (39), and at sunrise and sunset, the palace seems to explode with color as "[t]he light aerial gallery, golden-railed, / Burnt like a fringe of fire" (47-48).

Such sensuous imagery is the source of charges that Tennyson was indulging in the solipsism he seems to critique. However, reading the changes that Tennyson made to the poem between its 1832 and 1842 printings supports the idea that even the early

version of the poem reflects his attempts to situate art and the aesthetic as both anterior and superior to the empirical and the utilitarian. Sendry notes that in the 1842 version, "the poet pruned back his rambling description, redirected it in an orderly course, and accented specific details of moral significance" (150). Tennyson's narrowing of the wide-ranging sensuality of the original version suggests that he was attempting more carefully to shape the interpretation of the aesthetic as a source of moral knowledge and value rather than simply of pleasure. The 1832 version spends far more time than the 1842 version appealing to all five senses, for example, featuring an entire stanza devoted to the incense urns in what would have been lines 37-47. Several stanzas from the 1832 version devoted to gustatory delights and which referred to the Soul as sitting "[i]n pomp beyond control" were excised from between lines 180 and 195. Tennyson also excised several stanzas from the 1832 version after line 137 that referenced carvings of great figures in art, religion, classics, and philosophy, such as Michaelangelo, Martin Luther, Cervantes, David, Isaiah, Ezekiel and Moses. Other imagery that remains in the 1842 version includes the "great bells that swung, / Moved of themselves, with silver sound" (129-30) and the solipsistic echo of the Soul's own singing. What remains in the 1842 version for the Soul to delight in are primarily the paintings and mosaics which grace the palace with only the greatest intellectual, aesthetic, and moral giants of human history. Retaining the "choice paintings of wise men" (131) and limiting the additional aesthetic references, Tennyson allows the focus to remain on figures whose greatness and influence was uncontested regarding their contributions to humanity. While the 1842 version features a palace in which intellectual and aesthetic pleasures are associated with

moral knowledge and value, including paintings of Dante, Homer, Shakespeare and Milton, the Soul nonetheless has missed their significance and believes herself "Lord over Nature, Lord of the visible earth, / Lord of the senses five" (179-80). The Soul believes that her orderly, yet sumptuous palace has given her mastery over all she surveys, not realizing that it has effectively trapped her in the gilded walls of a cage, demonstrating in both versions of the poem the dangers of solipsistic engagement with the aesthetic. The builder of the palace ignores the moral and practical wisdom available in contemplating and reflecting on the old artists as the Soul simply partakes in aesthetic pleasures and experiences the illusion of mastery. The Soul's overlooking of this moral value reflects Tennyson's added critique of those who would reject the aesthetic for the empirical and utilitarian on the basis of its lack of moral content.

The imagery that surrounds the design and building of the palace suggests that Tennyson was attempting to portray entropy as a result of falling away from the spiritual and the aesthetic and as a result of the encroachment of the material, while he also attempted to insulate the aesthetic and his poem from the charges of solipsism by critiquing it himself. The narrator designs the palace with the best of intentions, not intending for it to be a cage, but "a lordly pleasure-house" (1), where the Soul can stand apart from the material world and enjoy the highest forms of art unmolested by the "darkening droves of swine" (199). The narrator builds the palace for the Soul to enjoy her artistic and intellectual pursuits without ever forcing her to encounter any material conditions that threaten art itself. Thus, it is outfitted with those things that bring the Soul pleasure, such as in the picture gallery, where ... every landscape fair

As fit for every mood of mind,

Or gay or grave, or sweet, or stern, was there,

Not less than truth, designed. (89-92)

As the Soul strolls through the gallery, her eyes might fall on a variety of landscapes that reflect truth in nature, or she might choose to stroll through the gallery where instead the pictures portray scenes from the most important stories humanity has created for itself:

Nor these alone: but every legend fair

Which the supreme Caucasian mind

Carved out of Nature for itself, was there,

Not less than life, designed. (125-29)

The word "designed" in both stanzas itself suggests intentional orderliness, as does the idea in the second stanza where the word is used particularly, that the mind has carved and situated this out of Nature, much like the great "crag-platform" (5) foundation which the narrator carves out of the landscape for the palace to sit upon. The narrator, in both versions of the poem, surrounds the Soul with the portraits of great authors who have also demonstrated a capacity to access truth and impart its meaning to humanity: Milton, Dante, Shakespeare, and Homer (133-38). Below the "royal dais" (132) where the Soul will sit and rule

... was all mosaic choicely planned

With cycles of the human tale

Of this wide world, the times of every land

So wrought, they will not fail. (145-48)

Here again, the phrase "choicely planned" denotes the careful attention to detail that has gone into the creation of the palace by way of constructing pleasure in its highest form, rather than just in terms of sensuous pleasure. However, the Soul carelessly steps on this mosaic and its stories when she goes to take her seat on the dais. In a poem where the Soul rules over her domain, the designing narrator acts as the divine Creator, supplanting the spiritual with a materialist creation and re-performing the sin of hubris that caused the fall of Eden. Earlier Romantic aesthetics had implied that Nature was the source and model of truth, but Tennyson's critique points out that the pleasure in simply taking in nature, rather than interrogating all of it, denies one the truths of nature. These truths are also denied to empiricists and utilitarians, who focus only on the truth of materialist fact and fail to see the moral and aesthetic truths that are available in the mosaics of cycles of "the human tale / Of this wide world, the times of every land" (146-47). Both factions that of the purely aesthetic and that of the purely empirical—create chaos by imposing order on only one aspect of the world, without considering the disorder that results within that which has been ignored.

The narrator thus includes the stories that reflect the collected wisdom and values of human existence and does so in a manner that he hopes "will not fail" (148). In fact, the builder clearly orders the palace's aesthetic contents in a kind of cultural hierarchy. Above the floor are stories such as the scene of the crucifixion (93-96), that of "Uther's deeply-wounded son," (105) and "flushed Ganymede" (121). Closer to the throne are the great authors and their elevated subjects. Above all of these, the likenesses of Plato and Bacon, as philosophers, look down benevolently through the great windows, over the floor where the stories of the simple lie:

The people here, a beast of burden slow,

Toil'd onward, prick'd with goads and stings; Here play'd, a tiger, rolling to and fro The heads and crowns of kings;

Here rose, an athlete, strong to break or bind

All force in bonds that might endure,

And here once more like some sick man declined,

And trusted any cure. (149-56)

This tale is universal and unending, but the Soul simply steps over it, as if paltry human concerns are of no issue to her, for while the cycle is ever-moving, the Soul is rapturous over her "still delight" (190). Yet this delight cannot last.

God strikes the Soul with despair, creating an internal chaos that no longer allows her to enjoy the Palace. Wherever she looks, "[t]he airy hand confusion wrought, / Wrote, 'Mene, mene,' and divided quite / The kingdom of her thought" (226-8). The palace and the Soul have become "[a] spot of dull stagnation, without light / Or power of movement" (245-46), a critique of the Romantic aesthetic since the Soul's focus on the self has caused this stagnation. William Cadbury notes that "while the Soul and palace are one in their relations to others, they are also one in their natures, for the palace in which the art works appear is, by metonymy, the Soul which lives there—we learn the characteristics of the Soul of the palace which was created for it" (25). It follows that if the Soul and Palace are one, then as the Palace falls apart, so does the Soul, which suggests implications for the end of the poem as to whether or not the towers of the palace remain standing. The reference here is to the book of Daniel, where the prophet translates the warning that God has inscribed on the wall of the feast-hall of Belshazzar:

Then the fingers of the hand were sent from Him, and this writing was written. "And this is the inscription that was written: MENE, MENE, TEKEL, UPHARSIN. This *is* the interpretation of *each* word. MENE: God has numbered your kingdom, and finished it; TEKEL: You have been weighed in the balances, and found wanting; PERES; Your kingdom has been divided, and given to the Medes and the Persians." (Daniel 5:24-28, *NKJV*)

Beginning the final section of the poem with the Biblical warning suggests that the palace will suffer the same kind of fate as Belshazzar's kingdom: "That very night Belshazzar, king of the Chaldeans, was slain. And Darius the Mede received the kingdom, *being* about sixty-two years old" (Daniel 5:30-31). Like the kingdom of the Chaldeans, the kingdom of art is also ready to fall and the rest of the poem is filled with proto-entropic images that suggest that the palace and its landscape are falling into chaos. The Soul is "mouldering with the dull earth's mouldering sod" (261), whereas the palace at the beginning of the poem had been built with "the rangèd ramparts bright" rising "From

level meadow-bases of deep grass" (6-7). Though the palace seems to be standing after chaos sets in, the Soul is "[s]hut up as in a crumbling tomb, girt round / With blackness as a solid wall" (273-74), suggesting a crumbling structure that buries the arts and the Soul in the grave while life carries on outside. The narrator, watching this occur, sees only the swirling mists of chaos and "[t]he hollow orb of moving Circumstance / Rolled round by one fixed law" (255-56). Eventually, the Soul leaves the palace and asks for a small house somewhere in the country, back in a natural environment, but asks someone—God or perhaps the narrator-God—not to completely tear down her palace, "[p]erchance I may return with others there / When I have purged my guilt'" (295-96). Her guilt lies in her ignoring the teachings of art and the ancients and in her self-indulgent willingness to separate herself from all other interactions, as well as the realization that this selfindulgence has been responsible for the destruction of the palace. Only when she can act as a mediator and guide between the world of the palace and the world of human need and suffering can she purge her guilt. Thus, through God's plaguing her "with sore despair" so she not "fail and perish utterly," the Soul survives and, by Cadbury's metonymy, so must the palace.

The fall of the Soul from the palace is foreshadowed by introducing contradictions and chaos early in the poem to undermine the narrator's original Romantic vision that the Soul can isolate and protect herself from the ugly mutability of the world. Previous literary and cultural examples had demonstrated that nature itself is unruly and uncontrollable and commented on the attempts of humanity to control it. In *Paradise Lost*, Milton's Adam and Eve are given the job of tending the garden of Eden, which without their care would turn to chaos even in its pre-lapsarian state (XI.205-12). Eighteenth-century landscaping by architects such as Capability Brown imposed a human-designed structure on nature, even if in some cases that structure was intended to be perceived as "natural," but without continual upkeep, these gardens would also become seedbeds of entropy. Joseph Sendry notes that the Soul's "inflated professions lead her into unwitting, ironic, and amusingly deflating contradictions" (158), as her supposedly "still soul" in line 60 delights in the variety of objects in the palace, "fit for every mood" (59). These moods are not always peaceful, orderly ones either, as the landscapes that follow show, demonstrating that the Soul's isolation is not an entirely happy one. Though the picture described in lines 65-68 suggest a walk along the beach, the opening line notes that it "seemed all dark and red" (65), giving the picture an ominous overtone, and the figure there is "pacing there alone, / who paced for ever" (66-67). The figure is already alone, but now that loneliness will be set in eternity—an artistic notion, perhaps, but hardly one to fit a mood of a supposedly "still soul."

The next scene similarly does not fit the image of a "still soul":

One showed an iron coast and angry waves.

You seemed to hear them climb and fall And roar rock-thwarted under bellowing caves, Beneath the windy wall. (69-72)

There, images of an angry and stormy coastline could perhaps be the same coastline from the previous painting, the ominous, dark red potential energy of the previous landscape turning into kinetic energy that thrashes the shore with a violence that cannot only be seen in the landscape, but which almost echoes in the marble halls of the palace. Even in the painting, entropy can be found in the inevitable erosion of the shore by the crashing waves. For these scenes to fit the emotional moods of the "still" Soul denotes the Soul herself as a particular locus of chaos as she simply delights in her pleasures, rather than learns from them.

The contradictions are not only in the Soul's mood, but also in the physical aspects of the palace. Plato and Bacon look down on the Soul's throne, and Sendry notes that their very solid and unmoving presence is subversive due to the fact that they were "full-welling fountain-heads of change" (166). The Soul addresses them, "O silent faces of the Great and Wise, / My Gods, with whom I dwell!" (195-96), before immediately contradicting herself and celebrating the "God-like isolation which art mine" (197), the plural verb contradicting the singleness of isolation and once again acknowledging the presence of the philosophers. Sendry suggests that "we can imagine the poet chuckling slightly as he watches the creature of his imagination trap herself in her own contradiction" (159). But the trap is not just contradiction—it may be the palace itself. It was meant to be a place of solitude, but suddenly, as the Soul begins to realize her folly, the palace becomes populated with the shades of the unknown. What had been "not less than life, designed" (128) and "choicely planned" (145), and which was so beautiful and bright that it would blind those who looked upon it (41-42), suddenly becomes a house of horrors:

> But in dark corners of her palace stood Uncertain shapes; and unawares

On white-eyed phantasms weeping tears of blood,

And horrible nightmares,

And hollow shades enclosing hearts of flame, And, with dim fretted foreheads all, On corpses three-months-old at noon she came,

That stood against the wall. (237-44)

The palace, once so full of light, now has dark corners where evil can hide. The palace is not so much a palace any longer as it is a haunted house with terrors ready to jump out at any moment to disrupt the calm altar of the palace of art, as specific as "white-eyed phantasms" with their "tears of blood" (239) and "corpses three-months-old" (243) and as vague as "horrible nightmares" (240) and "hollow shades" (241). The place of dwelling, the "spacious mansion built for me / Whereof the strong foundation-stones were laid / Since my first memory?" (234-36) is no longer the "place of strength" (233), but the "crumbling tomb" (273). The sounds of the palace change as well, pleasant music turning into a dissonant cacophony. Before, "great bells / Began to chime" (157-58), and the Soul herself created music in the palace, music so beautiful that even a nightingale dares not join her song (173-76) as it spilled from "her lips, as morn from Memnon" (171). But by the end of the poem, these pleasant sounds have turned to a confusing "low / Moan of an unknown sea" (279-80) that could be "thunder, or a sound / Of rocks thrown down, or one deep cry / Of great wild beasts" (281-83), all of which connote chaos in the images of storms, avalanches or landslides, or wild beasts prowling on the hunt. Once

again, the Soul fails to interrogate all of Nature, not just that which is aesthetically pleasing, and thus has been unable to draw out Nature's truth.

Though the Soul had been strong and sure, she becomes the site of emotional chaos: "death and life she hated equally / And nothing saw, for her despair," (265-66), a far cry from the Soul who had

... clapt her hands and cried,

'I marvel if my still delight

In this great house so royal-rich, and wide,

Be flattered to the height. (189-92)

In fact, the narrator characterizes the Soul as being "utterly confused with fears, / And ever worse with growing time, / And ever unrelieved by dismal tears" (269-71). In the end, the palace is so overcome with chaos that it is no longer habitable by the Soul and she must leave, asking for a small cottage where she "may mourn and pray" (291). She must live in a situation where change, outside of the palace, is inevitable, and where the aesthetic and the material necessarily co-exist. It is a humble come-down from the palace, and follows Tennyson's own departure from the hallowed halls of academia, reflecting the necessity of coming to terms with an insistently material world in ways that would avoid rejecting the aesthetic.

"The Palace of Art," then, provides readers with an early indication of Tennyson's concerns regarding the status and direction of art and the aesthetic as a source of value, rejecting Romantic solipsism while yet affirming a superior and anterior place for art in the material world that appears to experience the chaotic effects that science says holds ultimate sway. In doing so, Tennyson also plays with concepts of order and chaos, ideas that form the basis of the second law of thermodynamics. Recognizing the tendency of all things toward entropy, "The Palace of Art" anticipates Tennyson's ultimately life-long project of portraying the aesthetic and spiritual as the source of meaning, value and truth as the world increasingly turned to the material as the source of truth. In *In Memoriam*, he would begin questioning the status of the metaphysical when the empirical world was providing yet more evidence for the impermanent nature of humanity.

Chapter 3

In Memoriam and the Impermanent Nature of Humanity

It happens now and then that a poet by some strange accident expresses the mood of his generation, at the same time that he is expressing a mood of his own which is quite remote from that of his generation. –Poems of Tennyson (1936) —T.S. Eliot

From 1833, the year in which Arthur Henry Hallam died, through 1850, the year in which In Memoriam was finally published, Tennyson spent a considerable amount of his time and his creative effort working through issues of grief and loneliness, as well as the philosophical perplexities surrounding Hallam's death that appear in this centerpiece of Tennyson's non-Arthurian work. Hallam was Tennyson's best friend and engaged to Tennyson's sister, Emily, and the loss of so dear a friend is reflected in the poem as grief and consolation, doubt and faith. The poem consists of 131 sections of various lengths as well as a prologue and epilogue, all of which use stanzas in iambic tetrameter in an ABBA rhyme scheme. Tennyson wrote the poem's sections out of sequence in the seventeen years following Hallam's death, large portions of which are contained within two manuscripts, one held at Trinity College, Cambridge, and one at the Tennyson Research Centre at the Lincoln Central Library. Susan Shatto and Marion Shaw provide a presumed chronology of all the extant manuscripts of *In Memoriam* and a timeline for the publication of the poem. This timeline shows that Tennyson was revising and making changes to the poem all the way through a private trial run Tennyson asked for in March of 1850. Even the first edition of *In Memoriam*, published in June 1850, featured

changes from the trial edition, as Tennyson continued to work through and articulate his grief.

Howard W. Fulweiler refers to the poem as "arguably the central English poem of the nineteenth century" (297). In terms of the poem's rehearsal of the main elements of the Victorian crisis of faith, scholars have also long been aware of the scientific nature of many passages in *In Memoriam*. In her essay on the presence of thermodynamic theory as a basis of consolation in the poem, however, Barri Gold claims that Tennyson had other goals in mind for the scientific passages in his poem beyond illustrating religious doubt in the face of scientific fact. Instead, Gold argues that the poem's references to thermodynamics and the nature of chaos are central to the poem's larger consolatory functions. Extending this observation beyond the concept of energy physics in analyzing *In Memoriam* reveals science's connections to spiritual and aesthetic forms of an epistemology that threatened the privileged place of humanity and its works at the center of the universe.

In Memoriam clearly illustrates Tennyson's understanding of science and his interaction with the theories found in the science volumes that were so popular in his day and that he read voraciously. Tennyson himself was a member of the Royal Society, refusing their first invitation in 1864, but joining in 1865, by which time the Royal Society had largely ceased admitting non-scientists to its ranks (Meadows 111). Tennyson's concerns about the nature of the scientific discoveries of the time were well-informed by his reading and his friendships with scientists and other members of the

Royal Society, and he carefully explored implications of new scientific discoveries in his poetry. Susan Gliserman notes that certain passages from *In Memoriam* evoke influential Victorian popular science tomes. Gliserman investigates the crossover between poetics and rhetorical strategies in popular scientific texts by studying the emotional conflicts resulting from the ruptures in Victorian society caused by scientific discoveries and their implications. For centuries, Western thought had predicated itself on assumptions that humanity occupied a special place in the universe, and on related beliefs about unity, continuity, and other assumptions largely associated with the great chain of being. The scientific community had been struggling with this upheaval, but it was not until the rise of the middle class and the increase in literacy rates during the Victorian era that these ideas became largely accessible to the general public.

Rather than simply accept scientific findings on an intellectual level, Gliserman notes, Victorians experienced emotional upheaval that resulted from a fundamental shift in perspective. As discoveries were made and publicized, Victorians were continually forced to rethink and reconsider their place in the universe. Gliserman finds this emotional upheaval apparent in both scientific and literary works:

> In an analysis of writings on these discoveries and their significance, including literary texts like *In Memoriam*, one begins to perceive both a stratum of assumptions, emotional conflicts, and resolutions which are common to many writers, and a stratum of personal feeling and need which gives an individual pitch to the treatment and resolution of common issues. Although without a thorough biographical investigation of each

writer even shared assumption and feelings cannot be fully accounted for, there does emerge something that can be called a "structure of feeling," to use Raymond Williams' term. Even personal variations and unique resolutions bear a relationship to these shared conflicts. (278)

Tennyson put these scientific findings and implications into a contextual framework and language accessible by the general public, which was also struggling with these concepts. Gliserman notes that "we assume that [a culture's] authors experienced and reproduced aspects of their culture which their contemporaries also experienced and thought significant" (278), and T.S. Eliot claims that Tennyson specifically "express[ed] the mood of his generation" (207). This public, attempting to situate and understand itself, included Tennyson, yet Tennyson was more than simply the public. Gliserman continues on to say that too many scholars assume that Tennyson composed his poetry directly from science textbooks. "But," she notes, "it is more correct to see this information as mediated by the schemes through which the various writers give it meaning, and to see Tennyson as much working with their solutions as with the implications of the theories themselves" (281). Tennyson occupied a liminal space between scientists and the general public, commenting through his poetry on implications of scientific discovery and modeling ways to assimilate science with faith, without, however, translating the discoveries themselves as did the popularizers of science.

In Memoriam deals with perhaps the most threatening implications of scientific discoveries, those having to do with the break in the great chain of being and the displacement of humanity from its central place in the universe and thus its spiritual

prominence. Traditional optimistic and Biblical beliefs had insisted upon a loving God who had created a perfect and orderly world for humanity, a world in which God's presence and laws could be found in nature, in which there was a purpose to life, and in which humanity inhabited the best of all possible worlds. The works of humanity, while never measuring up to the works of God, were still of worth, particularly the works of the poets, who served as prophets and moral arbiters guiding the way to understanding of spiritual truths, alongside scripture and received religion. However, fossil records revealed that entire species had disappeared from the face of the earth, in a far distant past, thus challenging the structure of the great chain of being and its assumptions so that the origins of humanity were no longer certain. Astronomical observations also confirmed a much longer cosmological history than was consistent with Biblical accounts. When William and Caroline Herschel mapped the night sky a generation before Tennyson wrote, they finally put to rest the old idea of a sphere of stars fixed into place, instead replacing it with the modern notion of space with vast distances between stellar bodies. Anna Henchman notes that "[i]n 1838, advancements in telescopy enabled Friedrich Wilhelm Bessel finally to measure the distance of a nearby star. Astronomers had been trying for centuries to detect an annual stellar parallax. Bessel showed the star 61 Cygnus to be at a distance of 657,700 times the distance between the earth and the sun" (31-32). Furthermore, these distances also meant that Herschel and Bessel were seeing incredibly old stellar objects, objects much, much older than the Biblical figure for the age of the earth (Meadows 112). Herschel's observations also allowed astronomers to posit the existence of new suns and new galaxies where earth-like planets might be

forming, perhaps occupied by other species, so that humanity might not be the only special species.

Energy physics and incipient thermodynamic theories also threatened received views of the earth's permanence. Pierre Simon Laplace's nebular hypothesis, which theorized that clouds of stellar gas spun and coalesced into stars and their systems, was worked through to its logical conclusion by those studying both astronomy and energy physics: "Added to the increasing conviction that the sun was a limited power supply was the realization that most of the sun's energy was wasted: how little of the suns' heat and light (late Victorians calculated) would be intercepted for use on earth; how much would dissipate uselessly into space!" (Gold 433). Theories of energy physics began to claim that all things tended toward entropy; even if there was an Almighty who had created everything, the universe, however it had originally been set in motion, was moving according to rules that required its eventual complete disorder. Consequently, the logical assertions that had followed the great chain of being came under scrutiny as being unable to account for these claims, or at least as requiring new versions of God's cosmos.

Humanity's loss of a privileged space in the universe had far-reaching implications, particularly for works of art, another aspect that Tennyson analyzes in his poem. Like the species itself, the impermanence of humanity's work struck the Victorians as well, and artists had to ask themselves what the point of aesthetic creation was if their works too would pass away, hardly a new aspect of poetic angst, but made more acute by the concept of entropy. Benthamite utilitarianism reinforced this question by denying the distinction between the pleasure of reading a poem and the pleasure of a simple game. When science began to imply that individual lives might be ultimately meaningless, the same must be true of the products of human labor. Throughout *In Memoriam*, Tennyson struggles to reconcile his beliefs about the spiritual and the aesthetic with scientific claims that ultimately represented attacks on those beliefs. Tennyson specifically addresses implications of scientific thought in order to work through them, as well as to display his own thought process and search for truth.

Tennyson addresses these implications at the beginning of *In Memoriam*, in section III, where the poet-speaker sees nature as an uncaring force and his sorrow as a taunting spirit. This section blends the language of astronomy with poetic personifications of Sorrow and Nature in a passage wherein austere imagery of an empty universe conflicts with the great chain's concept of plentitude:

'The stars,' she whispers, 'blindly run;

A web is woven across the sky; From out waste places comes a cry, And murmurs from the dying sun:

'And all the phantom, Nature, stands –

With all the music in her tone,

A hollow echo of my own, --

A hollow form with empty hands.' (III.5-12)

As Sorrow speaks, she describes a dying, mechanistic universe consistent with the trope of mourning found in the rest of the poem. Barri Gold explains that section III sets up a conflict between faith and science in terms of energy physics (453). Yet, she says, "Tennyson's cognizance of what will become the first law of thermodynamics, in many ways rooted in Romanticism, enables his famous consoling gesture, on the personal and the popular scales—for the loss of his friend and for the rift between God and Nature, faith and science, produced by evolutionary and geological concerns" (454). This consolation comes much later in the poem, after three years of grief for the poet-speaker (seventeen for Tennyson himself) and poetic reflection, culminating in a wedding at the end of the poem and the poet-speaker's ultimate affirmation of his spiritual beliefs, which he has adjusted to accommodate science.

However, this resolution becomes available only after the poet-speaker rehearses various questions in the poem. One concerns the nature and content of thought itself. The poet-speaker queries whether or not to continue to listen to the tune of a Nature that is now discredited as the source and emblem of goodness:

And shall I take a thing so blind,

Embrace her as my natural good;

Or crush her, like a vice of blood,

Upon the threshold of the mind? (III.13-16)

The poet only sees two options at this early stage of the poem; he can either accept nature, in its blind state, and all of its implications, or he can use his mental powers to ignore the scientific evidence that lies before him. Importantly, this early stage is not only early in its placement in the poem, but also in the poem's composition. Section III was begun in 1833, the same year in which Hallam died, and reflects an early formulation of the concerns that Tennyson worked through throughout the long composition of *In Memoriam*.

The poet employs the tropes of Time as a maniac and Life as a fury in the poem's most complete contemplation of science's implications of the ephemeral nature of life. At the end of the second stanza of section L, the poet-speaker's visions of "Time, a maniac scattering dust / And Life, a Fury slinging flame" (7-8) are part of the "pangs that conquer trust" (7). Time and Life both plague the poet here, as Time throws the dust of creation around with little regard for where it might land, while Life, like a Fury, burns the threads of Fate's tapestry. These images deny any suggestion of an overall pattern as implied by the great chain metaphor. The new cosmic perspective challenged received belief, instead representing humanity's short life as nothing more than the lives of "the flies of latter spring / That lay their eggs, and sting and sing" (10-11), and humanity's works as nothing more than "petty cells" (12) constructed before death.

Sections LIV through LVI, often referred to as the geology sections of *In Memoriam*, restate religious and philosophical beliefs and articulate one of the scientific attacks that undermine them. The first lines of LIV provide the overall argument that will guide the rest of the poem: "Oh, yet we trust that somehow good / Will be the final goal of ill" (1-2), a representation of the optimistic belief that sometimes bad things happen to good people. The next stanza reaffirms the idea that life has purpose that is only visible from the perspective of eternity,

That nothing walks with aimless feet;

That not one life shall be destroyed,

Or cast as rubbish to the void,

When God hath made the pile complete; (LIV.5-8)

This sketch of a divine plan presumes that all things have a purpose, even those things that have been found seemingly "cast as rubbish" in fossil piles. Even the smallest things, including worms (9) and moths (10), have a place in the great chain, according to this belief, and the poet-speaker affirms that human knowledge is incomplete, that "we know not anything" (13), since we cannot behold the whole from our limited perspective. However, this trust is violently challenged in the next two sections by the findings of geology.

The central and perhaps most explicit discussion of scientific doubt is in section LV, where the poet-speaker continues to consider the evidence of science in language of both the great chain and contemporary scientific thought. The poet-speaker considers the possibility that "God and Nature" are at strife" (5), which seems likely since Nature seems "[s]o careful of the type," and also "careless of the single life" (7, 8). The poet-speaker thus articulates common fears that immortality is only a wish, and follows the logic of science to a recognition that its evidence does not support any such possibility of personal immortality. Gliserman notes that Tennyson particularly "uses the science writer's landscapes to create experimental environments for the speaker" that "focus the emotional tension associated with science" (441). This emotional tension infuses the poem with more than just grief for losing Arthur Henry Hallam, but also for the loss of a belief system that many feared might no longer be viable. The poet-speaker notes Nature's seeming disregard for individual beings but care for entire species (L.5-9), and

realizes that fossil evidence suggests that Nature has no special care even for entire species (LVI.1-4). He acknowledges the very human yearning for purpose in the first stanza of section LV, and the belief that this yearning is itself proof of God's existence:

The wish, that of the living whole

No life may fail beyond the grave,

Derives it not from what we have

The likest God within the soul? (1-4)

The poet then articulates the weakness of his faith against the evidence of the fossils: "I falter where I firmly trod" (13), and can only reach forth with "lame hands of faith, and grope, / And gather dust and chaff" (16-17), all to only "faintly trust the larger hope" (20). The bedrock of faith has turned to a shifting landscape of sand. The poet's mocking question marks his dashed hopes: "So careful of the type?' but no" (LVI.1). Nature cries out unmercifully to the poet-speaker from "scarped cliff and quarried stone," saying, "'A thousand types are gone: / I care for nothing, all shall go" (3-4). Now, prayer is "fruitless" (12), according to the poet, and he is left to wonder if humanity will be left to "[b]e blown about the desert dust, / Or sealed within the iron hills" (19-20). The poet-speaker sees the answers to these questions as lying "[b]ehind the veil, behind the veil" (LVI.28), another representation of humanity's limited capacity to know and understand, but in this case, without the promise that this vision is all part of a beneficent whole.

Ultimately, Tennyson never dismisses science or the discoveries that have been made about the natural world in favor of a strictly religious affirmation of faith. However, he denies that science is able to furnish meaning, producing instead an epistemology that affirms science but does not solely rely on it to schematize the cosmos. As the poem progresses, the poet gradually distances the voice of nature from the narrative; whereas Nature was clearly speaking in the geological sections, she has no voice in section CXVIII. Instead, the poet-speaker's explanation of theories of the earth's conception and the origins of humanity begins with the words "[t]hey say" (7) rather than with any direct statement from Nature herself, attributing the information to a fallible human source. This version loosely follows a type of the nebular hypothesis, whereby

[t]he solid earth whereon we tread

In tracts of fluent heat began,

And grew to seeming-random forms,

The seeming prey of cyclic storms,

Till at the last arose the man; (CXVIII, 8-12)

Tennyson echoes Robert Chambers' *Vestiges of the Natural History of Creation* here, as Chambers repeats Laplace's nebular hypothesis in the first few chapters of *Vestiges*.

The poem also rehearses Chambers' theory of the mutability of species.

Chambers outlined his theory, saying:

The idea, then, which I form of the progress of organic life upon the globe—and the hypothesis is applicable to all similar theatres of vital being—is, *that the simplest and most primitive type, under a law to which that of like-production is subordinate, gave birth to the type next above it,*

that this again produced the next higher, and so on to the very highest, the stages of advance being in all cases very small,--namely from one species only to another; so that the phenomenon has always been of a simple and modest character. (222)

The poet-speaker's description of the evolutionary development of humanity echoes this hypothesis that man "throve and branch'd from clime to clime, / The herald of a higher race, / And of himself in higher place" (CXVIII.13-15). The poet asks if man "crowned with attributes of woe / Like glories, move his course, and show / That life is not as idle ore" (18-20), or rather iron to be molded and made into something useful. The section ends with the directive for humanity to "[m]ove upward, working out the beast, / And let the ape and tiger die" (27-28). Gibson points out that "[h]ere, of course, is science made moral: recapitulate Evolution within yourself and improve on it" (65). The poet thus harnesses science to an evolutionary vision of faith that even if humanity has come from the beasts, evolution will provide upward movement towards its betterment.

The poet-speaker ultimately forges a belief that science can be only one part of a search for truth in his claim that meaning cannot be ascertained solely through empirical means. He comes to believe that "we are not wholly brain, / Magnetic mockeries" (CXX.2-3). The part of the poem where he articulates these ideas, section CXX, did not appear until the 1850 edition of *In Memoriam*, not even appearing in the trial edition, suggesting that Tennyson inserted this section into the longer poem to make sure that his message was understood by his readers. The second stanza of this section elaborates his
beliefs that science cannot furnish meaning and value, as the poet-speaker affirms his own belief that humans are

[n]ot only cunning casts in clay;

Let Science prove we are, and then

What matters Science unto men,

At least to me? (5-8)

Tennyson argues that the moment that Science proves that men are nothing but the dust of the earth, science reveals its limitations and incapacity to access meaning and value. The next stanza continues to play with the idea of evolution:

Let him, the wiser man who springs

Hereafter, up from childhood shape

His action like the greater ape,

But I was *born* to other things. (9-12)

Tennyson seems to consign the future to its own fate here, directing any who desire to do so to feel free to take science as a mistress and move forward as they see fit. However, the poet-speaker refuses that approach for himself; he emphasizes the word *born* through the use of italics to distinguish between that birth as intentionally directed within a meaning-laden world as opposed to the happenstance nature of evolution, while not discounting the scientific account of the process. While a person who believes wholly in science might "spring / Hereafter, up" (9-10) and is therefore fully human, that person can only perceive himself as "like the greater ape" (11), and nothing more than an intelligent mammal.

The poem's consolation, then, results from the poet-speaker's final vision that science can never provide meaning, and that the spiritual realms can. Those who accept faith as part of their world are like Tennyson "*born*" (12) into a world of meaning and into a great chain still directed by God rather than blind nature. Thus, the poet-speaker sees that evolutionary work itself allows humanity to advance closer to God. He still acknowledges that upheaval and chaos are necessary aspects of life, as expressed in the stanzas of CXXIII, where he muses on geological changes in the landscape: "From form to form," where "nothing stands; / They melt like mist, the solid lands, / Like clouds they shape themselves and go" (CXXIII.6-8). The poet-speaker contextualizes these changes when he is finally able to recognize that all things change according to thermodynamic and geological principles, but within the context of his faith, meaning and value can remain constant: "But in my spirit I will dwell, / And dream my dream, and hold it true" (9-10).

The final affirmation of the spiritual is a result in part of the speaker's vision of a material world without access to meaning and value that he now sees is enabled only through a non-rational, non-empirical vision. In section CXXIV, the poet affirms that he has looked for God, "[t]he Power in darkness whom we guess" (4), in the material world and not found Him there:

I found Him not in world or sun,

Or eagle's wing, or insect's eye;

Nor through the questions men may try,

The petty cobwebs we have spun: (CXXIV.5-8)

The poet portrays humanity's work as ephemeral cobwebs, easily swept away and of "petty" consequence. This section repeats the argument of Hebrews 11:1-3 in its distinction between reason and faith, and the nature and necessity of faith:

Now faith is the substance of things hoped for, the evidence of things not seen. For by it the elders obtained a *good* testimony. By faith we understand that the worlds were framed by the word of God, so that the things which are seen were not made of things which are visible. (*NKJV*)

The poet-speaker contrasts the experience of listening "when faith had fallen asleep" (CXXIV.9) to a voice that said "'believe no more'" (10), which emanates from "the Godless deep" (12). Rather, he responds to his heart, which "like a man in wrath . . . / Stood up and answer'd 'I have felt'" (15-16), and finds the comfort that "a child that cries, / But, crying, knows his father near" (19-20), for "out of darkness came the hands / That reach through nature, moulding men" (23-24). Doubt itself has made his faith stronger. His solution is not to reject science but to reject empirical concepts of humanity that claim totalizing versions of the truth that ignore non-rational, non-empirical experience.

In her exploration of the thermodynamic consolation provided by Tennyson in *In Memoriam*, Barri Gold notes that rather than envisioning energy as simply being lost forever when changing from one form to another, in the poem's conclusion, "God alone remains, the repository of all energy that has passed, irrecoverably, to the other side" (462), saving what might otherwise have been lost. Rather than affirming the deep chaos that would result from the breakdown of the great chain of being, Tennyson forges his own version of the relationship between faith and science, the spiritual and the empirical in an optimistic vision of the shortcomings of human reason and the power of faith:

And all is well, though faith and form

Be sundered in the night of fear;

Well roars the storm to those that hear

A deeper voice across the storm, (CXXVII.1-4)

Despite whatever chaos might seem to rule, the poet-speaker hears the voice of a guiding power, and so can say that "all is well" (1). Though nature may seem filled with disorder and fear, the poet can still see the hand of a loving God. It is easy to see this resolution simply as a matter of personal consolation when analyzing the poem from the perspective of a postmodern cultural paradigm such as our own in which science has largely silenced faith's claims to truth. McGowan's vision of modernity, however, suggests that we should consider the poem as reacting to totalizing claims of science by voicing a counter vision, which aims at an even more ambitious claim to totality. This perspective casts Tennyson's concerns about the role of the artist and of art, a seemingly narrower concern than that of fears about immortality, in the same context of these larger cultural contests over the status and nature of truth itself. Thus, the poet-speaker's worries about the ephemeral nature of humanity as portrayed by science also extend to the nature of humanity's works, especially art, through which the romantics "attempt[ed] to recreate the ethical totality of society through a revitalized mythology" (McGowan 5). This attempt, however, could only succeed if art occupies a prominent place in society.

Thus the poem questions the status and meaning of poetry, which, like humanity, is affected by the harsh nature of time, and is even more ephemeral than the species that live and die during the eons that span the life of the universe. The poem begins with a prayer, however, that validates a paradigm in which the spiritual and aesthetic contain the empirical and material. The poet-speaker thus expresses concern that he has gone too far in expressing his grief and in questioning the Almighty. In the prayer that prefaces the poem, written well after the body of the poem, Tennyson directly asks God for forgiveness:

Forgive what seemed my sin in me;

What seemed my worth since I began;

For merit lives from man to man,

And not from man, O Lord, to thee. (Pro. 33-36)

This sentiment is repeated in section V, written early in timeline of the poem's composition, when the poet-speaker says, "I sometimes hold it half a sin / To put into words the grief I feel" (V.1-2). These timing of these claims reflects the pattern of enquiry that the poem displays as resulting in the affirmation of faith based on expanded knowledge, observation, reflection, and experience. Part of the intervening process, however, involves the poet-speaker's anxious exploration of what poetry does, what it means, and what its value might be.

One of the first forms of anxiety about the relation of poetry to truth appears early in the poem, when the poet-speaker claims that words, even poetry, will never be entirely sufficient to express the full nature of the his feeling: In words, like weeds; I'll wrap me o'er,

Like coarsest clothes against the cold: But that large grief which these enfold Is given in outline and no more. (V.9-12)

These metaphorical widow's weeds reflect the public and private nature of grief, which parallels that of poetry, and furnishes the poet with another occasion to voice public perceptions of both his grief and his poetry in section XXI. The poet describes three travelers who overhear his song of grief and criticize it as unmanly, hypocritical, and solipsistic, precisely the type of attitudes towards the aesthetic preached by various factions-utilitarians, technocrats, businessmen, and others for whom use-value meant something measurable. The first traveler casts aspersions on the masculinity of the poet and on poetry that evokes emotion, saying "This fellow would make weakness weak, / And melt the waxen hearts of men'" (XXI.7-8). The second traveler dismisses the poet as one who simply wishes to achieve his own notoriety for his artistic efforts, rather than offering any significant contribution to humanity or real honor to the dead, claiming that the poet "loves to make parade of pain, / That with his piping he may gain / The praise that comes to constancy" (10-12). The third traveler's angry rejoinder to hearing the grief song, however, brings the wonder of Victorian science into direct conflict with the aesthetic:

A third is wroth: 'Is this an hour

For private sorrow's barren song, When more and more the people throng The chairs and thrones of civil power?

'A time to sicken and to swoon,

When Science reaches forth her arms To feel from world to world, and charms Her secret from the latest moon?' (13-20)

The poet's own reasons for creating poetry fall under scrutiny in an era of cultural discord and constant scientific discovery, for a poet who seems to be wallowing in his grief is not fulfilling the greater moral purpose that many, coming out of the tradition of the eighteenth century, believed was necessary for poetry. Coupled with social skepticism about art, scientific discoveries of the time conceived of a universe without a divine presence and without a guiding purpose to life; this skepticism suggested that poetry, too, lacked purpose—particularly without the moral tradition it had so long claimed as its basis. Furthermore, the third traveler directly accuses the aesthetic of being out of place in such an era. The sorrow he accuses the narrator of is "private," unfit for public expression, and the song itself is "barren." To the third traveler, there is no use-value to elegy.

The widow's weeds of section V are also significant because of the inability of language to express completely the true nature of things, for the "large grief" the poetspeaker attempts to describe can only be "given in outline and no more" (11, 12). William Wilson observes of this incommensurability between language and experience: Here, Tennyson translates the traditional image of language's referentiality into one of inexpressibility. Writers as diverse as Pope, Johnson, and Carlyle endorsed the idea that language was the appropriate dress of thought, but for the Victorian poet the coarse vestment of language is an image of loose approximation, not effective signification. (30)

This insufficiency of language and the anxiety attached to it, Wilson argues, can be found in the work of John Mitchell Kemble, a friend of Tennyson's and a fellow Apostle, whose work in semiotics explored the idea of words as "arbitrary labels that later became conventional signs that referred to attributes and accidents of things" (34). In both empirical and aesthetic realms, language is unable to describe the truth of things. This realization about language brought Tennyson a new anxiety about the status and value of his poetry. The poet-speaker of *In Memoriam*, in addition to memorializing his struggles with science, expresses his difficulty with his poetry, trivializing it as a "sad mechanic exercise" (V.7) and referring it as "this poor flower of poesy / Which little cared for fades not yet" (VIII.20-21). Though it has not faded, the word "yet" suggests a bleak status for poetry and the aesthetic, and the poet-speaker, still caught in the throes of doubt, offers this poem as one final bouquet because it was something that Hallam enjoyed:

But since it pleased a vanished eye,

I go to plant it on his tomb,

That if it can it there may bloom,

Or dying, there at least may die. (VIII.21-24)

If poetry has no ultimate meaning or value, then it can at least commemorate Hallam, which the poet-speaker sees as an acceptable function.

Yet even as the poet, in his grief, consigns his poem to serve as a lengthy epitaph, he questions himself, once again in parallel with his questioning of nature and science. Whereas in section III the poet-speaker asks whether or not to cleave to science as he thinks of what Sorrow whispers to him about nature, in section XVI, he asks in similar confusion how grief has altered his words. The section returns to the theme of poetic confusion and chaos prevalent in "The Palace of Art":

What words are these have fallen from me?

Can calm despair and wild unrest

Be tenants of a single breast,

Or sorrow such a changeling be? (XVI.1-4)

In earlier sections, the poet has found some use for his poetry—as a wrap against the chill of grief, as notice of mourning like widow's weeds, and as a memorial, like flowers on a grave. Now, the poet-speaker questions the status and value of his words as if they have arisen from the chaotic in his "wild unrest" (2). He asks if the shock of grief has "stunned me from my power to think / And all my knowledge of myself" (15-16), and his final stanza of the section asks if he has become delirious in his pain, representing such a person in terms that sound like the impersonal, amoral nature of scientific thought, bringing all together without care for an overall effect:

And made me that delirious man

Whose fancy fuses old and new

And flashes into false and true,

And mingles all without a plan? (17-20)

This section, then, reflects the confusion that humanity, like the poet, experiences in the search for truth, as the poem models a mental and emotional experience common to individuals, whether or not they are poets.

This section, found in the later Lincoln manuscript but not the earlier Trinity manuscript, was written after Tennyson had already completed several sections of In *Memoriam.* It rehearses the uncertainty involved in poetic composition in ways that reveal the poet's self-questioning. This process is central to the questioning of all aspects of truth that the poem addresses, and it follows the same pattern of doubt, disbelief, and discovery of pattern and purpose. In the final stanza of the section where the poetspeaker reflects on the composition process, he notes that the 131 sections of the poem seem to have been composed without a particular order in mind aside from the linking theme of grief. Even the linking trope of the three Christmases do not appear to have been part of an original plan for the poem. The first Christmas in section XXVIII was written between 1833 and 1834, as it appears in the Trinity Notebook, and confirmed by Hallam Tennyson in the *Memoir*. Section LXXVIII, featuring the second Christmas, may have been written not long after, as it is first found in the Huntington Notebook, dated between 1834-1838. Section CIV, the third Christmas, first appears in the Trinity manuscript, dated between 1840-1842 (Shatto and Shaw 6). Yet even after adding this scaffolding of the three Christmases to create the structure of *In Memoriam*, the poetspeaker still acknowledges a certain amount of creative chaos in section XVI, which

harkens back to the prologue, written even later. The prologue demonstrates that Tennyson, worried throughout the creation of the poem about truth and doubt, questioned even when he had recovered his faith "what seemed my worth since I began" (Pro. 1.34), and in the face of his questioned and recovered faith, he writes the prologue to validate another function of poetry—as prayer.

In exploring the function and value of poetry, and his own value as a poet in a world where art is no longer held in regard, the poet-speaker alludes to classic mythology by way of suggesting the fallen-ness of the world in which he must compose. In section XXXVII he references two poetic muses by way of contrasting poetry's ancient status as a holy form sent by the gods with present-day poetry and poets. Urania, the muse of astronomy and later of Christian love, invoked by Milton in Book VII of Paradise Lost to help him describe the creation of the cosmos, frowns upon the poet-speaker and claims that his doubt degrades him as a poet: "Thou pratest here where thou art least; / This faith has many a purer priest, / And many an abler voice than thou'" (XXXVII.2-4). Urania directs the poet-speaker to "Go down beside thy native rill, On thy Parnassus set thy feet" (5-6), implying that he is unworthy to presume kinship with such a poet as Milton. Melpomene, the muse of tragedy and Urania's sister, is claimed by the poetspeaker as his own. However, Melpomene, "[a] touch of shame upon her cheek," declares that she is "not worthy even to speak / Of thy prevailing mysteries" (10-12), and furthermore that she has only "a little art / To lull with song an aching heart, / And render human love his dues" (14-16), reflecting the poet-speaker's anxieties about his own talent as well as the capacity of poetry in his era. Peter Allan Dale argues that the

discussion between Urania and Melpomene encapsulates not only Tennyson's personal anxiety at living up to his great predecessor but also an anxiety about moving from the level of Melpomene to Urania:

> The suggestion, clearly, is that he lacks the language to express or body forth those religious truths that were Milton's "great argument" and that had traditionally been the highest object of the poet. Tennyson is now regretting not simply the failure to express his particular emotion of grief and to give Hallam his due, but a much larger failure of spirit and of poetic vocation. He has not the language to move, as Milton had moved, beyond elegy and the experience of death to the celebration of spiritual transcendence. (152-53)

Melpomene, the "earthly Muse" (XXXVII.13) may aspire to Urania's "prevailing mysteries" (12), but the place to do so will not be with Urania, among the poetic greats. The poet-speaker is almost certain that Hallam will be remembered, but he is not certain that it will be through his efforts, according to section LVII: "Me thinks my friend is richly shrined; / But I shall pass; my work will fail" (7-8). What enshrines Hallam, the poet does not say, but still, the lasting effect of his own work, expressed only a few sections after Nature's dismissal of care for the world in section LVI, "will fail." Melpomene, as an earthly muse, suggests a lower form of aesthetic while the poet-speaker aims for the sacred power of Urania.

Tennyson's anxiety about creating art and the final end of poetry thus parallels his anxieties about science. The poet-speaker's bleak vision of his work is clear in his lament that "I shall pass; my work shall fail" (8). He echoes the argument of section LVI in the final lines of section LXXVI and in LXXVII by connecting poetry's staying power to natural processes of decomposition through the use of the words "mouldering" (8) and "wither" (11). The opening lines of LXXVII directly ask the question of what will happen to poetry:

What hope is here for modern rhyme

To him, who turns a musing eye

On songs, and deeds, and lives, that lie

Foreshortened in the tract of time? (1-4)

Fulweiler provides an analysis here, asking "[i]f nature were, after all, not only independent of God's purpose, but independent of human creativity and perception, there was no need for poetry, which could only reflect in 'so many words' the autonomy of things, or in the later theory of natural selection with its emphasis on chance, 'one thing after another'" (310). The next stanza provides concrete examples of what happens to poetry in a utilitarian world, where "These mortal lullabies of pain / May bind a book, may line a box, / May serve to curl a maiden's locks;" (LXXVII.5-7). The triviality of these homely acts reflects the deepest fears of the poet that his work, like his life, will pass away unnoticed, assigned to the dustbins and massive garbage heaps that reflect Victorian consumerism and materialism.

Victorian linguistic theory and semiotics also registers the impermanence of "modern rhyme," as time intervenes between the original objects and feelings it was intended to represent. According to William Wilson:

Over time, the arbitrariness in language increases, owing to a process analogous to Gresham's law. A word in modern currency is like 'a piece of paper not worth a farthing that passes for five or fifty pounds' $(89)^3$ because corrupted denominations (especially, the degenerate discourse found in modern texts) have distanced man from the 'true forms' of his language (*Germanische Ursprung*, 377).... the tracts of time, which Kemble studied and edited, indicate that language has so deteriorated that its meaning and metaphysics are painfully remote. (34)

In the poem, on the other hand, the muses drag the poet-speaker away from the edge of the cliff and its linguistic precipice, as Kerry McSweeny explains: "Appropriately, in LVIII, after the nightmare vision of LV and LVI, it is the 'high Muse,' Urania, who leads Tennyson away from the brink of the scarped cliff of Victorian doubt and near despair. Melpomene, on the other hand, is 'but an earthly muse,' 'unworthy even to speak' of Urania's mysteries" (90). Urania tells the poet-speaker to "abide a little longer here" in sorrow, that "he shalt take a nobler leave" from his beloved friend (11-12). The aesthetic saves the poet from despair, at least momentarily, by pointing out its fruitlessness and his failure to honor his friend and their love. This section of the poem is sad in its fine expressions of grief, despite the poet-speaker's denials, allowing Tennyson both to rehearse anxieties about art's potential disappearance in a utilitarian age, but also to demonstrate its longevity and its power to soothe and to save.

³ Wilson quotes John Donaldson's *The New Cratylus* (Cambridge: Deighton, 1839) here.

The poet-speaker, in fact, claims that the need to create art is innate and sacredly inspired and cannot be denied by a true poet, regardless of what happens to his poetry. When the three travelers sneer at the poet's dirge, his reply dismisses their irritation: "Behold, ye speak an idle thing: / Ye never knew the sacred dust: / I do but sing because I *must*," (XXI.21-23, italics mine). Though the poet-speaker's statement is directed towards possible naysayers who never met Hallam and do not understand the poet-speaker's loss, the need to "sing" is more than just a method of grieving. It is an integral part of who the poet-speaker is, just as singing is integral to the linnets he compares himself to in the next verse—an intrinsic biological function that is necessary whether happy or sad (XXI.24-28). Even in LXXVII, where the poet-speaker dares to hope that his work might last and that someone might stumble upon it and read it, his own fame is less important than acknowledging and memorializing Hallam, and by extension, expressing the universal experience of love:

But what of that? My darkened ways

Shall ring with music all the same;

To breathe my loss is more than fame,

To utter love more sweet than praise. (LXXVII.13-16)

The poet-speaker thus grounds his assertions of the necessity of poetry on arguments from nature itself through the analogy to the bird, comparing the poet's "singing" to the natural phenomenon whereby birdsong is empirically functional as well as beautiful. The poet-speaker once again yokes the empirical and the aesthetic by way of rejecting the totalizing claims of science to comprehend all of nature. The climax of the poem in section XCV models Tennyson's program of dealing with the crisis of faith caused by scientific discoveries and the empiricism and materialism that form the basis of scientific and technocratic claims regarding social good. Doubt becomes a necessary part of the process of knowledge of a world that is imperfectly apprehended through materialist claims. Furthermore, it is through the words of his dead friend that their two souls reunite, affirming another fundamental function of the written text, poetic and otherwise. Tennyson models this process of doubt and affirmation through an episode when the poet-speaker spiritually reunites with Hallam when he reads his old letters. The poet-speaker, alone at night on the lawn, lovingly reminisces about the past as he reads the "noble letters of the dead" (24). The "silent-speaking words" (26) tell of Hallam's own experience with faith and doubt, as the narrator reads of his determination to pursue all doubts and questions without being deterred:

The faith, the vigour, bold to dwell

On doubts that drive the coward back,

And keen through wordy snares to track

Suggestion to her inmost cell. (29-32)

The letters from the past come back to strengthen the poet-speaker's faith once again, focusing on doubts without fear, with faith, and winding through "wordy snares" to find philosophical and spiritual truth. The experience is a profound acknowledgement of the truth of his own process, and that realization results in ecstasy:

So word by word and line by line,

The dead man touched me from the past,

And all at once it seemed at last

The living soul was flashed on mine,

And mine in this was wound, and whirled

About empyreal heights of thought,

And came on that which is, and caught

The deep pulsations of the world, (XCV.33-40)

It is only when the two souls reunite that the poet begins to hear "Æonian music" (41), the old Romantic symbol of poetic inspiration.

The narrator's experience convinces him that that the interrogations prompted by his doubts have lead him to "that which is." There can be no empirical explanation for this event; as soon as his "trance" (43) is over, the poet is "stricken through with doubt" (44). Indeed, he can barely put the experience into "matter-moulded forms of speech" (46). It is also difficult "even for intellect to reach" the trance state he has just left (47). The poet-speaker speaks of Hallam's faith and poetry in the next section, as well, by way of addressing those who condemn doubt as "Devil-born" (XCVI.4). He affirms his method of pursuing all questions raised by doubt in describing Hallam as having "touched a jarring lyre at first, / But ever strove to make it true" (7-8), and that "at last he beat his music out" (10). The poet-speaker notes that Hallam "fought his doubts and gathered strength, / He would not make his judgment blind, / He faced the spectres of the mind" (13-15). The poet-speaker is heartened and affirmed in his own experience by the fact that Hallam acknowledged and confronted his own doubts and did not ignore or

dismiss them; instead, he "faced the spectres of the mind / And laid them: thus he came at length / To find a stronger faith his own" (15-17). The poet-speaker can thus acknowledge that "[t]here lives more faith in honest doubt, / Believe me, than in half the creeds" (11-12). Doubt, then, is now an essential feature of the search for truth, even though the poet-speaker asks God to forgive his own doubt after he has reaffirmed his new faith. The epilogue prayer for forgiveness seems to contradict these later affirmations of doubt as the begetter of renewed, stronger faith. However, if the poem itself models ways for Victorian readers to process their own doubts and to affirm the spiritual and the aesthetic in light of science and materialism, then the epilogue might be seen as an admission by a prominent, revered poet of his own vulnerabilities that led ultimately to his triumph over despair.

The epilogue confirms the poet-speaker's resolution of the epistemological battles that engaged him and his culture. The poet-speaker is "no longer caring to embalm / In dying songs a dead regret" (13-14). Though the poems that make up *In Memoriam* seem to be "echoes out of weaker times, / As half but idle brawling rhymes" (22-23), the poet-speaker himself recognizes their worth, because it is through writing those rhymes and spending the time that has passed in wrestling with his doubts and pain and incongruities that he can acknowledge that "[f]or I myself with these have grown / To something greater than before" (19-20). The poet recognizes the impermanent nature of his work, but he has come to know its value in its various functions, at the very least in memorializing his closest friend and an acknowledged great man. Whereas "The Palace of Art" focused on the inability of the aesthetic to survive in isolation from the material

world, *In Memoriam* warns of the danger of perceiving the empirical as isolated from the aesthetic and the spiritual and rehearses a model by which his readers can work through their doubts to a finer awareness of the spiritual and aesthetic nature of things that empiricism cannot access. In the "Locksley Hall" poems, Tennyson performs the same task, taking as its impetus not the death of a loved one, but another type of loss: the rejection of a marriage proposal by the narrator's beloved and an interrogation of the loss of ideals that the incident prompts.

Chapter 4

"Locksley Hall" and Tennyson's Concerns for Society

Written and published during the years between *The Palace of Art* and *In Memoriam*, the 1842 poem "Locksley Hall" provides a particular counterpoint to the lyric chaos of the palace and the tortured wanderings through entropy of *In Memoriam*. Rather than focusing on the pessimistic nature of chaos that so concerned Tennyson in these earlier poems, "Locksley Hall" instead draws attention to an optimistic version of the future guided by scientific discoveries and inventions. However, its companion poem, "Locksley Hall Sixty Years After," published in 1886, forty-four years after the original, looks back to see such optimism based on the promises of science as misplaced. In these poems, Tennyson's anxieties regarding the encroachment of the empirical and material focuses less on the effects on the aesthetic and more on the effect that such encroachment has had on cultural and social well-being. While the concerns that this later poem expresses are serious, he once again relies on science to ground his vision of a purposefilled cosmos, even in the face of his pessimism.

Formally, the "Locksley Hall" poems differ significantly from *The Palace of Art* and *In Memoriam* in ways that assists the delivery of the message of the poems. The lyrical nature of *The Palace of Art* lends itself to the fantasy world Tennyson weaves for the Soul. The rhymed, regular, but short, quattrains of *In Memoriam* reflect the painful process of sequential thought that marks the poet's hard-gained triumph of faith in his elegy for Arthur Hallam. In a significant departure, the unrelenting couplets of the "Locksley Hall" poems, written in trochaic octameter, convey the intensity of an angry,

ranting poet-speaker. In the first poem, the poet-speaker takes one last stroll about Locksley Hall, his family's ancestral home, before he departs with his military company. Having been spurned by his cousin Amy, the woman he loves, in favor of a wealthier man, the poet-speaker bemoans his lost love, metaphorically kicking rocks as he walks the paths around Locksley Hall. The poet-speaker finds consolation in the progress he imagines the world will undergo, discarding his old hopes regarding life at Locksley Hall in a bitter triumph of will and intellect over feeling. He sets forward into his military life, assuring himself that he does not care what happens to the home he is leaving behind.

This first "Locksley Hall" poem exhibits the chaos that concerned Tennyson in his early poems, as the poet-speaker finds parallels between Amy's descent through her marriage into a mundane, materialist world and the moral descent he envisions in the cultural world at large, prompting questions about progress of all kinds. As with *In Memoriam*, the poet-speaker's passionate reflections reveal Tennyson's knowledge of scientific preoccupations of the day, particularly astronomy, evolution, and theories of race. However, the anxieties expressed in this poem are more concerned with the moral challenges that the world faces rather than with the direction of art, although the poetspeaker is still concerned with affirming that his own poetic gifts remain intact after suffering the emotional blow of being spurned by his love and of his dashed ideals about love and life. The second poem finds the poet-speaker back at Locksley Hall sixty years after the original poem, meeting his grandson who has also been jilted by his lover in favor of a wealthier man. "Locksley Hall Sixty Years After" examines, in part, the realities of the poet-speaker's life versus the hopes that had been set out in the original poem. His grandson, now the heir of Locksley Hall, takes possession of a property in a world that has continued to decay culturally, and the poet-speaker, still speaking in the same rapid trochaic octameter, remarks on the failure of science and progress to move humanity forward into a kinder, more moral society, at least in its current trajectory. The older poet-speaker has witnessed the world of science become more and more sophisticated, but without the corresponding moral evolution he had expected based on views that human morality and knowledge advance concurrently with the knowledge of science and its applications. The older poet-speaker's knowledge of history tempers his vision and completes a journey of realization that the scientific cannot account for the moral and spiritual. Thus, the "Locksley Hall" poems fulfill an important place in Tennyson's larger project to justify the spiritual and aesthetic as superior to the empirical by examining the moral and spiritual effects of the growing presence of materialist views and values and the diminishment of the aesthetic and spiritual.

The poet-speaker of the "Locksley Hall" poems is also less overtly identified with Tennyson than are the poet-speakers of the previous poems this study examines, due to Tennyson's careful description of the poet-speaker as being "a trampled orphan, and a selfish uncle's ward" (156) after his father fell in "wild Mahratta-battle" (155). However, the text of the poems suggest that a number of autobiographical events were involved in the composition of the poems, especially Tennyson's aborted romance with Rosa Baring. Thus, critics tend to focus on the autobiographical connection with Tennyson rather than on the poem's scientific content, which is also an important aspect of his personal life. F.E.L. Priestly notes that "critics have been strangely reluctant to accept Tennyson as a dramatic poet, and have persisted rather in treating what are formally dramatic poems as thinly disguised autobiographies or confessional lyrics" (512). Ralph W. Rader notes that "Tennyson's love for Rosa [Baring] was one of the most important episodes of his life, leaving its mark not only on the 'Locksley Hall' poems but on certain other major works as well," (225). While the poem contains autobiographical references, reading "Locksley Hall" as "a relatively light-hearted dramatic study of a jilted adolescent," as Priestly suggests, over-simplifies the poem (512). Richard B. Hovey agrees, discussing the poem as much more than "a period piece," filled with "intensity of feeling" and "brutal honesty" (24). Hovey exhorts readers to "look closely at the heart in the poem, at its lacerations" (24). The despair of a wrecked love is as palpable in "Locksley Hall" as the grief in *In Memoriam*, and when "Locksley Hall" is considered with its later companion poem, Tennyson's grief appears just as clearly as it does in his great elegy.

However, to foreground the poems' overtly autobiographic incidents undercuts a fuller understanding of the poem. Like both *The Palace of Art* and *In Memoriam*, "Locksley Hall" features a rapidly shifting world in which what has seemed stable and predictable is uprooted and overturned. "Locksley Hall" begins with an inversion of epistemologies, placing the empirical in the position of having to justify itself. The poet-speaker fondly recalls his youth, when he looked "on great Orion sloping slowly to the West," and watching "the Pleiades, rising thro' the mellow shade" (l. 8-10), reflecting Tennyson's own interests in the scientific and not just a romantically idealized setting for the poet-speaker's youth. After being rejected by his beloved, however, he is disillusioned, and sees himself in the past as "nourishing a youth sublime / With the fairy

tales of science, and the long result of Time" (11-12). Such an epistemological reassessment and inversion would not be unusual following a period of great loss; *In Memoriam* itself is a longer, more involved journey through the process of such a reassessment after a greater loss. This epistemological reversal reflects what follows later in the poem as an indictment of social mores that the poet-speaker believes have been taken over by the material, as he denounces "the social lies that warp us from the living truth!" (60). At this early stage in the poet-speaker's stormy monologue, he blames materialism and the ideal-crushing effects of empiricism for overtaking moral values that have resulted in Amy's selection of the wealthier suitor. Money directs these values, and the poet-speaker's frustration stems from the fact that "[e]very door is barred with gold, and opens but to golden keys" (100). All of his hopes and dreams have been ruined because Amy has left him and their purer love in order to pursue wealth and material security, a loss that he views as personal, but also as symptomatic of larger cultural forces that betray his youthful vision of purposeful progress.

The poet-speaker looks in anger back at his youth, when the future held fears but also hope. The poet-speaker prays to "thou wondrous Mother-Age" (108) to "Make me feel the wild pulsation that I felt before the strife" (109). He is then able to recapture his youthful vision, when he saw "[m]en, my brothers, men the workers, ever reaping something new: / That which they have done but earnest of the things that they shall do" (117-18). Then, he could see "into the future far as human eye could see; / Saw the Vision of the world, and all the wonder that would be. – " (117-18).

The poet-speaker articulates his vision where science, potentially benign and beneficial, has been perverted to destructive ends through materialistic greed and he sees

... the heavens fill with commerce, argosies of magic sails, Pilots of the purple twilight, dropping down with costly bales;

Heard the heavens fill with shouting, and there rained a ghastly dew

From the nations' airy navies grappling in the central blue; (119-24) Though the commercial applications of air travel that the poet-speaker foresees has productive potential, human morality lags behind, resulting in war. Indeed, economic inequalities are at the center of the poet-speaker's failed romance and his vision for any progress gained through science involves the same dynamics; the poet-speaker curses the money of Amy's new suitor (63) and notes that money determines winners and losers (100). The wars the poet-speaker predicts being fought in the sky ultimately would leave no part of the earth untouched by science's ability to conduct war via land, sea, and air.

However, in his youthful vision, the poet-speaker found hope that the wars in the sky would cease, as he envisions a time when

... the war-drum throbbed no longer, and the battle-flags were furled In the Parliament of man, the Federation of the world.

There the common sense of most shall hold a fretful realm in awe, And the kindly earth shall slumber, lapt in universal law. (127-30) The cessation of war eventually results from the work of humanity's "common sense" catching up with scientific progress. With mature insight, the poet-speaker now sees that "all things here are out of joint," and that "Science moves, but slowly slowly, creeping on from point to point" (133-34). This observation presupposes that wiser men will harness science's potential to result in the advent of a new, more peaceful world order with a universal government and law. The poet-speaker rejoices in his recovered optimism, claiming to have "triumph'd ere my passion sweeping thru' me left me dry, '/ Left me with the palsied heart, and left me with the jaundiced eye" (131-32). He realizes that, in fact, it is the "[e]ye, to which all order festers" (133), that accounts for our inability to perceive the larger patterns of progress. Thus the poet-speaker confidently asserts that despite the slow movement of this progress: "… I doubt not through the ages one increasing purpose runs, / And the thoughts of men are widened with the process of the suns" (136-37).

Science is responsible for enabling the achievement of the "increasing purpose," however, only in the sense that it enacts "universal law." In "Locksley Hall," this phrase echoes the "One God, one law, one element" that ends *In Memoriam* (Epi.142), revealing the essence of science as the orderly fulfillment of God's purpose. The poet-speaker of "Locksley Hall" makes a clear distinction in lines 141 and 143 between "knowledge" and "wisdom" by way of acknowledging the fact that science is the outcome of purposeful progress, and that time, through which wisdom accrues, differs from time experienced by individuals, often resulting in the individual's inability to realize the purposeful nature of experience: "Knowledge comes, but wisdom lingers, and he bears a laden breast, / Full of

sad experience, moving toward the stillness of his rest" (143-44). The poet-speaker's reassessment does not cause him to deny scientific knowledge, only its significance to the individual. Progress may be slow to develop, but "the long result of Time" (12) that the poet-speaker acknowledges in the beginning of the poem allows him ultimately to affirm his ideals. He contrasts the individual existing only at one moment in time to the long-term existence of humanity: "Knowledge comes, but wisdom lingers, and I linger on the shore, / And the individual withers, and the world is more and more" (141-42). Accepting that the perception of individuals is too limited to comprehend the entirety of "one increasing purpose" (137), the poet-speaker can once again affirm his ideals of a higher plan both for himself and for humanity as well.

This view of an increasing purpose, particularly connected with the idea of humanity's unending progress towards the divine, as predicated in the chain of being, pervades both eighteenth-century and Victorian optimistic philosophy. This philosophy is especially evident in "Locksley Hall" in the form of the implicit assumption that more hopeful things are on the horizon for humanity, which can make itself over into a new civilization of peace, even though progress may not always appear to be straightforward. Of interest here is the certainty in the poet-speaker's voice in a poem written well before similar expressions in the final stanzas of *In Memoriam*. The journey of the poet-speaker of *In Memoriam* is much longer than the poet-speaker of "Locksley Hall." Indeed, Tennyson composed *In Memoriam* over a seventeen year period, although he condenses the poetic time-frame into three years, rather than the time it takes for an early morning walk around a country estate. Yet both poems describe a loss that results in a period of

doubt, followed by a review of scientific knowledge and reflection on events in terms of the poet-speaker's lost ideals, resulting in a clear affirmation of the poet-speaker's belief in God's "increasing purpose" for the universe. Just as the poet-speaker does earlier in "Locksley Hall," the poet of *In Memoriam* in section CXX qualifies claims that the scientific paradigm trumps all faith in the Creator:

I think we are not wholly brain,

Magnetic mockeries: not in vain, Like Paul with beasts, I fought with Death;

Not only cunning casts in clay;

Let Science prove we are, and then

What matters Science unto men,

At least to me? I would not stay. (2-8)

"Locksley Hall" does something similar, as the poet-speaker expresses trust in both a religious plan in the overall "increasing purpose" and in the "creeping" of Science as the means by which the greater plan comes to fruition. However, in "Locksley Hall" the purpose initially matters very little to the poet-speaker. While he has experienced a blow that is less substantial than that experienced by the poet-speaker of *In Memoriam*, the "Locksley Hall" speaker 's loss seems fresher and more immediate since he speaks from a closer perspective. In line 133—the temporal *here* of the morning—the poet-speaker walks around the spatial *here* of Locksley Hall and its grounds, and he questions his faith

in an overarching purpose by wondering why such a plan matters at all when his heart has been broken:

Yet I doubt not thro' the ages one increasing purpose runs, And the thoughts of men are widen'd with the process of the suns.

What is that to him that reaps not harvest of his youthful joys,

Though the deep heart of existence beat for ever like a boy's? (137-42) In section CXX of *In Memoriam*, the poet wrangles with conflicting truths provided by science and religion before ultimately subordinating science to the non-rational by asserting the capacity of the aesthetic to access the spiritual. He ultimately affirms that insights into value and science's moral status lie there, rather than in the material realm, both poet-speakers relying on the same epistemological moves, affirming a spiritual certainty that can only be known through spirit. The poet-speaker of In Memoriam takes simply longer to re-establish trust in faith. The severity of the emotional impact of the event that initiated the poem's composition, results in a longer and more philosophically complex poem than "Locksley Hall." The tone of "Locksley Hall" also differs due to foregrounding of the poet-speaker's anger, rather than the grief of the speaker of In Memoriam, but the musings of both poet-speakers reflect Tennyson's continuing interrogation of his spiritual beliefs and values and both poet-speakers arrive at very much the same place-a knowledge that science and the empirical world are subject to the design of the Creator.

The poet-speaker's anger, in fact, drives him to contemplate leaving England to return to the country of his origins, and his contemplations rehearse aspects of his country's colonial experience, as well as contemporary observations about evolution and race. He is so furious about being jilted for a wealthier man that he considers moving away and raising a new race of humanity with "some savage woman" who shall give birth to a "dusky race" (168). He ultimately rejects this possibility as "wild" (173), repeating an evolutionist concept of race and culture, that "[t]hrough the shadow of the globe we sweep into the younger day" (183), while also articulating a common imperialistic viewpoint that "[b]etter fifty years of Europe than a cycle of Cathay" (184). Both these observations reflect evolutionary assumptions by which Christianity's project of civilizing and Christianizing the primitive cultures of the world underwrites the economic interests of imperialism. While initially considering abandoning a society that has morally undermined his cousin's love for one purer and uncorrupted, the poetspeaker dismisses the idea as he recalls his science. The poet-speaker expresses a common belief in a progressive moral and cultural evolutionary path for humanity. As he cools off and reconsiders his intention to find a wife and found a family among native cultures, he rejects the idea as the folly of a heated mind. In his rationale for this rejection, he articulates in poetry what had been codified in scientific texts of the time:

But I count the gray barbarian lower than the Christian child.

I, to herd with narrow foreheads, vacant of our glorious gains, Like a beast with lower pleasures, like a beast with lower pains! Mated with a squalid savage – what to me were sun or clime?

I the heir of all the ages, in the foremost files of time— (174-78) As a Caucasian speaker, the poet-speaker occupies a privileged place on the Victorian evolutionary scale, both culturally and racially, conflated in his position. The poetspeaker, as a white European male and a poet whose perspective is superior even to other European men, can speak for himself and does so, articulating for his Victorian readers the wise, poetic insights of "Locksley Hall."

The poet-speaker also repeats observations that reflect common views of the time regarding race. Robert Chambers' anonymously-published *Vestiges of the Natural History of Creation* explains the difference between races "on the ground of *development*" (306, author's italics). Tennyson requested a copy of this book from his publisher, Edward Moxon, in a November 1844 letter, noting 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" (*Mem.* I. 222-23). Chambers sees racial development in terms of recapitulation theory:⁴

The leading characters, in short, of the various races of mankind, are simply representations of particular stages in the development of the highest or Caucasian type. The Negro exhibits permanently the imperfect

⁴ The phrase "ontology recapitulates phylogeny" was coined by Ernst Haeckel to describe what he saw as the development of individual organisms of an advanced species passing through stages represented by the adult stage of each primitive species in its evolutionary history. Haeckel's theory incorporates aspects of Lamarck's, Goethe's, and Darwin's theories, and reflects the fluid state of evolutionary theory during the nineteenth century (Gilbert 19.1). According to Scott F. Gilbert, Haeckel first applied "great chain" ideas to evolutionary theory (23.2). The so-called "law of recapitulation" is no longer strictly supported, although research in various fields continues to explore relationships among phylogeny and ontogeny, including social, educational, and linguistic fields.

brain, projecting lower jaw, and slender bent limbs, of a Caucasian child, some considerable time before the period of its birth. The aboriginal American represents the same child nearer its birth. The Mongolian is an arrested infant newly born. And so forth. (307)

Features and skin tones inherent to specific ethnic groups, Chambers explains to his readers with nineteenth-century certainty, reflect their developmental status; Caucasians represent the most advanced and most perfect form of humanity, allowing humanity as a whole—for Chambers does allow that all races are part of the same species (277)—to continue to progress up the evolutionary scale, articulated by Chambers in the language of the "great chain" with echoes of Tennyson:

In the Caucasian or Indo-European family alone has the primitive organization been improved upon. The Mongolian, Malay, American, and Negro, comprehending perhaps five-sixths of mankind, are degenerate. Strange that the great plan should admit failures and aberrations of such portentous magnitude! But pause and reflect; take time into consideration: the past history of mankind may be, to what is to come, but as a day. Look at the progress even now making over the barbaric parts of the earth by the best examples of the Caucasian type, promising not only to fill up the waste places, but to supersede the imperfect nations already existing. Who can tell what progress may be made, even in a single century, toward reversing the proportions of the perfect and imperfect types? And who can tell but that the time during which the mean types have lasted, long as it appears, may yet be thrown entirely into the shade by the time during

which the best types will remain predominant? (309-10)

Chambers attempts to bring a certain sense of hope to his conception of the universe in his view that humanity will continue to ascend the great chain of being—theoretically, in his mind, as a fully Caucasian humanity. Thus the poet-speaker of "Locksley Hall," the "heir of all the ages," dismisses any idea of moving to the tropics to create a new life, refusing to accept such a future for one of the "best examples of the Caucasian type," as he "rather held it better men should perish one by one, / Than that earth should stand at gaze like Joshua's moon in Ajalon!" (179-80). Like the sun and moon did during the Israelites' battle in Ajalon (Joshua 10:12), running away actually puts the poet-speaker into a holding pattern, as E. C. Bufkin argues, and "inaction is fatal—to man in particular, to men in general" (27). Thus the poet-speaker affirms his vision of progress: "Forward, forward let us range, / Let the great world spin for ever down the ringing grooves of change" (181-82).

However, June Steffensen Hagen claims that it is not only the loss of love that has the poet-speaker considering leaving the world he knows behind. Rather, she notes that "the real crisis in the poem is not that of love—that crisis had already passed; the fundamental crisis is one of poetic creativity. The poet-speaker feels that his ability to write poetry has departed along with his love" (170). The final couplet stanzas of the poem are caught in the confusion of the previous stanzas, as the poet-speaker prays, and then exults that his poetic powers have not departed:

Mother-Age (for mine I knew not) help me as when life begun:

Rift the hills, and roll the waters, flash the lightnings, weigh the Sun

O, I see the crescent promise of my spirit hath not set.

Ancient founts of inspiration well through all my fancy yet. (185-89) The poet-speaker seeks renewal here, one that mimics the violent upheaval of creation's origins—and the poetic return to the beginning of all things comforts him by reconnecting him with his spiritual foundation, which alone provides access to its truths and his poetic abilities. Like the spiritual renewal of *In Memoriam* in section XCV, when the poet-speaker envisions the soul of his dead friend, the affirmation of the spiritual comes with the flash of thunder and lightning, and a joyous recognition that the thunderbolt can "fall on Locksley Hall, with rain or hail, or fire or snow," without changing the truth of progress (193). The poet-speaker's shaken world is now stabilized by his recognition that the spiritual and the aesthetic—which to Tennyson are coequal precede and guide the empirical. In calling on the "Mother-Age" as a sort of muse, he suggests that the "ancient founts of inspiration" are as old as the age which created the world, settling him, in his privileged position and with his spiritual certainty of his own aesthetic power, firmly in his place in the great chain of being as the beneficiary of all the wisdom of time. Thus, the poem ends with the poet-speaker, inspired as Percy Shelley by the West Wind: "For the mighty wind arises, roaring seaward, and I go" (194). The great chain remains intact, acknowledged as being sometimes inscrutable, even misleading, thus advancing the poet's mission to a renewed state of urgency as a model for those to follow whose faith has been assailed by personal loss and the claims of science.

"Locksley Hall Sixty Years After" was written and published in 1886, over thirty years after In Memoriam was published and forty-four years after the original "Locksley Hall" was published. The later poem reflects the mature Tennyson's visions regarding scientific and moral truths and the unique capacity of the aesthetic to enlighten. The poem brings the poet-speaker back to the location of his former heartbreak with his grandson, who now, after the death of most of the rest of the family, has become the heir and lord of Locksley Hall, an outcome not envisioned by the earlier poet-speaker. The grandson is bemoaning a fate similar to that of his grandfather sixty years earlier, having loved and lost a woman due to her marriage to a wealthier man, and this poem allows the poet-speaker to reflect on what has passed. The poet-speaker's love for his lost Amy forms the organizing structure of the second "Locksley Hall" poem, just as it does the first. Amy had married the lord of Locksley Hall but died shortly thereafter in childbirth, and the poet-speaker feels some connection with her recently deceased husband through their mutual love of her. The poet-speaker himself has outlived all of his friends and loved ones, including his own wife of "forty years," who despite his original heartbreak allowed his "life in golden sequence" (47) to run:

> Strong in will and rich in wisdom, Edith, yet so lowly-sweet, Woman to her inmost heart, and woman to her tender feet,

Very woman of very woman, nurse of ailing body and mind, She that linked again the broken chain that bound me to my kind. (49-52) Only after sixty years have passed does the poet-speaker begin to understand how the pattern of his life has come together; the limited perspective of his younger self could not anticipate the entirety of the "increasing purpose." Having thus learned this lesson, the poet-speaker is able to counsel his grandson, who has no one else to look to for advice, and he chides the young man for being just as short-sighted as he had been as a youth, contrasting him with his father, the poet-speaker's son, who had died at sea at a young age: "Wiser there than you, that crowning barren Death as lord of all, / Deem this over-tragic drama's closing curtain is the pall!" (61-62). The poet-speaker in "Sixty Years After," then, offers hope to the young man, at least in the ways of love, for the poet-speaker knows now that he found love and happiness after leaving Locksley Hall, despite the pain and doubt he felt as the youthful poet-speaker of the original poem.

However, in many ways, "Sixty Years Later" is also a poem of disillusionment, for the hope expressed in the original "Locksley Hall" has turned into despair over the world appearing not to have progressed, even though the visions of the young poetspeaker had suggested it would not be a straight-forward process. In "Sixty Years Later," Tennyson's scientific anxieties return to clash with artistic anxieties once again, suggesting that nearing the end of his life, Tennyson remained concerned with the same subjects that had occupied him as a young man. The poet-speaker of "Sixty Years Later" recognizes that he has grown more curmudgeonly, as he lambasts his grandson for daring to compare his puerile love with the great love the poet-speaker once felt for Amy. All his family and companions have gone save his grandson, adding to his sense of loss and
his pessimism. Still, as in the original "Locksley Hall," the poet-speaker seems initially to find some comfort in his ideal of an all-encompassing plan that insures immortality:

Gone for ever! Ever? no—for since our dying race began, Ever, ever, and for ever was the leading light of man.

Those than in barbarian burials killed the slave, and slew the wife,

Felt within themselves the sacred passion of the second life. (65-68) Here, the poet-speaker justifies his belief in eternal life by reference to cultural evolution, demonstrating how science serves spirit. However, this affirmation is followed by a harsh condemnation of the loss of the mystery of life and death and eternal life, resulting from challenges to faith mounted by scientific discoveries of the time. First, the poetspeaker notes that when the notion of life after death is unavailable, all becomes a mundane dust: "Truth for truth, and good for good! The Good, the True, the Pure, the Just— / Take the charm 'For ever' from them, and they crumble into dust" (71-72). Without the hope of eternal life, the poet-speaker sees humanity as having no capacity to strive for anything beyond personal gain. In fact, without the concept of eternal spirit, humanity is nothing more than the lower animals.

This vision is underscored by the poet-speaker's observations of the barbarity that humanity has enacted throughout history, even in the name of God and supposedly following the morally enlightening teachings of His son:

> Love your enemy, bless your haters, said the Greatest of the great; Christian love among the Churches looked the twin of heathen hate.

From the golden alms of Blessing man had coined himself a curse: Rome of Caesar, Rome of Peter, which was crueller? which was worse? (85-88)

The poet-speaker's historic knowledge suggests to him that the moral life after Christ's teachings looks no different than that of the pagans. Moral evolution seems to be moving just as slowly as the geological processes of the earth, even with the intervention of Christ. The poet-speaker conflates humans with animals, asking, "Have we grown at last beyond the passions of the primal clan? / 'Kill your enemy, for you hate him,' still, 'your enemy' was a man" (93-94). He insists that even the beasts of the fields are "kindlier brutes" than humans (96). In response to his vision of the degradation of all of nature, humanity included, the poet-speaker calls for the reappearance of St. Francis of Assisi, "He that in his Catholic wholeness used to call the very flowers / Sisters, brothers – and the beasts – whose pains are hardly less than ours!" (101-02). Yet even as he calls for this paragon of harmony between spirit and nature, the poet-speaker bursts with frustration, fearful that the world he describes perhaps reflects humanity's regression as a species, employing the language of current scientific theories that, however, cannot supply meaning or foretell the outcome of the processes they describe:

Chaos, Cosmos! Cosmos, Chaos! who can tell how all will end? Read the wide world's annals, you, and take their wisdom for your friend.

Hope the best, but hold the Present fatal daughter of the Past,

Shape your heart to front the hour, but dream not that the hour will last.

Ay, if dynamite and revolver leave you courage to be wise: When was age so crammed with menace? madness? written, spoken lies? (103-08)

The cause and effect of science may yet usher in humanity's devolution through cultural processes as well as material entropy.

The democratizing movements taking place across the world at the time emphasize the poet-speaker's fears that the hierarchical great chain no longer functions as it had as a metaphor of purposeful design due to cultural and political circumstances as well as scientific processes. The poet-speaker attributes this situation largely to political philosophies of the time, which he describes as unnatural in their visions of equality and as ignoring natural distinctions, an ironic reliance on science to support his political views. Tennyson employs analogies from nature by which the poet-speaker foresees the masses determining their own extinction through their clamor for equality, a condition that natural selection theories refute . As the franchise continued to be extended to more and more of the British populace, the poet-speaker warns his readers of the attractive lies of public speakers and writers, which he claims will lead towards doom:

> Envy wears the mask of Love, and, laughing sober fact to scorn, Cries to Weakest as to Strongest, 'Ye are equals, equal-born.'

Equal-born? O yes, if yonder hill be level with the flat.

Charm us, Orator, till the Lion look no larger than the Cat,

Till the Cat through that mirage of overheated language loom

Larger than the Lion,--Demos end in working its own doom. (109-14) Repeating the language of theories of thermodynamics and natural selection, the poetspeaker repeats his refrain of "Chaos, Cosmos! Cosmos, Chaos!" (127), foreseeing that the imagined freedom this equality would bring would be disastrous and that it foretells the beginning of the end of British Empire and civilization.

Cornelia Pearsall notes that though Tennyson was careful not to make his political views publicly known in order to avoid problematic relationships with other noteworthy figures of the time and his reading public, he clung to Whig politics long after they had gone out of style, observing that "a resistance to all but the most gradual introduction of democracy characterized Tennyson's political opinions throughout his life" (41). In 1884, the third Reform Bill passed through Parliament and William Gladstone, Tennyson's friend and the prime minister, lobbied for Tennyson's vote for the Bill, which Tennyson only granted after being assured that seats in the House of Commons would be redistributed better to represent the populace (*Mem.* II.305-10). Hallam Tennyson notes that Tennyson voted with Gladstone to extend suffrage, "not that he deemed the time altogether ripe for such a measure, on the contrary. But the promises of statesmen and agitators had so deeply stirred the popular mind, that delay, he thought, was no longer safe" (*Mem.* II.303). This "suffrage of the plow" (118), Tennyson told his son, could be "the first step on the road to the new social condition that is surely coming on the world.

Evolution has often come through revolution. In England, common-sense has carried the day without great upheavals, and I believe that English common-sense will save us still if our statesmen be not idiotic" (*Mem.* II.303). Universal democracy was one form of progress which the elderly poet-speaker could stand to see move slowly.

Thus, the poet-speaker sees the misuse of language as partially responsible for the unnatural situation of the present. The "charm" of the "Orator" and his "mirage of overheated language" (113) results in and reflects the chaos of the realm. Tennyson's concern for preserving the unity of the Empire shows in his letters. When Queen Victoria wrote the Tennysons to express her sympathy over the death of their son Lionel, Tennyson's response devotes more page space to airing Tennyson's views on the need to deny Ireland home rule than it does responding to the sympathy note. (*Letters*, vol. 3, 335-36). Tennyson confirmed this view in other correspondence, referring to himself as a "Unionist" (347), and reflecting that the "future is dark enough, if the Irish who can neither rule themselves, nor will be ruled, are to get the upper hand" (354).⁵ The poetic poet-speaker thus worries about what will happen to the greatness of the empire if democracy allows the uneducated, mislead masses to vote:

Those three hundred millions under one Imperial sceptre now, Shall we hold them? shall we loose them? take the suffrage of the plow.

Nay, but these would feel and follow Truth if only you and you, Rivals of realm-ruining party, when you speak were wholly true. (117-20)

⁵ Tennyson was also concerned that the democracy would not understand the need for national defense, according to Hallam Tennyson, who reports the following in the *Memoir*: "The democracy,' he said, 'does not appreciate that our trade depends on the strength of our fleet" (II.325-26).

The self-interested, factional rhetoric taking place in the public sphere "[b]ring the old dark ages back without the faith, without the hope / Break the State, the Church, the Throne, and roll their ruins down the slope" (137-38). Pearsall notes that "Tennyson's own overheated language voices skepticism regarding oratorical mirages, as well as anxiety over the increasing potential for the orator's discursive power to overtake the poet's" (42). The ramifications of breaking the great chain of being reverberate through Victorian society and politics, and the poet-speaker finds the resulting lack of hierarchical structure and the replacement of the poet as moral arbiter by the political orator as contributing to the devolution of both language and culture.

Equally disturbing to the poet-speaker is the way he sees art progressing in the post-chain world. He sees the scientific insistence on materialism as ushering in a new literary urge to register reality in terms that are devoid of spiritual and aesthetic vision, In five couplets, the poet-speaker, in his characteristic hyperbolic speech, presents his opinion of the kind of realism that had begun to sweep through Europe, destroying spirit, hope and idealism with its insistent portrayal of the worst of human nature in their rejection of idealism:

Authors—essayist, atheist, novelist, realist, rhymester, play your part, Paint the mortal shame of nature with the living hues of Art.

Rip your brothers' vices open, strip your own foul passions bare; Down with Reticence, down with Reverence – forward – naked – let them stare. Feed the budding rose of boyhood with the drainage of your sewer; Send the drain into the fountain, lest the stream should issue pure.

Set the maiden fancies wallowing in troughs of Zolaism, Forward, forward, ay and backward, downward too into the abysm.

Do your best to charm the worst, to lower the rising race of men;

Have we risen from out the beast, then back into the beast again? (139-48) Three terms in these ten lines deserve particular attention: "atheist" and "realist" in line 139 and "Zolaism" in line 145. These terms reflect Tennyson's vision of art's mission as conveying spiritual truth and inspiring humankind to aspire to the highest form of development. In his memoir of his father, Hallam Tennyson published a brief poem that his father supposedly wrote in 1869 in response to Charles Swinburne's sensational *Poems and Ballads* and its rejection of any moral function of art:

Art for Art's Sake! Hail, truest Lord of Hell!

Hail Genius, Master of the Moral Will!"The filthiest of all paintings painted well Is mightier than the purest painted ill!"Yes, mightier than the purest painted well,So prone are we toward the broad way to Hell. (*Mem.* II.92) Hallam Tennyson commented, "These lines in a measure expressed his strong and sorrowful conviction, that the English were beginning to forget what was, in Voltaire's words, the glory of English literature—'No nation has treated poetry in moral ideas with more energy and depth than the English nation'" (92). The term "atheist" in line 139, which appears in the series of those who contribute to English cultural discourse, registers Tennyson's view of art's legitimate aim, which must always be to enable us to see that "the highest Human Nature is divine" (276). Tennyson wrote "Sixty Years Later" when Darwin's *Origin of Species* had been on the market for over twenty-five years, and *The Descent of Man* had been influencing thought for almost fifteen. Whether Darwin intended to question the existence of a Creator is up for debate, but certainly these volumes and their defenders, such as Thomas Henry Huxley, did not attempt to keep evolutionary theory and religious worlds in harmony.

The terms "realist" (139) and "Zolaism" (145) also demonstrate Tennyson's rejection of contemporary views of art. Emile Zola articulates the type of naturalistic aesthetic that Tennyson roundly rejects: "The return to nature, the naturalistic evolution which marks the century, drives little by little all the manifestation of human intelligence into the same scientific path. Only the idea of a literature governed by science is doubtless a surprise until explained with precision and understood" (Zola 1). Zola's essay on the "experimental" novel reflects two senses of the term in that he claims this form of the novel had never been tried before and also in the sense that the actions of the characters were based on observation, so the development within the novel itself is an

experiment in putting together a number of agents and examining the reactions that result, analogous to the way that chemical experiments function:

> I will take as an example the character of the *Baron Hulot*, in "Cousine Bette," by Balzac. The general fact observed by Balzac is the ravages that the amorous temperament of a man makes in his home, in his family, and in society. As soon as he has chosen his subject, he starts from known facts; then he makes his experiment, and exposes *Hulot* to a series of trials, placing him amid certain surroundings in order to exhibit how the complicated machinery of his passions works. It is then evident that there is not only observation there, but that there is also experiment; as Balzac does not remain satisfied with photographing the facts collected by him, but interferes in a direct way to place his character in certain conditions, and of these he remains the master.... The whole operation consists of taking facts in nature, acting upon them, by the modification of circumstances and surroundings, without deviating from the laws of nature. Finally, you possess knowledge of the man, scientific knowledge of him, in both his individual and social relations. (Zola 8-9)

Zola's justification for such experimental work in the novel is that only by experimenting and coming to an understanding of how such passions work can humanity learn to control them (25). He attempts to demystify human nature through novelistic realism as "the way to explain the natural phenomena, both individual and social, of which metaphysics, until now, has given only irrational and supernatural explanations" (56). The naturalist project in the works of Zola and other realists such as Flaubert and Balzac gave rise to more explicit descriptions of aspects of life than had previously been published before, pointedly denying idealized representations of embodied experience. Peter Brooks notes that Zola's novel *La Terre*, translated into English and often censored,

> was the last straw for English middle-class morality—the word 'bestial' keeps coming back in the comments—and in that same year, 1888, Zola's publisher, Henry Vizetelly, was made to suppress all three novels [*La Terre, L'Assonmoir* and *Nana*] and promise to publish no more, was fined one hundred pounds, and was then sent to prison for three months. It is a curious reminder that the British, who had created the worst human squalor in their industrial cities, could find representation of poverty, misery, and sexuality dangerous. (12)

Audrey Boyle Tennyson, Hallam Tennyson's wife, noted in a manuscript wherein she was recollecting things her father-in-law had said, attributes the following to the poet in 1889: "Zola's art is monstrous in not practicing selection. I agree wholly with Wordsworth who says that 'Art *is* Selection'" (qtd. in Hoge 65). Hoge, in his note to this passage, notes that Tennyson is referring to Wordsworth's "Prelude to Lyrical Ballads" and the poet's responsibility to select appropriate language to describe emotion (65). Tennyson felt that Zola, with the thoroughness of the scientist, chose to leave nothing out and to describe everything in the fullest detail, no matter how sensationalist, a process that approaches that of the scientific observer, but with the same limitations—the inability to ascribe meaning and purpose and to inspire readers towards just the ideals that such writing rejected as "supernatural" and thus not "real."

Throughout the poem, the poet-speaker vacillates between hopeful observations based on self-reflection and his knowledge of history, science, and visions of desolation and death, ironically based on the same sources. Yet the poet-speaker justifies his vision that the current situation, both personal and cultural, does not foretell the end when he asks, "After all the stormy changes shall we find a changeless May?" (156). Instead of desolation, he foresees scientific discoveries leading to a utopian world where suffering and weakness are obsolete, when "[a]ll diseases quenched by Science, no man halt, or deaf or blind; / Stronger ever born of weaker, lustier body, larger mind" (163-64). He is less sure about the prospect of a warless world, and the pessimism of sixty years' experience seeps back in as he asks ""Warless? war will die out late then. Will it ever? late or soon? / Can it, till this outworn earth be dead as yon dead world the moon?" (173-74)." Tennyson's knowledge of current geological and astronomical theories engenders anxieties that he voices through the poet-speaker's pessimism in terms of cosmic evolution, the poet-speaker registering the declaration of "the new astronomy" (175) that the moon is dead. This moon-death causes the poet-speaker to speculate in bald, plain terms on the thermodynamic conclusion that Barri Gold discusses in her examination of In Memoriam. However, the poet-speaker also remembers the moon shining down upon him and his beloved Amy sixty years earlier, privileging its Romantic status rather than its scientific status and function, that the moon (as Amy) is "[d]ead, but how her living glory lights the hall, the dune, the grass! / Yet the moonlight is the sunlight, and the sun

himself will pass" (181-82). Thus, he models the kinds of vacillations that prevent his ever claiming the certainty that science proclaims about its access to truth, simply by creating another vision, and thus sufficient doubt about science and realism.

As the poet-speaker attempts to reconcile his scientific knowledge without giving up his belief in an "increasing purpose," he assumes a cosmic perspective. Having already acknowledged his inability to clearly envision a divine plan over a long period of time, he attempts to do so spatially, leading him to wonder what the possible inhabitants of other worlds might think of the faraway star of Earth in their skies and to wonder what might be on those worlds. The questioning form of the lines enact the poet-speaker's method of creating doubt that truth is accessible through either science or religion:

> All the suns – are these but symbols of innumerable man, Man or Mind that sees a shadow of the planner or the plan?

Is there evil but on earth? Or pain in every peopled sphere? Well be grateful for the sounding watchword, 'Evolution' here,

Evolution ever climbing after some ideal good,

And Reversion ever dragging Evolution in the mud. (195-200) On one hand, evolutionary theory suggests that humanity can easily devolve into extinction, through its own moral decline. On the other hand, the same science has allowed an enlarged vision whereby the great chain reflects a much fuller cosmos than pre-scientific thought could possibly have perceived. Furthermore, evolutionary theory also offers the possibility of a continual rise of the species from a lower level to a higher, more advanced, ideal level. In the end, the poet-speaker echoes Psalm 8 to justify his determined affirmation of faith in its capacity to explain science, and science's function to affirm faith: that "[o]nly that which made us, meant us to be mightier by and by, Set the sphere of all the boundless Heavens within the human eye" (209-10).

As the poet-speaker and his grandson return to Locksley Hall from their walk, the poet-speaker's mood turns sour again, and in an odd turn, engages in a realist description of what the forward motion of society has wrought, noting the tendency of both metaphysical and scientific visions to lead to quietism deriving from assumptions that this is the best of all possible worlds:

> Is it well that while we range with Science, glorying in the Time, City children soak and blacken soul and sense in city slime?

> There among the glooming alleys Progress halts on palsied feet, Crime and hunger cast our maidens by the thousand on the street.

There the Master scrimps his haggard sempstress of her daily bread, There a single sordid attic holds the living and the dead.

There the smouldering fire of fever creeps across the rotted floor, And the crowded couch of incest in the warrens of the poor. (217-24)

For all the hope that the future is evolving toward a higher form of humanity, the present has fallen victim to the material. These descriptions demonstrate that the science that has made possible the material advances that characterized industrialized England for some of its citizens, still cannot supply the moral and the spiritual insights and impulses that lead to better treatment of fellow humans. Indeed, social Darwinism relies on science to justify the degradation that these descriptions portray. The poet-speaker exhorts his grandson, as Tennyson does his readers, to remember how to understand the lessons of science, history, and faith: "Forward then, but still remember how course of Time will swerve / Crook and turn upon itself in many a backward streaming curve" (235-36). Science allows us to understand the material world in ways that enable material progress. Science also furnishes theories of development that enable us to identify historic patterns in the physical world and in human affairs. However, science also grounds theories of devolution and extinction. Tennyson's poet-speaker models the thinking and vision that will allow his grandson, standing in for Tennyson's readers, to avoid falling into despair. This modeling instead affirms the ideals to which humanity can aspire by pointing out that history is cyclically inclined towards progress and that poetry and faith promote hope and supply the ideals that enable humanity to avoid devolution and extinction that would otherwise result from science alone.

The poet-speaker's last sad comments reflect his profound sense of displacement in a world where "Art and Grace are less and less: / Science grows and Beauty dwindles" (245-46). He bemoans the passing of his era, even though recognizes that he is only caught in a backwards eddy of time, and that events will progress towards higher forms: "Poor old Heraldry, poor old History, poor old Poetry, passing hence, / In the common deluge drowning old political common sense!" (249-50). In the original "Locksley Hall," the poet-speaker had feared that his poetic inspiration would leave him with his lost love; here, he fears that it may have left him as one caught in one of time's backward swerves: "All I loved are vanished voices, all my steps are on the dead. / All the world is ghost to me, and as the phantom disappears, / Forward far and far from here is all the hope of eighty years" (252-54). At the end of his life, the poet-speaker remains convinced of his new, more complex vision of the great chain and its implications, but he grieves to have lived into one of time's devolutionary swerves.

His last advice for his grandson affirms his sense that spiritual, and not scientific, truth provides the guide to the future, affirming that individuals can, indeed, must "halfcontrol" life's outcome, which will culminate in bettering life on earth for the self and others, ending in resurrection:

> Follow you the Star that lights a desert pathway, yours or mine. Forward, till you see the highest Human Nature is divine.

Follow Light, and do the Right – for man can half-control his doom –

Till you find the deathless Angel seated in the vacant tomb. (275-78) His directions to his grandson (and readers) follow on his observations, born of intense self-reflection, that the dead lord of the manor who had won his lover away from him in their youth was in fact a "Worthier soul . . . than I am" (239). The poet-speaker now sees him as a model citizen, as a "sound and honest, rustic Squire, / Kindly landlord, boon companion," observing that "youthful jealousy is a liar" (239-40). He tells his grandson to follow the models of both the elderly men: "Cast the poison from your bosom, oust the madness from your brain./ Let the trampled serpent show you that you have not lived in vain" (241-42). This advice comes from the insights of the old poet-speaker regarding the teachings of faith and Christian love. The rest of his advice describes how to model the actions of the old Squire in making a better world:

... You, my Leonard, use and not abuse your day,

Move among your people, know them, follow him who led the way,

Strove for sixty widow'd years to help his homelier brother men, Served the poor, and built the cottage, raised the school, and drain'd the fen. (265-69)

The poet-speaker thus affirms the spiritual, demonstrating the inability of science to disprove faith, and pointing out that the fruits of faith are what will drive the world towards a higher form. He makes these points by noting the inability of humanity to know the truth: "Nay, there may be those about us whom we neither see nor name, / Felt within us as ourselves, the Powers of Good, the Powers of Ill, / Strowing balm, or shedding poison in the fountains of the Will" (272-74). In his youth, he strew poison, and now he wants his grandson to profit from his insights in being one who strews balm.

The final lines thus underscore the poem's essentially Christian orientation: "Love will conquer at the last" (280). The conclusion allows Tennyson to affirm his vision of those powers that poetry and faith possesses and that science does not, the powers to

guide and inspire. While these poems have traditionally been read as the grumblings of a pessimistic, sad old man, reading them through Tennyson's preoccupation with issues of science, faith, and art foregrounds his project of modeling ways of working through personal and cultural doubts and fears that his readers would have personally experienced in general, if not specifically in the form of the poet-speaker's early rejection by a lover for a wealthier man. The narrative, in fact, details the kind of historical move towards, then away, and again towards to the bright future that awaits the poet-speaker's grandson as the new master of Locksley Hall, but only if he can give over his bitterness and devote himself to following the highest ideals of human behavior. Thus, it parallels the process by which the poet, following the model of Hallam articulated in *In Memoriam* assesses doubt and reaffirms faith. This process is initiated when the individual experiences profound loss: a personal loss of a loved one, a destruction of cherished ideas by scientific discovery, the losses experienced due to aging, the loss of cherished life styles in the face of industrialism and capitalism. The grieving individual then faces the issues with bravery and self-honesty, tolerating and reflecting on the grief while interrogating the forces involved. The process then leads to an affirmation, in the case of Tennyson and presumably his readers who want to affirm their faith, of a way to reconcile faith, art, and science, as a process itself of loss and growth, of development, as it were, explained by analogy to scientific processes, but guided always by values and observations provided by the aesthetic and spiritual. The poet retains his important function in this process as one who, like the Romantics, sees and discerns more clearly than ordinary individuals, and communicates these larger truths. Unlike the Romantics, however,

Tennyson must deal with mounting scientific challenges to idealism in any form, especially by way of avoiding charges of romantic solipsism, and also avoiding utilitarian dismissals of art and the aesthetic. Seen within this context, the "Locksley Hall" poems reveal themselves as part of this process, and not simply a rehashing by an old man of his failures, hopes and fears.

Chapter 5

Tennyson's Conclusions

During the last twenty years or so of Tennyson's life, he continued to explore in verse his views regarding science, art, and religion. For Tennyson, these three subjects were inextricably connected, three strands of a triple-braided rope that could not be untangled except to the detriment of all. In these later poems on science, Tennyson's statements affirm his belief in the spiritual and aesthetic as superior and anterior to the material and empirical, acknowledging that both faith and science provide valid access to truth and rejecting the possibility that humankind can access ultimate truth through empirical knowledge.

Tennyson's later poetry reflects the influence of his association with prominent scientific and metaphysical thinkers of the era. In 1868, James Knowles first conceived of a Theological Society in which a group of religious intellectuals from a variety of ecumenical backgrounds could come together and discuss the moral and theological questions that concerned middle-class Victorian society of the time, forming an organized resistance against increasing materialism and agnosticism. However, when Knowles sought advice from Dean Stanley of Westminster and his wife, Lady August Stanley, they counseled "all that such a society could do would be to widen the breach between the religious and scientific points of view. *Rapprochement*, Stanley felt, would help more than organized resistance" (Brown 21). The idea for a Theological Society was therefore expanded to a Metaphysical Society to include non-religious points of view. Knowles, with the assistance of Tennyson, established the Metaphysical Society in 1869, a group of

extraordinary men of wide and varied viewpoints who met nine times a year to discuss theological and metaphysical issues of the day (20-21). Joining Tennyson and Knowles in the society were such personages as Stanley himself; Thomas Huxley, Darwin's most staunch defender; William Gladstone, Prime Minister; and the Duke of Argyll, who was a fellow of the Royal Society and the Chancellor of the University of St. Andrews.

While Tennyson never contributed a paper to the society to be read, he sent a poem to the first meeting of the society (which he did not attend), titled "The Higher Pantheism." Knowles read the poem in Tennyson's absence, and the Society meeting began with a reading of the poet laureate's poem, which rehearses typical arguments for and against the metaphysical, ultimately affirming God and the purposefulness of creation. Addressing the Soul, the poem asks several questions that rehearse typical concerns of the Society's members and other seekers of the era, juxtaposing questions and shortcomings of those who believed only in science. The poem begins by phrasing conventional pantheistic views that identify God as available to human awareness through His creation: "The sun, the moon, the stars, the seas, the hills and the plains, - / Are not these, O Soul, the Vision of Him who reigns?" (1-2). The pantheism of the poem's title is addressed immediately in these first lines by associating God with aspects of the natural world. The third stanza, however, asks a question that posits a typical contradictory view: "Earth, these solid stars, this weight of body and limb, / Are they not sign and symbol of thy division from Him?" (5-6). In one of the few published works of scholarly criticism of "The Higher Pantheism," Nathan A. Cervo claims that the Soul of the poem "reflexively regards things such as the stars as barriers to earthly accessible

unity with God. At best . . . he or she dilutes natural things into signs or symbols pointing towards God as the Other from which the 'I' is ontically divided, cut asunder, or separated" (77). The poem's next stanza, points out the consequences of human limitation, and the cause: "Dark is the world to thee; thyself art the reason why, / For is He not all but thou, that has the power to feel 'I am I'?" (7-8). The speaker thus articulates the views of those who see human understanding of God's creation as being limited precisely due to the limitations of human perception and reason and not due to a design flaw or even the absence of design.

The next two lines also describe the state of the unbeliever as deficient and fallen due to inability to conceive of the non-material: "Glory about thee, without thee; and thou fulfillest thy doom, / Making Him broken gleams and a stifled splendor and gloom" (9-10). These lines are reminiscent of *In Memoriam*'s prologue, where the speaker likewise describes human attempts to comprehend God's creation, using similar terms:

Our little systems have their day;

They have their day and cease to be:

They are but broken lights of thee,

And thou, O Lord, art more than they. (Pro. 17-20)

Tennyson's speakers, from the "Locksley Hall" poems and *In Memoriam* to "The Higher Pantheism," thus attribute spiritual doubt to humanity's inability to conceive of the cosmos in metaphysical terms due to reliance only on the empirical. The speaker in "The Higher Pantheism" distinguishes between those who do and those who do not clearly perceive God in His creation. Juxtaposing the wise and the foolish, these designations suggest Tennyson's epistemology, which views God and natural law as one: "God is law, say the wise; O Soul, and let us rejoice, / For if He thunder by law the thunder is yet His voice" (13-14). The poet-speaker affirms a meaning to nature that is both empirical but must always be understood in terms of the great chain and its creator.

Though the poem begins and ends with questions, the first four stanzas and the last ending interrogatively, Tennyson's message is not entirely ambivalent. Believers are wise, and those who do not believe are fools: "Law is God, say some; no God at all, says the fool, / For all we have power to see is a straight staff bent in a pool;" (15-16). Tennyson compares an unbeliever's viewpoint to the classic demonstration of refraction in water. A straw placed in a clear glass of water appears to be bent, the sections above and below the water line no longer seeming to match up, though the straw itself remains unchanged. The analogy demonstrates the limits of human perception and understanding, as the poem's speaker rejects the ability of empiricism alone to discover truth. Rather, he affirms a more nuanced approach to understanding truth, but finds himself unable to provide anything like a full account. Like the rest of humanity, the speaker cannot comprehend the material universe in its entirety, although he concludes that his inability to comprehend metaphysical truth does not presuppose its absence: "And if the ear of man cannot hear, and the eye of man cannot see: / But if we could see and hear this Vision – were it not He?" (17-8). While the views implied by the poem reiterate Martin's comments that Tennyson "knew little more than he had at the founding of the Society" (484) about those questions that prompted its formation, the form of the poem supports a view that Tennyson was at least confirmed in his rejection of any human claims that

empirical knowledge could access and comprehend truth and his affirmation that any truth was to be found in the spiritual. Such a pointed statement departed from the questioning spirit of the society and would have been particularly challenging to someone like Thomas Huxley, Darwin's staunch defender and coiner of the term 'agnostic,' who was present at the first meeting when the poem was read aloud.

The Metaphysical Society thus began with clear salvos from and for the theological members of the organization and with a rejection of science's reliance on empirical data to discover knowable truth. R.H. Hutton followed Tennyson's poem with a paper entitled "On Mr. Herbert Spencer's Theory of the Graduate Transformation of Utilitarian into Intuitive Morality by Hereditary Descent." The topic itself defines the issues at stake and the variety of attempts to rationalize what Tennyson affirmed could not be rationalized. Brown summarizes the paper as "a clear attack on Spencer's effort to establish an empirical or utilitarian basis for some of those aspects of morality for which the Christian believers in revelation and the sceptical followers of Mansel and Hamilton claimed an intuitive origin" (44). In documenting the Society's history, Brown notes that "the history of the Society is a long unfolding of one argument which can perhaps be stated as: 'What must a man believe? What may or can a man believe?'—not only about God and 'reality,' but about his own nature" (33). This extended discussion took place over eleven years, from 1869 until the dissolution of the Society in 1880. Despite his role in establishing the organization, Tennyson was not often present for the meetings, but kept abreast of the discussions through the papers that were read at the meetings that

were then printed and distributed to the members. Hallam Tennyson remarks of his father that

[f]rom the discussions of the Metaphysical Society he came out as strongly convinced as ever of the irrationality of pure materialism, while respecting the earnestness and lofty aims of many agnostics. He was glad to receive the impression that theologians of this age were more enlightened than their predecessors, and that there was an endeavor in the Churches to march side by side with science, and bring their teaching into living relation with the movement of contemporary thought. (*Mem.* II 170).

Robert Martin notes, however, that "[o]f the proofs of eternal life he knew little more than he had at the founding of the Society" (484). Tennyson had resigned from the Society in 1879 before its dissolution the next year, and Hallam Tennyson notes that Tennyson "declared that it 'perished because after ten years of strenuous effort no one had succeeded in even defining the term "Metaphysics" (*Mem.* II 170). James Martineau wrote to Hallam Tennyson, reflecting that "in general, [Tennyson's] sympathies went with the advocate of the more conservative aspects of moral and metaphysical questions" (*Mem.* II 171). "The Higher Pantheism" reflects Tennyson's failure to resolve issues of the spiritual and the material beyond what he had already pre-shadowed in *In Memoriam*, but by posing his last statement of the poem as a question, he avoids any claim to absolute knowledge, which he had already demonstrated is beyond human understanding.

While "The Higher Pantheism" rehearses science's threat to faith, "Parnassus" extends those concerns to another non-material realm, the aesthetic, and more directly, the possibility of immortality. Published in *Demeter and Other Poems* in 1889, "Parnassus" is a short poem of only 20 lines that recognizes science's rising prominence and its threat to the aesthetic, but ultimately refuses to admit that the empirical can ever subsume the aesthetic as a necessary source of value and meaning. While Tennyson deals more thoroughly with scientific conflicts with faith and art elsewhere in his poetry, the juxtaposition of science and art are perhaps clearest in "Parnassus" as England's poet laureate prepared to finish out his career, his life, and the century. Perhaps because it is such a brief statement, scholars have provided little critical analysis of the poem. "Parnassus" leaves Tennyson's readers with a final word, an ultimate assertion that though individual artists vanish from life, Art itself does not die. The poem does not claim the same immortality for the artist, however, since Tennyson had already established that proof of eternal life was among those metaphysical truths beyond human capacity to know.

Biographically, "Parnassus" features importantly in Tennyson's life, according to Cornelia Pearsall, who connects the poem with the 1883 trip Tennyson took with Prime Minister William Gladstone, who had also been a member of the Metaphysical Society. She points out an important interchange between the two, and anticipates Tennyson's response to Gladstone's pronouncement: "I anticipate for him…immortality,' Gladstone declared of Tennyson [during a stop] at Kirkwall. The speechless poet at his side, however, had he spoken, would have voiced deep skepticism at the notion of his or any poet's immortality" (346). Yet it was during this trip that Gladstone offered Tennyson the barony he had wished for, not simply the baronetcy he had been offered before, but the peerage that his sons would inherit after his death. Gladstone, in this sense, had ensured that Tennyson's poetry earned him a legacy beyond his printed words.

The poem itself can be read as an allegory of the disappearance of the world's great poets and thinkers as they are eclipsed by "Astronomy and Geology, terrible muses" (16). Tennyson appropriates classical conceptions of poetic immortality by beginning the poem with an epigraph from Horace's third ode. Though Tennyson only excerpts part of the ode, there exists a distinct similarity between the thrust of "Parnassus" and that of the short sixteen lines of the ode. These lines rehearse a familiar theme that English poets at least since Shakespeare have employed to assert the primacy of art over the ultimately insubstantial material world and the uncertainty of personal immortality. C.E. Bennett's translation of Horace follows in its entirety:

I have finished a monument more lasting than bronze and loftier than the Pyramids' royal pile, one that no wasting rain, no furious north wind can destroy, or the countless chain of years and the ages' flight. I shall not altogether die, but a mighty part of me shall escape the death-goddess. On and on shall I grow, ever fresh with the glory of after time. So long as the Pontiff climbs the Capitol with the silent Vestal, I, risen high from low estate, where wild Aufidus thunders and where Daunus in a parched land once ruled o'er a peasant fold, shall be famed for having been the first to adapt Aeolian song to Italian verse. Accept the proud honour won by thy merits, Melpomene, and graciously crown my locks with Delphic bays. (279)

In a prophetic spell, Tennyson's speaker sees Horace himself as one of the "crowned forms high over the sacred fountain" ("Parnassus" 1). The Muses have "raised to the heights of the mountain" the great "Bards" (2), and Tennyson repeats Horace's own language when he adds that these poets have also been raised "over the flight of the Ages!" (3). In a fairly standard poetic call to join other famous writers in their immortality, the poet asks the muses to enable his own words to live forever so that he may "stand with my head in the zenith, and roll my voice from the summit, / Sounding for ever and ever through Earth and her listening nations, / And mixt with the great Sphere-music of stars and of constellations" (6-8). The poet assigns immortality to words, if not to poets, but only to poetic utterances. Having blasted the "mirage of overheated language" in "Locksley Hall Sixty Years After," he dismisses the idea that political language will last: "Lightning may shrivel the laurel of Caesar, but mine would not wither" (4).

Like the approach Tennyson takes in "The Higher Pantheism," he juxtaposes the aesthetic and the scientific by presenting in the second stanza opposing summits, with the latter portrayed as taller and more prominent, overshadowing the mountain on which the bards reside, where the speaker now sees science "ever spreading and heightening" (11). Over the immortal mountain where the bards have been raised by the Muses, the two overshadowing shapes of Astronomy and Geology have cast the poets into darkness, suggesting that poetry's immortality cannot stand against the colossuses of scientific discovery. Though ancient tales supposed that laurel wreaths were lightning-proof,⁶ the poet-speaker sees that Caesar's laurel has already been shrivelled, and that the poet's wreath "is blasted by more than lightning" (12) and that "the crown'd ones" are "all disappearing" (13). Instead of the illuminating flash of light that lightning would ordinarily provide, darkness is instead falling in the "deep double shadow" (13) created by "Astronomy and Geology, terrible Muses!" (16). Viewing the destruction of what had been the Muses' monument to art and wisdom, the speaker instructs poets who must travail in this new landscape to "Sing like a bird and be happy, nor hope for a deathless hearing! (14). He rhetorically dismisses the possibility of the immortality of art with a cynical question about his former ideals about poetry "Sounding forever and ever" (15). Disturbed by the vision, he tells himself to "pass on! the sight confuses—" (14-15). The poet-speaker is undergoing the same sort of journey of faith and doubt that the speakers in the other poems of this study have experienced, and as before, he adjusts his ideals without rejecting a vision that art's meaning and value transcend the materiality of science.

Thus the third section finishes the pattern by returning the speaker to an affirmed faith that has been subjected to doubt and questioning, followed by an enlarged vision. It reaffirms Tennyson's vision of the durability of the aesthetic and its identity with the sacred, despite, once again, the limitations of humans to perceive the truth:

> If the lips were touched with fire from off a pure Pierian altar, Though their music here be mortal need the singer greatly care?

⁶ In Suetonius' *Lives of the Caesars*, book III, section LXIV describes Tiberius wearing a laurel wreath during thunderstorms due to this superstition.

Other songs for other worlds! the fire within him would not falter;

Let the golden Iliad vanish, Homer here is Homer there. (16-20). While the poet-speaker recognizes and accepts the impermanent nature of poetry he affirms the continued existence of the spiritually inspired poet, figured in the poem as Homer. Despite the overshadowing structures of Astronomy and Geology, the aesthetic will continue to enter the world through each poet's soul, which becomes fueled at the "Pierian altar," through the powers of the Muses. The "Pierian altar," home of the Muses at the base of Mount Olympus, provides a home where both spiritual and aesthetic combine as the goddesses channel beauty and wisdom through their worshipers. This poem, then, models the journey of the wise from uninformed and idealistic certainty, through doubt, into an affirmation of the transcendent that exceeds human understanding, but that the knower can claim more surely to exist.

Immediately following "Parnassus" in *Demeter and Other Poems* is Tennyson's ironically titled "By an Evolutionist," which like "The Higher Pantheism," looks beyond the material world and affirms a spiritual one that is not accessible through reason or logic, a utilitarian or other secular moral calculus. The poem begins with a conversation between God and man as a parable whereby an aged man looks back and casts the great questions of life in their starkest terms. Thus the poem begins at the beginning of life, personal and theological: "The Lord let the house of a brute to the soul of a man" (1). When the man asks if he is God's debtor, the Lord replies, "Not yet; but make it as clean as you can, / And then I will let you a better" (3-4). The man questions why he should

follow the ascetic plan that would lead to a "clean house" if he is not sure of the immortality of a soul:

If my body come from brutes, my soul uncertain or a fable,Why not bask amid the senses while the sun of morning shines,I, the finer brute rejoicing in my hands, and in my stable,Youth and health, and birth and wealth, and choice of women and of wines? (5-8)

The first line in particular, containing the argument of evolution that humanity is simply a superior form of animal life, leads to a sort of reverse-Pascal's wager; if there is no proof that the soul exists or that it exists only as a cultural construct, and if morality based on Biblical teaching is unfounded, then there is no need to constrain oneself to a moral lifestyle. In the next lines, Youth, who is represented as a sort of Hobbesian, self-interested brute, complains to Old Age that his life has consisted only of "breaking my bones on the rack" (9), and he wishes that he had simply "past in the morning" (10) to avoid the ravages of time. Old Age, in fact reinterprets the facts to him, noting that he has made it easier for him to attain his spiritual home. He has "starved the wild beast that was linkt with thee eighty years back. / Less weight now for the ladder-of-heaven that hangs on a star" (10-11). The overindulgences of the flesh, as Old Age has "starved the wild beast that was linkt with thee." The Youth thus voices a joy-robbing negativity that appeared to Tennyson as one of the outcomes of evolutionary views of humanity.

Old Age continues to reframe the view of life from his perspective to provide an alternate vision of the human condition. He restates the claims of the Lord in the opening

parable, claiming supremacy for the human soul over that of the animal and sensual body that supposedly evolved from lower "brutes." The material world that the youth delights in is worth nothing to the old man, whose wisdom furnishes a surer vision, and he articulates a call for all to be patient and understand that the desires and pangs of youth which cause pain also distort vision. Both will cease with time and will be replaced by quiet certitude of a higher space, which the poet, however, does not delineate:

> I have climb'd to the snows of Age, and I gaze at a field in the Past, Where I sank with the body at times in the sloughs of a low desire, But I hear no yelp of the beast, and the Man is quiet at last, As he stands on the heights of his life with a glimpse of a height that is higher. (17-20)

The pattern remains consistent, then, even in old age. Doubt is replaced by certainty, not of the facts of the spiritual world, but by its existence.

These final lines are consistent with Tennyson's often repeated belief in an afterlife that would provide humanity with a better eternity than earthly experience. Queen Victoria remarked on this in her journal:

> He talked of the many friends he had lost and what it would be if he did not feel and know that there was another World, where there would be no partings; and then he spoke with the horror of the unbelievers and philosophers who would make you believe there was *no* other world, no Immortality—who tried to explain *all* away in a miserable manner. We

more cruel than any human being. (qtd. in *Letters*, vol. III, 249-50) "Crossing the Bar," the poem that Tennyson requested end all volumes of his poetry, looks forward to the afterlife, where he hopes "to see my Pilot face to face / When I have crost the bar" (15-16).

agreed that were such a thing possible, God, who is love, would be far

Tennyson interacted less overtly with science during the final years of his life, and several events contributed to a diminishment of overt scientific references within his poetry. First, Tennyson's poetic attention had turned in part to producing *The Idvlls of* the King, published between 1859 and 1885. In 1883, Tennyson finally accepted a barony, and his letters begin to show increased political activity, though he never officially allied himself with any party. Perhaps most significantly, however, was the increased specialization of science, which began to put the scientific world out of the reach of even well-educated laymen. The lingua franca of science was rapidly shifting to mathematics, a realm in which Tennyson was not particularly adroit, given that Tennyson had read Virgil under his desk during his mathematics classes at Cambridge. Popular science books that had run through the presses during the first half of the century were no longer bestsellers as they had once been. Furthermore, late Victorian Britain had not yet adopted a systematic means of supporting scientific research: "as late as the second half of the nineteenth century there was no systematic promotion of science based on longterm planning by the government in London" (Alter 273). Alter argues that while science worldwide was advancing and becoming more specialized, Britain's scientific endeavors were falling behind those of the rest of the world, particularly from Victoria's Diamond

Jubilee to the beginning of World War I. He concludes that "science was not a particularly attractive career in Britain" (289) during the Victorian era, and clergy who had been at the forefront of scientific discovery were no longer using their time to perform the kind of independent study they had once done in the past. Thus Tennyson's later years witnessed a lag between the times when amateur science vitalized the intellectual world and the turn away from amateur science before an institutional framework was in place for advancing scientific study.

Tennyson's late poems demonstrate an easing of the anxieties displayed in his earlier poems, even while they register a pessimistic perception of the contemporary state of things. "The Palace of Art" and In Memoriam both deal with problems of the status of art in a materialist world, particularly as science itself cast doubt on humanity's own fate. "Parnassus" provides Tennyson's final answer, previewed in In Memoriam, whereby the poet must express him or herself without worrying about the finality of things, which can in any case, not be ascertained by human faculties beyond understanding that the fact that poets must sing is itself a type of proof of higher things. "The Higher Pantheism" and "By an Evolutionist" reject aspects of science that would deny humanity an afterlife or a caring God, just as In Memoriam does. The "Locksley Hall" poems elaborate on his earlier claims that science must be understood in terms of God's great chain. Tennyson never refuses science its due, only warns against the danger of understanding it apart from the spiritual and aesthetic. The separation of spiritual and aesthetic from each other was only possible once secularization began to take place, but for Tennyson, the two could never be untangled from one another, and ultimately, the epistemology that

grounded his acceptance of science also insisted on its interpretation in terms of the nonmaterial. Science, for Tennyson, could never provide ultimate truth—that could only be provided through the spiritual and the aesthetic, and as his understanding of the sciences taught him, human perception and apprehension must remain limited until evolution of the material and spiritual would eventually permit a fuller knowledge and understanding.

Nearly two hundred years after Tennyson began his literary career, the struggle between science and faith remains. Thus Tennyson's poetic project remains entirely relevant in its modeling of ways to understand science in terms of the spiritual and aesthetic. For the Victorian era, Tennyson is perhaps one of the most appropriate subjects to study regarding these epistemological and axiological contests that continue today. Discovering the poet through his engagement with science reveals his poetry as dealing not only with personal loss and grief and anxiety over change, concerns that troubled Tennyson personally, but also at the fact that his personal concerns paralleled larger concerns about the place of science and the non-material in what many perceived as a degenerating cultural world. This approach also makes visible the model that his poetry provides whereby the always faithful Victorian readers as well as those whose faith was tested by science could face their doubts, interrogate them, and find a firmer basis for belief. Tennyson crafted a vision wherein the spiritual, aesthetic, and empirical co-exist, the spiritual and aesthetic providing meaning and value that informs the findings of the empirical. He rationalized his disillusionment and disappointment in humanity's progress by envisioning his era in a backwards eddy of an ultimately forward flowing

progression of time, keeping faith at the forefront of his own epistemology and art, acknowledging the limits of human perception and understanding, and rejecting any claims to the contrary.

Discerning what Tennyson would tell us now is difficult when the separations between the categories he attempted to bridge have become seemingly impassible chasms. Still, the personal nature of his poetry suggests his answer—that individual struggles to reconcile competing epistemologies must always be personal. On the other hand, the spirited discussions of the Metaphysical Society that demonstrated the prominent contrasts in views held by individuals in the Victorian era, also reflect a public attempt to expand understanding, and a recognition of the high stakes involved. Indeed, Tennyson's project of crafting an epic and continuing national identity for England through his *Idylls* suggests his awareness of the importance to the moral condition of his nation of a metaphysical vision and of the appropriateness of poetry in both bringing into being and also disseminating that vision. A passage from the prologue to his great midlife poem succinctly articulates the relation of human ideas to an imperfectly perceived truth

Our little systems have their day;

They have their day and cease to be:

They are but broken lights of thee,

And thou, O Lord, art more than they. (In Memoriam, Pro. 17-20)

By the end of his life, Tennyson would find the words he had inscribed in the prologue to *In Memoriam* apropos, in their affirmation that the spiritual realm would always remain superior to the "little systems" crafted on the basis of humanity's imperfect perception.
Works Cited

- Alter, Peter. "Science and the Anglo-German Antagonism." *Later Victorian Britain,* 1867-1900. Ed. T.R. Gourvish and Alan O'Day. New York: St. Martin's, 1988.
 271-90. Print.
- Barthes, Roland. "From Work to Text." *Word, Image, Text.* Trans. Stephen Heath. London: Fontana, 1977. 155-164. Print.
- Bartusiak, Marcia, ed. Archives of the Universe: A Treasure of Astronomy's Historic Works of Discovery. New York: Pantheon, 2004. Print.
- Beer, Gillian. Open Fields: Science in Cultural Encounter. Oxford: Clarendon P, 1996. Print.

The Bible. Nashville: Thomas Nelson, 1995. New King James Vers.

- Bonnecase, Denis. "The First Generation Poets; Historicity, Neurosis, Private
 Mythology." *After History*. Ed. Martin Procházka. Prague: Litteraria Pragensia,
 2006. Print.
- Brantlinger, Patrick. *Crusoe's Footprints: Cultural Studies in Britain and America*. New York: Routledge, 1990. Print.

Brooks, Peter. Realist Vision. New Haven: Yale UP, 2005. Print.

- Brown, Alan Willard. The Metaphysical Society: Victorian Minds in Crisis, 1869-1880. New York: Columbia UP, 1947. Print.
- Brunner, Larry. "'I Sit as God': Aestheticism and Repentance in Tennyson's 'The Palace of Art.'" *Renascence* 56.1 (2003): 43-54. *MLA International Bibliography*. Web. 19 Oct. 2012.

- Bufkin, E.C. "Imagery in 'Locksley Hall." Victorian Poetry 2.1 (1964): 21-28. JSTOR.Web. 3 Apr. 2013.
- Burkhardt, Richard W. Jr. *The Spirit of System: Lamarck and Evolutionary Biology*. Cambridge: Harvard UP, 1977. Print.
- Cadbury, William. "Tennyson's 'The Palace of Art' and the Rhetoric of Structures." *Criticism* 7.1 (1965): 23-44. Microtext.
- Cervo, Nathan A. "Tennyson's *The Higher Pantheism.*" *Explicator* 63.2 (2005): 76-8. Web. 18 Nov. 2013.
- Chambers, Robert. Vestiges of the Natural History of Creation and Other Evolutionary Writings. Ed. James A. Secord. 1844. Chicago, U of Chicago P, 1994. Print.
- Cronin, Richard. "The Palace of Art and Tennyson's Cambridge." Essays in Criticism 43.3 (1993): 195-210. Oxford Journals. Web. 19 Oct. 2012.
- Crowe, Michael J. Modern Theories of the Universe from Herschel to Hubble. New York, Dover, 1994. Print.
- Culler, Dwight A. "'Tennyson, We Cannot Live in Art.'" In *Nineteenth-Century Literary Perspectives: Essays in Honor of Lionel Stevenson*. Ed. Clyde de L. Ryals, John Clubbe and Benjamin Franklin Fisher IV. Durham, NC., Duke UP, 1974. Print.
- Dale, Peter Allan. "Gracious Lies': The Meaning of Metaphor in *In Memoriam*."*Victorian Poetry* 18.2 (1980): 147-67. *JSTOR*. Web. 29 Jan. 2013.
- Darwin, Charles. Letter to John Fordyce. 7 May 1847. Darwin Correspondence Project. Darwinproject.ac.uk Web. 18 Feb. 2014.

- ---. On The Origin of Species by Means of Natural Selection. 1859. New York: Barnes and Noble, 2004. Print.
- Eliot, T.S. "In Memoriam." In Critical Essays on the Poems of Tennyson. Ed. John Kilham. New York: Barnes & Noble, 1967. 207-218. Print.

"Entropy." Def. 1. *The Oxford English Dictionary*. 2nd ed. Web. 4 Dec. 2013.

- Friedman, Norman. "Hallam on Tennyson: An Early Aesthetic Doctrine and Modernism." *Studies in the Literary Imagination* 8.2 (1975): 37-62. *MLA International Bibliography*. Web. 29. Jan. 2013.
- Fulweiler, Howard W. "Tennyson's *In Memoriam* and the Scientific Imagination." *Thought* 59.234 (1984): 296-318. Print.
- Fyfe, Aileen. "The Reception of William Paley's Natural Theology in the University of Cambridge." The British Journal for the History of Science 30.3 (1997): 321-35. JSTOR. Web. 23 July 2013.
- Gibson, Walker. "Behind the Veil: A Distinction Between Poetic and Scientific Language in Tennyson, Lyell, and Darwin." *Victorian Studies* 2.1 (1958): 60-8.*JSTOR*. Web. 2 April 2011.
- Gliserman, Susan. "Early Victorian Science Writers and Tennyson's 'In Memoriam': A Study in Cultural Exchange." *Victorian Science* 18.3-4 (1975): 277-308, 437-59. *MLA International Bibliography*. Web. 2 April 2011.
- Gold, Barri J. "The Consolation of Physics: Tennyson's Thermodynamic Solution." *PMLA* 117.3 (2002): 449-64. *JSTOR*. Web. 2 April 2011.

- Hagen, June Steffensen. "The 'Crescent Promise' of 'Locksley Hall': A Crisis in Poetic Creativity." Victorian Poetry 11.2 (1973): 169-71. JSTOR. Web. 3 Apr. 2013.
- Henchman, Anna. "'The Globe we groan in': Astronomical Distance and Stellar Decay in In Memoriam." Victorian Poetry 41.1 (2003): 29-45. Project Muse. Web. 15 March 2011.
- Hoge, James O. Jr, "Talks and Walks: Tennyson's Remarks and Observations, 1870-92." *The Journal of English and Germanic Philology* 77.1 (1978): 53-71. Web. *JSTOR*. 1 June 2013.
- Holmes, Richard. *The Age of Wonder: How the Romantic Generation Discovered the Beauty and Terror of Science*. Pantheon: New York, 2008. Print.
- Horace. *The Odes and Epodes*. Trans. C.E. Bennett. Cambridge: Harvard UP, 1988. Print.
- Howell, A. C. "Tennyson's 'Palace of Art'—An Interpretation." *Studies in Philology* 33.3 (1936): 507-22. *JSTOR*. Web. 19 Oct. 2012.
- Hovey, Richard B. "Tennyson's 'Locksley Hall': A Re-Interpretation." *Forum* 4.1 (1963): 24-30. Print.
- Irwin, William. "Against Intertexutality." *Philosophy and Literature* 2 (2004): 227-42. *Project Muse.* Web. 9 Aug 2007.
- Kuhn, Thomas. "Energy Conservation as an Example of Simultaneous Discovery." The Essential Tension: Selected Studies in Scientific Tradition and Change. Chicago: Chicago UP, 1977. 66-104. Print.

---. The Structure of Scientific Revolutions. 3rd ed. Chicago: U of Chicago P, 1996. Print.

- Lang, Cecil Y. and Edgar F. Shannon, Jr., eds. *The Letters of Alfred Lord Tennyson*. 3 vol. Cambridge: Harvard UP, 1981, 1987, 1990. Print.
- Lemonick, Michael D. *The Georgian Star: How William and Caroline Herschel Revolutionized Our Understanding of the Cosmos*. New York: Norton, 2009. Print.
- Lewis, Christopher J.T. *Heat and Thermodynamics: A Historical Perspective*. Westwood, CT: Greenwood P, 2007. Print.
- Lightman, Bernard. Victorian Popularizers of Science. Chicago: Chicago UP, 2007.
- Lovejoy, Arthur O. *The Great Chain of Being: The Study of the History of an Idea*. 1936. New York: Harper, 1960. Print.
- Martin, Robert Bernard. *Tennyson: The Unquiet Heart*. Oxford: Clarendon Press, 1980. Print.
- McGann, Jerome. "Rethinking Romanticism." *After History*. Ed. Martin Procházka. Prague: Litteraria Pragensia, 2006. Print.

McGowan, John. Postmodernism and Its Critics. Ithaca: Cornell UP, 1991. Print.

McSweeney, Kerry. "The Pattern of Natural Consolation in *In Memoriam*." *Victorian Poetry* 11.2 (1973): 87-99. *JSTOR*. Web. 9 April 2011.

Meadows, A.J. "Astronomy and Geology, Terrible Muses! Tennyson and 19th Century Science." *Notes and Records of the Royal Society of London* 46.1 (1992): 111-8. *JSTOR*. Web. 2 March 2011.

Milton, John. *Complete Poems and Major Prose*. Ed. Merritt Y. Hughes. 1957. Indianapolis: Hackett, 2003. Print.

- Molesworth, W. N. *The History of the Reform Bill of 1832*. 1865. Clifton: Kelley, 1972. Print.
- Paley, William. Natural Theology or Evidence of the Existence and Attributes of the Deity, Collected from the Appearances of Nature. Oxford: Oxford UP, 2008.
 Print.
- Pearsall, Cornelia. *Tennyson's Rapture: Transformation in the Victorian Dramatic Monologue*. New York: Oxford UP, 2008. Print.
- Pinker, Steven and Leon Wieseltier. "Science Vs. the Humanities: Round III." *The New Republic. Newrepublic.com*. 26 Sep. 2013. Web. 22 Jan. 2014.

Priestly, F.E.L. "Locksley Hall Revisited." Queen's Quarterly 81 (1974): 512-32. Print.

- Rader, Ralph. "Tennyson and Rosa Baring." Victorian Studies 5.3 (1962): 224-60. JSTOR. Web. 4 Apr. 2013.
- Rudwick, Martin J.S. *The Meaning of Fossils: Episodes in the History of Paleontology*. 2nd ed. New York: Science History Publications, 1976. Print.
- Secord, James A. Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation. Chicago: U of Chicago P, 2000. Print.
- Sendry, Joseph. "'The Palace of Art' Revisited." *Victorian Poetry* 4.3 (1966): 149-162. *JSTOR*. Web. 19 Oct. 2012.

Shatto, Susan and Marion Shaw, eds. In Memoriam. Oxford: Clarendon P, 1982. Print.

Sonn, Carl Robinson. "Poetic Vision and Religious Certainty in Tennyson's Earlier Poetry." *Modern Philology* 57.2 (1959): 83-93. *JSTOR*. Web. 23 Oct 2012.

- Tennyson, Alfred. *The Poems of Tennyson*. Ed. Christopher Ricks. 2nd ed. 3 vols. Berkeley: U of California P, 1987. Print.
- Tennyson, Hallam. *Alfred, Lord Tennyson: A Memoir by His Son.* 2 vol. New York: Macmillan, 1898. Print.
- Whewell, William. Astronomy and General Physics Considered with Reference to Natural Theology. 1833. Cambridge: Cambridge UP, 2009. Print.
- Wilson, William A. "Victorian Philology and the Anxiety of Language in Tennyson's *In Memoriam.*" *Texas Studies in Language and Literature* 30.1 (1988): 28-48. Print.
- Woolford, John. "The Critique of Romantic Solipsism in Tennyson's 'The Palace of Art." *The Review of English Studies* 57.232 (2006): 707-20. *Oxford Journals*. Web. 19 Oct 2012.
- Yamada, Taiji. "Art and Artifice in 'The Palace of Art." *Hitotsubashi Journal of Arts* and Sciences 14.1 (1973): 45-52. Print.
- Zola, Emile. "The Experimental Novel." *The Experimental Novel and Other Essays*. Trans. Belle M. Sherman. New York: Haskell, 1964. Print. 1-56.