

Abstract

Cosmos in Verse: A Study of Manilius' Astronomica

Tetsufumi Takeshita

The *Astronomica* of Marcus Manilius is one of the earliest extant astrological documents. Written in poetic form, the document comprises five books and was composed at least partly under the first Roman Emperor Augustus. Although Manilius, a contemporary of Ovid, belongs to the so-called 'golden age' of Latin literature, his work attracted little scholarly attention and it was not until 1977 that a complete English prose translation appeared for the first time. This study is the first comprehensive Japanese treatise on *Astronomica* and aims to shed some new light on the literary contributions of Manilius.

After a brief history of ancient astrology, Chapter 1 discusses some problems related to the chronology of *Astronomica*. Although Housman's Augustus-Tiberius theory is still widely accepted, recent scholarship provides a convincing basis for attributing the entire poem to the Augustan period. This chapter concludes with a summary of the history of Manilian scholarship from the rediscovery by Poggio Bracciolini to 21st century.

Chapter 2 begins by examining the novelty which the poet repeatedly stresses in the proem of the first book, then moves on to the relationship between Manilius' cosmology and Stoic philosophy. While some scholars question the linkage, this chapter demonstrates how the worldview of *Astronomica* accords with that of Stoics.

Given that Stoic cosmology is one of the features of *Astronomica*, it is useful to examine the connection between *Astronomica* and Stoic poetry. This chapter includes a survey of the Stoic poetry, quoting some passages from *Stoicorum Veterum Fragmenta*, and an overview Manilius' attitude towards poetry. In short, Stoic poetry consists in allegorical interpretation and these peculiarities can also be recognized in *Astronomica*. From that point of view, it will become clear that some difficult verses in the proem have an allegorical meaning and their ambiguity is not caused by textual uncertainty but is intended by the poet.

Chapter 3 expands on the origin of the cosmos-poem metaphor introduced in the previous chapter. Since Manilius was heavily inspired by Lucretius, this chapter surveys the history of Epicurean poetics and its development. According to Diogenes Laertius and Plutarch, Epicurus was very doubtful about the didactic or paedagogical function of poetry, but this sceptical attitude was changed by Philodemus of Gadara, who had a great influence on many Roman poets.

In addition, this chapter examines Lucretius' poetry, concentrating on his analogy between atoms and letters. This metaphor plays an important role in *De rerum natura*. In short, as Schiesaro has shown, there is an analogous relationship between the book and the universe. Finally, this chapter suggests that an epigram of Philodemus is a possible source of this metaphor.

Chapter 4 focuses on Manilius' seemingly contradictory attitude towards myth. In the proem of the second book, he criticises other poets who wrote catasterisms because their poems are no more than *fabula* ('fictional tale') and far from the truth. On the other hand, he describes an epyllion about Perseus and Andromeda at great length in the fifth book. Salemme holds that this 'contradiction' is a reflection of the development of Manilius' attitude towards myth throughout the entire poem. According to him, there is a progress from simple mythical catasterisms to an erudite, sophisticated ludus in *Astronomica*. Consequently, some ludic aspects of this poem are analysed, focusing on (pseudo-)etymological figures.

According to Volk, Manilius reveals himself as a pious agent of the universe (*mundus* or *deus*) whose celestial travel is in harmony with heavenly bodies so the *mundus* rejoices in the poet's songs. Nevertheless, his attitude to the cosmos sometimes appears violent and impious, particularly when he describes the progress of civilisation and the superiority of human reason (*ratio*). Consequently, Volk attributes this 'contradiction' to the eclecticism of the poet.

Chapter 5 reinterprets this Manilian 'contradiction'. Volk's conclusion seems persuasive at first blush. However, such tension between *natura* (the Stoic equivalent for *deus*) and human beings can also be found in Vergil's *Georgics*. Although, under the influence of Lucretius, the Mantuan poet looks at the progress of human civilisation from a somewhat ambivalent point of view: the *labor* owes its origin to the will of Jupiter and it is necessary for the development of various arts. Yet he does not forget to insert a negative adjective, namely *improbus*. Vergil considers rustic life as Saturnian (i.e. that of the Golden Age). At the same time, he depicts agriculture as a struggle against Nature.

If we take this complex attitude into account, the 'impious' approaches in *Astronomica* can be interpreted differently. Manilius imitated and developed Vergil's ambivalence between mankind and Nature. Thus, it may be argued that the supposed 'contradiction' is not a result of eclecticism but should itself be considered as a poetic tradition that Manilius inherited from his predecessor.

Chapter 6 begins with a discussion of the astrological parts of *Astronomica* (especially in Books 2, 3 and 4), which have been largely neglected by classical scholars. Recently, Kennedy and Glauthier shed some new light on the books of *Astronomica*, pointing out that this poem follows a literary tradition which can be described as 'mathematical poetry'. In fact, Hellenistic mathematicians composed several poems with mathematical contents (e. g. Archimedes' *Cattle Problem*). They had a good

knowledge of how to express these technical themes in verse, and the same skill is found in this Roman astrological poem. In addition, Manilius linked the role of an astrologer and mathematician (both can be called *mathematicus*) to that of a poet.

From this point of view, it becomes necessary to consider the history of the word *ratio*, one of the key-concepts of *Astronomica*. In *Astronomica*, this word usually means ‘divine order’ or ‘human reason, rational power’, but as Kennedy points out, it can also have mathematical connotations (‘calculation’). Although the true etymology of *ratio* and its cognates is obscure, this word was used in an economic or financial context in the early stage of Latin literature. Then, in the Roman Republic, it was used in Cicero’s philosophical treatises as an equivalent to Greek *logos*. In addition, *ratio* and its derivative *rationarium* meant a financial survey of the Roman Empire in the political context. If we take into account Manilius’ metaphorical use of *census* (‘the registration of Roman citizens’), it turns out that his *ratio* not only mathematical meaning, but also financial and political meanings. The Manilian universe, which is sometimes called *immensus* (literally, ‘which cannot be measured’), is calculated using mathematical methods while, at the same time, it remains under the control of the cosmic empire.

Chapter 7 examines the encyclopaedic features of *Astronomica*. While scholars have focused on Manilius’ eclecticism and his use of various sources, the encyclopaedic tradition in *Astronomica* has been neglected. Nonetheless, *Astronomica* can be read as a literary *monumentum* that reflects the well-ordered world under the Emperor(s). Based on recent studies that point to the importance of the Roman imperial period for the development of this intellectual movement, this chapter sheds light on some encyclopaedic features of this Augustan poetry.

First, Manilius aims not only at a compilation of purely technical knowledge about astrology but also at a philosophical and comprehensive understanding of the universe, which is governed by divine power. Like Pliny the Elder, who considers the world as Nature’s artwork (*opus*), Manilius defines the cosmos (*mundus*) as God’s work. Second, Manilius is interested no less in human affairs than in celestial phenomena. He reveals an optimistic view of civilisation in the first proem and praises Menander for his realism in the fifth book. In the fourth and fifth books, various human arts and skills are subordinated to astrology and categorised under the zodiacal signs that functions as the index. Third, Manilius places Italy and its capital city Rome in a dominant position in his zodiacal geography. This Roman centralism matches with Augustus’ political ideology, which is found not only in his own *Res Gestae* but also in Strabo’s *Geography* and particularly in Agrippa’s ‘world map’. Finally, *Astronomica* has a symmetrical and circular structure: the catalogue of constellations in the first book corresponds to the lengthy list of human qualities and professions arranged according to the constellations in the fifth book.

In conclusion, these chapters not only highlight the diversity of Manilius' intellectual background and literary tradition but also show clearly that his alleged contradiction or inconstancy is quite understandable and, at least in some cases deliberate. From large astronomical matters to small human beings, *Astronomica* includes almost all the entities in the universe, as if it were itself the celestial sphere. By ordering the universe in an encyclopaedic and comprehensive manner, Manilius makes his poem a mimic cosmos in verse.