INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600

UMI®

Planets and Predictions:

Shakespeare and the Copernican Revolution

David Rogers

A dissertation presented to the Graduate Faculty of Middle Tennessee State University in partial fulfillment of the requirements for the degree of Doctorate of Arts May 2000

UMI Number: 9967116

UMI®

UMI Microform 9967116

Copyright 2000 by Bell & Howell Information and Learning Company. All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

> Bell & Howell Information and Learning Company 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346

Planets and Predictions:

Shakespeare and the Copernican Revolution

APPROVED:

Graduate Committee

Agne Cantrell Major Professor

Janez Critical Reader

Head of the Department of English

Abstract

Planets and Predictions:

Shakespeare and the Copernican Revolution

By David Rogers

A reading of six of William Shakespeare's plays shows that Shakespeare used the astronomical and astrological ideas of his contemporaries to reveal his characters' understanding of themselves and the universe. The Copernican Revolution, the change from a geocentric view of the universe to a heliocentric view, began with the publication of Copernicus's <u>De Revolutionibus</u> in 1543 and continued throughout the life of Shakespeare (1564-1616). The plays seem most influenced by the Copernican Revolution's attempt to find an adequate language to describe the universe and by a desire to predict the motions of the planets. Charles Peirce's work on semiotics provides a valuable framework within which to discuss the goals of the thinkers involved in the controversy.

In <u>The Tempest</u>, <u>Pericles</u>, <u>Julius Caesar</u>, <u>King Lear</u>, <u>Troilus and</u> <u>Cressida</u>, and <u>The First Part of Henry the Sixth</u>, characters' comprehension of themselves and the world varies widely. In <u>The</u> <u>Tempest</u>, Prospero has developed the ability to understand, predict, and control nearly everything of importance to him. The emphasis on order and predictability in <u>The Tempest</u> suggests that the play takes place in a Copernican universe. <u>Pericles</u>' Cerimon also seems to have attained a wisdom similar to Prospero's. Conversely, in <u>The First Part</u> of <u>Henry the Sixth</u>, characters understand and can predict virtually nothing beyond the obvious. The other plays examined in this study involve a universe that is fundamentally orderly, but the characters misunderstand that order. <u>King Lear</u>'s Gloucester misunderstands the astrological predictions, even though they are true; Julius Caesar does not heed the good advice of his soothsayer; and the <u>Troilus and</u> <u>Cressida</u>'s Troyans, to their detriment, ignore Cassandra's prophecies.

Thus, the evidence suggests that Shakespeare's attitude about the order and predictability of the universe progressed through a state of deep pessimism in the early play <u>Henry the Sixth</u> toward an optimistic attitude in the late play <u>The Tempest</u>. This evidence can reasonably be interpreted to suggest that Shakespeare's optimism about humanity's place in the universe grew in proportion to the optimism of Copernican astronomers.

Acknowledgments

Countless thanks are due to Dr. Ayne Cantrell, whose painstaking reading and comments have caused this dissertation to be much better than it would have been without her input. Dr. David Lavery has provided valuable insights and inspiration by helping to deepen my appreciation of historical criticism. His enthusiasm in pursuit of ideas is infectious. A debt of gratitude is also owed to Dr. Elizabeth Oakes of Western Kentucky University. She helped me find the way. Without the encouragement of my wife, Ruth, I wouldn't have made it this far.

Table of Contents

I.	Introduction: Shakespearean Astronomy
II.	Planets and Predictions: The Copernican Revolution and
	Astrology
III.	Strange Stories in The Tempest and Pericles
IV.	"A Tide in the Affairs of Men": The System of the World
	in <u>Julius Caesar</u>
v.	King Lear's Moon and "the excellent foppery of the world" 89
VI.	Mad Prophets, Mad Lovers, and "virtuous sin": The
	Exhaustion of Metaphor in <u>Troilus and Cressida</u>
VII.	"What mischief and what murther too": The Desertion of the
	Gods in The First Part of Henry the Sixth
VIII.	Shakespeare and the Big Questions
Notes	s
Work	s Cited

Chapter One

Introduction

Shakespearean Astronomy

Through how many dimensions and how many media will life have to pass? Down how many roads among the stars must [humanity] propel [itself] in search of the final secret? The journey is difficult, immense, at times impossible. . . . We have joined the caravan . . . at a certain point; we will travel as far as we can, but we cannot in one lifetime see all that we would like to see or learn all that we hunger to know. —Loren Eiseley, The Immense Journey (12)

The life of Shakespeare (1564-1616) coincides with some of the most important years in the Copernican Revolution, the movement away from the geocentric model of the universe toward a heliocentric model. The Copernican Revolution began with the publication of Copernicus's <u>De Revolutionibus</u> in 1543 and continued with the invention of the telescope in 1608. When the Italian mathematician Galileo Galilei published his telescopic observations in 1610, the idea of heliocentrism gained a good deal of popular momentum. Editions of Shakespeare's works often mention these events as part of the historical background, but there are few detailed analyses of the ways these events may have influenced Shakespeare's plays.

However, a survey of Shakespeare criticism reveals much material that discusses the relationship between Shakespeare and magic and the occult, which were not clearly distinguished from science during the Renaissance. Predictably, such discussions tend to focus on <u>The Tempest</u>'s magician-ruler, Prospero. For instance, John S. Mebane argues that Prospero can be seen as an agent of providence helping to bring the will of God to fulfillment ("Metadrama" 34). Alternately, Frances Yates describes Prospero as an example of "the late stages of Renaissance occult philosophy" that dealt with alchemy and conjuring (<u>Occult</u> 163). Barbara Howard Traister has also examined Prospero as an example of the tradition of theurgic magic, or magic based on control of spirits, which allowed worthy human beings to take on god-like qualities (141).

In addition, various aspects of Renaissance astronomy and astrology have received a fair amount of attention from both Shakespeare scholars and historians of science. The Shakespeare scholar F. David Hoeniger has analyzed the connection between astrology, medicine, and the theory of humors (<u>Medicine</u> 108-110). Both Bernard Capp and Francis Johnson have reviewed the popular astrological almanacs from which physicians would have taken essential information during the Renaissance. Although they have nothing to say about the relationship between Shakespeare and astronomy, the historians Thomas Kuhn and Owen Gingerich have also done important work on the Copernican Revolution.

In general, though, writers on Shakespearean science tend to focus on astrology—the art of making predictions about human affairs based on the stars and planets—instead of the purely astronomical aspects of Renaissance science. This focus is reasonable; since even the words "astronomy" and "astrology" were

once virtually interchangeable, any discussion of Renaissance astronomy that omits astrology is incomplete. Currently, however, the criticism suffers from an incomplete understanding of Renaissance astronomy proper and its relationship to Shakespeare.

This scarcity of studies of astronomy and Shakespeare has not gone entirely unnoticed. Aside from the present work, two recent dissertations have undertaken historical studies of the cosmological context of Shakespeare's plays. Although his work, like others, is focused on astrology more than astronomy, Alan Weber claims, in his 1996 dissertation, to have discovered "Anti-Aristotelianism and anti-peripatetic cosmologies" in three Shakespeare plays (2499A). Another scholar, Kathleen Graney, has uncovered evidence of a "re-visioning" of "spatial awareness" in the works of Shakespeare and Edmund Spenser, which she connects to Copernicus's "discovery" of heliocentrism (2841A).

Still, important questions remain unanswered. For instance, did Shakespeare's treatment of astronomical, astrological, and cosmological questions change over time? What, if anything, does his use of astrological and astronomical concepts imply about the Copernican controversy itself? To answer such questions, it will be necessary first to reach an understanding of the issues involved in the Copernican Revolution; these issues will be discussed in chapter two. Then, an examination of six plays, <u>The Tempest</u> (c. 1611), <u>Pericles</u> (c. 1608), <u>Julius Caesar</u> (c. 1599), <u>King Lear</u> (c.

1605), Troilus and Cressida (c. 1602), and The First Part of Henry the Sixth (c. 1590), which span nearly the entire course of Shakespeare's career, will follow. Chapter three will address astrology, medicine, and magic in The <u>Tempest</u> and <u>Pericles</u> to show these plays' optimism about the predictability of the universe. In chapter four, I argue that the predictability of the universe is also a concern in Julius <u>Caesar</u>. However, there is no powerful astrologer in Julius Caesar to successfully predict and control the natural and human world as The Tempest's Prospero and, to a lesser extent, Pericles' Cerimon do. The fifth chapter focuses on King Lear and argues that, like Julius Caesar, Lear is set in a systematic and, in theory, predictable world. The characters misunderstand the predictions available to them because they misunderstand the systematic nature of the world. The sixth chapter shows that the situation in Troilus and Cressida is similar to that in Lear—accurate prophecies, ones even more specific than those offered in Lear, are available, but the characters do not benefit from them. The last play to be considered, The First Part of Henry the Sixth, is shown in the seventh chapter to lack even the possibility of reliable prediction-the would-be prophetess, Joan La Pucelle, is clearly an evil fraud. In the final chapter, I draw some general conclusions and consider briefly the larger context in which the concerns of this study are important.

The question that bothers most of Shakespeare's characters is not whether there are forces larger than themselves that create a cosmic order; the difficult question is, what is that order? And to what extent can the individual predict it or participate in its formation? The ultimate horror for Shakespearean humanity comes when characters can no longer read the signs in the heavens or the mundane world and coordinate their desires with the natural order. When King Lear, for instance, goes mad and loses the ability to work out his destiny according to any rational plan, he finds himself totally at the mercy of an incomprehensible world. Herein lies the basic distinction between comedy and tragedy: Like Prospero, the magician in The Tempest, and Cerimon, the doctor in Pericles, comic characters can reconcile thomselves and their actions with the reality they experience and even find room for action and choice that will improve their fortunes or those of other characters. As Mebane points out. Prospero's magic always works within the confines of a larger cosmic order, with the spirit "Ariel and his fellows as 'ministers of Fate" ("Metadrama" 34). Comic "fate" allows the possibility for redemptive action, however, while tragedy does not. Mad King Lear and the conspirators who assassinate Caesar, for example, experience no such possibility or, if they do, they cannot recognize it. Similarly, the Troyans in Troilus and Cressida have fair warning from the prophetess Cassandra about the result of keeping Helen, the wife of the Greek Menelaus, yet it avails them

nothing because they pay her no heed. Finally, in <u>The First Part</u> of <u>Henry the Sixth</u>, the world threatens to lose all potential for order and predictability.

The critical methods of this study are an eclectic mixture. Part of the strategy consists of a formalist close reading of the plays. In addition, inspired by Peircean studies of semiotics, I examine sign and language and the ways they produce (or fail to produce) meaning. Finally, the study is an exercise in old-style historical criticism, an attempt to read the plays with an awareness of the context in which they were written. While there are many other valid ways of responding to texts, and no "final reading" of any significant text is likely to stand the test of time, the methods applied here make it possible to see both Shakespeare and the Copernican Revolution in a fresh light.

The evidence will support the conclusion that the Copernican Revolution involved problems of epistemology, language, and prediction. The astronomers' desire to predict planetary positions parallels the astrologers' desire to predict and understand earthly events. The possibility of astrological or other kinds of prediction is crucial in several of Shakespeare's plays; the later Shakespearean world seems to be essentially predictable. It operates mainly in an orderly fashion, but the characters often have grave difficulty in understanding that order; that is, characters as diverse as Lear, Brutus, and Pericles experience personal crises of epistemology. If Shakespeare did not endorse

the Copernican world view, the plays, <u>Troilus and Cressida</u> in particular, suggest that he at least mistrusted the geocentric system. Questions about the limitations and appropriate uses of language and signs will also be important in understanding both Shakespeare and the Copernican Revolution.

I have been careful to avoid making insupportable claims about what Shakespeare did or did not believe about Copernican astronomy. The evidence, after all, must come from the plays, and it is never safe to assume that any one character speaks for Shakespeare. The most one can do is to read the plays with an awareness of their context and attempt to perceive themes and patterns. If we can read the plays as Shakespeare or his contemporaries did, then we may, <u>perhaps</u>, come close to knowing what Shakespeare thought about things. It is also important to keep in mind that Shakespeare was first an entertainer, a commercial playwright. If he was also a philosopher, he was one whose bread was paid for by the groundlings, not by the Church or the universities. In the absence of other evidence, it would therefore be premature to suppose that the plays give us the final word on what Shakespeare himself believed about anything.

Thus, we can attempt to read Shakespeare in context, but it is important to remember that Shakespeare himself may have been engaging the conflicts that made up the context. One hopes to avoid the legendary mistake that E. M. W. Tillyard made in supposing there was a single, universal, uncontroversial

"Elizabethan world picture" that will unlock all the secrets of the plays. The plays show that Shakespeare thought about problems of astronomy—and there <u>were</u> problems that remained unresolved during Shakespeare's lifetime. The astronomers also thought about the problems that concern Shakespeare's characters—the nature and purpose of human life and the nature of the world. Consequently, a study of Renaissance astronomy can help in understanding Shakespeare. A study of Shakespeare can also help in understanding Renaissance astronomy.

Chapter Two

Planets and Predictions: The Copernican Revolution and

Astrology

I. A Factual Account

The relationship between Shakespeare and the Copernican Revolution depends, of course, on the nature of the Copernican Revolution itself. The basic historical events may be readily summarized: before 1543, most reasonable people, scholars and the uneducated alike, saw the Earth as the fixed, immobile center of the universe; the stars and planets, including the Sun and Moon, all orbited the earth. After the publication of Copernicus's <u>De Revolutionibus</u> in 1543, opinion began slowly to shift toward a view that put the Sun in the center and a moving Earth in orbit around it. Modern astronomy is usually said to date from this period. The difficult question is <u>why</u> the Copernican Revolution happened as it did. It was not, as some think, a simple matter of new observations of fact contradicting old theories.

Sometime in the second half of the second century C. E., the Egyptian astronomer Ptolemy produced the <u>Almagest</u>, a book that would be the standard treatise on the heavens for fourteen centuries. The title of the book, an Arabian term for "the greatest," was given to it by later scholars and says something about the esteem in which Ptolemy's views were held. In <u>Between</u> <u>Copernicus and Galileo</u>, James Lattis outlines the main features of the Ptolemaic cosmology, as it was defined by Christoph Clavius (1538-1612), one of the chief defenders of geocentrism against the new astronomy (65-66). Clavius's system followed Ptolemy's arrangement of the planets, with the Earth at the center and the planets attached to actual, material spheres that carried them around their orbits. Clavius, like most other authorities, believed this vision of the universe was endorsed by both Aristotle and Christianity.

Copernicus, then, was challenging not only Ptolemy, but, implicitly, some aspects of Christianity and Aristotle as well. In 1543, when he was on his deathbed, Copernicus's <u>De</u> <u>Revolutionibus Orbium Coelestium</u>, or <u>On the Revolutions of the</u> <u>Heavenly Spheres</u>, appeared. It did not report any startling new observations to disprove Ptolemy. The importance of Copernicus does not derive from any new discoveries in the contemporary scientific sense, although it is sometimes reported that he "discovered" that the Sun is at the center of the planets' orbits. He did not. Instead, the significance of the book is that its author had the audacity (or, perhaps, foolhardiness) to reopen speculation about questions that most non-astronomers regarded as long having been well answered and to challenge the assumptions used to answer them.

Ideas of heliocentrism and the Earth's motion were not entirely new, of course. As Thomas Kuhn reports, the ancient Greeks had considered alternate cosmologies. Both the Pythagoreans and Aristarchus of Samos had advanced ideas that

put the Earth in motion and the Sun or a "central fire" at the center of the planetary motions. However, Kuhn continues, such systems were not supported by what would count as modern scientific evidence, nor were they compatible with the immediate evidence of the senses. The senses tell us that the Earth is stable and motionless and that the stars and planets orbit it approximately once a day. Therefore, ideas of heliocentrism were not taken seriously during the Middle Ages. Kuhn explains, "The reasons for the rejection [of heliocentrism] were excellent. These alternative cosmologies violate the first and most fundamental suggestions provided by the senses about the structure of the universe^{*} (42). The Earth around us certainly appears to stand still, and the Sun, Moon, planets, and stars do appear to orbit us. Only because we are assured from a very early age by parents and teachers that the Earth is moving do we find the idea plausible today. Copernicus's contemporaries had no such conditioning, and they reacted to heliocentrism accordingly. Nevertheless, since history is written by the winners, in this case, proponents of heliocentrism, and since Copernicus's system turned out to resemble what counts as modern scientific truth more than Ptolemy's, our instinct is to admire Copernicus's insight. This instinct should not lead us to overlook the fact that he was engaging in what, at the time, could only be accurately categorized as wild speculation.

The speculation persisted, however, until Galileo Galilei (1564-1642), Tycho Brahe (1546-1601), and Johannes Kepler (1571-1630), the next three indispensable players in the drama, appeared. At some point, the Italian mathematician Galileo, a contemporary of Shakespeare's, became acquainted with Copernicus's ideas; eventually, he came to agree with them. After he heard of the invention of the telescope in Holland, Galileo constructed several of his own. In 1610, he reported observing, among other things, the phases of Venus and the four brightest moons of Jupiter. The moons of Jupiter were anomalous for geocentrism, since they clearly orbited Jupiter and could only be said to orbit the Earth in a secondary way, and that only if Jupiter orbited the Earth. Even if the moons of Jupiter might have been accommodated, though, the phases of Venus were fundamentally incompatible with the Ptolemaic system. As Galileo observed, Venus exhibited a full range of phases from full to crescent; these phases cannot be explained using Ptolemy's geocentric model. If Galileo's observations were not an illusion, then Ptolemy must be wrong.

His observation of the phases of Venus convinced Galileo even more firmly that the Earth was in motion around the Sun. The discovery was regarded in a different light by many of his contemporaries, however, including Tycho Brahe and his assistant, Johannes Kepler. Brahe realized the phases of Venus did not prove the Copernican system to be "a true description of

reality," as Theodore Spencer, for instance, claims they did; nor did they confirm "the accuracy of the fundamental principles of the Copernican theory," as H. L. Kelly claims (Spencer 30, Kelly 418). Even Harry Levin, in his introduction to the influential <u>Riverside Shakespeare</u>, asserts that Shakespeare "seems to have anticipated Galileo's demonstration that the Earth revolves around the sun" (5). This claim is an oversimplification at best; while Galileo did argue vigorously for the Earth's motion around the Sun, he could not prove it conclusively, even after the discovery of the phases of Venus. Moreover, it was Copernicus, not Galileo, who first revived the debate, so any suggestions of alternate cosmologies in Shakespeare's plays prior to 1611 are more sensibly thought of as echoes of Copernicus rather than anticipations of Galileo.

Thus, to disprove Ptolemy, as the phases of Venus <u>did</u> do, was not to say what should take Ptolemy's place. For instance, many saw the phases of Venus as evidence for Tycho's system. Tycho retained the Earth at the center but placed the planets in motion around the Sun, which still orbited the Earth in this scheme. Kuhn points out that Tycho's geocentric system had the advantage of not contradicting a literal interpretation of Scripture, which seemed to require the Earth at the center, and it explained the phases of Venus as well as heliocentrism (204-05). Moreover, Tycho's system did not contradict the senses, which suggest that the Earth does not move. Thus, it was for other, more complicated

reasons that Galileo and others advocated heliocentrism and a moving Earth.

Kepler, like Galileo and Copernicus, was interested in "saving the appearances," or describing the cosmos in a way that did not contradict observation, but his main motives for adopting Copernicanism instead of his mentor's system were not, for the most part, based on observation. Hans Reichenbach acknowledges that Kepler corresponded with Galileo and was well aware of his discoveries (23-24). However, in 1619, in his Epitome of Copernican Astronomy, Kepler did not even mention the phases of Venus in arguing for heliocentrism. Using non-telescopic observations left by Brahe, Kepler formulated the three modern laws of heliocentric planetary motion, including the idea that the planets' orbits are ellipses, not circles. The use of elliptical orbits was a breakthrough in the attempt to predict planetary positions, which was important both for what we think of today as scientific purposes and for astrological purposes. It remained for Isaac Newton to formulate the law of gravity to try to explain what caused the planet's motions. One authority, Edward Grant, marks the end of medieval cosmology from the publication of Isaac Newton's Principia Mathematica in 1687 (9). Kepler's ellipses described the planets' paths with unprecedented accuracy, and Newton's law of gravitation provided a mathematical tool for describing the force that was needed to hold the planets, including

the Earth, in their orbits around the Sun. The transition to heliocentrism was very nearly complete.¹

If the Copernican Revolution ends with Newton (1642-1727), still one final piece of evidence remained to fall in place: actual proof that the Earth moves. Galileo's observations had really only disproven Ptolemy, and although a philosophical and mathematical system was flourishing on heliocentric assumptions when Newton's most famous work was published, direct observational proof that the Earth moves did not come until around the time Newton died. Tycho had realized that a moving Earth would cause a tiny apparent motion of the stars. Victor Thoren reports that Tycho tried to measure the apparent motion of the stars caused by Earth's motion, but even his state-of-the-art pre-telescopic instruments were not sufficiently precise; he found no evidence that the Earth moved (279, 304). The nearest stars are much farther away than Tycho realized, however; the apparent motions of the stars are very small, and extremely accurate telescopic measurements are therefore required to detect the Earth's motions by observing them. By 1725, according to Henry C. King, instrumentation and the art of measurement had progressed sufficiently to allow the astronomer James Bradley to take very exacting measurements of the star known as Gamma Draconis. He noticed that, in addition to its well known daily and annual apparent motions, the star appeared to move very slightly north and south over the course of a year. Further observations

proved the initial observations to be sound, and by 1728 Bradley realized what he had seen: the phenomenon known as the aberration of light. There was no plausible explanation for the changes except that the Earth was moving (112). From this point on, no serious arguments could gain any ground against heliocentrism.

II. Science, Myth, and Analogy: A Problem of Language

The mind—the culture—has two little tools, grammar and lexicon: a decorated sand bucket and a matching shovel. With these we bluster about the continents and do all the world's work. With these we try to save our very lives.

Annie Dillard, "Total Eclipse" (39)

The preceding account of the Copernican Revolution leaves open the more difficult question why Copernicus, Galileo, Kepler, and Newton were convinced of heliocentrism before observation required it. The facts—names, publication dates, technical differences between competing theories, etc.—can be deceptively simple. In part, the Copernican Revolution seems to have been a natural outcome of the Renaissance mindset, the desire to reexamine old ideas and assumptions. Even so, the idea of a moving Earth revolving around the Sun was a very strange one for minds that had not been inculcated with such an idea since early childhood, as in our times. In fact, the geocentric view was so pervasive that even today our ordinary language still suggests a geocentric system: we routinely talk of "sunrise" and "sunset" as if it were the Sun's motion instead of the Earth's that actually causes what we experience. Why, then, did the giants in Renaissance science adopt such an arcane and counterintuitive theory? The answer to that question involves attitudes toward language and mythology as much as, if not more than, what we normally call scientific thinking. The answer will be found in the boundaries between science, religion, myth, and philosophy of language. It is my contention that questions about what caused the Copernican Revolution can best be answered outside the realm of what is normally considered the history of science; instead, it will be profitable to look also in the context of figures like Shakespeare, who can show us the mythologies that were competing for recognition in the Renaissance mind. These mythologies were intricately bound up with attitudes toward language and symbol.

Scholars have suggested various hypotheses about the causes and central conflicts of the Copernican Revolution. The most obvious view, of course, holds that the controversy was driven by the conflict between science and the Bible. A. G. Dickens summarizes the attitudes of the religious reformers John Calvin and Martin Luther: they "fondly imagined they could demolish Copernicus by quoting the Old Testament" (194). Kuhn quotes Luther's complaint against astronomers who debated Copernicus's ideas: The astronomers, Luther argued,

> give ear to an upstart astrologer [Copernicus] who strove to show that the earth revolves, not the heavens or the firmament, the sun and the moon. . . . This fool

wishes to reverse the entire science of astronomy; but sacred Scripture tells us [Joshua 10:13] that Joshua commanded the sun to stand still, and not the earth. (qtd. in Kuhn 191)

Biblical and theological arguments against heliocentrism were among the most difficult problems Copernicans had to contend with.

Another view is represented by Giorgio de Santillana, who sees the major conflict as primarily one between the new natural philosophy and traditional Aristotelianism. Santillana claims that "Galileo did not come to grief as 'the scientist' facing a religious credo" and even goes so far as to assert that "a major part of the Church intellectuals were on the side of Galileo, while the clearest opposition to him came from secular ideas" (xiv-xx). While it may be that Santillana overstates his case, his point is valuable: there were other conflicts besides the innocent scientist falling victim to religious hegemony. Simple academic conservatism, which esteemed Ptolemy and Aristotle, formed a barrier against new ideas.

Neither can the role of authority in opposition to empirical investigation be entirely ignored in giving a complete account of the conflict. Even though Galileo's telescopic observations did not prove Copernicus right, they did provide empirical evidence that Ptolemy was no longer adequate for anyone who understood the geometry involved. Stefan Zweig writes, in what may be a

polemical oversimplification of the matter, the "Authority of the Church stood aloft, brazen and puissant" during the Middle Ages, but during the Renaissance the universities became "the fortresses of free investigation" (28-30). It was therefore appropriate that Galileo, a former university lecturer, should provide the strongest challenge to religious authority on the basis of his empirical investigations.

However, another set of categories, one that has thus far been mostly overlooked by Copernican scholars, also helps to define the conflicts of the Copernican Revolution: whatever else the Copernican Revolution may have done, it also posed a problem of language. The conflict was to a large extent defined by debate about the virtues of literal, factual use of language as opposed to strictly metaphorical use of certain types of language. Galileo is often quoted as having said about the Bible, "The intention of the Holy Ghost is to teach us how one goes to heaven, not how heaven goes" (qtd. in Ley 121). For Galileo, Biblical assertions that mention the heavens should be taken as metaphorical claims representing spiritual truths, but Biblical statements about cosmology must not be taken as literal scientific descriptions. The claim is more than a mere pun; it also implies the necessity to distinguish two fundamental functions of language: the factual in contrast to the comparative or metaphorical.

Historically, these different functions are not always clearly distinguished when they first appear. George Boas clarifies:

... in the earliest forms of scientific explanation in the Occidental tradition, human nature was projected into the nonhuman world. Nature in its changes behaved as if it were a human being.

All science must begin with analogies. The similarities that exist among things and events give the scientist a clue to possible identities which he will then use as a basis for classification. . . .

For purposes of prediction, the way things behave is more important than the way they look. . . . If the similarities are those between human beings and nonhuman things, then it will be normal to explain the behavior of the latter as if it were an example of the former. (216-17)

Arthur O. Lovejoy makes a similar point about medieval cosmology in <u>The Great Chain of Being</u>:

> While not literally or physically tenanted, the . . . planets were, of course, the symbolical or, so to say, official seats of various grades of the blessed, and were ruled by differing angelic Intelligences, though the actual place of all these was in the Empyrean [the realm beyond the stars]. (342)

In other words, a strong current of anthropomorphism, such as the attribution of intelligence to heavenly bodies or the spirits that control them, runs through the early perceptions of nature or the

supernatural. By analogy, human motives and purposes are attributed to non-human objects, and the result is mythology. The analogy is not always clearly distinguished from literal factual description. Thus earthquakes and floods give rise to religions featuring vengeful gods. As thought progresses, however, distinctions begin to be made between metaphorical, mythological, and symbolic language, on one hand, and literal use of language on the other.

An important difference between mythological language and modern scientific language involves attitudes toward measurement. Zhang Xiaoyang explains that the attempt to discover a sense of proportion between cause and effect, science becomes more concerned with measurement and quantification than its mythological or theological predecessors (83). For instance, Basil Willey points out that Galileo's experiments with falling weights depart significantly from medieval scholastic habits of thought in part because Galileo was concerned with quantity: his energies were focused on "measuring the speed of falling bodies in terms of time and space" (25). The emphasis on measurement changes the focus of the observer; the anthropomorphic qualities that cannot be reduced to measurement tend to fade into the background, and the language of science becomes mathematics. Even figures like John Dee, an Elizabethan astrologer who dealt mostly in what we would certainly call the occult, if not in mythology proper, referred to mathematics in his

<u>Preface to Euclid</u> as a means to "mount above the clouds and stars"—not a modest claim, given the traditional structure of the medieval cosmos (qtd. in Payne 43). Scientific measurement and science in general remain human activities, but the language and instrumentation of modern science tend to emphasize rather than minimize the distinction between the human world and the nonhuman.

If the Copernican Revolution was driven by a need to distinguish between the metaphorical and literal uses of language, it also involved a controversy over the nature of the metaphorical language that was appropriate for discussing the heavens. For instance, Kepler, an ardent Copernican, argued that the Sun ought to be considered as the "Centre of the world" because of "the dignity of the sun" and because "the more worthy place is due to the most worthy and precious body" (856). Thus, Kepler retains a strong tendency to mythologize, even while Galileo tries to replace mythology with mathematics. Nevertheless, Kepler makes no mention of Galileo's telescopic observations in arguing for heliocentrism. He, at least, realized that Galileo's discoveries did not prove that the Earth moved or that the Sun lay at the center of things.

For Kepler, the debate was still as much about metaphor and mythology as it was about what today we would call science. Lovejoy points out that Kepler's cosmology remained "essentially medieval" (105). What Lovejoy calls Kepler's Copernican

"astronomico-theological parallelism" relied as heavily on metaphor and symbol as did any defense of the Ptolemaic system. Lovejoy writes, "If the sun is the analogue of God the Father, the sphere of the fixed stars, Kepler finds, is manifestly the sensible counterpart of the Son, the intermediate region of the planets being assigned to the holy ghost" (106). In Kepler's mind, the problem was not only whether the Sun lay at the center of the planets' orbits; Kepler was also concerned to show what symbols, metaphors, and analogies—the components of a mythology—best explained why the Sun belonged in the center. Modern science texts usually ignore or de-emphasize these aspects of Kepler's thought, however.

Broadly speaking, of course, modern science also implies a mythology, in the sense that it involves metaphysical and epistemological assumptions that cannot necessarily be proven. The systems of myth and science operate on different assumptions, using different methods, having different goals, and employing language in different ways. However, neither system of thought is necessarily superior to the other; both in some form are necessary components of human culture, and both begin with unproven assumptions. In the case of modern science, perhaps the most important unproven assumptions involve the belief that the reality most worth knowing about is empirically observable, subject to literal description and measurement, and best interpreted mathematically.

The "principle of verifiability" that the twentieth century philosopher A. J. Ayer advocates in <u>Language</u>, <u>Truth</u>, <u>and Logic</u> represents the furthest development of the modern scientific mode of thought. This principle is an extreme development of an approach that began to take hold during the Renaissance. In a chapter entitled "The Elimination of Metaphysics," Ayer writes,

> ... a sentence is factually significant to any given person, if, and only if, he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false.... We enquire in every case what observations would lead us to answer the question one way or the other; and if none can be discovered, we must conclude that the sentence under consideration does not ... express a genuine question, however strongly its grammatical appearance may suggest that it does. (35)

Thus, for Ayer, questions and claims that cannot be settled by reference to observation are simply not meaningful. Use of language that violates the principle of verifiability is not merely unimportant; it is unintelligible.

For the way of thinking Ayer represents, literal use of language has become the only legitimate use of language. What he seems to mean by "metaphysics" has much in common with mythological

language, although he uses the term as if it were synonymous with "bad poetry":

The distinction between the kind of metaphysics that is produced by a philosopher who has been duped by grammar, and the kind that is produced by a mystic who is trying to express the inexpressible, is of no great importance: . . . the utterances of the metaphysician who is trying to expound a vision are literally senseless. (45)

In this view, poets, metaphysicians, and mystics are, at best, specimens of harmless lunacy; they must stand aside for the philosopher-scientist who will describe the world as it really is. For such a thinker, language used well is a sharp chisel with which to pare away the poet's confusion, leaving the clean outlines of the world as it is observed to be. Galileo and other proponents of heliocentrism like Kepler could not have wholeheartedly endorsed this position. It will become clear, however, that the conflicts that motivated figures as diverse as Galileo and Shakespeare concerned the relationships between language and reality. They would not have agreed to Ayer's solution, but they would have recognized the problem it is intended to solve.

III. The Language of Sign and Symbol

The significance of the distinction between the two ways of using language—as myth and as literal description of physical reality—can best be seen, perhaps, by considering both astronomy

and astrology around the time of Shakespeare and Galileo. The distinction between astronomy and astrology is to a large extent a modern one. During the Renaissance, the two words were often used interchangeably, although writers as early as Chaucer were sometimes inclined to dismiss astrological predictions as unreliable pagan superstition. Nor did the Copernican Revolution itself require an abandonment of belief in astrology, although the scrupulous astrologer might rethink some techniques to take into account stars that could only be seen with the telescope. The relationship between heliocentrism and astrology seems to be poorly understood, since both Kuhn and Levin link the demise of astrology with the rise of heliocentrism (Kuhn 94; Levin 5). Bernard Capp, however, has shown that many English astrologers rallied to the cause of Copernicus and believed that heliocentrism could be readily reconciled with the principles of their profession (192). Kepler himself, whose laws of planetary motion are still standard fare in college astronomy courses, was not adverse to the casting of horoscopes; Charles Wallis notes that Kepler wrote a treatise on the prognosticator's art called On the More Certain Foundations of Astrology (841).

Most writers on the history of astronomy tend to forgive figures such as Kepler and Tycho for their astrological inclinations in light of their valuable discoveries. Such an attitude encourages neglect of an important part of the Renaissance world view. However sound the reasons for doubting the validity of astrology

today, it is probably impossible to understand the causes of the Copernican Revolution and its relevance to Shakespeare without understanding Renaissance astrology. Fundamentally, the practice of astrology implied a mythological, anthropomorphic view of the universe; what happened in the cosmos had the potential to directly influence the individual human being. The cosmos were, in some sense, metaphors for human life, but, astrologically speaking, they were not merely metaphors. For instance, as Thoren points out, it seemed incontrovertible to Tycho that the movements of the stars and planets (especially the Sun, which Ptolemy considered a planet, or "Wanderer") did influence climate (213-14). By anthropomorphic analogy, it was but a short step to the assumption that the heavens influenced humanity in other, more subtle ways.

For the Renaissance astrologer, the heavens were, to use the terminology of C. S. Peirce, both sign and symbol. Peirce defines signs (which he also calls "indices") as "representations . . . whose relation to their objects consists in a correspondence in fact." Symbols, in contrast, he defined as "representations . . . whose relation to their objects is an imputed character" (30). Douglas Anderson explains, "One of Peirce's standard examples of an index [sign] was a weathercock, which is caused by the wind's action to represent the wind's direction." In other words, there is a single, direct, causal connection between the sign and the thing it represents, between the weathercock and the wind. In contrast,

Anderson writes, "Symbols are general and lawlike"; they include "ordinary words or terms" and "depend for their representation on convention, or a law of interpretation" (47). General scientific theories also count as symbols under Peirce's definition. Symbols, Peirce asserts, are made up of "arguments" which "determine their interpretants, and thus the minds to which they appeal, by premising a proposition or propositions which such a mind is to admit" (30). The Copernican and Ptolemaic theories can thus be described as symbols, general arguments about the overall structure of the universe and the relationships between its parts. Much of the controversy surrounding the competing theories can be delineated as problems concerning the relationship between the signs (stars and planets) and the language (symbols) that were to be used to describe them.

For instance, in both the Copernican and Ptolemaic systems, the planet Mars could function as a sign and could be represented symbolically in various ways. In general, representations of the planet, in their ancient mythological association with the god, symbolized war and anger; for a particular horoscope, the planet's position, like the position of a weathercock, functioned as a sign, indicating a direct and specific cosmic influence on the individual whose horoscope was being plotted. As a symbol, the planet's representation in word or image referred to a general way of thinking and speaking—not a modern scientific theory, but still a more or less systematic way of trying to know the universe and its

relevance to humanity. These modern categories would not have been used by Renaissance astrologers to explain what they did, of course, but the terms "sign" and "symbol" will be useful in describing the two ways of thinking that were becoming distinguished. Although Shakespeare's contemporaries did not have Peirce's theories, the problems that led to Peirce's ideas were becoming important to them. A basic conflict in the Copernican Revolution was the question whether symbol might be constrained by sign or, alternately, whether the meaning of the symbol might be interpreted independently of signs.

One of the problems Galileo faced was a need to distinguish between these two ways of using language about the heavens. For instance, it was a favorite tactic of the anti-Copernicans to assert that God in his omnipotence could have arranged the heavens anyway he pleased and yet produce the phenomena we see from Earth. As Richard Blackwell shows, in response to Cardinal Bellarmine, Galileo argued that problems of cosmology were not "matters of faith" and could therefore not be solved by reference to the language the Bible used to describe the heavens (108). Similarly, in his <u>Dialogue on the Two Great World Systems</u>, Galileo's protagonist responds to an argument by one of his interlocutors who suggests that scientific questions must be subordinate to theological doctrine. "Surely," Galileo's protagonist asserts, "God could have caused birds to fly with their bones made of solid gold, with their veins full of quicksilver, with their flesh heavier than lead, and with wings exceeding small. He did not, and that ought to show something" (qtd. In Santillana 176).

In Peircean terms, what is shown by the fact that birds fly as they do and not in some other improbable fashion is that, in matters of natural philosophy, the meaning of the symbol, or theory, is constrained by the sign: the flight of actual birds is a sign of how flight becomes possible in the world as it is. Assertions about what might, theoretically, be possible if God willed it are a barrier to understanding, not an aid. In general, Galileo argues, the ways birds fly also limit the ways one should suppose birds would ever be made. A particular bird's flight is a sign of how it is made, as the direction of the weathercock is a sign of which way the wind blows. Galileo's instinct is to generalize, to claim that the symbol—the argument about the nature of the universe—ought to be constrained by the particular observable signs like the flight of birds and the appearances of the planets.

Peircean terminology can also be used to describe Galileo's argument against literal interpretation of the Bible as a treatise on cosmology. Galileo wrote,

Scripture cannot err, [but] some of its interpreters and expositors can sometimes err in various ways. One of these would be very serious . . . namely to want to limit oneself always to the literal meaning of the words; for there would thus emerge not only various contradictions but also serious

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

heresies and blasphemies, and it would be necessary to attribute to God feet, hands, and eyes, as well as bodily and human feelings like anger, regret, hate, and sometimes even forgetfulness of things past and ignorance of future ones.

Whatever sensory experience places before our eyes or necessary demonstrations prove to us concerning natural effects should not in any way be called into question on account of scriptural passages (qtd. in Finocchiaro 49-50)

For Galileo, Scripture must be interpreted as symbol, a systematic way of thinking about salvation, but not as symbol or literal language intended to describe the heavens. Symbols have limitations, for Galileo, and the symbols that make up Scripture must not be extended beyond "matters of faith" to be interpreted as a treatise on natural philosophy.

As Stillman Drake writes, Galileo advocated "restricting science to things that could be established by 'sensory experience and necessary demonstrations', in the phrase he adopted when philosophers began to appeal to theologians for support" (42). Of course, this terminology makes Galileo sound very much like a good twentieth-century empirical scientist, which he was not in all respects; at the last, he did recant under orders from the Church. One can only speculate what was in his mind as he uttered the words denying the motion of the Earth; although the Church could have punished him severely if he did not recant, it is also likely

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that Galileo, a good Catholic, felt some legitimate desire for the official approval of the Church.

The problem of deciding whether symbols could function as factual descriptions appeared in other contexts, too. Renaissance thinkers often distinguished between hypothetical cosmologies employed simply for the sake of making calculations-"mathematical fictions," Kuhn calls them—and cosmologies that professed to be literal descriptions of the physical universe (187). Michael Crowe points out that the preface to the De Revolutionibus itself, written by Copernicus's friend Osiander. suggested heliocentrism could be considered as a fiction, a mere mathematical tool, not a literal description of reality (69). In other words, the symbol could be dissociated from the signs, if necessary, the connection or relationship between sign and symbol being recognized as merely conventional. After Galileo's problems with the Church, the distinction became an even more useful one. The faithful could thus, to an extent, have the best of both worlds--without denying the literal truth of Scriptural cosmology, they could avail themselves of the accuracy the new heliocentric calculations promised. However, making such a distinction drove another wedge between two ways of thinking about the world, and consequently two ways of using language: one must decide whether a description corresponded to a physical reality, or whether it were merely useful in some way. Did sign constrain symbol, or were the two ways of thinking independent? In other

words, was Copernicanism acceptable as mythology, theology, or mathematics? And what was the difference?

Thus, the Renaissance astronomer had a problem both of knowledge and of language. Were the stars and planets and their representations merely metaphors open to various interpretations for calculating planetary positions, calculating horoscopes, and conducting Biblical exegesis, but impossible to definitely describe? Or were the planets also signs that could show the way to definite symbolic description, as Galileo wanted to suggest? The need for an answer to such questions was a fundamental cause of the Copernican Revolution. Before the Renaissance, the question had not demanded an answer as imperatively as it then did. If the heavens were too closely connected with divinity to be comprehensible to human beings, one might be tempted to condemn both astronomy and astrology as King Lear's Edmund condemns astrology, as "the excellent foppery of the world" $(1.2.118)^2$ By insisting on direct connections between signs in the heavens and the symbols used to explain them and by trying to restrict the theologians' authority over questions of natural philosophy, Galileo forced the issue to its crisis.

IV. Astrology as Practical Science

Of course, there were other, more practical problems with both Ptolemaic and pre-Keplerian Copernican astronomy. Whether Copernicus or Ptolemy prevailed, working astrologers needed accurate predictions of the motions and positions of the planets.

The extent to which astrologers' interest helped to create the curiosity that drove the Copernican Revolution has been neglected by scholars, probably because of the modern skepticism about astrology. The ordinary work of astrologers involved taking careful measurements of planetary positions relative to stars, and in the course of taking such measurements, astrologers like Kepler noticed anomalies between the predicted and the actual positions. Legitimate astrologers were always concerned with accuracy in the taking of such measurements. There were astrologers who were consciously frauds, of course, and these were not worried about accuracy; however, Thoren points out, observers such as Tycho Brahe hoped to establish the science of astrology on a sound empirical footing (214). Like Galileo in his study of falling weights, Tycho placed unprecedented emphasis on accurate measurement of planetary positions. Good astrology could not begin with bad measurement.

However, such concerns were not entirely new. In his <u>Treatise on the Astrolabe</u>, for instance, Chaucer discusses some of the more technical aspects of the astrologer's art. The astrolabe was one of the basic instruments that early observers used to measure the positions of stars and planets. It could also be used to tell time or to determine various data that were essential to the astrologer. Chaucer writes,

> The assendent sothly, as wel in alle nativitez as in questions and elecciouns of tymes, is a thing which

that thise astrologiens gretly observen; wher-fore me semeth convenient, sin that I speke of the assendent, to make of it special declaracioun. The assendent sothly, to take it at the largeste, is thilke degree that assendeth . . . upon the est orisonte; and there-for, yif that any planet assende at that tyme in thilke for-seide degree of his longitude, men seyn that thilke planete is <u>in horoscopo</u>. But sothly, the hous of the assendent . . . is a thing more brood and large. For after the statutz of the astrologiens, what celestial body that is 5 degrees above thilk degree that assendeth, . . . yit

rikne they thilke planet in the assendent. (2.4.1-14)

To summarize, Chaucer's point is that astrologers are much concerned with observing what is called the ascendant (the degree, or zodiacal sign associated with a constellation) that is rising at a given time. When a planet is in a rising sign or within five degrees above it, the planet is considered to be "in horoscope." Chaucer explains further that Saturn and Mercury are "wykkid" planets and that it is unfortunate to have them in horoscope (2.4.20-23). To balance the excursion into such matters, however, he concludes with a disclaimer: "Natheles, thise ben rytes of payens, in which my spirit ne hath no feith"; that is, "These are pagan practices in which my spirit has no faith" (2.4.37-38). Faith or not, he certainly had an <u>interest</u> in such matters.

Chaucer also warns against attempting to "take a just assendent . . . whan any celestial body by which that thou wenest governe thilke thinges ben ney the south lyne" (2.3.44-47). That is, one should not try to measure the ascendant based on the position of a star or planet lying close to due south because measurements taken then with the astrolabe are not very accurate ("just"). The important thing to notice here is the concern for careful measurement and accuracy and the limitations of the instrument. If astrology was not an exact science, it could, in the hands of a careful practitioner, at least aspire to be based on exact measurement.

The problem for the astrologer, then, was that good astrological predictions based on the planets required accurate knowledge of the planets' positions; yet the positions of the planets themselves defied very accurate prediction. Both the Ptolemaic system and the Copernican system prior to Kepler's introduction of ellipses allowed only for roughly accurate longterm predictions (Kuhn 74; Gingerich 198). One could use the astrolabe (or some other instrument, such as the sextant or quadrant) to take sightings of planetary positions at a given time, but predicting how the planets would appear in a few years or how they had appeared a few years past was another matter. For instance, in the introduction to Copernicus's <u>On the Revolutions</u>, Osiander asserts, "it is the job of the astronomer to construct . . . hypotheses such that [the celestial] movements can be calculated

from the principles of geometry for the past and for the future too" (505). One of the goals of the Copernican enterprise was to make such predictions more accurate. Part of Osiander's justification for the radical new hypothesis is that "in setting up the solar and lunar movements and those of the other five wandering stars [the planets visible to the naked eye]," astronomers had not "been able to establish anything for certain that would fully correspond to the phenomena" (507).

Despite his willingness to challenge his predecessors, Copernicus retained the medieval assumption inherited from the Greeks that circular motion was the most perfect motion and therefore the most appropriate for the heavenly bodies. As a result, planetary orbits based on circles ultimately sabotaged the accurate predictions Copernicus sought until Kepler replaced them with ellipses. The important thing to notice, however, is that Copernicus's goal was the possibility of accurate prediction, even if he did not reach it.

The problem of planetary orbits occupied a great deal of Kepler's energies. Kuhn writes, "A long series of unsuccessful trials forced Kepler to conclude that no system based upon compounded circles would solve the problem" (212). Here was the reason Kepler's use of elliptical orbits was such a coup: in the long run, the assumption of a strictly circular orbit spelled disaster for anyone trying to calculate exactly where the planets would be in a few years; circular orbits would yield an

approximation, but that approximation had to be corrected periodically by empirical observation. Kepler's elliptical orbits solved this problem, and they did it within a system that assumed heliocentrism. Kuhn reports that Kepler introduced the theory of elliptical orbits in 1609, in a work called <u>On the Motion of Mars</u>. In 1627, he brought out the <u>Rudolphine Tables</u>, a set of very accurate predictions of planetary positions. Kepler's success using Copernican principles did as much as anything to further the cause of heliocentrism (212, 219).

Thus, astrology lay at the intersection between what, in modern terminology, we would call scientific thinking and mythological or religious thinking. The difficulty with the planets was a scientific problem, but it was also a nuisance for the working astrologer (like Kepler himself), who might need to know the position of a planet ten years in the past for the casting of a horoscope. In the absence of an observation report or reliable theory with which to trace the planet's motion backward in time, the astrologer would be reduced to guesswork-and as Chaucer shows, a difference of a degree can make all the difference, astrologically speaking. Although modern thinkers may discount astrological predictions based even on accurate planetary positions, as Chaucer seems to do, there were those who took them very seriously. The astrologers' interest in predictions of the heavens for the sake of predictions about terrestrial matters is probably underestimated as a cause of the Copernican Revolution.

The discoveries that emerged from the Renaissance resulted from the asking of questions about astrology and mythology and philosophy of language. The questions concerned the relationships between the universe, language, and humanity, and they occupied others besides astronomers and astrologers: any thinking person had to be in some way concerned with the possible answers. Shakespeare was among the askers of the more profound questions. Both the mythological and astrological way of thinking are reflected in the plays, but the mythological and astrological are often frustrated or questioned. Shakespeare's attitude (more properly, his characters' attitudes) toward language will be the key to understanding his relationship to the Copernican Revolution.

Chapter Three

"Strange Stories" in The Tempest and Pericles

I do not pretend to have set down, in Baconian terms, a true, or even a consistent model of the universe. I can only say that here is a bit of my personal universe, the universe traversed in a long and uncompleted journey. If my record, like those of the sixteenth-century voyagers, is confused by strange beasts or monstrous thoughts or sights of abortive men, these are no more than my eyes or my mind conceived. On the world island we are all castaways, so that what is seen by one may often be dark or obscure to another. Loren Eiseley, <u>The Immense Journey</u> (13-14)

If Renaissance thinkers did not make a clear distinction between astronomy and astrology, neither were they ready to finally classify all astrologers as equally virtuous or reliable. Shakespeare, however, provides portraits of two astrologers whose knowledge of the heavens endows them with extraordinary powers. Both Cerimon, the doctor who revives Pericles' wife, Thaisa, in the first of Shakespeare's romances, <u>Pericles</u> (c. 1607), and Prospero, the magician and once and future Duke of Milan in a later romance, <u>The Tempest</u> (c. 1611), are presented as admirable characters. Since these characters are both astrologers and skilled users of language, an understanding of how astrology and language function for these characters in <u>The Tempest</u> and <u>Pericles</u> will provide relevant, if indirect, evidence on the question whether the dominant order in these plays is Ptolemaic or Copernican.

Thus, in this chapter I will analyze Cerimon's and Prospero's characters and the themes of appearance and reality in both plays. The analysis of <u>The Tempest</u> and <u>Pericles</u> will show that both

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

plays, but <u>The Tempest</u> especially, take place in an orderly universe that can be understood and even manipulated by the astrologically informed. The cosmology of both plays is therefore more clearly compatible with the Copernican world view than the Ptolemaic.

The temptation to see the germ of Prospero in Cerimon is irresistible. Like Prospero, Cerimon epitomizes knowledge and power coupled with benevolence and wisdom. Cerimon explains:

I hold it ever

Virtue and cunning were endowments greater Than nobleness and riches. Careless heirs May the two latter darken and expend; But immortality attends the former,

Making a man a God. (3.2.26-28)

Prospero's nobleness and riches, of course, have been "darkened" even before his death, and his enemies have tried to hasten that death by setting him afloat with his daughter, Miranda, in an unseaworthy vessel. Instead, however, they survive and take up residence in exile on the island. Like Cerimon, Prospero attains to godlike status on account of his virtue and cunning, especially in contrast to the witch Sycorax, her wicked son Caliban, the corrupt noblemen, and even the virtuous spirits represented by Ariel. All are under his control, thanks to his superior knowledge— "cunning," Cerimon would say.

In addition, his virtue lends him a "quality of mercy" which, if it is perhaps strained, nevertheless serves to restrain the worst vengeance against his enemies. For instance, Prospero orchestrates a tempest to bring his enemies to the island. If he sought only vengeance, it would have been easy enough to simply allow the passengers on the ship to drown instead of bringing them safely to shore, as he tells Miranda he has done (1.1.28-32). If they had perished, it might seem no more than poetic justice, since the passengers include his brother, Antonio, whose criminal record is remarkable. Before the main action of the play, Prospero explains, Antonio has usurped Prospero's dukedom; "confederated" Milan with Prospero's enemy Alonso, the King of Naples, who is also on the ship; and sent Gonzalo, a councillor in Antonio's party, to put Prospero and his daughter Miranda out to sea to die in a leaky boat (1.2.66-168). In addition, once the passengers of the ship are on the island, it would surely be a simple enough matter for Prospero, with the immense power he wields through Ariel and the spirits, to inflict any punishment he wishes on Antonio. Instead, Prospero forgives Antonio on the condition that his dukedom be returned (5.1.130-134).

Moreover, when Sebastian and Antonio plot to kill King Alonso in his sleep, Prospero sends Ariel to awaken Gonzalo in order to preserve the life of his enemy Alonso (2.1.190-310). In another plot, the monster Caliban and his accomplices, Trinculo and Stephano, plan to take Prospero's books and then kill him.

Prospero learns of this plan, and the would-be assassins are instead vanquished by spirits in the guise of hounds. Thus, they escape relatively lightly, given the magnitude of the crime they plan (4.1.254-260). Prospero has his own agenda to pursue in all this, of course: he wants his dukedom back. However, given the complete control he gains over his enemies and the justification he could offer for seeking the most horrific revenge, his restraint can justifiably be called merciful.

No doubt, many of Shakespeare's contemporaries probably had little trouble perceiving the mature Prospero as a virtuous father and ruler. At any rate, seventeenth-century thinkers would have been more likely to object against the younger Prospero's virtue because he neglected his duties as a ruler or because a shadow of suspicion could always be raised against magicians than because he represents patriarchy or the forces of colonialism.³ Even the objection that as a magician Prospero must be allied with dark powers can be successfully rebutted. Mebane has shown that Prospero's magic could also have been interpreted within a theological framework as the work of "an agent of God" (<u>Renaissance</u> 180).

The similarity between Prospero and Cerimon does not end with their mutual knowledge, power, and virtue. Specifically, the art of both men is astrological. As Sigmund Eisner has explained in <u>The Kalendarium of Nicholas of Lynn</u>, a knowledge of astrology had long been regarded as essential for the practice of medicine.

The medieval kalendarium, or calendar, was a document something like a modern almanac, but it contained more information than the modern calendar. For instance, Eisner points out that Nicholas's calendar warns physicians against bleeding patients when the Moon is in certain positions. Eisner also notes that Nicholas includes tables predicting which planet will reign at a given time of day. In adjoining tables, Nicholas lists the actions of the humors and their associated element—earth, water, wind, or fire. Treatment of patients had to be planned so that the correct bodily humors and elements would be influenced in the desired fashion by the appropriate reigning planet. Eisner concludes, "All of this information was of great value to the medieval physician" (19-23). Medically speaking, the connection between the heavens and the human body was a direct one. The planets were believed to have an empirically observable influence on the condition of the body. Thus, as a healer, Cerimon would be expected to know something of astrological influences.

Astrology's practical usefulness was not limited to the practice of medicine, however. Keith Thomas explains that the Renaissance astrologer could claim to perform any of several feats of insight: casting nativities, making general predictions, and answering "horary questions" (286). A nativity was a map or chart showing the state of the heavens at the time of a given person's birth. General predictions, medical or otherwise, could then be made from the nativity. The answering of horary questions,

Thomas writes, was based on the assumption that the astrologer could answer "any question put to him by considering the state of the heavens at the exact moment when it was asked. Answering such questions was the most controversial aspect of the astrologer's art" (286-87). It is clear enough what value the ability to answer horary questions—ones about the likely effects of a given treatment, for instance—would have for the physician. Thus, charts such as Nicholas provided might have afforded a method for answering horary questions in medical affairs. At any rate, a working knowledge of astrology and planetary positions at the time of treatment was necessary for medieval and Renaissance physicians.

Although Cerimon does not specifically mention astrological investigations, he does claim to have studied the "secret art" of "physic," and thereby to have learned of "the blest infusions / That dwells in vegetives, in metals, in stones." He can therefore "speak of the disturbances / That nature works, and of her cures" (3.2.35-38). When Thaisa, Pericles' wife, appears to die in childbirth and is cast overboard from the ship she and Pericles are on, Cerimon's knowledge allows him to revive Thaisa from her comatose state, a truly god-like act. As the attendant gentleman comments to Cerimon, "The heavens, / Through you, increase our wonder, and sets up / Your fame for ever" (3.2.95-97). The gentleman's comment could be taken as a purely metaphorical use of "heavens," but given the close relationship that existed in the

medieval and Renaissance mind between medicine and astrology, it seems fair to see a more direct, literal connection. For Renaissance medicine, the "disturbances / That nature works" included planetary influences on the human body itself.

If Cerimon provides an example of reasonably accurate astrological knowledge used for benevolent purposes, Pericles does not always present those who profess to have astrological knowledge in an equally favorable light. For instance, Antiochus, King of Antioch and father of the princess that Pericles unwisely comes to court in the first act, makes astrological claims. He asserts that the birth of his daughter (whose name is not given) was presided over by "The senate-house of planets" who "knit in her their best perfections" (1.1.10-11). In other words, a nativity cast for her, based on the positions of the planets at her birth, would have predicted a desirable future. Yet it is hard to imagine a less desirable or admirable existence than hers: to win her hand, suitors must solve a riddle revealing that Antiochus has secretly committed incest with his daughter. Failure to solve the riddle carries the death penalty, but solving the riddle means revealing the secret kept by powerful, dangerous Antiochus. Thus, the daughter functions as the incestuous bait in Antiochus's murderous trap—hardly what one would expect from the "best perfections" of the "senate-house of planets." The implication is clear: the heavens could provide reliable information for good men like Cerimon or Prospero. Conversely, astrological claims

(unreliable ones, in Antiochus's case) could also be made by evil men in order to deceive.

To summarize, Cerimon is a powerful character whose abilities probably rely on astrology as well as other forms of knowledge. Cerimon, however, merely contends with the effects of the storm in reviving Thaisa, who had seemed to perish in the "tempest" of childbirth, while Prospero controls the tempest itself.

Although very little attention has been paid to this aspect of his character, Prospero clearly represents the fully-developed astrologer at his finest. For whatever else he is, Prospero <u>is</u> an astrologer. His "art" includes magical power both to control and predict the natural and supernatural world. For instance, he tells Miranda,

... by my prescience,

I find my zenith doth depend upon A most auspicions star, whose influence If now I court not, but omit, my fortunes Will ever after droop. (1.2.180-84)

For Prospero, the "auspicious star" functions as a sign with a definite meaning for him. Like Peirce's weathercock, the star is causally related to that which it indicates; his fortunes will be determined by the star. However, the knowledge he gleans from the star also allows him some control over his future. As <u>Julius</u> <u>Caesar's Brutus observes</u>,

There is a tide in the affairs of men,

Which taken at the flood, leads on to fortune; Omitted, all the voyage of their life

Is bound in shallows and in miseries. (4.3.218-21) For the most part, the Shakespearean world is a system. The challenge is to read the signs that reveal the system. Brutus, of course, it will appear, consistently fails to meet that challenge adequately. Nevertheless, if the world is systematic, so also are human affairs, since they are bound up with the world. As Hamlet says, "There's a divinity that shapes our ends, rough-hew them how we will" (5.2.10). The mature Prospero, however, does not rough-hew his ends or those of the other characters, but rather sculpts them carefully in cooperation with the cosmos.

Although astrologers, as such, did not claim the ability to control other people, the spirits, and the natural world as Prospero does, the popular mind tended to attribute such powers to astrologers, who were often called "magicians." The ability to predict events was associated with the ability to cause them. Prospero, however, is still subject to forces larger than himself. His future literally "depends" on cosmic influences. Curiously, modern critics have paid scant attention to Prospero as astrologer, focusing instead on his role as magician proper or, more recently, patriarch or colonizer. Even those who focus their attention on Prospero as magician rather than colonizer have little or nothing to say about the astrological aspect of his art.

The Tempest contains elements of fantasy, so one should not be surprised to find Prospero's abilities exceeding those that practicing astrologers actually claimed. However, even a fantastic character requires some foundation for his plausibility. Something must prepare the audience to believe, at least within the context of the play, that a character such as Prospero might exist. In Prospero's case, figures such as the thirteenth-century scholar Roger Bacon provide such a background. Steven Williams has discussed Bacon's astrological inclinations and investigations into what many of his contemporaries considered magic. For instance, Williams reveals, Bacon edited an edition of the pseudo-Aristotelian Secretum secretorum, a text which he believed to contain much secret wisdom deliberately omitted by Aristotle from his more popular writings. The secret wisdom, Bacon thought, included instructions for synthesizing gold, extending the human lifetime indefinitely, and defeating the Antichrist. Unfortunately (but not surprisingly, given such claims), the integrity of the text of the Secretum was being endangered by Christian scholars whose sensibilities were offended by what they perceived as magic. Bacon rejected this criticism and tried to repair the damage done to the text by other editors (Williams 64-65). The difference between what counted as magic and what could be defended as sound scientific or religious belief was apparently somewhat illdefined.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

But how much might the average theatre-goer who saw Shakespeare's plays have known or believed about someone like Bacon? Enough, apparently, to justify Robert Greene's use of the Bacon legend in <u>Friar Bacon and Bungay</u> (c. 1589). In addition, Christopher Marlowe has the sinister German Valdes advise Dr. Faustus to bring his copy of Bacon to their appointment in the "lusty grove" where Faustus will begin his career in the dark arts, a reference which persists in both the A-text and the B-text of Marlowe's <u>Doctor Faustus</u> (A-text 1.1.156; B-text 1.1.148). The question, then, is what distinguishes Prospero, who is presented as an admirable character, from the doomed Faustus for Renaissance audiences?

At first glance, Prospero seems to have attained already what Faustus strives for, but he has managed somehow to avoid selling his soul to the devil. The difference seems to be one of motive: Faustus's goal is to have "a world of profit and delight, / Of power, of honour, of omnipotence" (A-text 1.1.55-56). Conversely, Prospero has been driven by his pure desire for knowledge—a desire so strong it caused him to disdain the duties that accompanied the power he already had as Duke of Milan. He tells Miranda that he neglected "worldly ends" and dedicated himself "To closeness and the bettering of [his] mind" until his library "Was dukedom large enough" (1.2.89-90, 110). Prospero recounts his fall from precisely the sort of power Faustus aspires to.

Masao Hondo has called Prospero's magic "the disciplined exercise of virtuous knowledge" (182). Prospero is therefore unhampered by the temptations that beset Faustus, for whom knowledge is a means to pleasure. Prospero's fall from power is motivated by love of knowledge, and the cultivation of that knowledge has also taught him the discipline he needs to return to political life and rule wisely. Unlike Prospero's motivation, Anthony Harris argues, Faustus's desire for knowledge is motivated by his undisciplined desire for power; he is "entirely egocentric in his motives" (116, 131). Ironically, Prospero unwittingly gave up political power to gain astrological knowledge and magical power, but at the time of the play's main action, he claims to be abandoning the magical power that returns him to his Dukedom. Politics and magic, it seems, do not mix well.

Astrology makes up an essential component of Prospero's art, but, significantly, he does not reveal the precise methods he uses in identifying the "auspicious star" whose "influence" he courts. In his explanation to Miranda, he refers to the selfimposed "closeness," or solitude, that allowed him to conduct investigations into "that which, but by being so retir'd, / O'er prized all popular rate" (1.2.90-92). That is, his studies involve hidden or secret—"retired"—knowledge that is not easily attained in public life and is not sufficiently understood or appreciated in the common mind. An air of mystery surrounds arts such as

Prospero's, and Shakespeare's treatment does not significantly reduce the mystery.

Thus, Prospero's character can be summarized as something surprising on the English stage—an astrologer and magician who is both authentic and virtuous and who manages not to be overwhelmed by the forces he invokes. Not only does he manage to control the cosmic forces he invokes, but he manages to apply the power he wields effectively to the world around him. It will become clear from analyses of other plays that, among Shakespearean prophets and fortune tellers, Prospero's abilities are singular.

The Tempest does not appear to specifically endorse either a Copernican or a Ptolemaic cosmology, yet the world of the play seems to resemble a Copernican universe more than a Ptolemaic one. One of the basic innovations of Copernican cosmology is the suggestion that what the senses see is not simple reality—an interpretive act of intellect is required to find reality behind appearances. Similarly, in Terence Eagleton's phrase, the relationship between humanity and the natural world in <u>The</u> <u>Tempest</u> "is dialectical, a dynamic interaction" (165). The last act of <u>The Tempest</u>, in particular, focuses intensely on the problem of appearance and reality and the intellectual challenge of distinguishing the two. A sort of dialectic must exist between mind and world for understanding to occur. For instance, after Prospero has promised to "abjure" his "rough magic," he comments

on the characters who were involved in the initial plot that brought him to the island with Marina:

> Their understanding Begins to swell, and the approaching tide Will shortly fill the reasonable [shores] That now lie foul and muddy. Not one of them

That yet looks on me, or would know me! (5.1.79-83) Still standing within Prospero's "magic circle," the plotters begin to gain some understanding of how the appearances fall short of the reality that holds sway on the island. The fog does not lift from their minds immediately, however. As Marjorie Garber writes, the play involves a "multiplicity of interpretive systems," from the base language of Caliban and the would-be regicides, to the magical or spiritual language of Prospero and the spirits (48). It may be impossible for Prospero to fully translate the explanation of the effects of his magic into an interpretive system the rest can understand.

After Prospero reveals himself and his identity, Alonso struggles to reconcile reason and senses:

since I saw thee,

Th' affliction of my mind amends, with which I fear a madness held me. This must crave (And if this be at all) a most strange story. (5.1.114-17)

Gonzalo expresses a similar tendency to doubt the evidence of his senses. Prospero replies, "You do yet taste / Some subtleties o' th' isle, that will [not] let you / Believe things certain" (5.1.123-25). Alonso sees his choices to be either to acknowledge himself a victim of "madness" or to believe in a "strange story" to provide some rational explanation of his experiences. There seems to be no middle ground between madness and strangeness available for these characters—the return to the prereflective state of mind is not an option. Prospero asserts that the "approaching tide / Will shortly fill the reasonable [shores]" of their minds, but the more he explains, the more incredulous Alonso becomes. For instance, when the Boatswain reappears, Alonso remarks, "These are not natural events, they strengthen / From stranger to stranger" (5.1.227-28). Alonso's astonishment continues when Caliban appears, and he continues to insist that Prospero's story will "Take the ear strangely" (5.1.314).

Although Prospero has vowed to abandon his magic, the sense of strangeness and the need for a "story" that will bridge the gap between what the senses detect and what reason can accept persist right up to the epilogue. The epilogue functions as a doorway between the world of the play and the world the audience lives in, and as he goes through that door, Prospero does not so much abandon magic entirely as hand off his mantle to the audience/reader. "Let me not," he begs the audience "dwell / In this bare island by your spell," indicating that his fate is still

based on the contingency of a spell (Ep. 5-8). In other words, the responsibility for telling the "strange story" has been transferred to us. Similarly, although Prospero promises to resolve Alonso's questions, Alonso persists in looking for an "oracle" that will satisfy him (5.1.242-4). The supernatural and natural make uneasy bedfellows at best, and some of the play's other basic conflicts—appearance in contrast with reality, for instance remain unresolved as well. Thus, Miranda never realizes that things are not as wonderful as they seem: "O brave new world" (183). In fact, it is a very old world; the political struggles that haunt the island are as old as humanity itself. To take things at face value in such a world is to risk being misled, at least. One theme of the play is that human beings must reconcile themselves to a potential dichotomy between simple appearance and ultimate reality, both in the natural and in the human realms.

Similarly, appearance and reality are commonly at variance in <u>Pericles</u>, but Cerimon, the figure who could perhaps provide the necessary "strange story" to reconcile them, plays a relatively minor part. Significantly, the commentary provided by "Ancient Gower" promises the play will please the senses—ear and eye—but makes no such promise about the intellect or rational capacity. He also reminds the audience that, in the past, the play has been read "for restoratives" and that the result of such readings is "to make men glorious" (1.cho.8, 9). On the other hand, it <u>is</u> an ancient tale, now being presented "in these latter times / When

wit's more ripe," and on this account Gower places the issue of whether the audience will "accept" his rhymes in the conditional (1.cho.11-12). As presenter, Gower does not endorse the play wholeheartedly; instead, he can only "tell you what [his] authors say" (1.cho.20). In other words, the play relies at least in part on an argument from authority, the validity of which the audience is invited to evaluate. It will require careful exercise of the wit to avoid being misled by deceptive claims, appearances, and traditions. The Renaissance tendency to reassess old beliefs in light of new ideas is clear in <u>Pericles</u>.

Nor is it to be overlooked that in the opening lines we are introduced to a figure, Gower, who immediately places the play within the context of a strong tradition. "Ancient Gower" is no doubt intended to invoke the English poet John Gower, who, F. David Hoeniger reports, had been dead two hundred years before the debut of Shakespeare's version of the story and whose work, the <u>Confessio Amantis</u> (1390), supplied Shakespeare with his primary source for the play (<u>Pericles</u> lxxxvi). Both Gower's reputation and his antiquity would, as Howard Felperin has shown, have been well-known to an Elizabethan or Jacobean audience (145-47). The play clearly reflects, without necessarily endorsing, the medieval tradition of saints' plays and miracle and mystery plays which were performed on Church holidays, or "ember eves and holy[-ales]," in Gower's phrase (1.cho.6).

Despite the sense of familiarity the play lulls the audience into, it plunges quickly into a quagmire of deception, forcing the audience to draw a firm distinction between appearance and reality. Pericles goes to Antiochus's court to woo an incestuous daughter who is not really beautiful and available, but only seemingly so; he flatters himself, not only that he will be courageous in the face of death but also that he will succeed in answering the riddle Antiochus poses, even though many others have died, either from failing to answer the riddle or because, having answered it, they prove that they know Antiochus's guilty secret. Pericles, of course, can solve the rather obvious riddle, but he chooses to escape by keeping the secret. His judgment and courage fail him-earlier, he has proclaimed that he thinks "death no hazard in this enterprise," but he ends the scene by planning a rather undignified escape: "By flight I'll shun the danger which I fear" (1.1.5, 142). Meanwhile, he flatters Antiochus, telling him "Kings are earth's gods; in vice their law's their will; / And if Jove stray, who dares say Jove doth ill?" (1.1.104-05) In other words, Antiochus's divine sanction puts him beyond reproach, whatever his actions. Of course, the setting, replete with the corpses of Antiochus's former victims, makes it impossible for the audience to deny that Antiochus has "done ill."

The play offers other examples of appearances that differ from reality, certainly not least of which are the apparent death of Pericles' wife Thaisa while giving birth to Marina. Then, too, there

is the apparent kindness of Cleon, governor of Tharsus, and Dionyza, Cleon's wife, that leads Pericles to entrust Marina to their care in act three. Instead of nurturing the child, however, Dionyza ends by plotting her murder when Marina is old enough to rival Dionyza's own daughter. Marina escapes Dionyza's plot when pirates kidnap her and sell her to work in a brothel, a fate which she resists with appropriate indignation. <u>Pericles</u> ends with father and daughter reunited and Pericles' crown restored, yet it is not at all clear that Pericles has come to understand the fundamental realities that lie behind the appearances well enough to live happily on anything like a permanent basis. He has done nothing to actually cause his reunion with Marina; the reunion is more like a mere stroke of good luck than the result of a wellorchestrated plan such as Prospero might conceive and execute.

The brief appearance of the goddess Diana in the final act provides some justification for Hallet Smith's reading, which asserts that the "plot shows a rough and violent world in which purity and innocence miraculously survive and triumph" and whose attendant deities are "inscrutable but finally beneficent" (1481-82). Diana does appear to Pericles in a vision telling him to go to Ephesus, where he is to make a sacrifice on her alter and tell the story of his wife Thaisa's supposed death. After being revived by Cerimon, Thaisa has become a priestess of Diana at Ephesus, and thus she is reunited with Pericles. Yet the goddess takes no credit for having arranged any grand plan leading to the reunion,

nor does she promise that the characters will not experience further tribulations of similar magnitude. Instead, she emphasizes her demands for sacrifice (5.1.240-49). If any divine plan has been in the works, the characters (with the exception of Cerimon) remain ignorant of its exact nature or purpose. In Smith's terms, insofar as <u>Pericles</u>' gods are in fact "inscrutable," one cannot really be certain whether they are "beneficent" or not.

In stark contrast to Prospero's or Cerimon's attitudes, Pericles' attitude is one of stoic acceptance of what the heavens offer; referring to his loss of Thaisa, he asserts,

> We cannot but obey The powers above us. Could I rage and roar As doth the sea she lies in, yet the end Must be as 'tis. (3.3.9-12)

Maurice Hunt summarizes Pericles' unquestioning attitude as one of "faithful silence" in response to his problems (163). Prospero, in contrast, is quite conscious of the "powers above," but he does not see his fate as immutable.

Marina comes closer than her father to mounting a successful challenge to her fate. She is no magician or astrologer; her efforts on her own behalf rely on the agency of language as thoroughly as do Prospero's, however. She does manage to escape the brothel, in part due to what Lorraine Helms calls her "pugnacious oration" (328). Of course, as Helms further points out, Marina remains a prisoner of patriarchal language and its

possibilities; she continues to be "confined rhetorically to the economic marketplace" (329). Her remarkable silence (she speaks but one line after her implied betrothal to Lysimachus) is symbolic of her continued linguistic entrapment by the patriarchal order. Unlike Miranda, who falls in love and is permitted to marry, Marina's marriage will be appointed without the necessity of her consent. Even a seventeenth-century audience, less sensitive than late twentieth-century audiences to the problems of patriarchy, could have noticed how much more enviable Miranda's position is. Like her father, finally, Marina meets her fate with stoic silence.

The comedic element missing in <u>Pericles</u>—understanding and a certain control over cosmic forces that shape human destiny—is supplied in <u>The Tempest</u> by what Frances Yates calls Prospero's "reforming magic" (<u>Last</u> 94). This element is present in <u>Pericles</u> to an extent, of course, through the agency of Cerimon's healing powers, without which the reunion in the final act would be impossible. Yet Cerimon's magic is absent from this act; he only recounts what has already happened. One is left with the uncomfortable feeling that these characters' troubles may not be entirely over. Without a Cerimon or Prospero to predict the reality behind the appearances, how will they cope? Thus, Kay Stockholder is correct when she asserts that <u>Pericles</u> does more to camouflage than to resolve the basic conflicts between the order of the world and the possibility of human happiness (17).

The world order in both plays is more fundamentally compatible with the Copernican cosmology than the Ptolemaic, <u>The</u> <u>Tempest</u>'s more so than that of <u>Pericles</u>. According to Mebane,

> <u>The Tempest</u> not only suggests that there are subjective elements in our perception of the world, but endeavors furthermore to persuade us that some interpretations of life are more valid than others: events that seem "impossible" or "miraculous" to some observers may eventually be proven literally true. ("Metadrama" 38)

The <u>Tempest</u>'s shipwreck victims, when they express amazement at the wonders of the island, serve as reminders for the audience that the miraculous events we have grown accustomed to in the course of the play still seem miraculous to the uninitiated. Like minds that have grown up in a geocentric universe being introduced to heliocentrism, the shipwreck victims recoil from the idea that the world is different than it has always appeared to them.

Never a simple model of the universe, the Ptolemaic system nevertheless retained a basic faith in a more or less direct correspondence or parallelism between the world that appeared to the senses and the reality behind the appearances. Medieval thought posited a vast unseen theological and cosmological mechanism to support those appearances, but the fundamental disparity between appearance and reality that Copernicus (like

Shakespeare) suggests is possible ran contrary to the medieval mindset. In the <u>On the Revolutions</u>, Copernicus asks,

... why not admit that the appearance of daily revolution belongs to the heavens but the reality belongs to the Earth? And things are as when Aeneas said in Virgil: "We sail out of the harbor, and the land and the cities move away" ... So it can easily happen in the case of the movement of the Earth that the whole world should be believed to be moving in a circle. (519)

The theologian Thomas Aquinas asserted in the thirteenth century, "It is natural to man to attain to intellectual truths through sensible things, because all our knowledge originates from sense" (16). Copernicus does not deny this proposition outright; however, he makes it evident that the relationship between sense and knowledge may be more complex than Aquinas suspected. The intellect begins with sense data, but it cannot wholeheartedly embrace them. Copernicus was right in supposing the Earth to be moving, but not in supposing that it would be easy for everyone to grasp such a possibility.

At first glance, Aquinas's proclamation may sound strangely empirical and modern for a medieval theologian, but it functioned more as a justification for allegorical thinking than as a foundation for anything like modern science. For Aquinas, it is fundamental that the habits of thought we learn through sense

experience will serve us well in coming to understand immaterial, intellectual truths. In contrast, modern science brings us, for instance, subatomic "particles" such as the neutrinos that, we are told, constantly pass through our bodies and even the entire Earth at unspeakable velocities and yet can only be detected indirectly and with the aid of elaborate instrumentation. In this respect, modern science is very far from confirming a reality that is essentially parallel to ordinary sense experience. The universe may be far stranger than we can imagine-more like Prospero's island than the medieval cosmos. Like Alonso, we need a "strange story"—a linguistic spell—to allow us to comprehend the counterintuitive vision of the world that begins with heliocentrism. When Pericles can no longer cope with the reality he experiences, his reaction is to abandon language, to refuse to speak (5.1.41). Conversely, Prospero's ability to correlate appearance and reality comes through the agency of language. Prospero confesses that his preference for his books over matters of state cost him his dukedom.

Even the wretched Caliban, whom Simon Palfrey appropriately refers to as "an opprobrious cipher of others' malice," can associate books with power (156). He tells his fellow conspirators Trinculo and Stephano, "Remember / First to possess his books; for without them / He's but a sot, as I am" (3.2.91-93). This is at best a half-truth, of course; books or not, Prospero is no sot, and we assume he has by now internalized most of the knowledge he needs to control the island. Thus Stephen Greenblatt oversimplifies, perhaps, when he asserts that Prospero's "entire source of power is his library" (65). We see Prospero wielding a magician's staff, not conjuring from a book. And yet, Caliban, who has "drown'd his tongue in sack," according to Stephano (3.2.12), thus effacing the minimal linguistic skills Prospero taught him, can still recognize the power of language.

Driven first by the pure desire to know, both Prospero and Cerimon have learned to manipulate a more or less predictable system of invisible forces. Like Galileo, Prospero interprets the signs in the heavens and draws unequivocal conclusions. His power involves the agency of spirits, but the spirits operate within a system he can understand and predict through astrological observation. Prospero's will controls their actions, apparently because he is master of forces more powerful than they; Ariel serves Prospero because he freed him from imprisonment by the witch Sycorax (1.2.270-93). Cerimon's abilities do not involve spirits, but they are based on a superior, god-like understanding of the natural world and seem to involve heavenly forces of some sort.

As portraits of astrologers, Prospero and Cerimon come out surprisingly well. They are certainly not frauds—in the context of the play, their powers and knowledge are real enough. They are also used for appropriate purposes, from a Renaissance point of view—to heal, to prevent the schemes of the wicked Sebastian and

Antonio from coming to fruition, and to right the wrongs caused by Prospero's own former neglect of his duties as Duke. Taken together, Prospero and Cerimon function as powerful affirmations of the value inherent in an understanding of the patterns and forces of the natural and supernatural world.

Chapter Four

"A Tide in the Affairs of Men": The System of the World in

<u>Julius Caesar</u>

We know we are here and small at the outskirts of some fabulous system we sense above and far off, we of this grainy planet of this pebbly sun at the pelagic fringe, who dreamed ourselves once the size and center, and called it Father and Love.

And we sense we are related to one another by some compact whose terms we all forever puzzle at, wander from, but return to, and must again, from every loss of phrasing and abdication of ourselves.

-John Ciardi, "The Starry Heavens, the Moral Law" (ll. 6-15).

Like <u>The Tempest</u>, the tragedy <u>Julius Caesar</u> (c. 1599) is a play with both astrological and linguistic implications that are relevant to Shakespeare and the Copernican Revolution. If <u>The</u> <u>Tempest</u> gives us a character in Prospero who reads the system on which the world operates, <u>Julius Caesar</u> presents us with a character, Brutus, who is in some sense Prospero's opposite. Prospero understands that the world is not always as it appears, but he also understands the reality that lies beyond the appearances. Brutus, on the other hand, although he has better intentions than <u>The Tempest</u>'s Alonso and Gonzalo, understands little more about the disparity between appearance and reality than do the political conspirators Prospero ultimately confounds.

For Brutus, "the noblest Roman" among Caesar's assassins (5.5.68), the world ought to be as it appears, just as language ought to reflect characters' intentions in an honest and straightforward manner. Paradoxically, though, Brutus refuses to accept the reality suggested by the appearances with respect to Caesar's character. Brutus's failure to understand the reality beyond appearances and the signs that describe it is a major cause of the bloodshed in the play. The signs, both linguistic and astronomical, if read correctly, reveal that the world of <u>Julius</u> <u>Caesar</u> is systematic, perhaps even Copernican. The problem is that there is no powerful authority figure who can read the signs correctly and convince or command others as Prospero and Cerimon do.

Brutus, unlike Prospero, is at a loss when he most needs to perceive what the future holds. Before he decides to join the conspirators to prevent Caesar from being crowned the emperor of Rome, Brutus weighs the situation and his response to it carefully. He has the best of intentions: to prevent Caesar from "The abuse of greatness" that "disjoins / Remorse from power" (2.1.18-19). Nevertheless, in the very next line, Brutus admits that all the evidence of Caesar's past behavior indicates it is unlikely Caesar will abuse his power: "to speak the truth of Caesar, / I have not known when his affections sway'd / More than his reason" (2.1.19-21). Brutus then resorts to a "common proof":

> . . . lowliness is young ambition's ladder, Whereto the climber-upward turns his face; But when once he attains the upmost round, He then unto the ladder turns his back,

Looks into the clouds, scorning the base degrees By which he did ascend. So Caesar may; Then lest he may, prevent. And since the quarrel Will bear no color for the thing he is, Fashion it thus: that what he is, augmented, Would run to these and these extremities. (2.1.22-31)

It is a strangely illogical and disjointed speech on Brutus's part. He wants to prevent Caesar from becoming a tyrant, yet Caesar's past behavior indicates there is no danger of this. Anne Barton summarizes the situation well: "There is no tangible basis for Brutus' fears of Caesar" ("Julius Caesar" 44).

Still, Brutus argues, it is possible that, like some others, Caesar might become a tyrant once he is crowned, since "the quarrel" bears "no color" for Caesar's character. So, Brutus concludes, let us assume ("fashion") that Caesar will become a tyrant. Therefore, Caesar must die. Lack of evidence becomes evidence against Caesar. Brutus simply assumes that the future reality will be the opposite of what present appearances indicate. All the evidence he can muster indicates that killing Caesar is the last course of action reason recommends, yet he decides to participate in Caesar's murder. Moreover, the conspirator Casca reveals, the Senate itself plans to elect Caesar king, so even by republican principles, assassination seems unjustified by the evidence Brutus gives (1.3.85-86). The contradictions are glaring.

Similarly, Cassius, another conspirator against Caesar, sarcastically argues that Caesar has "become a god," yet, again, the evidence may suggest otherwise (1.2.115-16). As Casca, reports, Caesar does in fact refuse the coronet when Mark Antony offers it to him, not once, but three times (1.2. 236-44). It is significant that Shakespeare chooses to have such a crucial event narrated rather than allowing the audience to see it firsthand. At the least, even if one ultimately affirms the conspirators' view of Caesar as an over-reacher, the narration effectively calls attention to language as a filtering medium for reality, since Casca claims Caesar "was very loath to leave his fingers off" the coronet (1.2.242). The crucial question is what the audience is to think of Caesar's rejection of the crown. Or can the audience form any definite conclusions in the matter? Certainly, Cassius's claim that Caesar "Is now become a god" supports Casca's claim that Caesar was "loath" to refuse the crown. After all, false modesty might well lie behind Caesar's rejection of the crown; "a god" would not like to refuse a crown. Perhaps Caesar makes a politic refusal rather than a genuine one.

Yet the audience must wonder if Cassius's claim is ultimately reliable. After all, the claims political partisans make about their opponents can hardly be taken at face value. At any rate, neither Cassius's claim nor Casca's is a literal report of fact. In Casca's case, the claim consists of speculation, not about what Caesar actually did, but about what he may have wanted to do. In

Cassius's case, the claim is metaphorical; presumably, Cassius means something like "Caesar thinks he has become a god" or "Caesar wants to be treated as a god."

In fact, the play's emphasis on metaphor begins in the very first scene, when the tribune Murellus demands to know where the self-proclaimed carpenter's leather apron and ruler are. Such accessories, being physically necessary to the performance of his function, would, if they were present, be metonymic signs of the carpenter's profession in the Peircean sense: there is a physical connection between the sign and its meaning. The punning carpenter, however, devoid of the signs of his trade and dressed in his best clothes to greet Caesar's return, frustrates such interpretation. This scene, as is hinted by the obvious pun on "rule[r]," establishes in miniature a motif that is repeated in the play as a whole: if the identity of a carpenter without a ruler is questionable, how certain can we be that a would-be tyrant who refuses a crown is really a would-be tyrant?

Such a question is one that Brutus is ill-equipped to deal with. He aspires to an impossible literalism, the principles of which he himself, ironically, sometimes violates. He advocates use of language in which words and reality have a direct correspondence. However, other kinds of language may be necessary to read a world where carpenters do not carry rulers. Like Murellus and his counterpart Flavius, when they try to interrogate the cobbler but cannot get a straight answer, Brutus

prefers language whose literal meaning is trustworthy and can therefore be taken at face value. His ineptitude with language (his own or others') that cannot be taken at face value proves fatal.

For instance, to entice Brutus to join the conspiracy, Cassius resolves to throw through Brutus's window letters that seem "as if they came from several citizens." The letters, Cassius says, will flatter Brutus and hint at Caesar's alleged ambition (1.3.315-320). Brutus's servant Lucius finds and gives Brutus "the letter," presumably Cassius's, which encourages him to "awake" and take action (2.1.45-48).⁴ His preference for literalism causes him to unquestioningly assign the obvious meaning to the forged letter Cassius sends. Since the forged letter plot is instrumental in beginning the chain of events that leads ultimately to Brutus's death, it implies that sensitivity to the possibilities of language, legitimate or otherwise, can literally be a matter of life and death.

When he does resort to metaphor or simile, Brutus leads himself astray, as when he compares Caesar to an unhatched serpent's egg that needs to be killed "in the shell" as part of his justification for the assassination (2.1.34). Brutus's notion that his "gentle friends" will kill Caesar "boldly, but not wrathfully" and "carve him as a dish fit for the gods" is also a masterpiece of selfdeception (2.1.171-75). Not only is it clear to the reader that his "friends" hate Caesar and will certainly kill him wrathfully, but there is nothing to suggest that the gods want Caesar as a dish.

Elsewhere, Brutus persists in his resistance to all but plain language. When Cassius suggests the conspirators against Caesar take an oath, Brutus will have none of it. He asks,

> What need we any spur but our own cause To prick us to redress? what other bond Than secret Romans, that have spoke the word And will not palter? and what other oath Than honesty to honesty engag'd That this shall be, or we will fall for it? Swear priests and cowards, and men cautelous, Old feeble carrions, and such suffering souls That welcome wrongs. . . . (2.1.123-131)

Oaths usually spring from what Michael Long calls "deep and spontaneous emotional conviction," yet Brutus operates more on a faulty sense of rational justification and honor than a strong desire to see Caesar dead (59). As Long says, "the immediate instigation of the emotive is absent" in Brutus (56). Because he shares none of the other conspirators' sense of outrage at Caesar's aggrandizement, Brutus's crime bears more resemblance to coldblooded, premeditated murder than to a crime of passion. In Brutus's own mind, though, his attitude toward oaths accords with the New Testament injunction to "Let your yea be yea and your nay, nay" (James 5:12). The deed should simply conform to the word, and no emotionally driven hyperbole should be

necessary. In fact, an oath would "stain" their enterprise, in Brutus's view (2.1.132).

The irony of the assassination is increased by the fact that Brutus and Caesar are alike in their failure to perceive a reality behind the appearances; Caesar is surprised by Brutus's attack: "<u>Et tu, Brute?</u>" (3.1.77). Nor does Brutus ever realize that he has been duped by Cassius's letter that is intended to seem as if it "came from several citizens" (1.2.317). Like the "prodigies," as Casca calls the strange events such as the slave whose hand flames but does not feel fire (1.3.15-28), language itself requires interpretation to be understood, and more than one interpretation is often possible. The most obvious interpretation is not necessarily the most appropriate. One can summarize the cause of the conflicts in <u>Julius Caesar</u> very succinctly as an epidemic of cosmic illiteracy.

For instance, referring to the prodigies, which appear on the eve of the Ides of March, Cicero, a Senator, makes an observation that Barton has appropriately summarized as "a warning of how language may misrepresent fact" ("Julius Caesar" 24). Cicero tells Casca, "men may construe things after their fashion, / Clean from the purpose of the things themselves" (1.3.34-35). Cassius himself may well be an example of such misconstrual—he says he believes the prodigies "are portentous things / Unto the climate that they point upon" (1.3.31-32). Cassius then tells Casca that the prodigies appear because "heaven" uses them as "instruments

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of warning" of the "monstrous state" of Rome (1.3.69-71). The implication is that he takes the prodigies as signs that heaven is opposed to Caesar's ascent and that the assassination plot should proceed. However, Calphurnia, Caesar's wife, interprets the signs differently—she is frightened by them, but she certainly does not believe they justify Caesar's death.

Thus, the interpretation of signs, whether they take the form of "prodigies," speeches or letters such as Brutus receives, can result in the misconstrual Cicero warns of. Indeed the entire play can be seen as the result of Brutus's confused decision to participate in the plot against Caesar. Brutus, however, never understands this potential in language, just as he never grasps the deceptive purpose of the letter, instead accepting the obvious interpretation of them, as Cassius intends. The best defense for Brutus may be not merely that he thinks he is resisting tyranny, but that he thinks so because he is as much plotted against as plotting.

Characters in the play also have a good deal to say about flattery. Flattery is a kind of language designed purposely to obscure rather than reveal reality, and so it is another example of the kind of misconstrual Cicero warns against. For instance, Barton points out that Caesar prides himself on his "unpersuadability" but does not escape the "general malaise" that pervades language in Rome ("Julius Caesar" 41). Thus, the conspirator Decius, in planning how to bring Caesar to the Capitol

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

where the assassins plan their attack on the Ides of March, explains that Caesar

> loves to hear That unicorns may be betray'd with trees, And bears with glasses, elephants with holes, Lions with [nets], and men with flatterers; But when I tell him he hates flatterers He says he does, being then most flattered. Let me work;

For I can give his humor the true bent,

And I will bring him to the Capitol. (2.1.203-11) Decius is confident that Caesar will fall prey to his flattery, to his ability to make the reality appear rosier than it is for Caesar.

Brutus also suffers from the sort of shortsighted lack of selfunderstanding that Caesar suffers from. Early in the play, Cassius tests Brutus's feelings about Caesar and his ambition. He also discovers that Brutus can be easily manipulated with flattery. Cassius asks, "Tell me, good Brutus, can you see your face?" Brutus responds, sensibly enough, "No, Cassius; for the eye sees not itself / But by reflection, by some other things" (1.2.51-53). Cassius replies,

Tis just,

And it is very much lamented, Brutus, That you have no such mirrors as will turn Your hidden worthiness into your eye, That you might see your shadow. I have heard Where many of the best respect in Rome (Except immortal Caesar), speaking of Brutus And groaning underneath this age's yoke,

Have wish'd that noble Brutus had his eyes. (1.2.54-62) Clearly, just as Decius says he can flatter Caesar by telling him he hates flatterers, Cassius flatters Brutus by telling him he has no "mirrors" to "turn" his "hidden worthiness" to his sight. At the same time, Cassius himself offers to be Brutus's mirror: "I, your glass, / Will modestly discover to yourself / That of yourself which you know not of" (1.2.68-70). Cassius, however, is not a particularly accurate mirror. One could hope that, if he cannot see his own face, Brutus would at least be more sensitive to the fact that mirrors, like metaphors, can distort as well as reflect.

Of course, Cassius's purpose here is to flatter Brutus; Cassius has probably heard no such wishes about "Brutus's eyes" expressed; at any rate, we know the letter he sends is forged. Moreover, we never hear the popular outcry against Caesar except as reported by Cassius. In fact, if the commoner in the first scene is any evidence, Caesar seems to have a great deal of popular support, and this support is reiterated by the "flourish and shout" which, fewer than twenty lines later, prompt the observation from Brutus, "I do fear the people / Choose Caesar for their king" (1.2.78-79). Cassius sees his opening in the word "fear" and makes the most of it, finally extracting a promise from Brutus to "consider" Cassius's arguments against having Caesar as king (1.2.168). Because he never sees through Cassius's flattery, Brutus's tragic flaw seems to lie, like Caesar's, in not examining critically enough what people tell him.

After the murder, Brutus's insensitivity to language is reinforced by his dramatically ironic suggestion that the conspirators go the marketplace where, "red weapons" prominently displayed, they will "all cry 'Peace, freedom, and liberty" (3.1.109-110). The waving of the bloody swords while crying peace shows how the words have become disconnected from the signs: as signs, bloody swords signify conflict, not peace. They typify the struggle that will ensue in the vacuum of power Caesar's death creates. Thus, by killing Caesar, Brutus has crossed his own Rubicon; the battle lines have been drawn, and the "tide" Brutus will later refer to has already begun to flow toward what Brutus would prevent: dictatorship, albeit one established by Octavius, Julius Caesar's corrupt kinsman. What G. Wilson Knight calls the "tempest" is unleashed (185). This time, however, no Prospero is at hand to control or predict it.

The schism between words and facts continues to widen after Caesar's murder. The "reasons" Brutus promises for the murder of Caesar do not really appear; claims that pass for reasons in Brutus's speech do not satisfy. As readers, we learn nothing that we have not heard from Brutus before; his speech simply asserts once more that Caesar was ambitious and reiterates the possibility

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that he <u>might</u> have become a tyrant. If one accepts Brutus's assumption that Caesar posed a serious threat to Rome, then his claim that he killed Caesar not because he "lov'd Caesar less" but because he "lov'd Rome more" has a certain amount of intellectual appeal (3.2.21-22). It pales in comparison to Antony's impassioned speech, however.

Niccolo Machiavelli pointed out in The Discourses on Titus Livy that the people can be misled easily in any direction by a clever enough speaker (143-45). Comparison of the two speeches illustrates the point well. Brutus's prosy, relatively uninspired speech pacifies the crowd, which cries "Live, Brutus, live, live!" when he offers to sacrifice his own life should Rome require it (3.2.45-47). The crowd's contentment with Brutus's position is short-lived, however. It lasts only until Antony makes his much more eloquent, emotionally appealing verse speech, the effect of which is the opposite of the literal meaning the words suggest. "They that have done this are honorable," Antony asserts, knowing full well that the crowd will conclude otherwise (3.2.212). The scene emphasizes the rhetorical power of words not so much to convey facts as to persuade hearers what to think about the facts. And yet Antony has no more honor than the conspirators: we soon find him plotting with Octavius to insure the downfall of Lepidus, the third member of the triumvirate Octavius and Antony form after the murder, when he is no longer useful (4.1.18-27).

Barton writes "We must use words to interpret . . . and remember phenomenal experience. Yet sometimes . . . the use of language to express fact" gives way to "gross distortion" ("Julius Caesar" 34). After Caesar's death, language does become more useful as a tool of distortion, of interpretation divorced from fact, than of honest interpretation. Antony's speech clearly demonstrates this condition. Chaim Perelman and Lucie Olbrechts-Tyteca call it "a typical case of epideictic discourse" which "ends by provoking a riot that is clearly political." The goal of the speech, Perelman explains, "is to create a disposition to act ... and finally to bring people to act" (1082). The speech is effective in inspiring the people to turn against the assassins. It is not intended to provide the crowd with a true understanding of the situation, which is that neither Antony nor the conspirators are honorable. It also whips them into an emotional condition where rationality is almost entirely absent. Good reasons for the murder would avail little at this point. Brutus's paltry logic is forgotten. If Brutus were more sensitive to these possibilities for language to change the direction of events, he would not have committed the colossal blunder of allowing Antony not only to speak but to speak last at Caesar's funeral.

Brutus and the rest of the conspirators appear to be just as easily manipulated by Antony's flattery as Brutus is by Cassius's. When Antony appears after Caesar's murder, he tells the conspirators,

Live a thousand years, I shall not find myself so apt to die; No place will please me so, no mean[s] of death, As here by Caesar, and by you cut off,

The choice and master spirits of this age. (3.1.159-63) As "spirits" of intrigue, murder, and rebellion, of course, the conspirators are in a sense the "choice and master" spirits of the age, although they do not understand Antony's words as insults.

One would be tempted to read Antony's lines here as if spoken with a sneer, if the following lines did not make it clear that Antony is politic enough to recognize the need to retain the good will of the conspirators for the moment. He tells them, "My credit now stands on such slippery ground / That one of two bad ways you must conceit me, / Either a coward or a flatterer" (3.1.191-93). Of course, he does flatter the conspirators, but he also recognizes the exigencies of the situation. To react too strongly at the murder of Caesar before he can rally the support he needs to resist the conspirators would threaten his own wellbeing. Cassius is less deceived by Antony's conciliatory remarks, as he intervenes and tries to dissuade Brutus from allowing Antony to speak; but too late. Caesar's murder has effectively drawn the battle lines, and nothing can be done to avoid the battle. Ironically, the naked struggle for power that ensues resembles the thing Brutus would avoid: the end of republican government. As Jan Blits has pointed out, the funeral orations

are "the last examples of political rhetoric in Shakespeare's Rome" because afterward "no one ever thinks it necessary or even useful to persuade the people of anything" (54).

In this play, words are not always reliable signs of what happens either in the world or in other people's minds. They do not, to borrow a phrase from A. D. Nuttall, necessarily conduct "the user to a reality which exists beyond the linguistic forms" (105). To their detriment, Brutus and Caesar both ignore this fact. The puzzle that the play which is ostensibly about Caesar has so many more lines spoken by Brutus may be solved by noticing that both Brutus and Caesar and the causes of their fates are more alike than anyone in the play, including themselves, ever realizes. The similarity may also help to explain the otherwise enigmatic words of the ghost of Caesar. The ghost appears to Brutus in his tent on the plains of Phillipi where Brutus's forces will face Octavius's the next day. Brutus commands the ghost to "speak to me what thou art," and it replies "Thy evil spirit, Brutus" (4.3.281-82). Whether the ghost is really the spirit of dead Caesar, some other evil spirit, or merely a figment of Brutus's own guilty imagination, it appears only to Brutus. When he questions them, his servants avow they saw nothing (4.3.297-305). In this sense, then, whatever its metaphysical status, the ghost is Brutus's own evil spirit. Appropriately, since the downfall of both Caesar and Brutus is caused by an inability to read the signs correctly, the ghost appears as Caesar.

If words fail as signs directly related to what characters intend, the cosmic signs fail as well. More properly, perhaps, it is the characters' ability to read them that fails. The characters' inability to use language to point toward a reality beyond language does not necessarily mean no such reality exists. The fault may as easily lie with the language user as with the language. For instance, just before his soliloquy debating the possibility that Caesar will become a tyrant. Brutus tells Lucius he "cannot by the progress of the stars / Give guess how near to day" (2.1.2-3). Telling time by the stars is one of the simplest of astronomical tasks—anyone who recognizes the major constellations can estimate the time by them, and the astrolabe can be used to determine the time more accurately. (The modern equivalent of the astrolabe, the planisphere, is still useful for telling time.) Brutus's lack of even such elementary knowledge suggests a much deeper lack of understanding of the cosmic context in which he acts.

Similarly, the conspirators Decius and Cinna fail in the most elementary way when they cannot even tell for certain where the Sun will rise. They agree on a direction as east, however. Cinna even believes he sees daybreak until Casca points in a different direction, the southeast, and correctly explains that because the season (spring) is "youthful," the Sun is rising well south of east. He further explains correctly that, "some two months hence," around the middle of May, the Sun will rise in the "high east,"

where the Capitol stands (2.1.101-111). Interestingly, Casca has the Capitol in the east, in the same direction as the Sun, an image Copernicans such as Kepler would have appreciated. Given the Elizabethan tendency of political power to style itself after the supposed cosmic order, associating the Sun with the center of political power implies an endorsement of heliocentrism. Despite his understanding of the astronomical facts, however, Casca chooses to follow the mistaken course of murdering Caesar. The implication is that more than just knowledge is required for someone to receive accurate guidance from the heavens. Factual knowledge alone is insufficient. Virtuous intentions are also essential. As the comparison of Faustus and Prospero shows, knowledge used for the wrong purposes is very dangerous.

Some of the appearances, such as Cassius's counterfeit letters to Brutus, are deceptive to the characters but can be rightly interpreted from the first by the audience. We see the deception being planned. In interpreting the prodigies and omens, however, the audience faces difficulties similar to Brutus's when he receives Cassius's forgeries. How to read them in order to avoid the false interpretation Cicero warns against? After the fact, of course, we see that Calphurnia is right when, trying to keep Caesar at home on the Ides of March, she says, "The heavens themselves blaze forth the death of princes" (2.2.31). If we set aside our foreknowledge of what is to come, however, Caesar's course of action (unlike Brutus's) seems reasonable. Like many of

the words the characters speak, the signs in the heavens are difficult to interpret accurately.

Julius Caesar takes place in a systematic world, though, however poorly the participants understand the system. From the characters' point of view, the world of the play is in crisis; certain vague predictions about the future are possible but do not convince those concerned. The predictions in that play are more specific but still misunderstood. The tragic blindness, or crisis of understanding, seems to be a characteristic of Shakespearean tragedy in general; characters are caught up in a system they do not understand. To begin with, they may have varying degrees of innocence, as in the case of Hamlet, who finds a ready-made tragic situation not of his own making in which he must struggle to perceive the right course of action. Or, like Macbeth, Othello, or Lear, they may play more active roles in defining the situation that leads to their downfall. In the present case, Brutus, by taking an active role in the plot against Caesar, clearly plays an essential part in creating the situation that leads to his downfall. He does so as a character caught up in a tragic crisis of understanding.

Brutus and Caesar act in a world whose system they do not quite grasp, but the play makes it clear that there <u>is</u> a system. The assassination does come on the Ides of March, the time Caesar has been warned to beware of, yet it is unclear to the reader exactly whether the system is Ptolemaic or Copernican, just as it is unclear to the characters what to do about it. Casca's

association of the Sun with the Capitol is the clearest evidence that the world is Copernican; other evidence, however, can be cited for either system. For instance, Caesar's soothsayer understands the system well enough to have fairly specific knowledge of when something disastrous may happen to Caesar. The ability to predict planetary positions accurately, a necessary preliminary to making the most reliable astrological predictions, was one of the advantages Copernicus hoped to gain through heliocentrism. Yet the soothsayer's role is limited, and he does not reveal his methods or assumptions; they could be Ptolemaic as well as Copernican. Moreover, the frustration of attempts at exact prediction of planetary positions that the Ptolemaic system suffered from parallels Brutus's and Caesar's lack of insight into the future.

In addition, Decius invokes the theory of humors in his speech promising to bring Caesar to the Capitol by giving "his humor the true bent," and Portia hopes the reason her husband Brutus is "heavy" is "but an effect of humor" [2.1.210, 250, 275]. This theory is essentially medieval, tracing its history all the way back to Aristotle. The theory is most clearly astronomical in its implications when, as Walter Clyde Curry explains, it associates the elements—earth, wind, fire, and water—with both the composition of the human body and the influences of the stars and planets (9-11). Aristotle explained the tendency of heavy things to fall to the center of the Earth by placing the heavy Earth at the

center of the cosmos, where Ptolemy keeps it. Earth, then was associated with melancholy through a thought process that was metaphorical, associating heaviness with melancholy, but not <u>merely</u> metaphorical. The influences of the humors on the body were very real.

Given the assumptions outlined above, it becomes clearer why the Copernican Revolution took place: thinkers might be more willing to entertain counterintuitive arrangements of the heavens if they promised to make sense of what happened on Earth. According to John Crawford, "Brutus accepts his destiny and finds it difficult, if not impossible, to control its circumstances" (31). Perhaps the most heroic thing Brutus does is to accept the same destiny he has imposed on Caesar by killing himself. Yet it is not a heroism that anyone would desire to emulate. His observation about a tide leading on to victory proves far too optimistic. Knight points out that only the death of Brutus can calm the tempest Caesar's death has unleashed (187). Thus, once Caesar is dead, the chain of events leading to Antony's and Octavius's uprising is set in motion, yet it is a tide that will drown Brutus, not lead him on to victory. Or perhaps Brutus has simply mistaken the point at which the tide can be "taken at the flood." However, the only opportunities the play seems to offer Brutus to choose a course of action leading to anything like victory come before the murder of Caesar. Events transpire so that killing Caesar seals Brutus's fate as well, although he cannot know it beforehand. In fact, Brutus

even seems to die thinking he has won a victory of sorts. Shortly before committing suicide, he asserts, "I shall have glory by this losing day / More than Octavius and Mark Antony / By this vile conquest shall attain unto" (5.5.36-38). Brutus remains confused to the very end.

Alessandro Serpieri has asserted that Shakespeare dramatizes "history as a clash of models," but is "careful not to declare allegiance to one side or another" ("Reading" 126). Shakespeare's Brutus does not attract our wholehearted endorsement, but neither does Shakespeare's Caesar. The lack of an entirely sympathetic character invites the reader to finally stand outside the play with something like the historian's or scientist's emotional uninvolvement. Frank Kermode asserts that Shakespeare treats Brutus "with delicate sympathy, but cannot have thought his act a right one" (1104). Even if the end justifies the means, which it probably never does in Shakespeare's plays, Brutus's act is wrong because it is based on incorrect guesswork about the consequences of his actions. By acting as if his guess that Caesar may become a tyrant were reliable, Brutus presumes to an impossible knowledge, thus making himself guilty of a kind of over-reaching. But he acts in a world where little more than guesswork is possible, and hence the potential for "delicate sympathy." Thus, the grand conflict of the play represents a clash between monarchy and a republican model, but Brutus's decision to ally himself with the conspirators represents not so

much a conflict between models as a vacuum of models. Brutus has no reliable pattern to guide him.

In the fantasy world of one of Shakespeare's last plays, <u>The</u> <u>Tempest</u>, completed in 1611, Prospero can reliably read the future and control the present because he has mastered his magic books. In the more realistic world of <u>Julius Caesar</u>, written around 1599, there are no such books, nor anyone who could read them if there were. <u>Julius Caesar</u>'s heavens speak a language nobody really understands but which may be used by men to "construe things after their fashion / Clean from the purpose of the things themselves." It is a problem that will continue to haunt the characters in <u>King Lear</u>.

Chapter Five

King Lear's Moon and the "excellent foppery of the world"

He blames the stars, Aldebaran, Capella, Sirius, For looking on and not participating. (Why are we so resentful of detachment?) But don't tell me it wasn't his display Of more than royal attributes betrayed him. How hard it is to keep from being king When it's in you and in the situation. —Omar in Robert Frost's "How Hard It Is" (84)

King Lear, the story of an old king who proposes to "Unburthen'd crawl toward death" after dividing his kingdom among his daughters (1.1.41), was written around 1605, when Shakespeare's career as a playwright was more than half over. Nevertheless, Lear is a very medieval play, at least in the sense that a full understanding of it requires a knowledge of the historical background. In another sense, however, it is modern in its insistence on a world ruled by an unseen order, one that cannot be fully comprehended by ordinary mortals. Like Prospero's island, explaining the world of Lear to the characters that live in it would require a strange story such as only a skilled astrologer or someone with similar insight could tell. However, instead of attaining to a Prospero-like understanding of the world and the signs that can be used to predict it, Lear's characters tend to abuse language or disdain its complexities. The conflicts of the play are caused at least as much by characters' failure to understand themselves, their language, and the world as by inherent defects in the world itself. Like Julius Caesar, Lear takes place in systematic worlds where characters misunderstand both the signs and the system.

For instance, Lear impetuously banishes the Earl of Kent for questioning his disowning of Cordelia, the only one of Lear's daughters who does not flatter him in hopes of gaining a large share of the kingdom. When Kent returns in disguise, he describes himself to Lear as one who "can keep honest counsel, ride, run, mar a curious tale in telling it, and deliver a plain message bluntly." Kent concludes, "... the best of me is diligence" (1.4.32-35). He craves a straightforward, easily apprehended vision of reality, one void of curious tales to mar, one which will allow him to believe what he sees and act on it, more like a faithful dog than a thinking human being. Like Tempest's Alonso and Gonzalo, Kent would not comprehend any strange stories, even if there were a Prospero to tell them. However, traveling in disguise to avoid being recognized by the nominal king who banished him, Kent is not what he seems, despite his claims to be "no less than I seem" (1.4.13). His own appearance puts him at odds with the world as he would have it.

Similarly, Kent's claim of diligence puts him at odds with the inconstant moon with which Lear allies himself in abdicating and planning to live with his two remaining daughters, Goneril and Regan, "by monthly course" (1.1.132). Nevertheless, Kent continues to serve Lear because, he explains to the self-deposed king, "you have that in your countenance which I would fain call

master^{*}—that is, "Authority" (1.4.30). Authority (or the illusion of it) is enough for Kent, even though Lear, with typical whimsicality, only promises to tolerate him until after dinner (1.4.40-41). Kent is an essentially conservative figure who cannot comprehend or adapt to a new order, who tries to continue following the old king and the old rules even when they no longer apply. As such, he embodies the contradictions of a world in flux. Ralph Waldo Emerson might reasonably have had Kent in mind when he labeled consistency as the "hobgoblin of little minds" (496).

On the surface, of course, there is something admirable in Kent's loyalty to his former king. However, a closer examination shows that his loyalty is misplaced. Despite Kent's professed love of plainness and bluntness, there is some justice in what Regan's husband, the Duke of Cornwall, says about Kent. Cornwall describes him as a

fellow

Who, having been praised for bluntness, doth affect A saucy roughness, and constrains the garb Quite from his nature.

These kind of knaves I know, which in this plainness Harbor more craft and more corrupter ends Than twenty silly-ducking observants That stretch their duties nicely. (2.2.95-104)

Kent is not a particularly crafty character, but, curiously, he "constrains his garb" so that Lear will not recognize the man he banished. Indeed, it hardly seems the decree of banishment would any longer carry weight, since Lear's real authority as king vanishes when he divides the kingdom. Yet Kent wants desperately to see authority in Lear, so he disguises himself in order to disobey the authority he is simultaneously trying to protect. Kent is thus a curious mixture of naïve plainness and awkward, almost useless deception.

Moreover, Kent's service to the mad old ex-king is corrupt in the sense that it is a remnant of a decaying world, the world in which Lear was a functional king. For example, the conflict that brings Kent to the stocks begins with his violent over-reaction to the failure of Oswald, Goneril's steward, to treat Lear like royalty. At this point, Lear has come to spend a month with his daughter Goneril, who instructs Oswald, "Put on what weary negligence you please" with the ex-king (1.3.12). Goneril is irritated with Lear because, she says, "By day and night he wrongs me, every hour / He flashes into one gross crime or other" (1.3.3-4) Furthermore, Lear's abandonment of his authority seems to extend to the knights he kept as servants. In Goneril's words, "His knights grow riotous" (1.3.6).

Then, in the very next scene, Lear demands of Oswald, "Who am I, sir?" (1.4.78) The question has an ironic echo for the audience, since, as Regan has earlier asserted, Lear "hath ever but

slenderly known himself" (1.1.293-94). Oswald replies, sensibly enough, "My lady's father" (1.4.79). Lear, wanting, of course, to be recognized still as the King, erupts at Oswald: "My lord's knave! / You whoreson dog, you slave, you cur!" and strikes him when he denies being any of these (1.4.80-81). When Oswald objects again, Kent comes to Lear's rescue, physically attacking Oswald, whose actions consist mainly of meek self-defense. Kent's overreaction and immediate recourse to threats of violence bear much in common with Lear's own violence and hyperbole. Kent is thus much like Lear, who begins the conflict by striking Oswald.

In addition, Kent paradoxically expresses admiration for straightforward language while traveling in disguise and serving a "king" who is no longer really a king. This admiration contributes to the similarity between Kent and Lear. Like both Kent and <u>Julius Caesar</u>'s Brutus, Lear insists on a one-to-one relationship between simple language and reality, even while demonstrating its impossibility. His words, Lear asserts, must be signs of his deeds; like Peirce's weathercock, his words must have a causal link with his deeds. In banishing Kent, Lear accuses him of subverting this relationship between language and deed:

> ... thou hast sought to make us break our [vow]— Which we durst never yet—and with strain'd pride To come betwixt our sentence and our power, Which nor our nature nor our place can bear.... (1.1.168-171)

Of course, Lear is further like Brutus, in that he cannot even live up to the rule of acting in strict adherence to his own word. Lear's words do not predict his behavior. Just as Brutus continues to insist he loved Caesar even after he has killed him, Lear breaks his word to Burgundy less than fifty lines after banishing Kent for encouraging him to break his word. Referring to Cordelia's dower, Burgundy tells Lear, "I crave no more than hath your Highness offer'd, / Nor will you tender less" (1.1.193-94). Lear responds by reducing the dower to nothing; thus, Burgundy's speech highlights Lear's fickleness in contrast to the steadfast course he recommends.

Burgundy gently reminds Lear that he is recanting his former offer: "Give but that portion which yourself propos'd, / And here I take Cordelia by the hand" (1.1.242-43). Ironically, Lear responds, "Nothing. I have sworn. I am firm" (245). Whatever else he is, Lear is not firm; instead, he is as changeable as the lunar cycles he plans to follow in visiting his daughters. As Goneril points out, he is "full of changes." Regan agrees, adding "Tis the infirmity of his age, yet he hath ever but slenderly known himself" (1.1.288, 293-94). His erratic behavior does not seem to come entirely as a surprise.

In fact, Lear's behavior calls to mind Edmund's plot and Gloucester's astrological predictions. In the scene immediately following Lear's division of the kingdom, the Earl of Gloucester's bastard son, Edmund, begins a plot to deceive Gloucester into

thinking that his legitimate son, Edgar, is plotting against him. Edmund pretends reluctance in showing Gloucester a forged letter which seems to be from Edgar to Edmund. The letter invites Edmund to participate in a plot in which the brothers will share their father's estate if they work together to overthrow him. Edgar, of course, is innocent of any such plans.

Gloucester falls into Edmund's trap, however, and asserts that the "late eclipses in the sun and moon portend no good to us" and then lists the expected effects of the eclipse: "Love cools, friendship falls off, brothers divide . . . the king falls from bias of nature," and so forth (1.2.102-111). Shakespeare's having Gloucester refer to both solar and lunar eclipses suggests a respectable level of astronomical knowledge on Shakespeare's part, since solar and lunar eclipses do in fact come in pairs. What the audience is to make of Shakespeare's use of eclipse lore in this play is a more complex matter. As Douglas Peterson assesses the play, it raises the question "whether human events are random or teleological" (104). Peterson does not see it, but the answer the play suggests when read in historical context is that events are, in fact, mostly teleological; however, random events (or ones that seem random, at least, because they are unpredictable from a limited human perspective) may occur. Peterson concludes instead that what the characters believe about their experience is more important than the reality (105). Such an appraisal is problematic at best, since Gloucester's misunderstanding of the

astrological signs contributes to Edmund's plot and to Edgar's problems.

Actually, Gloucester's beliefs about his sons and the meaning of the eclipses are important precisely <u>because</u> they contradict reality. Like Brutus, Gloucester brings on his own doom through failure to correctly read the signs—both the ones in the letter and the ones in the heavens. At least partly because Gloucester believes the astrological signs predict division between brothers, Gloucester is prepared to accept Edmund's forged letter for what it appears to be. Yet when Edmund soliloquizes after Gloucester's exit, he admits the astrological predictions foretell that his character will be less than admirable, as it is: his conception took place "under the Dragon's tail," and he was born "under Ursa Major" (1.2.129-30). That is, the astrological signs of the Dragon and the Great Bear were dominant in the formation of his character. According to the astrologers, Edmund reveals, such conditions create a character that is "rough and lecherous" (131). Nor does he deny being so, asserting instead that he would have been as he is even if the "maidenl'est star in the firmament" had "twinkled" at his conception and birth (1.2.132-33). Edmund does not deny being a villain—he merely wants to take all the credit for his villainy himself. However, if Gloucester were a consistent astrologer, he would suspect Edmund because of his nativity. Gloucester's problems are caused, not by paying attention to the astrological signs, but by not paying enough attention to them.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Similarly, Lear's inability to see beyond his daughters' flattery is instrumental in his undoing. In sum, the same inability to read the signs that troubles <u>Julius Caesar</u>'s characters continues in <u>Lear</u>.

After Gloucester's exit, Edmund reaffirms his rejection of astrology. He claims,

This is the excellent foppery of the world, that when we are sick in fortune—often the surfeits of our own behavior—we make guilty of our disasters the sun, the moon, and stars, as if we were villains on necessity, fools by heavenly compulsion, knaves, thieves, and treachers by spherical predominance; drunkards, liars, and adulterers by an enforc'd obedience of planetary influence; and all that we are evil in, by a divine thrusting on. (1.2.118-126)

It is interesting that Edmund uses the phrase "disasters," the etymology of which denotes "bad stars," to describe the calamities that are blamed on the stars. By putting this phrase in Edmund's mouth, Shakespeare has him deny human independence of astrological influences even as he asserts it.

Of course, Edmund expresses very clearly what has rightly come to be the modern intellectual's skepticism toward astrological influences and the art of predicting them.⁵ Edmund's rejection of astrology parallels his attitude toward nature. Charles Frey says Edmund "allies himself with nature as free of custom or

art or providential design, a nature dominated by self interest and 'lusty stealth" (8). Yet Edmund's skeptical vision of reality is not endorsed by the play as a whole. For instance, it is important to notice that the kinds of events Gloucester predicts do in fact happen in the course of the play, although not as Gloucester first supposes. Furthermore, the argument opposing belief in astrological influences is made not only by a convicted liar but by a character who has already urged the gods to "stand up for bastards!" (1.2.22). Perhaps most significantly, the gods do not seem to "stand up" for him: in the end, Edmund perishes, and justly so. Not only is he evil, but he has also rejected the planetary influences through which the divine will was transmitted, sometimes haphazardly, to the earthly realm. Still, it is one thing to admit that, in the world of the play, astrological influences are real; it is quite another to predict them accurately. Gloucester is misled rather than enlightened by his interpretation of them. Ironically, as Arnold Shapiro points out, "Gloucester only learns the truth about his children when he is blinded" (89). Only after he is blinded does Gloucester realize his mistake: "I stumbled when I saw," he says (4.1.19). The predictions are true but harmful to him because he misunderstands them.

Suppose one rejects Edmund's argument against astrological prediction in light of his own questionable authority and the fact that the kinds of events Gloucester lists do happen; what, then, can be said against his argument that such predictions seem to

deny human freedom and responsibility in order to lay blame for the evils of the world on God or the gods? Such a problem was a familiar one for medieval theologians, whose formidable task it was to explain the existence of evil at all in a world supposedly created by a benevolent and all-powerful God. It seemed to make little difference whether God actually caused the evil or merely allowed it. Either way, a logical contradiction was implied, one which both Augustine and Thomas Aquinas, for example, were much concerned to avoid.⁶

The traitorous Edmund functions as a particular example of the logical problem of explaining the relationship between a good God and a world that harbors evil. In fact, Edmund contradicts himself; he calls on the gods to stand up for him, even while denying the effectiveness of the traditional astrological mechanism through which God or the gods were thought to influence human destiny. Edmund presumes to himself an unwarranted importance in the grand scheme of things when he disregards the power of destiny and fortune, which not even Prospero dares to do. Edmund only recognizes his mistake as he is dying, when he says, "The wheel [of fortune] is come full circle, I am here," meaning he is at the lowest ebb of fortune, where he began (5.3.175).

Thus, what happens to Edmund and the rest of <u>Lear</u>'s characters is not merely the result of chance. Instead, the evils are part of a system, whether the characters understand it or not. Walter Clyde Curry discusses the concepts of destiny, fortune,

nature, and providence as they function for Chaucer, who apparently learned them from Boethius. These concepts are also essential to understanding what goes on in <u>Lear</u>. "God, stable, indivisible, and benevolent," Curry explains,

> transmits the power of His will through successive stages of action, each one of which, as it is discovered to be further and further away from the unchangeable source, shows more and more diversity, change, and alteration than the one before. . . . First, God plans in His divine reason a universe as a complete and final whole, an entirely unified conception so infinite that it embraces every possible part—the creation of all things, the progressions of changing nature, all forms, causes, movements that have been or can be. (242)

This plan in the mind of God, Curry asserts, is what Chaucer and Boethius thought of as providence.

However, the plan must be implemented through some intermediates in order to traverse the distance between transcendent divinity and the mundane world. The task of transmission falls to the agencies of destiny, which is synonymous with nature in one sense, and fortune. Curry clarifies:

> God in his providence delegates executive powers to a blind force called Destiny, which administers in detail whatever has been planned.... Destiny is, therefore, the disposition and ordinance inherent in movable

things by which Providence knits all things together in their respective orders. . . . (243)

Finally, destiny, or nature, delegates some of its power to a "blind and capricious force," fortune (243). Fortune's function, Curry continues, is "to rule over the checkered careers of human beings in this world. And because this plane of activity is the farthest possible removed from . . . God, the chief qualities of Fortune are mutability, change, instability, and irrationality" (243). The idea of nature as the awkward instrument of God's perfect will is a widespread one. The seventeenth-century English philosopher Thomas Hobbes, for instance, echoes it when he sees no contradiction in defining nature as "the art whereby God hath made and governs the world" but then lists the reasons why human life is often "poor, nasty, brutish, and short" (342, 344).

For astrologers, Curry points out, the stars and planets take on the functions of fortune; the planets attract the most attention, since their movements are not fixed relative to each other or the stars but move in ways that seem to defy complete prediction (246). Thus the Moon, which is closest to the Earth and whose apparent motion is faster than that of any other planet save the Sun, formed a sort of border between the sphere in which the more constant agency of destiny was predominant and the lower realm of earthly fortune (247). Below the Moon, the music of the spheres was to be heard most clearly as "the wheel of fortune creaking against the greater wheel of nature," in Northrop Frye's phrase

(95). Not until Kepler's ellipses were applied to their orbits did the planets begin to behave in predictable and truly musical fashion. Thus, in the medieval scheme of things, the problem of evil is caused, not by God, but by the imperfection of the intervening spheres as transmitters of divine will.

Of course, it would be unwise to assume that Shakespeare's concepts of fortune and destiny are exact replicas of the older ones; at the very least, Shakespeare allows these concepts to be tested through the character of Edmund. Nevertheless, it seems to be Edmund's character, not the concepts of fortune and destiny, that fails the challenge. For a sufficiently insightful Shakespearean observer like Prospero or Cerimon, it is possible to read the will of God in an "auspicious star." Usually, however, Shakespearean astrological predictions enlighten ordinary mortals about as effectively as they enlighten poor Gloucester. These kinds of problems are as easily blamed on the would-be astrologer as on the science of astrology itself. Like Kent, those who are astrologically inclined but unskillful often "mar a curious tale in telling it^{*} (1.4.32). Taken as signs, the stars and planets are as apt to be misread as read correctly, as Gloucester's problems show.

Because the idea of nature is integral to the personal and cosmic realities the characters struggle with, it is unwise to discuss the cosmology of <u>Lear</u> without mentioning the play's various and complicated uses of the term "nature." The word

appears too frequently in Lear to discuss each instance. It is possible to examine some representative examples, however. For instance. Gloucester uses the term several times in his eclipseprediction speech. First, he observes, referring to the eclipses and their results, "Though the wisdom of nature can reason it thus and thus, yet nature finds itself scourg'd by the subsequent effects" (1.2.104-06). As the <u>Riverside</u> editor, Evans, points out in his gloss of the lines, "the wisdom of nature" refers to "natural philosophy" or "science" (1308). Hence "nature" in Gloucester's first use refers to the what we now call the physical world, including the stars and planets. (Perhaps our best synonym is "cosmos" or "universe"; but, of course, our cosmos and the language we use to describe it are very different than Shakespeare could have imagined.) To a Renaissance audience, however, particularly one sophisticated enough to know Chaucer or Boethius or other writers on the subject of astrological influences, "nature" might well have also conjured up the notion of destiny. Gloucester's belief that the eclipses will effect human behavior reinforces this interpretation. Nature, personified as the goddess Edmund allies himself with and the goddess Lear invokes to make Goneril barren, seems to be consistent with nature as destiny (1.2.1, 1.4.275).

Gloucester's reference to reasoning "thus and thus" also suggests some awareness of the debate about the arrangements of the Sun and Moon, perhaps along Ptolemaic or Copernican lines. Gloucester, however, in his reference to the scourging of nature, asserts only that, whatever the arrangement of the planets, the effects are the same: "nature" is scourged by eclipses. "Nature" here clearly has a different meaning than in Gloucester's first use. It seems to invoke earthly and human affairs—the mundane objects and events in the realm below the Moon, not the entire cosmos. Ironically, Gloucester, encouraged by Edmund, succeeds only partially in his first attempts at "reasoning it thus and thus" when he attempts to interpret the signs astrologically. If the heavens are meaningful, they are still only partially comprehensible. For <u>Lear</u>'s characters, the enigmatic turn of fortune's wheel is, like Lear himself, erratic and unpredictable.

A third use of "nature" appears a few lines later in the same speech by Gloucester. Among the effects of the eclipses, he lists the fall of the king "from [due to] bias of nature" (1.2.111). This use of the word could be taken to refer to nature as destiny, implying that Lear will fall because the heavens are against him. Alternately, it can also be taken to suggest something like "essence" or "constitution" or "character"; since Lear's character does seem to play an important part in his downfall, I incline to favor this meaning. A similar use of the term appears in Lear's assertion that he will "forget [his] nature" (1.5.32). Nature as essence is crucial to the conflicts in the play, since Lear's final indictment of his daughters before wandering off into the storm includes their being "unnatural hags" (2.4.278). Clearly, this use of the word carries normative connotations; people ought to act according to their natures. When they do not, problems ensue. Moreover, nature as character is conceptually distinct from nature as destiny, but nature as character, or at least its actions, according to Gloucester, can be influenced by nature as destiny. Characters' actions result from a complex interaction between their own natures and the nature of the world.

Thus, "nature" carries at least three (and possibly more) distinct connotations: essence or character, which carries the potential for normative implications; the mundane nature of the physical world; and cosmic nature, or destiny. By invoking these multiple senses of the word and coupling them with Gloucester's only partially successful attempts to predict mundane nature and character, Shakespeare highlights the difficulties the characters have in predicting the future or understanding the present. There is no benevolent Prospero, nor even a Cerimon, in this play to explain and control the conflicts. The relatively virtuous and sane characters, Kent, Cordelia, and Albany, are mostly ineffectual. Albany does not understand the true depths of Edmund's or the sisters' wickedness until it is too late. Cordelia, who chooses silence in the face of Lear's wrath instead of imitating her sisters' insincere hyperbole, cultivates a stoic acceptance of her fate that is reminiscent of both Pericles and Lear's Gloucester after his failed suicide attempt. As a stoic, however, her "love's more ponderous than [her] tongue," and so she is a relatively ineffective

language user (1.1.77-78). And Kent, in his proud rejection of all but simple, straightforward language, manages to get himself put in the stocks but will never read the complex signs in the heavens effectively.

Not only do predictions based on the Sun and Moon fail, but language itself, as a medium for prediction, is exhausted by Learian flattery and hyperbole by the end of the first scene. Lear takes Goneril's and Regan's blatant flattery at face value and then swears an oath so terrible it threatens to become parody when Cordelia does not imitate her sisters. He invokes

> the sacred radiance of the sun, The mysteries of Hecat and the night;

[And] all the operation of the orbs,

From who we do exist and cease to be to oversee his disowning of Cordelia (1.1.109-12). He then tells Kent he had "thought to set [his] rest / On her kind nursery," a vision of the future that now cannot come to pass (1.1.123-24). Despite his Brutus-like insistence on a one-to-one relationship between sign and reality, word and deed, he cannot live up to such a standard.

By proving himself as changeable as the Moon, Lear allies his personal fortunes as closely as possible with fortune, the erratic but inevitable force that works out human destiny according to a divine plan, albeit only by fits and starts. Fortune's unpredictability appears elsewhere than in Lear's whim.

For instance, in the third act, Cornwall blinds Gloucester because he suspects him of being allied with France. As even the servants who witness this cruelty suspect, fortune works on a system of rough justice; "I'll never care what wickedness I do, / If this man come to good," one of them says of Cornwall (3.7.99-100). But the Duke dies as a direct result of his blinding of Gloucester. Similarly, Regan, Goneril, and Edmund perish in the web of their own deceit. Lear has failed in his duties as King, not only by wielding power recklessly, banishing Kent and abusing Cordelia before abdicating, but also by leaving the country to an unstable sort of rule by committee. Like Prospero, he has failed as a ruler, but he does not develop the self-discipline to recover. His abdication is essentially a selfish act. If the king rules by divine right, he also bears a duty to rule that cannot be shirked merely because he is old and tired as Lear is. If death seems a harsh penalty, perhaps it appears so because of our inability to fully appreciate the responsibilities of kingship or the gravity of failure to meet them.

Cordelia's death is the odd element in this scheme of things, the proof of fortune's blindness. Sidney Homan's claim that Cordelia's death seems "both horrible and right" is very strange (Shakespeare's Theater 64). The horror of her death is readily apparent, but where is the rightness? She has scarcely done anything deserving of death. At most, her fault lies with Kent in bearing too much loyalty to her mad old father. All that can be said in defense of divinity is that it works through the inefficient media of destiny and fortune toward an ultimately benevolent goal. Thus, while the concepts of destiny and fortune do something to explain how evil comes to exist in the world, they do little to make actual events like Cordelia's death less troubling. Indeed, modern events such as the Holocaust, along with many other examples of evil on an immense scale that could be cited, certainly justify us in rejecting belief in a benevolent providence. But it is misguided to assume that, since <u>Lear</u> was written during the Renaissance, it rejects all such medieval attitudes and beliefs.

Specifically, it is a mistake to suppose that <u>King Lear</u>'s awareness of the potential for chaos and evil somehow makes its themes less medieval. Such potential is not an essentially modern discovery. In fact, the very development and proliferation of an idea such as the great chain of being provides evidence, not that medieval thinkers found the world to be obviously and unquestionably orderly, but that they needed a way to reconcile seemingly random natural events with the notion of a divine plan. As Zhang Xiaoyang points out, the idea of the chain of being "was useful in giving a sense of order amid the otherwise bewildering proliferation of natural phenomena" (83).

In other words, it seems likely that an idea such as the chain of being emerged as the solution to a perceived problem, not as a ready-made solution to a problem that was only discovered later. For example, the attempts of theologians like Aquinas and

Augustine to deal with the problem of evil show that the Middle Ages also recognized the menaces posed by life in the real world; they would not have been concerned to solve a problem that did not exist. Insofar as it echoes those concerns about providence and evil, **Lear** is as much a medieval play as a modern one. In fact, figures like Kepler, with his sustaining confidence that the planets moved according to some orderly and predictable plan, and Tycho Brahe, who hoped to establish the science of astrological prediction on a sound empirical basis, show that the Renaissance, like <u>The Tempest</u>, was in ways more, not less, optimistic than the Middle Ages about finding some kind of predictable system in nature.

Thus, Alessandro Serpieri is mistaken when he asserts, "King Lear gives a tragic shape to the breakdown of the medieval system of signs [representing the chain of being] which still precariously held the world view together in the Elizabethan age" ("Breakdown" 1071). Such a claim depends on an erroneous assumption that medieval thinkers, unlike the more worldly-wise Elizabethans, were unreasonably optimistic about the orderliness of the mundane world. In the Middle Ages, death and tragedy may have been caused by separation from God, and comedy may have been defined as reunion with God, but such causes made them no less tragic or comic. Perhaps Christian history is ultimately comic, given the belief in the inevitable triumph of good over evil and God over Satan, but the individual human life, which might as easily end in hell as paradise, still held vast potential for tragedy.

Consequently, <u>Lear</u>'s tragic nature does nothing to make it more clearly a product of the Renaissance or less medieval. As Arthur O. Lovejoy pointed out many years ago, the assumption that humanity's central location in the Ptolemaic universe was intended to give humankind an exalted status, a position above the vicissitudes of material existence on the chain of being, is wrong. Instead, humanity's terrestrial location was much closer to hell than to God; in fact, one of the objections to heliocentrism was that it made the Earth a star and moved it toward heaven, away from its appropriately wretched position surrounding hell (101-02). Nor were Copernicus and his followers denying that nature was orderly; they were, in fact, trying to perfect a vision of that order and the human place within it. As such, Copernicanism was an optimistic rearrangement, not an abolition, of the chain of being.

Serpieri is correct, however, in pointing out that there is a problem of identity in <u>King Lear</u>, typified by the mad, powerless ex-king ("Breakdown" 1071). Nature influences characters' identities, and nature below the Moon is unpredictable. Lear, for instance, is a king who gives up kingship but still wants to act king-like in ways: "Only we shall retain," he says as he abdicates the throne, "The name and all th' additions to a king" (1.1.135-36). The characters do what they do because they are who they are and because the situation is what it is, although they but poorly understand themselves and their situations. For instance, the reasons for the evil done by Regan, Goneril, and Cornwall are largely the result of their characters being what they are. The play does not give us any information about the positions of the stars and planets at the conception and birth of anyone but Edmund. Nevertheless, given the accuracy of astrological predictions elsewhere in the play, it seems likely that the sisters' births were under inauspicious stars. It is also reasonable to speculate that years of frustration with Lear's changeable nature have contributed to the deep resentment they feel toward their father.

The stars and fortune, then, are part of the situation, part of the influences the characters' "natures," in the sense of essences, react to. Edgar, for instance, employs several disguises after Edmund's plot sets him at odds with Gloucester. First, he disguises himself as Tom of Bedlam, a wandering lunatic, and resolves "Edgar I nothing am" (2.3.21). Nevertheless, the situation eventually gets the best of him. When he encounters Lear in his madness wandering with his fool in the storm after being locked out by Regan and Cornwall, Edgar (as Tom) participates in their mock arraignment and trial of Lear's daughters. When his pity for Lear's condition begins to get the best of him, he says, "My tears begin to take his part so much, / They mar my counterfeiting"

(3.5.60-61). The essential kindness of Edgar's nature cannot be disguised.

It is also in the guise of Tom that Edgar encounters his blinded father, Gloucester. Again, emotion nearly overcomes him. He resorts to his refrain, "Poor Tom's a-cold" and confesses in an aside, "I cannot daub it further" (4.1.52). The emotion of seeing his father's bleeding eyes easily reaches that part of him which is Edgar. In his next disguise, still accompanying his grieving, suicidal father, who does not yet recognize him, he appears as a peasant. It is in this disguise that he leads Gloucester to what, he tells him, are the cliffs of Dover, off of which Gloucester plans to leap. Gloucester "falls" unhurt from level ground, however. After the alleged fall, Edgar approaches yet again and tells Gloucester he saw him accompanied to the edge of the cliff by a fiend. Thus, he advises Gloucester, "Think that the clearest gods, who make them honors / Of men's impossibilities, have preserved thee" (4.6.72-74). Metaphorically and paradoxically, Edgar takes on himself the role of both demon tempting Gloucester to the sin of despair and the role of redeemer preserving him from death, all without revealing his real identity. He even uses the generic term "father" to address Gloucester, although it is clear that Gloucester does not recognize him, since Gloucester asks him who he is later in the scene (4.6.220).

Barbara Rosen has pointed out that Edgar "cannot speak his love" to his blinded father, offering Gloucester "a moral lesson"

against the futility of despair instead (194). Yet his emotion at finding his father blinded and repentant betrays him to the audience, if not to Gloucester: Edgar he still something is; strangely, though, he continues to deny that identity for some time. He can deny the name, but the essence of his character remains. Perhaps it is this fact that causes Gloucester to acknowledge that Tom reminds him of his son (4.1.31-34). Similarly, Lear cannot so easily abandon the habits of a king; his hundred retainers briefly provide a minor kingdom. Finally, Kent's paradoxical disguise for the sake of his loyalty to Lear is an apparent abandonment of his identity for the sake of retaining it. At their most basic, the conflicts of the play are the result of an incongruity between the characters' natures and their understanding of themselves and their situations.

If the two basic problems characters in <u>Lear</u> face are the challenges of knowing themselves and knowing the world, Lear himself fails at both of these. He fails to recognize that, as a creature below the Moon, his destiny is, in part, to change. Thus he fails to recognize what an impossible goal he sets for himself when he asserts to Burgundy, for instance, "I am firm" (1.1.245). He cannot possibly be firm. More seriously, he fails to recognize that, as king, his destiny is to rule—or, at least, to try to. If it seems contradictory that his destiny is both to rule and to change, the contradiction may be an example of the imperfect nature of human beings. There is no inherent reason why a king cannot

change in certain ways while still remaining as ruler, of course, yet Lear's too-changeable nature is what leads to his abdication. As the king goes, so the kingdom. Lear's madness is reflected in the political chaos that ensues after his abdication. This motif is another of the more medieval aspects of the play. If the king was seen as a link in the hierarchy between the order of heaven and the majority of humanity, then humanity severed from the divine influences that could come through the king threatened to fall into chaos.

Lear fails at knowing either himself or the world, at least until it is too late. He feels intensely the effects of the storm after wandering out into the night and having the doors locked behind him by Regan and Cornwall. Here, perhaps, he comes to an understanding of the basic human nature of even a king. For instance, referring to the "poor naked wretches" that commonly experience the elements, Lear says

O, I have ta'en

Too little care of this! Take physic, pomp, Expose thyself to feel what wretches feel, That thou may'st shake the superflux to them, And show the heavens more just. (3.4.32-36)

Similarly, he tells Edgar a few lines later, "unaccomodated man is no more but such a poor, bare, fork'd animal as thou art" (3.4.106-08). As a king, Lear has been flattered "like a dog," he comes to realize (4.5.96-105). Perhaps this flattery, like the flattery Brutus receives in <u>Julius Caesar</u>, contributes to Lear's downfall by making him overconfident and preventing him from developing an understanding of the darker side of existence. He has always been insulated from many of the common problems of human nature, but now he must face them with no intervening comforts. Human nature has something of animal nature in it, and the heavens, being just, make no special dispensations for royalty. By this time Lear achieves this realization, however, it is too late. The damage is done—he has delegated authority to those who abuse it, and there is no turning back.

Lear fails to understand either himself or the world adequately until it is too late, but Kent, Gloucester, and Edgar fail mainly at knowing the world. Edmund, Goneril, Regan, and Cornwall also fail this challenge, but in a different way. Kent, Gloucester, and Edgar fail because they do not realize the potential for evil in the world and the characters around them; they do not adequately challenge the appearances the world presents to them. Kent's loyalty to the old king simply will not let him recognize the new order of power. Edmund, Regan, Goneril, and Cornwall do not recognize that the Shakespearean world does not often allow unabashed evil to prosper. Just before putting the plot against his brother into action, Edmund complains that he is called base when his "shape" is "as true" as Edgar's; yet his actions and the forged letter he holds in his hand even as he speaks prove that, whatever else he is, he is not true in any of the usual senses (1.2.6). Insofar as Edmund actually believes himself true, he also fails the challenge of knowing himself.

Cordelia, on the other hand, understands from the start what no other character seems to, that she is at the mercy of forces beyond her control. She knows and represents herself as she is, a daughter who loves her father appropriately but is prepared to love her husband appropriately, too. In the first scene, when Lear expects her to flatter him more than her sisters do in order to receive "A third more opulent" part of the kingdom, Cordelia asks him, "Why have my sisters husbands, if they say / They love you all?" (1.1.86, 99-100). She expresses distress but not great surprise at the problems she anticipates: "What shall Cordelia speak? Love, and be silent," she tells herself as Lear begins the interrogation of the daughters in the first scene (1.1.62). Her understanding of herself and the world reduces the dramatic irony of what happens to her-she, unlike the other characters, understands as well as the audience what is happening to her.

Cordelia is caught up on the wheel of fortune, yet, unlike Prospero's understanding, which translates into power, Cordelia's understanding is the result of simple honesty. To borrow a phrase from Charles Stephens, her perceptions are "resolutely nontranscendental" (7). Thus she cannot save herself or her father from Edmund's fatal plot in the last act. However, her stoic acceptance lends her a certain dignity akin to that which

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Gloucester, in his post-despair condition, finally attains as well. As Sidney Homan suggests, part of "the play's final statement" is the "unassuming" assertion that "death stops pain" (<u>Shakespeare's</u> <u>Theater</u> 194). In Edgar's final comment, there is, in fact, a quiet reassurance, not that all will be well, but that the worst has come and gone: "we that are young / Shall never see so much, nor live so long" (5.3.327).

Thus the contradiction between human exaltedness, being the animals nearest divinity, and human wretchedness, being so close to hell, is personified in Lear. Shortly before he wanders out into the storm, Lear sends Gloucester to demand that Cornwall and Regan speak with him. When they do not respond as promptly as they would to a reigning king, he nearly loses his temper. Instead, though, he reflects that perhaps the Duke is ill, so he tells Gloucester, in a moment of clarity, "we are not ourselves / When nature, being oppress'd, commands, the mind / To suffer with the body" (2.4.107). The problem Lear describes is paradoxical, almost beyond language. If we are not ourselves, who can we be? But presumably, Lear means we are not our better selves when nature (fortune) subjects the mind and spirit to the infirmities of the physical being. Lear's use of "ourselves" here probably refers to something like the "King's Dignity," the divinely appointed and immortal part of the king which, according to English law, endured even when the mortal body fell victim to the infirmities of the flesh (Kermode 1251). At any rate, to inhabit the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

changeable realm beneath the moon, to crawl "between earth and heaven," in Hamlet's phrase (3.1.127-28), is to belong entirely to neither heaven nor earth, the eternal nor the temporal. It is both an ancient and a modern problem, one that extends into modernism through Descartes, for whom the immaterial soul could divorce itself from the mortal body. Contemporary philosophy inherits it as "the mind-body problem." The problem can be traced backward through the Middle Ages and ultimately to the Greek philosophers. The philosopher kings who, Plato hoped, would ascend to the eternal realm of the forms and then return to govern the temporal realm have not yet arrived.

Thus, like Lear and like philosophers since Plato, human beings seek the eternal, the unchanging, the universally true. Plato sought the eternal in the realm of the forms; medieval philosophy sought it in the mind of God, where it enshrined the Platonic forms; modern science seeks it in the depths of space and the rain forests and the minute quanta of energy that make up what we call matter. It remains to be seen whether the strange stories modern science tells will stand scrutiny or turn out instead to be clever imitations of a reality that eludes us, like the forged letters that get Gloucester and Brutus in trouble.

Like those in <u>Julius Caesar</u>, Lear's characters resemble people who may be living in a predictable, post-Copernican world but perceiving it through Ptolemaic conceptions. The most modern aspect of the play is not the breakdown of order, since the

potential for earthly chaos and evil was always inherent in medieval thought. Instead, the most modern aspect of the play involves the characters' lack of perception and inability to understand even the predictable aspects of their world. There is a basic order to the world, but they do not quite see what it is, and consequently they cannot predict events within that order. They cannot detect what fortune will or will not allow them to do. Thus Lear does not realize he will not be allowed to carry out his plans for a genteel royal retirement, and the sisters do not realize their wickedness is greater than fortune will allow. The "excellent foppery of the world," though, is not belief in a divinely appointed order; the mistake is to suppose that fortune's blindness means there is no basic order to the realm beneath the moon. Order exists in Lear, but there is no Prospero to accurately read the signs.

Chapter Six

Mad Prophets, Mad Lovers, and "virtuous sin": The Exhaustion of

Metaphor in Troilus and Cressida

Shakespeare's Troilus and Cressida (c. 1602) takes place in a world of contradiction, flattery, and paradox. The result is that language and metaphor are exhausted. To the characters, only actual events and the literal language that describes them retains meaning. However, the world of Troilus and Cressida is as systematic and predictable as that of the <u>Tempest</u>, although most of the characters do not understand the system. The Troyans, especially, are caught up in the workings of a universe they do not understand. The Troyan King Priam's daughter Cassandra is the single exception. A prophetess, not an astrologer, she somehow understands things well enough to predict the fall of Troy to the Greeks, but she is dismissed as mad. At the beginning of the play, the Greeks have been laying siege to Troy for seven years in an attempt to force the return of Menelaus's wife Helen, who has become the lover of Paris, one of the Troyan King Priam's sons. If Ulysses, a Greek commander, is an example of the Greeks' level of wisdom, they understand little more about how the world works than the Troyans do. Troilus and Cressida is a play about a world in crisis. The crisis, as I will show through an examination of how

characters reason and speak in comparison to what they do, is more one of knowledge and understanding than of order. The famous "degree" speech by Ulysses, one of the Greeks, will also be essential in analyzing the problem of understanding in the play.

The crisis results from the disconnection between order and rationality, on one hand, and the characters' actions on the other. For example, Hector, the Troyans' best fighter and another of Priam's sons, and Cressida exemplify what Howard Adams calls "sudden reversals in a chain of logic" (612). They act in ways that contradict their carefully reasoned speeches about how they should act. Cressida, the lover of Priam's son Troilus and the daughter of the Troyan priest Calchas who has gone over to the Greek side, understands very clearly her vulnerability in the relationship she has with Troilus. Nevertheless, her passions overcome her reason. Her uncle, Pandarus succeeds in introducing her to Troilus. Before this happens, however, she observes,

> Men prize the thing ungain'd more than it is. That she was never yet that ever knew Love got so sweet as when desire did sue. Therefore this maxim out of love I teach: Achievement is command, ungain'd beseech; Then though my heart's content firm love doth bear, Nothing of that shall from mine eyes appear. (1.2.89-95)

Instead of acting on her prudent maxim, however, Cressida finds her passion irresistible. Reason recommends one course, but action takes another. When Pandarus at last brings her together with Troilus, she asks, "Where is my wit? I know not what I speak" (3.2.151). A few lines later, she admits resignedly, "to be wise and love / Exceeds man's might; that dwells with gods above" (156-57). As her emotions cause her to lose her power of reasoning, she also loses control over language. Appropriately, therefore, the lovers retire to a bed that, as Pandarus says, "shall not speak of [their] pretty encounters" (3.2.208-209). Pandarus closes the scene by invoking Cupid to "grant all tongue-tied maidens" the same kind of dubious blessings Cressida has just received (210).

The movement away from ordinary language and reason can be debilitating, as it is for Cressida. Potentially, it can also warn of destruction, as it does for Cassandra and would for the other Troyans, if they were capable of grasping her vision. Under the influence of passion, Cressida struggles but slips into a prerational state, in which the logical consequences of her actions cease for the moment to matter. Cassandra, on the other hand, occupies a state beyond rationality in which she has a knowledge of the future that is inaccessible to the other characters. When the Troyan nobles hold council to decide whether to return Helen to the Greeks, Cassandra passes through and warns, "Troy burns, or else let Helen go" (2.2.112). She can only play a relatively

minor role, however, as the unheeded voice of fate, like the anonymous soothsayer in Julius Caesar. The other Troyan nobles pay no more heed to her than Troilus, who dismisses her as "our mad sister" (2.2.98).

If Cassandra is a true prophet, Troilus is a false one. Cressida exclaims, "Prophet may you be!" after Troilus has made some of his wildest promises of loyalty to her (3.2.183). Yet when the Troyan lords gather to debate their best course of action, it is Troilus who most fiercely opposes Hector's suggestion that Helen be returned. After Cassandra passes through predicting the fall of Troy if Helen is not returned, Troilus asserts,

> We may not think the justness of each act Such and no other than event doth form it, Nor once deject the courage of our minds Because Cassandra's mad. (2.2.119-22)

Paradoxically, Troilus's speech here suggests there must be some consistent and reliable standard for the "justness" of actions. This claim runs contrary to Troilus's earlier nominalistic rhetorical question, "What's aught but as 'tis valued?" in response to Hector's assertion that Helen "is not worth what she doth cost / The keeping" (2.2.51-52). Troilus is not only a false prophet, but he also seems to have at best a vague, ill-defined sense of values.

Hector, however, responds to Troilus's nominalism by arguing that something may be "precious of itself" as well as in being valued by someone (2.2.55). To this issue, Troilus makes no direct reply, launching instead into a discourse on the necessity of consistency for the sake of honor: if they return Helen, the Troyans will be "But thieves unworthy of a thing so stol'n / That in their country did [the Greeks] that disgrace / We fear to warrant in our own native place" (2.2.93-96). For Troilus, honor lies in consistency, not honesty, even though he reverses his own position on the origin of values. Although he cannot live up to it in his relationship with Cressida, Troilus aspires to a consistency reminiscent of Lear's Kent.

In the scene, Hector has a choice between two "prophets," Troilus or Cassandra; despite his best reasoning, he chooses the wrong one. As Sidney Homan describes the situation, there is a "fissure" between "theory and enactment" (<u>Shakespeare's Theater</u> 52). For instance, Hector's thoughts and actions seem to diverge, not converge, when he argues in favor of keeping Helen despite the many good reason for doing otherwise. He admits that,

> If Helen then be wife to Sparta's king, As it is known she is, these moral laws Of nature and of nations speak aloud To have her back returned. Thus to persist In doing wrong extenuates not wrong, But makes it much more heavy. Hector's opinion Is this in way of truth; yet never the less, My sprightly brethren, I propound to you In resolution to keep Helen still,

For 'tis a cause that hath no mean dependence

Upon our joint and several dignities. (2.2.183-93) Hector could not state more clearly or convincingly the arguments against keeping Helen. Yet, unexpectedly, in a turn as illogical as Brutus's decision to join the plot against Caesar, Hector succumbs to what Hawley Taylor calls Troilus's "ductile rhetoric" and resorts to the Troyan's "dignities" as motivation to keep Helen (86).

The Troyans deliberate renunciation of reason also infects their use of language. Later, when Cassandra and Andromache, Hector's wife, implore Hector to stay from the battle in which Cassandra knows he will be killed. Hector retorts, "Be gone, the gods have heard me swear" (5.3.15). Cassandra tells him, "It is the purpose that makes the vow, / But vows to every purpose must not hold" (5.3.22-3). This exchange reveals a major crux of the whole play. Perhaps Hector could profit from just one piece of advice from Julius Caesar's Brutus, which is echoed here by Cassandra: a good purpose should need no oaths to guide the character's action; it is better to break a vow to do the wrong thing than to compound the error by defending a mistake, such as the taking of Helen. Yet, the audience has already seen Hector decide to persist in the attitude of admiration and approval the Troyan nobles adopted when Helen was first brought to Troy. Cassandra argues for reasonable action over consistency. Hector dies for ignoring her advice.

Hector manages at least to achieve consistency by doing what he has sworn to do, but Troilus and Cressida cannot achieve even that much. The hyperbole of Troilus and Cressida's love scene is like Lear's ranting against his daughters—a sort of bluster, whistling in the dark, language compensating for impossible action. For example, Troilus insists his faithfulness to Cressida will become the standard for all future examples, providing the "similes" for "oath and big compare" (3.2.175-76). Along with other similes, though, he suggests lovers will compare their truthfulness with the truthfulness of "earth to th' centre" (3.2.179). The Riverside editor, Evans, glosses Troilus's reference to the centre as meaning a magnetic attraction of "objects on the surface of the earth the the center of the earth" (471). This interpretation, however, requires the gratuitous assumption that Troilus has, for no clear reason, omitted mentioning the "objects." It is much simpler to read the line as if Troilus, in this case, means to say what he says: that his love will be as faithful as the Earth itself is to the center—that is, the center of the solar system. To an Elizabethan audience, though, the comparison would sound badly chosen at best on Troilus's part. Copernicus's decentering of the Earth did not gain a great deal of popular support until after Galileo's telescopic discoveries dethroned Ptolemy; Troilus and Cressida was completed in 1602, well before the telescopic discoveries were announced in 1610. However, even

before the telescope appeared, Earth's constancy as the center was at least questionable, as Ulysses' "degree" speech shows.

Thus, like Hector and the rest of the Troyans, the lovers have put themselves in a situation where there are no attractive options. After Cressida is designated to be sent to her father Calchas in the Greek camp as part of an exchange of prisoners, it becomes possible for her and Troilus to keep their vows to each other only by openly proclaiming their illicit relationship. It is not clear, of course, that even Troilus's voice could save her, but as Priam's son, his opinion does seem to carry a good deal of weight with the Troyan leaders. Yet, presumably because of the illegitimacy of their affair, he does nothing to prevent her being taken, even though his affair with Cressida has less to object to than Paris's with Helen: at least Cressida is not married to someone else.

The many exaggerated vows of truth the lovers make to each other in their final parting speech are about to come to naught. Consequently, the language of their relationship breaks down into paradox and contradiction. Their world has been accurately described by Jeffrey Porter as an "unusual one" in which there is "much speech" and "little understanding" (59). For example, Troilus calls the "godly jealousy" he feels for Cressida a "virtuous sin" (4.4.80-81). Then, after he has seen Cressida seeming to flirt with her escort Diomedes in the Greek camp, Troilus asks rhetorically, "But if I tell how those two did [co-act], shall I not lie

in publishing a truth?" (5.2.118-19) Finally, Troilus sums up the situation very aptly: "O madness of discourse, / That cause sets up with and against itself!" (5.2.142-43) The situation, or cause, is such that rational language has lost its effectiveness. Only irrational language can serve at all when the rules of order that normally govern society have been consciously rejected.

The difficult question, of course, is what the normal order would look like. E. M. W. Tillyard once declared that Ulysses' "degree" speech, which Ulysses makes in the first act in an attempt to diagnose the Greeks' failure to sack Troy thus far, represents Shakespeare's "own version of order or degree" (32). He has been widely and justly reprimanded for this assertion (see Wiles 130, for example). Such a claim overlooks several critical issues, not the least of which is the assumption that any character speaks for the playwright himself. Even if we allow that questionable supposition, however, it seems likely that the character Shakespeare would choose to speak through would be better informed than Ulysses is. Ulysses does make some claims about order, yet he seems, if not to contradict himself, at least to hedge about a serious question his speech leaves open: do the heavens observe degree or not? Ulysses asserts,

> The heavens themselves, the planets, and this centre Observe degree, priority and place, Insisture, course, proportion, season, form, Office, and custom, in all line of order. (1.3.85-88)

It is a neat and tidy picture of order surrounding "this centre" that Ulysses describes thus far, one that he wants to recommend as suggesting the solution to the Greeks' inability thus far to sack Troy.

The problem is that this order does not always dominate in the earthly, social realm; nor is it at all clear that it really dominates in the heavens. As Ulysses himself admits,

> In evil mixture to disorder wander, What plagues and what portents, what mutiny! What raging of the sea, shaking of earth! Commotion in the winds! frights! Changes, horrors Divert and crack, rend and deracinate The unity and married calm of states Quite from their fixure! O, when degree is shak'd, Which is the ladder of all high designs, The enterprise is sick. (1.3.94-103)

But when the planets

Ulysses' hyperbole serves as a distraction from the contradiction in his theory, but the contradiction is there nevertheless: the intelligent design that ought to govern the heavens seems to "deracinate" the Earthly realm. Ulysses begins by asserting that the planets observe degree, yet he ends by suggesting that the wandering of the planets out of their places and into "evil mixture" is the source of the chaos that plagues the Greek camp. Which is

actually the case? Do the planets observe degree, or not? Ulysses does not know, although he desperately wants to believe they do.

Thus, the speech more clearly demonstrates what some Elizabethans hoped were true than what those who understood astronomy could claim to firmly believe. Copernicus's heliocentrism was relatively new, having been around for less than a century, and although there was optimism that heliocentrism could be brought into agreement with observation, such success would not be achieved until Kepler tackled the problem. His Epitome of Copernican Astronomy appeared in 1619, after the death of Shakespeare in 1616. At the time Shakespeare wrote <u>Troilus and Cressida</u>, nobody really knew what order the planets followed, although, almost as an article of faith, many were firmly convinced the heavens <u>must</u> conform to some specific, orderly design, whether geocentric or heliocentric. The hard question was whether human beings could ever understand that design, or whether it were not perhaps presumptuous even to inquire into such things. For thinkers like Martin Luther, it was enough to assume that the planets, like everything else, obeyed the will of God. For Copernicus, it seemed necessary to throw out the entire geocentric system and start over in order to have a hope of finding an accurate representation of the planetary order.

Whatever theory was proposed, however, the principles Ulysses asserts the heavens observe are precisely the principles that were problematic to astronomers. Like Carolyn Asp, most critics seem to assume that Ulysses "describes a cosmological, social, and psychological system in which value is determined by a fixed position in that system" (407). Similarly, T. M. Burvill sees Ulysses arguing for a society "as fixed and harmoniously stable as the Ptolemaic solar system" (192). Ulysses might agree with these interpretations of his argument. The problem with them is that they ignore some salient difficulties Ulysses glosses over. Renaissance thinkers knew the Ptolemaic system was not really as "fixed and harmoniously stable" as even its defenders could have wished. For instance, Ulysses' reference to "insisture," which Evans glosses as "steady continuance," and "course" and "season" were all sources of perplexity (455). The planets refused to maintain steady motion in any course astronomers before Kepler could describe; attempts to solve this problem were what led him to formulate his laws of elliptical, heliocentric planetary motion.

Similarly, the seasons presented problems. They were based on the apparent motion of the Sun, yet, as Osiander's introduction to Copernicus's <u>On the Revolutions</u> pointed out, that motion was difficult to understand precisely (507). The exact length of the seasons and the year itself were in question. As Thomas Kuhn summarizes, "the study of calendars brought the astronomer face to face with the inadequacy of existing computational techniques" (125). Thus, Ulysses' claims would have sounded questionable to anyone in Shakespeare's audience who was aware of the problems of Renaissance astronomy. If Ulysses represents a geocentric

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

system, the poor argument he makes can, on an informed reading, be more easily read as an indictment of geocentrism than as an endorsement of it.

In addition, Ulysses does not clearly endorse the Ptolemaic world view, although at first his reference to the Earth as center seems Ptolemaic. Critics do not notice it, perhaps because of an incomplete understanding of Renaissance science, but Ulysses' cosmology seems to correspond at least as well with Tycho's system as with Ptolemy's. Tycho retained the Earth in the center of the Sun's orbit, but he envisioned the other planets orbiting the Sun. This seems to be exactly what Ulysses describes when he asserts that "the glorious planet Sol" is "In noble eminence enthron'd . . . amidst the other" (1.3.89-91). Again, Ulysses' own words recall the competing theories surrounding the ideas he suggests as standards for behavior. The cosmic order as a metaphor for human order does not work much better for Ulysses than for Troilus. Ulysses is not merely condensing what all good Elizabethans believed about social order and the cosmos. Instead, as Richard Hillman summarizes, "Ulysses' conservative rhetoric thinly overlies a commitment to power broking premised on the assumption that social structures . . . are not fixed and stable but subject to manipulation and construction" (23).

Moreover, Ulysses' conclusion that Troy's successful resistance is all his fellow warrior Achilles' fault seems more like a juvenile exercise in political finger-pointing than a piece of

wisdom. When the Greek commander Nestor congratulates Ulysses on having "most wisely" discovered the cause of the Greek's problems, Agamemnon, the Greek general, asks what the solution is. Ulysses then launches into his description of Achilles' irreverence (1.3.138). Yet if the force of the play were to convince us that, in order to satisfy the cosmic order, Achilles should fight, his entry into the battle and his bout with Hector should have some grandeur to it. Instead, Achilles is presented simply as a bully, the leader of a gang of murderous thugs who slaughter Hector mercilessly. There is nothing noble about it. Vivian Thomas appropriately concludes that Achilles' "gloating over the body of Hector" provides "a powerful image of darkness descending on the scene" (98). If Ulysses' hopes for Greek victory hang on such a figure, what ought we to think of Ulysses?

Despite Ulysses' naïve conception of order, however, the play does seem to take place in an orderly universe. It is an order that only Cassandra understands well enough to issue accurate predictions. Of all the Shakespearean tellers of the future, we know the least about Cassandra's methods. She not only predicts the fall of Troy but also describes Hector's death in great detail: "look how thou diest, look how thy eye turns pale," she tells Hector as he prepares to keep his engagement with the Greeks (5.3.81, 68). Words perform a grimly referential function for Cassandra. Yet there is nothing in the play to suggest she is an astrologer, much less whether her methods assume a Copernican,

Tychonic, or Ptolemaic universe. Without endorsing a Copernican universe, the play seems to damn the earth-centered models by the faint praise of Ulysses' endorsement.

Unlike Lear, Troilus and Cressida does not have even an Edgar to provide a semblance of reassurance at the end of the play; instead, the last word goes to Pandarus, who can be taken as representative of the source of chaos: the Troyans are more faithful to their roles in battle than to their lovers, and the Greeks, when they are faithful at all, serve only imaginary ideals, the Helen who willingly deserted them or the order of degree that the planets refuse to follow. Thus, at the end of the play, Pandarus appropriately promises to "bequeath [his] diseases" to the audience. After all, disease is about all that is left. The metaphors that might have provided an understanding of the order of the world are exhausted, and their replacements do not yet appear at the end of the play.

Chapter Seven

"What mischief and what murther too": The Desertion of the Gods

in The First Part of Henry the Sixth

We take what we need from nature, Not what is there. We can only guess what is there." —John Ciardi, "No White Bird Sings" (51)

Lights come and go in the night sky. [People], troubled at last by the things they build, may toss in their sleep and dream bad dreams, or lie awake while the meteors whisper greenly overhead. But nowhere in all space or on a thousand worlds will there be [people] to share our loneliness. —Loren Eiseley, <u>The Immense Journey</u>

(162)

Written around 1590, <u>The First Part of Henry the Sixth (I</u> <u>Henry VI</u> hereafter) represents an attempt not so much to discover the natural order of the world as to build and impose an order on the world. The play therefore displays less optimism about characters' understanding of the cosmos than any other play examined in this study. Insofar as it suggests a cosmological system, the system is probably Ptolemaic. But <u>I Henry VI</u> has no Prospero or Cassandra with the knowledge or authority to make reliable judgments about such matters.

The play begins against the background of Henry the Fifth's death and ends with Machiavellian plotting for control of the new king and the country. In between, we witness the actions of Joan De Pucelle, a failed, evil French prophetess and sorceress who, fighting on the French side, lacks the virtue and power of a Prospero; English lords who are either cowardly or factious, like Falstaff and Somerset, or who die noble but futile deaths, like the Talbots; and a young English King, Henry VI, who is too easily swayed by his advisors. Prophecy, astrology, and war thus become awkward tools with which both the English and the French struggle unsuccessfully to convince themselves that the world can be made to conform to their visions of it. Remarkably, this earliest of Shakespeare's plays seems clearly to refute the conventions designed to affirm the order and predictability of the world. This fact alone makes it worthy of more critical attention than it has received.

Herschel Baker has written that Shakespeare chose for I <u>Henry VI</u> a "patriotic theme" expounded by Augustine and endorsed by Edward Hall, namely the idea that "history . . . reveals a steady moral purpose because its course is set by God" (588, 589). This divine purpose allegedly culminates in the "glories of the Tudors" (589). Baker's claim seems difficult to support, at least based on the evidence of the first of the <u>Henry</u> plays. True, the devilish Joan is vanquished, but the factious and Machiavellian English boast few moral giants. The characters' various attempts to impose an order on the world, divinely sanctioned or not, tend to fail or go astray. In the first act, for example, we find the Duke of Bedford, uncle to Henry VI, trying to invoke heavenly sympathy for the English, who are mourning the death of Henry the Fifth. Bedford calls for comets to "brandish" their "crystal tresses in the sky" and "scourge the bad revolting stars / That have consented unto Henry's death" (1.1.4-5).

The comets do not appear, however; instead, the stars, like Joan's familiars, seem to remain aloof. The Duke of Gloucester, another uncle to Henry VI and his Protector, echoes Bedford's call for heavenly sympathy by claiming that Henry's "brandish'd sword did blind men with his beams" (1.1.23, 25-28). However, the Duke of Exeter, a great-uncle of Henry VI, rejects the tendency to "curse the planets of mishap" or think the "subtile-witted French . . . / By magic verses have contriv'd his [Henry the Fifth's] end" (1.1.10, 23-8). The comets do not come, and Henry the Fifth is dead. Thus, the tendency of the play from the very start is to cast doubt on mere "brandishing," whether of comets, swords, or planets; it is action, not words, that will carry the day. In fact, the influence of any supernatural forces seems minimal. For example, when the Bishop of Winchester, another great-uncle of Henry VI, becomes Cardinal, it is through the very mundane agency of a bribe, not a divine appointment. It is human endeavor, not divine or supernatural influence, that will create whatever order reigns at last.

Instead of a cosmic order prescribing the outcome of things, the earthly circumstances are so heavily stacked against the English that no planetary influences are necessary to insure defeat. The specifically astrological influences invoked by Bedford in favor of the English in the form of comets do not appear, and the messengers of bad news that appear immediately tend to dash the English hopes of heavenly aid. For instance, three messengers

bring more bad news to the lords who are mourning Henry the Fifth's death at the opening of the play. The third messenger explains the recent defeat of Lord Talbot, the most valiant of the English generals:

> The circumstance I'll tell you more at large. The tenth of August last this dreadful lord, Retiring from the siege of Orleance. Having full scarce six thousand in his troop, By three and twenty thousand of the French

Was round encompassed, and set upon. (1.1.109-14) Outnumbering Talbot by about four to one, the French should require no cosmic intervention to win the battle. The forces that fashion the outcome for English and French alike are terrestrial and military, not astrological or supernatural. If there appeared in the play a true prophet, soothsayer, or astrologer to foretell these events by reading the signs, there would be some reason to argue that they are the result of cosmically arranged destiny like the events of the later plays. Instead, we are only given the unreliable Joan. Thus, the general tendency of the play is toward a world in which supernatural influences are absent.

For example, late in the fourth act, both Talbot, who has been newly created Earl of Shrewsbury for his earlier efforts, and his son die after the battle with the French forces at Bordeaux. Sir William Lucy, an English knight, enters and, demanding to know where the elder Talbot is, reels off an eleven-line litany of

Talbot's appointments. He lists among them a knighthood in the "noble Order of Saint George / Worthy Saint Michael, and the Golden Fleece" (4.7.68-69). Despite his implied connection to saints, however, Talbot is already dead, even as Lucy provides his resume-like eulogy.

Similarly, Talbot earlier blames the English losses at Bordeaux on "malignant and ill-boding stars" (4.5.6). A few lines earlier, however, the audience has already seen that the real reason for Talbot's defeat is the feuding of the English lords Richard Plantagenet, who becomes the Duke of York, and John Beauford, first the Earl and later the Duke of Somerset. The disagreements between these two will lead to the War of the Roses. Because he sees Talbot's battle at Bordeaux as an enterprise designed by York for his own benefit, Somerset refuses to send reinforcements to help Talbot until it is too late (4.4.1-9). Lucy summarizes the problem very aptly: "The fraud of England, not the force of France, / Hath now entrapp'd the noble-minded Talbot" (4.4.36-37).

Moreover, Talbot's God does not seem much more reliable than Joan's evil familiar spirits, who will appear later, only to desert her. At the taking of Orleance in act two, Talbot, having heard of Joan, rejects her importance. He says of the French, "Well, let them practice and converse with spirits. / God is our fortress, in whose conquering name / Let us resolve to scale their flinty bulwarks" (2.1.25-27). The English do indeed take the city,

seeming to bolster Talbot's view that their cause is endorsed by God. And yet the collective character of the English themselves is ambiguous at best; the factions that continue to haunt their efforts, most notably between York and Somerset, will not be resolved until several more plays and murders have transpired. Even this first play in the cycle ends ambiguously, with the Earl of Suffolk plotting to control the crown by controlling the betrothed queen, Margaret, whose marriage to Henry he has just arranged. Talbot is dead, seemingly deserted by God, just as Joan will later be deserted by her spirits. Kurt Tetzeli Von Rosador sums up the situation well: <u>I Henry VI</u>'s "world is left to the intrigues of the factions [and] to the ambitious schemers" (9).

Thus, in the end, Talbot's invocation of God against the spirits seems to carry no more true moral force than the speculation offered by the Bastard of Orleance, one of the French commanders, a few lines later: "I think this Talbot be a fiend of hell" (2.1.46). Shakespeare's partisan English audiences would no doubt have automatically perceived Talbot sympathetically and the French as villains, but the implication is clear nevertheless: in war, language is the tool with which the other side is always demonized. The contradictions implied by such language exhausts its potential as a tool to encourage supernatural involvement in human affairs as fully as Lear's hyperbole. Thus, the religious and astrological patterns are ineffective or irrelevant in forming the characters' destinies in the mundane realm. More than Lear, I <u>Henry VI</u> shows us a world deserted by the gods. For modern readers, the play lacks a central character with whom we sympathize deeply enough to become as emotionally involved as in <u>Lear</u>, but the vision of this play is as dark or perhaps darker.

Not only are the human beings left to circumstance and their own efforts, but those efforts are also generally misguided. As Exeter comments after Henry has exhorted York and Somerset to stop their quarrel, the English factions obviously threaten everyone's well-being. Exeter observes,

... no simple man that sees
This jarring discord of nobility,
This shouldering of each other in the court,
This factious bandying of their favorites,
But that it doth presage some ill event.
'Tis much, when sceptres are in children's hands;
But more, when envy breeds unkind division:
There comes the ruin, there begins confusion.

(4.1.187-94)

The dangers posed by the division is obvious even to simple minds. Ideally, loyalty to the King, if nothing else, should quell the disagreements.

The danger of disloyalty and factiousness is emphasized by the powers of Joan la Pucelle and their source. Joan herself becomes the victim of disloyalty on the part of her spirits. Malign and unreliable, Joan is the opposite of <u>Troilus and Cressida</u>'s

Cassandra. Gabriele Jackson has called Joan "a coarse caricature, an exemplar of authorial chauvinism both national and sexual, or at best a foil to set off the chivalric English heroes" (40). Whichever of these interpretations one prefers, Joan's supernatural powers seem reliable at first, as the French succeed in taking Rouen in act three. They are immediately vanquished by Talbot, but only to score another victory for the French side by doing what Joan predicts they will. As the French try to regroup after their failure at Rouen, Joan reveals her plan: "By fair persuasion, mix'd with sug'red words, / We will entice the Duke of Burgundy / To leave the Talbot and to follow us" (3.3.18-20). As a prophecy, Joan's prediction that Burgundy will be persuaded to join the French proves accurate. Burgundy describes his capitulation to Joan's persuasion in curiously ambiguous terms, however: "Either she hath bewitch'd me with her words, / Or nature makes me suddenly relent" (3.3.58-59; my emphasis). Even Burgundy himself cannot be certain whether it is merely his own cowardly, Falstaff-like human nature or Joan's witchcraft that makes him desert the English cause. Or perhaps Joan's "sug'red words" alone are enough to persuade Burgundy.

Charles Frey has pointed out that Joan's tongue connects her directly to the devil (115). It is not a connection that will endure for long, however. Even the fiends eventually leave the humans to their own devices. When Joan first introduces herself, she claims virtual omniscience: "Be not amaz'd," she tells the

French Dolphin, Charles, when he is apparently surprised that she recognizes him. "There's nothing hid from me," she explains (1.2.68). As a prophetess whose knowledge comes through the agency of spirits, she inevitably reminds us of Prospero. There are few real similarities, however. Unlike Prospero, whose capacity as an "artist" is apparent from the first, Joan claims she is "untrain'd in any kind of art" (1.2.73). Instead, she asserts, her knowledge comes from "Heaven and our Lady gracious," who have chosen to "shine" on her "contemptible estate" (1.2.74-75). But when the audience later learns that her powers come from the fiends, the knowledge confirms her as a liar as well as one who consorts with spirits.

Moreover, the spirits Joan traffics with bear more resemblance to Faustus's evil Mephistopheles than to Prospero's benevolent Ariel. When she summons her spirits in the final act, as the English are rallying and the French are on the run, it becomes clear that they are evil, if there were any doubt. Joan addresses them as "substitutes / Under the lordly Monarch of the North" that have been "cull'd / Out of the powerful regions under the earth" (5.3.5-6, 10-11). Joan's offer of cannibalistic sacrifice and even her soul avails her nothing with them. Instead, according to the stage directions, "They walk, and speak not" (5.3.12). A few lines later, they "hang their heads" and then "shake their heads" (5.3.17, 19). The spirits' willingness to communicate only through the simplest sign language, and then only negatively, seems to nullify the possibility of language as a predictive medium at the same time it nullifies hope that the spirits will influence the outcome of human affairs.

Other attempts at something like prophecy in the play are only common sense predictions. In Shakespeare's English, the word "prophesy" could refer to the making of predictions based on supernatural knowledge or understanding beyond the perception of ordinary mortals. However, it did not necessarily carry such connotations and could also refer to simple predictions of the more or less likely or self-evident. For instance, Exeter's recalls that "Henry the Fift did sometime prophesy" about Winchester that "'If once he come to be a cardinal, / He'll make his cap co-equal with the crown" (5.1.31-33). Such an assertion is more a perceptive assessment of Winchester's ambitious character than a prophesy in the sense of the word that implies supernatural insight. Similarly, after Plantagenet (who will become York) and Somerset confront each other in the Temple Garden, Warwick asserts,

> And here I prophesy: this brawl to-day Grown to this faction in the Temple Garden, Shall send between the Red Rose and the White A thousand souls to death and deadly night.

> > (2.4.124-27)

Again, this "prophecy" is more like the obvious, common sense assertion that nothing good can come of enmity between two such powerful figures as Somerset and Plantagenet. In contrast to

Cassandra's vision of Hector's death in <u>Troilus and Cressida</u>, for instance, Warwick's prediction seems to require little supernatural insight. No reading of cosmic signs is involved. In fact, there are no cosmic signs.

Nor do the events of the play seen to require any supernatural influences to keep the plot in motion. In Julius Caesar, it becomes clear that Caesar must die if he ignores the cosmic signs; the cosmic order requires it, as the unheeded soothsayer sees. The plot to deceive Brutus then becomes the means whereby Caesar's appointed destiny is worked out. Similarly, Lear's division of the kingdom is the beginning of the process whereby Gloucester's astrological predictions come to pass. The human beings always play their part in the forming of their destiny, yet in those plays the destiny is also written in the heavens for those who can read it. Often in Shakespeare's plays, "the bare reality of consciousness faces the inexorable moral laws of the cosmic order' (Khanna 92). Such an order does not appear in I Henry VI, however, either to the characters or to the modern reader. The only supernatural forces that actually appear are Joan's fiends, and they are forces of disorder, not order.

The fear that the gods will abandon us is one of the driving forces of prophecy based on supernatural knowledge or insight. The idea of prophecy, of predictions of the future inspired by uncanny forces, is designed to reassure us that the gods are at least aware of what happens to human beings, even if they do not

always seem to be concerned enough to interfere directly in human destiny. Joan seems to believe her "gods," the fiends, are not only aware of her situation but will actually influence events in her favor. They do neither. If a destiny determined by cosmic forces, either Copernican or Ptolemaic, is impossible to challenge successfully, there may still be some comfort in knowing the worst before it happens; even this minimal comfort is denied to the characters in I Henry VI. None of the characters can make any sound claim to know whether the cosmos are Ptolemaic or Copernican. Indeed, they all have more immediate problems. The dominant attitude of the play toward such questions seems to be one of skepticism. If the play endorses any cosmic order, it is probably vaguely Ptolemaic. The characters are all at the center of their own poorly understood universe. What, if anything, lies beyond the appearances of their present, immediate environment remains a mystery.

Chapter Eight

Shakespeare and the Big Questions

Now I knew: things are entirely what they appear to be and behind them . . . there is nothing. Roquentin in Jean-Paul Sartre's <u>Nausea</u> (96)

He grew up believing in God, angels, demons, afreets, djinns, as matter-of-factly as if they were bullock carts or lampposts, and it struck him as a failure in his own sight that he had never seen a ghost. He would dream of discovering a magic optometrist from whom he would purchase a pair of green-tinged spectacles. . . [A]fter that he would be able to see through the dense, blinding air to the fabulous world beneath.

Salman Rushdie, <u>The Satanic Verses</u> (21-22)

A major part of the history of literature and ideas is concerned with possible answers to three of the big questions that interest Shakespeare. The questions are what is humanity like, what is the world like, and what is the relationship between them? Is humanity at home in the world, like the older Prospero, or as lost and confused as Brutus and Lear? Indeed, is there a knowable world at all beyond our speculations, or must we make do with the sum of our own perceptions and judgments? As Troilus asks, "What's aught but as 'tis valued?" (2.2.52)

Depending on which of these questions they are most interested in answering, characters in the world of Shakespeare's plays experience two kinds of crises: crises of order and crises of understanding. The tragedies <u>King Lear</u>, <u>Julius Caesar</u>, and <u>Troilus and Cressida</u> (considering it for the moment as tragedy⁷) depict crises of knowledge more than of order. The disorder in human affairs occurs because most of the characters fail to perceive or understand the cosmic order, not because the cosmos lacks order. <u>I Henry VI</u> lays both crises out in stark relief—the only order will be the one imposed by military force and intrigue. The world of that play is a chaotic one haunted by fiends and rebellious factions; no Prospero appears as the agent of a cosmic order, and there are no prophets of the caliber of Cassandra or even Julius Caesar's soothsayer. In the romantic comedies, beginning with <u>Pericles</u>, Shakespeare starts to envision a solution to the problems of both order and knowledge in the form of the wise, benevolent, and powerful authority figure, Cerimon. <u>The Tempest</u> brings this vision to maturity and resolves both crises through the more dominant Prospero.

Thus, insofar as optimism about order and predictability are associated with Copernican astronomy, it seems fair to say that the later plays are more clearly Copernican than the earlier ones. The plays show that Shakespeare knew and thought a good deal about astronomy and astrology. Moreover, if <u>Troilus and</u> <u>Cressida</u>'s Ulysses is an advocate of some form of geocentrism, it seems unlikely that Shakespeare would have chosen such an unpersuasive figure to defend his own beliefs. If Shakespeare rejected geocentrism, then he may have found Copernicanism a reasonable alternative to skepticism.

Such a conclusion is speculative, however. It may be that Shakespeare himself was undecided and unconcerned about the actual arrangement of the planets but found the ideas useful for dramatic purposes. In the end, the emphasis must be on the plays, and the world they occupy seems more clearly Copernican than anything else. When order and understanding triumph, as in <u>The Tempest</u>, the result is comedy. When either understanding or order falter, one of two conditions result: either tragedy, as <u>Julius Caesar</u> and <u>Lear</u> demonstrate, or the darker, more tragic side of history that is shown in <u>I Henry VI</u>. Which, if any, of these comes closest to discovering what the world is really like? Perhaps, as Hamlet said, "The play's the thing" (2.2.604); we who read and act must choose which play and what genre.

In the end, however, the categories of genre are artificial limits which life in the world does not always recognize. Part of the triumph of English history, even though it had a dark side that may have resembled Shakespeare's version, was that it produced Shakespeare and his audiences. Though Troy is fallen and Hector is dead, the victory of <u>Troilus and Cressida</u> is the reassurance that, despite human fumbling within it, there is a detectable cosmic order that will not be rebuffed. Conversely, even in <u>Pericles</u> and <u>The Tempest</u>, there is a sense of loss—despite their reunion, Pericles, Thaisa, and Marina will never recover the years they were lost to each other. Nor will we see Ariel again, and Prospero's political duties will be a poor substitute for his magic books. Most of all, Miranda's innocence will be lost as she discovers what kind of people really inhabit the brave new world.

Tess Gallagher writes, "Categories, you see, / like us . . . are simply errands. To be / fulfilled, yet transitory" (79). Perhaps

it is Shakespeare's ability to fill the categories of his genres so fully that they threaten to spill over into something else that keeps us returning to the plays nearly four hundred years after his death. The plays, it seems, are <u>still</u> the things.

Notes

¹Accuracy requires one to acknowledge that the difficulties of predicting planetary positions were not entirely solved until the twentieth century. Despite Kepler's ellipses, the gravity of the still-undiscovered planets Uranus and Neptune continued to influence, or "perturb," the orbits of the other planets, most noticeably Saturn, to which they pass the closest. Astronomers realized some undiscovered planet or planets might be the cause and set about trying to calculate where such planets might be, based on the movements of Saturn. The discoveries of Uranus and, more importantly, Neptune very near the positions Newtonian calculations predicted were an important confirmation for the theory of gravity. Still, the planets continued to wander from their predicted positions by tiny but definite and detectable amounts. It was hoped that the discovery of Pluto in 1930 would explain the perturbations, but Pluto's mass turned out to be much too small. Finally, Einstein's theory of relativity, which changes the calculation for gravity very slightly, brought prediction into agreement with observation.

²All quotations from Shakespeare's plays come from <u>The</u> <u>Riverside Shakespeare</u> and are cited by act, scene, and line.

³Postcolonialist and feminist critics may object, of course, to affirmations of Prospero's virtue. For a review of criticism questioning the virtue of Prospero and the world view he represents, see Michael Payne 44-45 especially. See also Jeanne Delbaere-Garant and Lorie Jerrell Leininger, for example. I have no quarrel with such approaches, which point out that Prospero enslaves even the good spirits and that his treatment of Miranda is relentlessly patriarchal. I see such issues as largely irrelevant to the historical concerns of this study.

⁴Cassius says he will throw letters in Brutus's window, and what Brutus reads seems as if it could be from several letters, yet the stage direction following 2.1.45 refers only to "the letter." Perhaps the stage direction ought to be changed to the plural.

⁵For a review of some criticisms of astrology by Shakespeare's contemporaries, see Elton 156-57.

⁶For more on this problem, see Aquinas's discussion of "The Cause of Evil" (267-79) in the <u>Summa Theologica</u> and Augustine's defense of his claim that "Every Being is Good" in chapters 12-16, Book 7, of the <u>Confessions</u> (172-75).

⁷ Anne Barton has reviewed the problem of assigning <u>Troilus</u> <u>and Cressida</u> definitely to one genre or another. She points out that, if the play is tragedy, the Troyans are to be seen as "the keepers of important human values tragically destroyed by an adverse fate." However, the title of the play as it was published in 1609 referrs to it as a "history," while the preface of that publication claims the play is "comical" (444). Others have observed that the play contains elements of satire (444-45). The fact is that the play is all of these. Attempts to answer such questions are useful mainly because they help us to a fuller understanding of the play as a whole. For purposes of this study, the tragic elements are most interesting, as Hector's tragic and willful blindness to his fate helps to cause that fate.

- Adams, Howard C. "The Poetry of Shakespeare's <u>Troilus and</u> <u>Cressida</u>." <u>Shakespeare and Renaissance Association:</u> Selected Papers 8 (1983): 61.
- Anderson, Douglas R. <u>Strands of System: The Philosophy of</u> <u>Charles Peirce</u>. West Lafayette: Purdue UP, 1995.
- Aquinas, Thomas. <u>Introduction to St. Thomas Aquinas</u>. Ed. Anton C. Pegis. New York: Modern Library, 1948.
- Asp, Carolyn. "In Defense of Cressida." <u>Studies in Philology</u> 74 (1977): 406-17.
- Augustine. <u>The Confessions</u>. Trans. John K. Ryan. New York: Doubleday, 1960.
- Ayer, Alfred Jules. <u>Language, Truth, and Logic</u>. New York: Dover, 1952.
- Baker, Herschel. Introduction to <u>Henry VI, Parts I, 2, and 3</u>. Evans 587-93.
- Barton, Anne. "Julius Caesar and Coriolanus: Shakespeare's
 Roman World of Words." Shakespeare's Craft: Eight
 Lectures. Ed. Phillip H. Highfill, Jr. Carbondale: Southern
 Illinois UP, 1982. 25-47.
- ---. "Troilus and Cressida." Evans 443-47.
- Blackwell, Richard J. <u>Galileo, Bellarmine, and the Bible</u>. Notre Dame: U of Notre Dame P, 1991.
- Blits, Jan H. "Caesarism and the End of Republican Rome." Journal of Politics 43 (1981): 40-55.

- Bloom, Harold. <u>William Shakespeare's</u> Julius Caesar. New York: Chelsea, 1988.
- ---. <u>William Shakespeare's</u> The Tempest. New York: Chelsea, 1988.
- Boas, George. The History of Ideas. New York: Scribner's, 1969.
- Burvill, Tom. "Ulysses on 'Degree'—Shakespeare's Doctrine of Political Order?" <u>Parergon</u> 2 (1984): 191-203.
- Capp, Bernard. English Almanacs 1500-1800: Astrology and the <u>Popular Press</u>. Ithaca: Cornell UP, 1979.
- Chaucer, Geoffrey. <u>A Treatise on the Astrolabe</u>. <u>The Complete</u> <u>Works of Geoffrey Chaucer</u>. Ed. Walter W. Skeat. Oxford: Clarendon, 1954. 175-241.
- Ciardi, John. "No White Bird Sings." <u>Selected Poems</u>. Fayetteville: U of Arkansas P, 1985. 50-51.
- ---. "The Starry Heavens, the Moral Law." <u>Person to Person</u>. New Brunswick: Rutgers UP, 1964. 76-77.
- Copernicus, Nicolaus. <u>On the Revolutions of the Heavenly</u> <u>Spheres</u>. Trans. Charles Wallis. Chicago: Encyclopedia Britannica, 1939.
- Crawford, John W. <u>Discourse: Essays in English and American</u> <u>Literature</u>. Amsterdam: Rodopi, 1978.
- Crowe, Michael J. <u>Theories of the World from Antiquity to the</u> <u>Copernican Revolution</u>. New York: Dover, 1990.
- Curry, Walter Clyde. <u>Chaucer and the Medieval Sciences</u>. New York: Barnes, 1960.

- Delbaere-Garant, Jeanne. "Prospero To-day: Magus, Monster, or Patriarch?" <u>Communiquer et Traduire: Hommages a Jean</u> <u>Dierickx/Communicating and Translating: Essays in Honor</u> <u>of Jean Dierickx</u>. Eds. Gilbert Debusscher and Jean-Pierre Van Noppern. Bruxelles: Eds de l'Uiv. de Bruxelles, 1985. 293-302.
- Dickens, A. G. <u>Reformation and Society in Sixteenth Century</u> Europe. London: Harcourt, 1966.
- Dillard, Annie. "Total Eclipse." <u>The Natural World</u>. Eds. Marjorie Ford and Jon Ford. Boston: Houghton, 1999. 31-42.

Drake, Stillman. Galileo. New York: Hill, 1980.

- Eagleton, Terence. <u>Shakespeare and Society</u>. New York: Schocken, 1967.
- Eiseley, Loren. <u>The Immense Journey</u>. New York: Vintage-Random, 1957.
- Eisner, Sigmund. Introduction. <u>The Kalendarium of Nicholas of</u> <u>Lynn</u>. By Nicholas of Lynn. Athens: U of Georgia P, 1980. 1-34.
- Elton, W. R. King Lear <u>and the Gods</u>. San Marino: Huntington Library, 1968.

Eshelman, Clayton. "And if after So Many Gods." Under World

Emerson, Ralph Waldo. "Self-Reliance." <u>The Norton Anthology</u> <u>of American Literature</u>. Eds. Nina Baym, et al. 4th ed. New York: Norton, 1995. 492-508.

Arrest. Santa Rosa: Black Sparrow, 1994. 85.

- Evans, G. Blakemore, ed. <u>The Riverside Shakespeare</u>. Boston: Houghton, 1974.
- Felperin, Howard. <u>Shakespearean Romance</u>. Princeton: Princeton UP, 1972.
- Finocchiaro, Maurice A. <u>The Galileo Affair: A Documentary</u> <u>History</u>. Berkeley: U of California P, 1989.
- Frey, Charles H. <u>Experiencing Shakespeare: Essays on Text</u>, <u>Classroom, and Performance</u>. Columbia: U of Missouri P, 1988.
- Frost, Robert. "How Hard It Is to Keep from Being King When It's in You and in the Situation." <u>In the Clearing</u>. New York: Holt, 1962. 74-84.
- Frye, Northrop. "The Tragedy of Order: Julius Caesar." <u>Twentieth</u> <u>Century Interpretations of</u> Julius Caesar. Ed. Leonard F. Dean. Englewood Cliffs: Prentice-Hall, 1968. 95-102.
- Garber, Marjorie. "The Eye of the Storm: Structure and Myth in <u>The Tempest.</u>" Bloom, <u>The Tempest</u> 43-64.
- Gallagher, Tess. "From Moss-Light to Hopper with Love." <u>Edward</u> <u>Hopper and the American Imagination</u>. New York: Whitney Museum, 1995. 77-80.
- Gingerich, Owen. <u>The Eye of Heaven: Ptolemy, Copernicus, Kepler</u>. New York: American Institute of Physics, 1993.
- Graney, Kathleen. "New Maps for Old: A Topological Approach to 'The Faerie Queen' and Shakespeare's History Plays." Diss. Auburn U, 1994. <u>DAI</u> 55 (1995): 2841A.

- Grant, Edward. <u>Planets, Stars, and Orbs: The Medieval Cosmos,</u> <u>1200-1687</u>. Cambridge: Cambridge UP, 1994.
- Greenblatt, Stephen. "Learning to Curse: Linguistic Colonialism in <u>The Tempest</u>. Bloom, <u>The Tempest</u> 65-68.
- Greene, Robert. <u>The Honorable Historie of frier Bacon, and frier</u> <u>Bongay</u>. <u>English Drama 1580-1642</u>. Eds. C. F. Tucker Brooke and Nathaniel Burton Paradise. Lexington: D. C. Heath, 1933. 69-96.
- Harris, Anthony. <u>Night's Black Agents: Witchcraft and Magic</u> <u>in Seventeenth-Century English Drama</u>. Rowman: Manchester UP, 1980.
- Helms, Lorraine. "The Saint in the Brothel: Or, Eloquence Rewarded." <u>Shakespeare Quarterly</u> 41 (1990): 319-32.
- Hillman, Richard. "Chaucer's Franklin's Magician and <u>The</u> <u>Tempest</u>: An Influence Beyond Appearances?" <u>Shakespeare</u> <u>Quarterly</u> 34 (1983): 426-32.
- Hobbes, Thomas. "From <u>Leviathan</u>." <u>Main Currents of Western</u> <u>Thought</u>. Ed. Franklin Le Van Baumer. New Haven: Yale UP, 1978. 342-48.
- Hoeniger, F. David. <u>Medicine and Shakespeare in the English</u> Renaissance. Newark: U of Delaware P, 1992.
- ---, ed. Pericles. London: Methuen, 1986.
- Homan, Sidney. Shakespeare's Theater of Presence: Language.
 - Spectacle, and the Audience. Lewisburg: Bucknell UP, 1986.
- ---, ed. Shakespeare and the Triple Play. Lewisburg: Bucknell UP,

1**988**.

- Hondo, Masao. "The Meaning of Magic and Masque in <u>The</u> <u>Tempest</u>." <u>Poetry and Drama in the Age of Shakespeare</u>.
 Eds. Peter Milward and Tetsuo Anzai. Tokyo: Renaissance Institute, 1982. 167-83.
- Hunt, Maurice. "'Opening the Book of Monarchs' Faults': <u>Pericles</u> and Redemptive Speech." <u>Essays in Literature</u> 12 (1985): 155-71.
- Jackson, Gabriele Bernhard. "Topical Ideology: Witches, Amazons, and Shakespeare's Joan of Arc." <u>English Literary</u> <u>Renaissance</u> 18 (1988): 40-65.
- Johnson, Francis R. <u>Astronomical Thought in Renaissance</u> <u>England: A Study of the English Scientific Writings from</u> <u>1500 to 1645</u>. New York: Octagon, 1968.
- Kelly, H. L. "Earliest Times to Flamsteed." <u>Astronomy</u>. Ed. Martin Davidson. London: Dent, 1954. 406-46.

Kepler, Johannes. Epitome of Copernican Astronomy. Trans.

Charles Wallis. Chicago: Encyclopedia Britannica, 1939.

Kermode, Frank. "Julius Caesar." Evans 1100-104.

---. "King Lear." Evans 1249-54.

Khanna, Shweta. "Astrology in Shakespeare's Works."

Shakespeare: Varied Perspectives. Ed. Vikram Chopra.

Delhi: B. R. Publishing, 1996. 79-93.

King, Henry C. <u>The History of the Telescope</u>. New York: Dover, 1979.

- Knight, G. Wilson. <u>The Shakespearian Tempest</u>. London: Methuen, 1953.
- Kuhn, Thomas. <u>The Copernican Revolution</u>. Cambridge: Harvard UP, 1957.

Lattis, James M. <u>Between Copernicus and Galileo: Cristoph</u> <u>Clavius and the Collapse of Ptolemaic Cosmology</u>. Chicago: U of Chicago P, 1994.

Leininger, Lorie Jerrell. "The Miranda Trap: Sexism and Racism in Shakespeare's <u>Tempest</u>." <u>The Woman's Part: Feminist</u> <u>Criticism of Shakespeare</u>. Eds. Carolyn Ruth Swift Lenz, Gayle Green, and Carol Thomas Neely. Urbana: U of Illinois P, 1980. 285-94.

Levin, Harry. General Introduction. Evans 1-25.

Ley, Willy. <u>Watchers of the Skies</u>. New York: Viking, 1966.

Long, Michael. "Julius Caesar: Social Order and the Kinetic

World." Bloom, Julius Caesar 53-60.

Lovejoy, Arthur O. The Great Chain of Being: A Study of the

History of an Idea. New York: Harper, 1936.

- Machiavelli, Niccolo. "From <u>The Discourses on Titus Livy</u>." <u>Main</u> <u>Currents of Western Thought</u>. Ed. Franklin Le Van Baumer. New Haven: Yale, 1978. 140-46.
- Marlowe, Christopher. <u>Doctor Faustus and Other Plays</u>. New York: Oxford, 1995.
- Mebane, John S. "Metadrama and the Visionary Imagination in Dr. Faustus and The Tempest." South Atlantic Review 53

(1988): 25-45.

- ----. <u>Renaissance Magic and the Return of the Golden Age: The</u> <u>Occult Tradition and Marlowe, Jonson, and Shakespeare</u>. Lincoln: U of Nebraska P, 1989.
- Nuttall, A. D. "Brutus's Nature and Shakespeare's Art." Bloom, Julius Caesar 108-20.
- Palfrey, Simon. <u>Late Shakespeare: A New World of Words</u>. Oxford: Clarendon, 1997.
- Payne, Michael. "Magic and Politics in <u>The Tempest</u>." Homan, <u>Shakespeare and the Triple Play</u> 43-56.
- Peirce, Charles Sanders. <u>Writings on Semiotic by Charles Sanders</u>
 <u>Peirce</u>. Ed. James Hoopes. Chapel Hill: U of North Carolina
 P, 1991.
- Perelman, Chaim, and Lucie Olbrechts-Tyteca. "A Treatise on Argumentation." <u>The Rhetorical Tradition</u>. Eds. Patricia Bizzell and Bruce Herzberg. Boston: Bedford-St. Martin's, 1990. 1068-1103.
- Peterson, Douglas. "Shakespeare and 'the New Philosophy': Theatrical Illusion and Epistemological Crisis." <u>Centennial</u> <u>Review</u> 39 (1995): 97-108.
- Porter, Jeffrey L. "Shakespeare and the Motives of Rhetoric: The Failure of Speech in <u>Troilus and Cressida</u>." <u>Postscript</u> 4 (1987): 55-64.
- Ptolemy. <u>The Almagest</u>. Trans. R. Catesby Taliaferro. Chicago: Encyclopedia Britannica, 1948.

- Reichenbach, Hans. <u>From Copernicus to Einstein</u>. New York: Philosophical Library, 1952.
- Rosador, Kurt Tetzeli Von. "The Power of Magic from Endimion to <u>The Tempest.</u>" <u>Shakespeare Survey</u> 43 (1991): 4-17.

Rosen, Barbara. "Actualizing the Metaphor: Image and Art in <u>Twelfth Night</u> and <u>King Lear</u>. Homan 187-96.

Rushdie, Salman. The Satanic Verses. New York: Viking, 1988.

- Sartre, Jean-Paul. <u>Nausea</u>. Trans. Lloyd Alexander. New York: New Directions, 1964.
- Santillana, Giorgio de. <u>The Crime of Galileo</u>. New York: Time, 1962.
- Serpieri, Alessandro. "The Breakdown of Medieval Hierarchy in <u>King Lear</u>." <u>A Semiotic Landscape</u>. Eds. Seymour Chatman, Umberto Eco, and Jean-Marie Klinkenberg. The Hague: Mouton, 1979. 1067-72.
- ---. "Reading the Signs: Towards a Semiotics of Shakespearean Drama." Trans. Keir Elam. <u>Alternative Shakespeares</u>. Ed. John Drakakis. London: Routledge, 1991.
- Shakespeare, William. <u>The First Part of Henry the Sixth</u>. Evans 596-629.
- ---. The History of Troilus and Cressida. Evans 448-98.
- ---. Pericles, Prince of Tyre. Evans 1483-1516.
- ---. The Tempest. Evans 1611-38.
- ---. The Tragedy of Hamlet, Prince of Denmark. Evans 1141-97.
- ---. The Tragedy of Julius Caesar. Evans 1105-34.

- ---. The Tragedy of King Lear. Evans 1255-1305.
- Shapiro, Arnold. "'Childe Roland,' Lear, and the Ability to See."

Papers on Language and Literature 2 (1975): 88-94.

Smith, Hallet. "Pericles, Prince of Tyre." Evans 1479-82.

- Spencer, Theodore. <u>Shakespeare and the Nature of Man</u>. New York: Macmillan, 1949.
- Stephens, Charles. <u>Shakespeare's Island: Essays on Creativity</u>. Edinburgh: Polygon, 1994.
- Stockholder, Kay. "Sex and Authority in <u>Hamlet</u>, <u>King Lear</u>, and <u>Pericles</u>." <u>Mosaic</u> 28.3 (1985): 17-29.
- Taylor, Hawley C. "The Stoic Philosophy and Shakespeare's <u>Troilus and Cressida</u>." <u>San Jose Studies</u> 4 (1978): 82-93.
- Thomas, Keith. <u>Religion and The Decline of Magic</u>. New York: Scribner's, 1971.
- Thomas, Vivian. <u>The Moral Universe of Shakespeare's Problem</u> <u>Plays</u>. Totowa: Barnes, 1987.
- Thoren, Victor E. <u>The Lord of Uraniborg</u>. Cambridge: Cambridge UP, 1990.
- Tillyard, E. M. W. "The Elizabethan World Order." <u>Shakespeare:</u> <u>The Histories</u>. Ed. Eugene M. Waith. Englewood Cliffs: Prentice-Hall. 32-42.
- Traister, Barbara Howard. <u>The Magician in English Renaissance</u> <u>Drama</u>. Columbia: U of Missouri P, 1984.
- Wallis, Charles. Biographical Note. <u>Epitome of Copernican</u> <u>Astronomy</u>. By Johannes Kepler. Chicago: Encyclopedia

Britannica, 1980. 841-42.

- Weber, Alan Scott. "Shakespeare's Cosmology." Diss. State U of New York at Binghamton, 1996. <u>DAI</u> 57 (1996): 2499A.
- Wiles, David. <u>Shakespeare's Almanac:</u> A Midsummer Night's Dream, <u>Marriage, and the Elizabethan Calendar</u>. Cambridge: Brewer, 1993.
- Willey, Basil. <u>The Seventeenth Century Background: The Thought</u> of the Age in Relation to Religion and Poetry. New York: Doubleday, 1953.
- Williams, Steven. "Roger Bacon and His Edition of the Pseudo-Aristotelian <u>Secretum Secretorum</u>." <u>Speculum</u> 69 (1994): 57-73.
- Xiaoyang, Zhang. "Shakespeare and the Idea of Nature in the Renaissance." Homan, <u>Theater</u> 82-88.
- Yates, Frances A. <u>The Occult Philosophy in the Elizabethan Age</u>. London: Routledge, 1979.
- ---. <u>Shakespeare's Last Plays: A New Approach</u>. London: Routledge, 1975.

Zweig, Stefan. Erasmus of Rotterdam. New York: Viking, 1934.