

JEWISH AND CHRISTIAN ASTROLOGY IN LATE ANTIQUITY — A NEW APPROACH¹

KOCKU VON STUCKRAD

There is no Jewish archisynagogus, no Samaritan, no Christian presbyter
who is not an astrologer, a soothsayer, or an anointer.²

Summary and Introduction

In late antiquity astrology held a key position among the accepted and well-reputed sciences. As *ars mathematica* closely connected with astronomy, it made its way into the highest political and philosophical orders of the Roman Empire and became the standard model of interpreting past, present, and future events. Although this is widely acknowledged by modern historians, most scholars assume that the application of astrological theories is limited to the ‘pagan mind,’ whereas Jewish and Christian theology is characterized by a harsh refutation of astrology’s implications.

As can easily be shown, this assumption is not the result of careful examination of the documentary evidence but of a preconceived and misleading opinion about the basic ideas of astrology, which led to an astonishing disregard of Jewish and Christian evidence for astrological concerns. This evidence has been either played down — if not neglected entirely — or labeled ‘heretic,’ thus prolonging the polemics of the ‘church fathers’ right into modernity.

After having reviewed the biases of previous research into monotheistic astrology and its crucial methodological problems, I shall propose a different approach. Astrology has to be seen as a certain way of interpreting reality. In this regard it is the very backbone of esoteric tradition. I shall sketch the different discourses reflected in some late antiquity’s Jewish and Christian documents. It will be shown that the astrological worldview of planetary and zodiacal correspondences was common to most of the sources. Examples will be presented for illustrating different adoptions of this attitude, namely the discourse of cult theology, the magical and mystical application of

¹ The following is a summary of my Ph.D. thesis’ results (1999). Each line of arguments presented here is discussed in that study in great detail, so that I shall give special references to it only occasionally. Special thanks go to Barbara Thériault, Erfurt, who improved my English.

² A saying of Hadrian, reported in *Hist. Aug. Firmus* 8.3; cf. also Apuleius, *Apol.* 90 and Lucian, *Alex.* 32.13.

astrological knowledge, the debates concerning volition and determinism, and, finally, the use of astrology for political and religious legitimization.

1. Research into Monotheistic Astrology: a Critique

Ancient astrology has been studied by a lot of famous scholars over the last century.³ In the course of time Babylonian and Greek astrology has been described in detail, whereas Jewish and Christian contributions to and adoptions of that science — if recognized at all — have been played down. One gains the impression that Jews and Christians simply did not take notice of what was going on around them. David Flusser put this common notion directly: “The Jewish people in Palestine and elsewhere had become completely immune to the attractions of the paganism against which the prophets [had spoken].”⁴ And Gundel resumes regarding the Christians: “Right from the beginning Christianity refuted astrology’s axioms and radically fought against them.”⁵ Considering the huge amount of Jewish and Christian astrologoumena dating from late antiquity these statements are, at least, questionable.

Among the biases of theologians and those of historians of religion the following three are prevailing:

(1) Belief in astrology leads necessarily to polytheism because the planets are in a way materialized forms of a deity. At times people even considered stars and gods being identical.

(2) Astrology implies a tendency to worship astral entities and thus usually establishes a star cult. This is obviously incompatible with monotheistic theology. As everyone knows, the Babylonians worshipped their astral deities with sacrifices. This behavior was

³ Still unsurpassed is Bouché-Leclercq’s opus of 1899. Of special value are the studies of Cramer (1954), Gundel (1966), van der Waerden (1968), and — more recently — Barton (1994 & 1995). A summary of ancient astrology’s development is given in von Stuckrad 1996: 17-85.

⁴ Quoted from Charlesworth 1987: 945 no. 65.

⁵ Gundel 1966: 332. If not noted otherwise, all foreign quotations are translated by the author.

consequently and radically refuted by the biblical prophets, so that later compromises were made impossible.

(3) Astrology is strongly connected with fatalism and deterministic worldviews. Given that pious and rightful behavior is dependent on free will and that prayer seems worthless in a deterministic universe, astrology must be considered inconsistent with Judaism and Christianity. Ergo: if astrology comes into play, there will be no room for Jewish or Christian beliefs. This notion seems exaggerated, but is continuously proposed, even by leading scholars. Talking for many others, M.P. Nilsson, a great scholar of ancient religions, may be quoted here: “The causal linkage excludes every arbitrary supernatural intervention into world’s history, so that astrology consequently had to establish atheism; it did so, as is told about the emperor Tiberius, himself a convinced adherent of astrology.”⁶

These usually undoubted theological axioms have important implications. First of all, documents not fitting into the narrow perspective of modern scholarship have simply been ignored. The fact that it took 35 years from the preliminary publication of the Qumran horoscope 4Q186 by J.T. Milik in 1957 and its new presentation to a wider public by R. Eisenman and M. Wise in 1992 — still lacking any scholarly responsibility — is a telling example. The Greek magical papyri are another one. But in some cases the astrological connotations were too strong to be ignored entirely, e.g. the pavements of the Palestinian synagogues with their zodiacal depiction or — on the Christian side — the elaborated astrological ingredients within Gnostic writings. In these cases scholars tend to claim that those developments were only able to emerge outside ‘orthodox’ or ‘normative’ Judaism and Christianity. With regard to astrology the same process of centralization has taken place, as in the case of Christian mythmaking, profoundly analyzed by Burton L. Mack.⁷ Jonathan Z. Smith laid further emphasis on the methodological difficulties still determinable within theological historiography:

⁶ Nilsson 1974: 278.

⁷ Mack 1995, see especially pp. 7-11.

As in the archaic locative ideology, the centre has been protected, the periphery seen as threatening, and relative difference perceived as absolute 'other.' The centre, the fabled Pauline seizure by the 'Christ-event' or some other construction of an originary moment, has been declared, *a priori*, to be unique, to be *sui generis*, and hence, by definition, incomparable. The periphery, whether understood temporally to precede or follow the Pauline moment, or, in spatial terms, to surround it, is to be subjected to procedures of therapeutic comparison. This is exorcism or purgation, not scholarship.⁸

The modulations of this criticism have been intensively discussed in the humanities during the last two decades,⁹ but its implications have only rarely been put into practice. In other words: although that criticism is widely accepted theoretically, a lot of scholars shrink from the consequences that lead to a new position regarding the possibility of telling a monolinear history. But one has to take them seriously. General definitions of 'Judaism,' 'Christianity,' or 'astrology' have to be avoided from the outset. They are the result of a theological project of legitimization carried out in ancient and early modern times. In contrast to this intention, it cannot be the goal of an academic examination to find out *the* position of ancient Jews and Christians towards astrology. Acknowledging the perspectives' plurality and their contingent backgrounds, my analysis focuses on the *social and religious discourses*. Single positions have to be examined for their own sake and, simultaneously, *embedded* in the discussions of the time.

Thus, the following questions are to be answered: which discourses characterize the background of the sources under examination? Which social, political, and religious contexts have to be taken into consideration? What were the means to gain consensus about the debates of the

⁸ Smith 1990: 143.

⁹ Among the most illuminating contributions to this debate are Berger & Luckmann 1966; White 1973 & 1978; Koselleck 1995; Müller & Rösen 1997. The present author's methodology is deeply influenced by those scholars. Furthermore, the philosophy of Richard Rorty was of high relevance for me in establishing a *pragmatic Religionswissenschaft*, cf. Rorty 1979 & 1989 and my methodological assumptions in von Stuckrad 1999, ch. II.

time within Jewish and Christian monotheism? What differences are determinable, and how are they to be explained?

2. *Astrology and the Esoteric Doctrine of Correspondences*

In the following I shall approach astrology from a different point of departure. Leaving the apologetic theological projections behind I do not consider astrology to be a superstition or apostasy. Furthermore, it is not *a priori* connected with determinism or star cult, though both phenomena are part of antiquity's debates. To begin with, astrology is an integral component of ancient culture and had an important impact on Western *Geistesgeschichte*. This holds notably true for the history of esotericism. Emerging from an hermetic discourse astrology can be regarded as *esoteric thinking's central discipline*. It stands in the center of alchemy and magic and exerted a strong influence on Western culture since Renaissance times.¹⁰

In a number of articles and books Antoine Faivre argued that esotericism is not a secret religion but a specific *worldview*. As is well known, he distinguishes six characteristic 'forms of thought,' the first four being considered as intrinsic to the definition of esotericism, the last two as relative or non-intrinsic.¹¹ As far as astrology is concerned, the first characteristic — the doctrine of correspondences — is of crucial importance. It is the very backbone of astrological thinking and can be called *vertical*.¹² Instead of assuming a causal and mechanistic influence of the stars astrologers try to establish analogies and symmetric correspondences between the planetary zone and the earth — hermeticism's famous 'as above, so below.' Hence, a denotation of astrology

¹⁰ The influence of Jewish specialists on the history of alchemy was recently spelled out by Patai 1994. Alchemy is a similar case to astrology, and Patai breaks new ground for future scholarship.

¹¹ The intrinsic characteristics are: Correspondences, living nature, imagination and mediations, experience of transmutation. The relative characteristics are: The praxis of concordance and transmission. Cf. Faivre 1994: 10-15; Hanegraaff 1995: 111f and 1996: 396-401.

¹² Cf. von Stuckrad 1999a. As an influential contribution to the contemporary (at least the popular) esoteric self description cf. Dethlefsen 1979, esp. ch. I.

would read as follows: Astrology is a concept of interpretation describing the *quality* of a given time, i.e. the essence of simultaneously and synchronically occurring events which are connected to inherent symbols and meaning. The measuring instrument for this purpose are the zodiac and the stars' movements.

The crucial point is that astrology is a discipline reckoning with the *meaning* of celestial instances. It strives to accurately read the 'signs of the time.' The discussions about this accuracy are of high importance for ancient people — including Jews and Christians. Indeed, people of the monotheistic creed participated in the astrological discourses to an astonishing degree. Astrological semantics, as I call them, play a significant role within most of Jewish and Christian theologies, ranging from a simple astral symbolism — that is not to be called astrological — to highly elaborated systems which show a distinctive theological hand.

3. *Diversified Sources and Methodological Implications*

From ancient times there has survived an abundance of astrologoumena of Jewish and Christian provenance. The sources, stemming from the second century BCE to the eighth century CE, show a variety of attempts to cope with astrology's challenges. Before analyzing the different contributions Jews and Christians made to the debates of the time, I shall give a short overview of the documents under examination. This is important because I do not restrict my analysis to the (later) canonized sources which are the result of what Jonathan Z. Smith calls purgation. For me, every source showing a Jewish or Christian provenance is of equal relevance. Indeed, the non-canonical documents were much more read in those days. What is at stake here is not the question of who was right about astrology or who 'won' the 'battle against the astrologers' superstition,' but how people reacted to the commonly accepted *ars mathematica*, whether by adaptation, transformation, or refutation.

Beginning with the Jewish documents of the so-called intertestamental time¹³ the Qumran scriptures prove to be of extraordinary value. They depict the priestly discourses of the Second Temple period and show a considerable interest in astrological semantics, even in horoscopic divination. Of the same period are the difficult Enochic literature, the Book of Jubilees, and the vast testamental documents, among which the Testament of Solomon is of special interest. Some minor texts, usually neglected, are also worth mentioning, such as the Treatise of Shem or the Oracula Sibyllina's Jewish insertions. Another genre is marked by the philosophical reflections of the historians, Artapanos, Aristobulos, and, of course, Philo of Alexandria and Josephus Flavius. Later, the different rabbinical documents come into play and show a vivid discussion about astrological implications. Furthermore, from the third to eighth centuries, the Hekhalot literature and the magical bowls from Mesopotamia, with their astrological connotations, are to be considered.

On the Christian side I include both the canonical and non-canonical sources. The former contributed a great deal to the myth of Christian innocence in astrological matters, whereas the latter — especially the huge amount of Gnostic documents — render the impression that a deep Christian contact existed with the star science. This can easily be shown with regard to the Nag Hammadi texts and the teachings of Marcos, Theodotus, and Bardaisan. Those documents contrast with the refutations of centrist Christianity's most famous apologetics, Tertullian, Origen, Augustine, and all the others plagiarizing them. Of crucial importance, then, is the significant Manichaean contribution to monotheistic astrological discourses. Evolving from a Judaeo-Christian apocalypticism centered around the prophet Elchasai and similar Baptist groups, Mani established a full blown astrological system of his own.

In view of these sources' strong diversity a methodological problem arises. As mentioned above, it cannot be the goal of an academic

¹³ The role of astrology within the biblical context falls beyond the scope of this article. For that cf. von Stuckrad 1996: 87-105.

examination to ‘find out’ the general or even consensual monotheistic position towards astrology. Nor is it my intention to ‘detect’ a linear development from refutation to adoption, from superstition to enlightenment, or vice versa. Those ‘developments’ are mere inventions of scholarly *plotment*.¹⁴ On the other hand, the ancient authors did not write ‘in empty space.’ They were involved in a twofold discourse — firstly, in their religion’s tradition, and, secondly, in their contemporary social, political, scientific, and religious negotiations. Hence, the analysis has to keep in mind the possible overlapping of different discourses, regardless of religions’ boundaries.

In order to do so, the following presentation has a systematic, abstract arrangement. Transgressing the perspective of single case studies I shall focus on how Jews and Christians reacted to astrological discussions of the time. Fortunately, the Babylonian and Greek astrological skills have been intensively studied, so that we can recur to the (popular) *vulgata* as well as the academic branches of the *ars mathematica* as kind of *tertium comparationis*. In the second century CE Ptolemy collected the ancient tradition and set a new standard for elaborated astrological knowledge.¹⁵ This standard interpretation of time’s quality was adopted by well-educated Jews and Christians whereas less educated people clung to traditional contentions.

My systematic approach attempts to give a typology of ancient discourses. To put it on other words, I describe a meta-structure of astrological semantics within monotheistic perspectives. Those *macro-*

¹⁴ Hayden White introduced this expression and distinguished it from *argument* and *ideological implication*. All three are usual means to give an academic treatise a pretence of explanation, cf. White 1973.

¹⁵ The canonical status of the *Tetrabiblos* has remained unbroken until our days. But one should not forget the highly developed astrology of Manilius (1st century CE), Vettius Valens (2nd century CE), and Firmicus Maternus (4th century CE); cf. von Stuckrad 1996: 79-85 and the literature mentioned above (n. 3). In addition, the common astrological debates can be reconstructed through the huge collection entitled *Catalogus codicum astrologorum graecorum* (12 vols.), ed. by F. Cumont & F.J. Boll, Brussels 1898-1953 (CCAG).

structures mirror the essence of quite different documents and have to be adjusted when applied to certain cases or micro-structures.

4. *Astrological Semantics in Monotheistic Perspectives*

As has been argued above, the *doctrine of correspondences* lies at the bottom of any astrological argumentation. In late antiquity it was never disputed that the heavenly realms mirror — in a secret or obvious way — mundane events. This notion was so common that it is difficult to find a document which does *not* make use of it. It is visible in the stoic concept of *sympathy* and *heimarmenê* as well as in the platonists' description of the world as a living creature with every part connected to one another or to its transcendent idea. In Roman Egypt Platonism was molded with older priestly traditions and brought forth the esoteric doctrines of the *Corpus Hermeticum*.¹⁶

Thus, the disputes did not touch upon the notion of correspondences but raised the question of how those correspondences were to be explained. Are the heavenly signs simply accompanying the mundane events — the stars as *sêmeia* — or are they responsible for them — the stars as *poiêtikoi*? And if there is a sympathetic correspondence between celestial sphere and earth, does this necessarily imply a deterministic or fatalistic influence? I shall return to these central questions later. At this point, I only call to mind the position of Origen (c. 185-255 CE), as everyone knows one of astrology's harshest critics. In his almost canonical commentary on Gen. 1:14 he explains that the movements of the stars are to be regarded as a kind of writing by God's hand in the sky. It reveals the divine mysteries to the heavenly powers. Some people may gain (at least inaccurate) insight

¹⁶ I am aware of the fact that the hermetic treatises show a strong Christian influence, and possibly are the result of a neo-platonist splitting into philosophers (Plotin) and Christians (Nag Hammadi) during the second or third century CE. But in my opinion the Egyptian matrix of hermeticism originating in Ptolemaic times cannot be doubted. On this point I agree with Cumont 1937 and Lindsay 1971. Cf. also Fowden 1986.

into those secrets.¹⁷ Thus, even anti-astrological arguments make use of astrological semantics.¹⁸ This is not due to a naïve misunderstanding of astrology's implications, as some scholars argue, but to an attempt to establish a monotheistically acceptable astrology.¹⁹

In the following pages it will be shown that this struggle for monotheistic astrology is a characteristic feature of Jewish and Christian discussions. To be sure, the doctrine of correspondences, as well as the concept of *heimarmene*, does not necessarily lead to astrology, it is instead astrology's *conditio sine qua non*. I shall now turn to the concrete modulations of this basic notion.

4.1. The Discourse of Cult Theology

In Second Temple times cult theology marked the most relevant feature of Jewish thinking. This is not only true for priestly groups but — through the accurate laws of temple duties — for each group relating to the sanctuary.²⁰ The cultic order was considered a binding revelation mirroring the cosmic order established by God. This fact cannot be overestimated when one analyzes the history of post-exilic Judaism. It is the cultic thinking that serves as background for the harsh conflicts between Jewish groups about calendars, calculations, and liturgical questions. The right interpretation of God's revealed order became the key topic for Second Temple discourses.

Thanks to the discovery of the Dead Sea scrolls, we are now able to gain insight into the peculiar, yet highly interesting, implications

¹⁷ Eusebius *Praeparatio Evangelica* 6.11; *Philocalia* 23.1-21; cf. also *CCAG* 9.2, 112, 11ff. The enormous influence of Origen's commentary is described by Riedinger 1956: 177-182. Cf. also Amand 1945: 307-318.

¹⁸ Tamsyn Barton correctly says that "Origen thus concedes a good deal to astrology. He says that the stars offer information about a fixed future from beginning to end, and that in some cases they are part of the medium by which fate is played out" (1995: 75). It is exactly the doctrine of correspondences which goes undisputed in Origen's argument.

¹⁹ In the words of John North: "Origen [...] tried desperately to purge astrology of fatalism" (1994: 123).

²⁰ Cf. Levine 1974; Haran 1978; Milgrom 1983.

of cultic thinking within the Zadokite perspective of the Qumran priests. The Qumran collection of biblical texts reveal a significant interest in chronographic or cultic material relevant to priestly matters and theological historiography.²¹ Special emphasis was laid on the connection between the priestly cult on earth — taking place in the ideal Jerusalem — and the heavenly cult, performed by the different classes of angels. In a series of texts the isomorphic resemblance reached a degree that makes it difficult to distinguish between priests and angels, or, generally speaking, the levels of holiness. Because the present article solely deals with astrological matters, I restrict myself to the famous *Songs of the Sabbath Sacrifice* (*Shirê 'Olat ha-Shabbat*). After having shown the doctrine of correspondences' cultic relevance, I shall argue that the specific astrologoumena found at Qumran are not a kind of foreign body in the *yachad* but a consequent result of priestly discourses.

The Songs of the Sabbath Sacrifice are a liturgical description of the 13 Sabbaths included in one quarter of a year.²² The holy angelic classes perform therein the heavenly cult, “because He esta]blished them to be His hol[iest servants in the Ho]lly of Holies” (4Q400 frg. 1 col. I, 10). In fragment 2 it is recalled how the angels praise the might of His kingdom “according to their knowledge” and recite the mysterious psalms. They praise the glorious design of God’s cosmos, together with the firmament, the girders and walls of His holy construction (4Q403 frg. 1 col. I, 42-44 [=4QShirShabb^d]). The angels settling in the “firmament of purity” represent God’s own perfection. Thus, the *planetary angels* are depicted in a very positive manner.²³ Likewise, on the twelfth Sabbath, “the cherubim praise from above the firmament the building of the Merkabah throne, and they cheer the majesty of light’s firmament from underneath the seat of His glory” (4Q405 col. XX, 8-9). In line 12 of this fragment the angels’ “turning of their paths” are mentioned, “when they rise, they rise in a wonderful

²¹ Cf. Maier 1995, vol. 3: 13.

²² Edition by Carol Newsom (1985). Cf. also Maier 1990.

²³ Cf. Mach 1992: 173-184.

way.” This probably refers to the planets’ turning points that were of prominent importance for Babylonian astronomical calculations.

The priests of the temple in Jerusalem — or their opponents at Qumran²⁴ — did exactly what the angels prefigured in the firmament of glory. Furthermore, the resemblance between heaven and earth was applied to the very appearance of the temple. The curtain veiling the Holy of Holies, it is said, was decorated with “appearances of the living God,” with “figures of the divine angels,” and so on (4Q405 col. XVI frg. 14 and 15 col. I). Priestly liturgy was careful to describe the holy ornaments in more detail but it can be assumed that, at this point, we come across the same tradition as in Josephus’ and Philo’s description of the Jerusalem temple. Philo of Alexandria can be read as a direct follower of the Qumranic discourse translating the latter into a philosophical speech. What is more, the *Songs* from the Dead Sea resemble platonic visions to an astonishing degree so that it was easy to transform them into another context.

Philo explicitly made use of the priestly cultic tradition. In *Spec. Leg.* 1.66ff and *Mos.* 2.67ff he explains the curtain in front of the Holy of Holies and the highpriest’s garment in a ‘vertical’ manner. The priest’s breastplate (*logeion* or *peristêtion*) was ornamented with twelve precious stones. It was “shaped after the original of the zodiac that consists of twelve pictures and represents the turning of the four seasons” (*Spec. Leg.* 1.87). Thus, the cosmic harmony rang through the temple and “joined the great cosmic worship wherein all creation manifested and worshipped the Creator.”²⁵ In *Mos.* 2.133-135 this is put explicitly:

Symbols of the zodiac are the twelve stones upon his chest arranged in four rows of three stones in each row, while the breastplate (*logeion*) as a whole represents

²⁴ There are strong reasons to assume that the *Songs* are not a peculiar Qumranic invention but form part of a much older priestly liturgy stemming from post-exilic times.

²⁵ Goodenough 1953-68, vol. 8: 209f. Goodenough’s opus is an important contribution to the scholarly research, although his notion of Philo being the leader of a mystical Jewish group is far from reasonable; cf. von Stuckrad 1996: 179-187.

that Principle [i.e., from the context, the *logos*] which holds together and rules all things. For it was necessary that he who was consecrated to the Father of the world should have that Father's Son who is perfect in virtue to plead his cause that his sins might be remembered no more and good gifts be showered in abundance. Yet perhaps it is also to teach in advance one who would worship God that even though he may be unable to make himself worthy of the Creator of the cosmos, he yet ought to try increasingly to be worthy of the cosmos. As he puts on his imitation (symbol) he ought straightway to become one who bears in his mind the original pattern, so that he is in a sense transformed from being a man into the nature of the cosmos, and becomes, if one may say so (and indeed one must say nothing false about the truth), himself a little cosmos.²⁶

The temple's cosmic symbolism was also known to Josephus Flavius. It was introduced by the historian in a number of versions. The cultic symbolism could easily be turned into an astrological one: "The seven lamps that were branched off the menorah indicated the planets and the breads lying on the table indicated the zodiac and the year."²⁷ (*BJ* 5.217-218). Hence, Smelik is absolutely right when he observes that "[t]he representation of the luminaries by the menorah lamps, in the wake of Zechariah's fifth vision and Mesopotamian astronomy, was current in the days of Philo and Josephus."²⁸

The vertical connection between heaven and earth, angelic cult, and temple liturgy, ubiquitous in late Second Temple times, is in itself not identical with astrological doctrines. But, as has been argued above, it opens the door to them. From cultic theology it is but one step into astrological semantics. This step can easily be traced in the Dead Sea Scrolls where the pious Jews from Qumran did not shrink from astrological divination. They not only tried to find out the disposition of new members by means of horoscopic analysis, but also used the common technique of *brontologia*, i.e. omens of thunder, connected

²⁶ Translation Goodenough 1953-68, vol. 8: 210f.

²⁷ *BJ* 5.217-218. Cf. also *BJ* 5.211-214 and *AJ* 3.145 and 179ff. For a similar interpretation of the menorah see also Philo *Mos.* 2.105; *Quaest. in Ex.* 2.73-79; *Rev. Div. Her.* 216-229.

²⁸ Smelik 1995: 138.

with the moon's way through the zodiac, to forecast the future.²⁹ Philo, for his part, talked at some length about the planets as *sêmeia* of future events (*Opif. mundi* 58f) and of the planetary influences on agriculture and human fertility or sexuality (*Opif. mundi* 101.113.117). In his tractate *de congressu eruditionis gratia* (§50) he even calls the *astronomia*, the “science of astronomers and Chaldaeans,” *basilis tôn epistêmôn* — queen of the disciplines.

Monotheistic cult theology has a crucial implication: it is highly sensitive with regard to purity and cultic correctness. This leads to a harsh refutation of any polytheistic notion that was often misunderstood in scholarly analysis as being a fight against astrology itself. To be sure, pious Jews — at least the priestly oriented ones — carefully avoided the worship of astral deities. The biblical prophets had fought against this branch of astrology, thus prefiguring the pattern of later argumentation. But how come that priestly Jews at Qumran or elsewhere had obviously no problem in applying astrological techniques in their daily religious life and even in the interpretation of politics and history? The only answer is that they were able to distinguish astrology from astrolatry, *the interpretation of time from the worship of astral entities*. Although this seems highly reasonable, most scholars — due to their preconceived attitude — are not able to follow that distinction. They usually declare the Qumran priests, as well as the Enoch astronomers, Philo of Alexandria, and Josephus Flavius to be radical enemies of astrology. The opposite is the case — all these Jews fought to purge astrology from cultic impurity and, as I shall show later, from *fatalism*.

A further field of cult theology's special interest is connected with the *calendar*. First, it is important to celebrate the religious festivals at the right moment, i.e. in isomorphic correspondence to the cosmic divine rhythms. The clash of different calendars, only understandable

²⁹ For the horoscopes 4Q186 and 4Q534 cf. von Stuckrad 1996: 118-128 (literature); the brontologion 4Q318 is a much discussed topic, see Charlesworth 1987: 939; Albani 1993 & 1994: 83-87; Maier 1995, vol. 2: 275-277; von Stuckrad 1996: 128-131 and the respective chapters in von Stuckrad 1999.

with regard to its cultic implications, was a driving factor for the Qumran Zadokites to break with the Jerusalem priests.³⁰ Calculating a calendar, therefore, is a highly religious act and it is correct to emphasize that priestly astronomy always and inevitably takes into consideration the *meaning of time*. Recent studies have shown that the Enochic calendar, visible in Qumran and the Enochic writings such as 1En, 2En, or the Book of Jubilees, mirrors a perfect harmony of several holy rhythms, especially the priestly important numbers six and seven.³¹

Secondly, priestly astronomy opens the door to a thorough exploration of the present time's quality. The calendar is a revealed pattern of holy history and the astronomical data led those who were able to 'read the signs' to a deep understanding of Jewish *Heilsgeschichte*. This is the bridge from priestly discourses to apocalyptic speculations vividly discussed among Enochic astronomers and other groups of Second Temple Judaism, later carried on by Christian interpreters of time.³² What is at stake here is the erudite knowledge of the *exact point on the time-axis*. Of course, that erudition was a matter of dispute and much of the ancient conflicts was centered around that question. But one thing was never challenged — the importance of celestial events, such as the rhythms of sun and moon, their eclipses, planetary intervals, conjunctions, or comets, for a 'vertical' understanding of time's quality.

4.2. Magical and Mystical Application

The secrets of divine astronomy were revealed to a few religious specialists who made their way into the heavens or received their knowledge by God's own intervention: Enoch, Moses, Solomon, or

³⁰ Talmon 1986; Chyutin 1993.

³¹ The Qumran scriptures reveal a complicated but perfect system that later calculations were never again able to generate. Cf. Glessmer 1991; Albani 1994; Maier 1995, vol. 3: 52-160; Glessmer 1996; Beckwith 1996.

³² For the latter see the calendars of the so-called Quartadecimaners and the discussion about the return of Christ, as described in Strobel 1977. Cf. also the 5th *excursus* in von Stuckrad 1999.

other heroes of Jewish tradition guaranteed the revelatory status of astrological information. But secret knowledge was not only attributed to those extraordinary persons. A lot of people in late antiquity were engaged in heavenly journeys in order to gain insight into the mysteries of God's cosmic order. Connected with that mystical orientation was an application of astrological skills in a way one would call magical. I may turn to this topic now.

During Greco-Roman times magic was a common religious activity. Recent studies into ancient magic revealed the fact that this kind of 'ritual power' flourished among Jews and Christians as well.³³ Just as in case of astrology, there is no reason to sever magic from pious Jewish or Christian faith, as theological historiography used to do. Nor is it appropriate to consider magic as being the religion for daily life purposes or poorly educated people. The complex rituals performed in the so-called *Mithras liturgy*, the *Sefer ha-raẓīm*, or some Gnostic documents demanded a high standard of education,³⁴ not to mention the philosophical skills of an Apuleius. The differences between sophisticated magical theory and practice, on the one hand, and the more pragmatic application for medical and daily life reasons, on the other, still await scholarly research.³⁵

From the beginning astrological semantics formed an integral part of magical work. In order to illuminate this I shall describe three examples in more details. The first document to be mentioned is the important *Makroform* (in the Schäferian sense) that was shaped around

³³ The literature is abundant. The change of paradigm concerning our understanding of magic can best be studied in Naveh & Shaked 1987; Gager 1992; Meyer & Mirecki 1995; Graf 1996; Schäfer & Kippenberg 1997.

³⁴ E.g. one may consider the fact that in *Sefer ha-raẓīm* 1: 94-96 the author suggests to consult an hieratic papyrus to predict the future and to write the message down in hieratic script.

³⁵ It seems that the former is represented by theurgic groups, philosophers, and others, the latter by the authors of PGM, magic bowls, and similar documents. But this distinction is far from being accurate. For the theurgic groups cf. S.I. Johnston: "Rising to the Occasion: Theurgic Ascent in Its Cultural Milieu," in: Schäfer & Kippenberg 1997: 165-194.

the figure of Solomon. The *Testament of Solomon* is its most important representative. The text's title makes sufficiently clear what the reader can expect:

Testament of Solomon, son of David, who reigned in Jerusalem, and subdued all the spirits of the air, of the earth, and under the earth; through (them) he also accomplished all the magnificent works of the Temple; (this tells) what their authorities are against men, and by what angels these demons are thwarted.³⁶

To unfold his magical power, Solomon, after having prayed to God, receives his famous seal ring from the archangel Michael. With the help of his magic ring Solomon is able to find out the names of the demonic powers and, subsequently, to thwart them.³⁷ Of astrological interest is the fact that Solomon forces the entities to tell him the zodiacal place they inhabit. For example:

(2:1) When I heard these things, I, Solomon, got up from my throne and saw the demon shuddering and trembling with fear. I said to him, "Who are you? What is your name?" The demon replied, "I am called Orniat." (2) I said to him, "Tell me, in which sign of the zodiac do you reside?" The demon replied, "In Aquarius; I strangle those who reside in Aquarius because of their passion for women whose zodiacal sign is Virgo [...]."

The zodiacal astrology, combined here with demonological perspectives, is further attested by the seven constellations that appear through the power of Solomon's evocation:

(8:1) There came seven spirits bound up together hand and foot, fair of form and graceful. When I, Solomon, saw them, I was amazed and asked them, "Who are you?" (2) They replied, "We are heavenly bodies [*esmen stoicheia*], rulers of this world of darkness [*kosmokratores tou skotous*]." (3) The first said, "I am Deception." The second said, "I am Strife." The third said, "I am Fate." The fourth said, "I am Distress." The fifth said, "I am Error." The sixth said, "I am Power." (4) The seventh said, "I am The Worst. Our stars in heaven look small, but we are named like gods. We change our position together and we live together, sometimes in Lydia, sometimes in Olympus, sometimes on the great mountain."

³⁶ I follow D.C. Duling's translation in Charlesworth 1983-85, vol. 2: 935-987, who in most cases relies on McCown's translation of 1922.

³⁷ Every magical act rests on the knowledge of the 'secret names.'

The seven *stoicheia* — heavenly bodies, planets, or just evil entities — belong to the most prominent actors of Jewish and Christian theology in late antiquity. They were known to Paul who reminded his audience that “we have not to fight against humans of flesh and blood but against the rulers and powers, the sovereigns of this dark world (*pros tous kosmokratores tou skotous toutou*), against the evil beings of the heavenly realm.”³⁸ At this point, Paul adopts the same attitude as his Gnostic colleagues at Nag Hammadi:

Then since Death was androgynous, he mixed with his nature and begot seven androgynous sons. These are the names of the males: Jealousy, Wrath, Weeping, Sighing, Mourning, Lamenting, Tearful Groaning. And these are the names of the females: Wrath, Grief, Lust, Sighing, Cursing, Bitterness, Quarrelsomeness. They had intercourse with one another, and each one begot seven so that they total forty-nine androgynous demons. *Their names and their functions you will find in “the Book of Solomon.”*³⁹

Whether this passage refers to our Testament of Solomon, the *Epistle to Rehobeam*,⁴⁰ or some other text, is of minor relevance, since the *stoicheia* topic is widespread in ancient theology. And, equally acknowledged was the *depotencation of the celestial powers*, forced under Solomon’s will who himself received his power from the almighty God. The intention is clear: the stars are under God’s control and man is capable of invoking them in order to do some kind of pious work. Each adept, knowing the demons’ secret names and performing Solomon’s instructions, can accurately take part in the power — he himself becomes Solomon.

If one examines the lines of correspondences fashioned in the TestSol, one notices no determinable common traditions, e.g., the connection between Aquarius and Virgo (2:2, see above) — standing in the minor quincunx aspect — is not attested in the *vulgata*. Manilius talks of Sagittarius who “is in love with Virgo only” and Ptolemy

³⁸ Eph. 6:12; cf. also Col. 2:4.20; Gal. 4:3.9.

³⁹ *On the Origin of the World* (NHC II.5 and XIII.2), tr. Bethge & Wintermute, in: Robinson 1988: 167.

⁴⁰ Ed. by J. Heeg in *CCAG* 8.2 (1911): 139-165.

assures the reader that a quincunx is irrelevant for interpretation.⁴¹ However, this is not due to the author's missing acquaintance with astrological tradition but to the simple fact that, up to Ptolemy's outstanding work, there was no such common tradition available. But all of them were united in the 'vertical attitude' that stands in the background. This 'hermetic' perspective found its way into the Testament of Solomon as well:

(20:14) I asked him, "Tell me, then, how you, being demons, are able to ascend into heaven." (15) He replied, "Whatever things are accomplished in heaven (are accomplished) in the same way also on earth; for the principalities and authorities and powers above fly around and are considered worthy of entering heaven."

It is important to note that the astrological techniques are not blamed in the text. Instead, the document's contribution to ancient discourses is the following: the doctrine of correspondences is not to be disputed. Knowledge of those correspondences — astrology — leads to a deep understanding of future events (cf. TestSol. 2:3; 20:12). To obtain that knowledge one has to control the demonic powers which inhabit the zodiacal sphere. Astrology, therefore, is a holy gift, handed over by God himself, and is embraced thankfully by man.

My second example belongs to the same matrix of discourse. In the 'Book of Mysteries,' the *sefer ha-razîm*, originating in the first centuries CE but compiled later, it is explained how "to master the investigation of the strata of the heavens, to go about in all that is in their seven abodes, to observe all the astrological signs, to examine the course of the sun, to explain the observations of the moon," and similar activities.⁴² Repeatedly, the adept is requested to pour libation or sacrifice incense, or even animals, to the celestial bodies, thus

⁴¹ Manilius *Astron.* 2: 504-506; Ptolemy *Tetrabib.* 1:17.

⁴² Preface to *SHR*: 5-10 (Morgan 1983: 17f). Morgan refers to Margalioth's insufficient edition (1966). *SHR* still is a scholarly desideratum, cf. Gruenwald 1980: 226. An important first collection of the many astrological connotations within the PGM was given by H.G. Gundel 1968: 3-17 (Sun), 17-25 (decans), 25-41 (Moon), 41-52 (planets). Gundel correctly stresses the significant doctrine of correspondences (cf. p. 39). The results can be transferred to *SHR* without difficulties.

revealing a totally different attitude towards cultic purity than that we had come across in priestly theology. The offerings are performed in order “to speak with the moon or with the stars about any matter.” This has practical consequences: “I adjure you to bring the planet of N and his star near to the star and planet of N, so his love will be tied with the heart of N son of N” (*SHR* 1:161-167 [Morgan 1983: 36f]). Here, *SHR* shares the same language as the rabbis used to depict the planetary influences — one’s star or *mazzal* (see below).

The following passage is very interesting because it indicates the overlapping of different discourses. To meet *Hêlios/The Sun* at night the adept is urged to celebrate purgation, keep diets, and utter the names of the sun and his accompanying angels. And then:

[...] In the name of the Holy King who walks upon the wings of the wind,⁴³ by the letters of the complete name that was revealed to Adam in the Garden of Eden, (by) the Ruler of the planets, and the sun, and the moon, who bow down before Him as slaves before their masters, by the name of the wondrous God, I adjure you, that you will make known to me this great miracle that I desire, and that I may see the sun in his power in the (celestial) circle (traversed by) his chariot, and let no hidden thing be too difficult for me (*SHR* 4:51-57 [Morgan 1983: 70f]).

The defeat of the planets and their subsequent instrumentalization is fully in line with Jewish argumentation.⁴⁴ Furthermore, the visionary’s search for a heavenly journey call similar texts of the Hekhalot tradition to mind, even rabbinical parallels may be mentioned.⁴⁵ Thus, Gruenwald correctly emphasizes that “these heavenly ascents of the soul became almost a cultural fashion in many religious systems in the first centuries of the Christian Era, the spiritual climate of which

⁴³ Cf. Ps 104:3.

⁴⁴ In the paragraph following the cited passage the ‘traditional’ scope is widened, though. Helios — the Sun God — is furnished with epitheta usually reserved for JHWH: “Trustworthy leader of the sun’s rays, reliable (witness), who of old didst establish the mighty wheel (of the heavens), holy orderer, ruler of the axis (of the heaven), Lord, Brilliant Leader, King, Soldier” (Morgan 1983: 71).

⁴⁵ Hekhalot literature: Hekhalot Zutarti §§335-374. 407-411. 420.422f. The rabbinic tradition is focused on R. Aqiba, cf. tChag 2:3; jChag 77b; bChag 14b.

was full of a constant exchange of religious ideas and practices. In this respect there was no substantial difference between religion, philosophy and science.”⁴⁶

To further illuminate the nature of this discourse and its capability to transgress religious boundaries, I use a Christian source as my third example. Heavenly journeys are a key motif within Gnostic theologies, but — contrasting the Hekhalot mysticism where the mystic serves as a mediator between God and Israel — now the intentions are individual ones. The Gnostic searches for redemption either in the world to come or during her or his lifetime. Pursuing this goal, it is of crucial importance ‘to know one’s enemies,’ i.e. to understand the heavenly opponents who try to block the mystic’s way into the realms of light. This platonic notion is found in a variety of texts. In the *First Apocalypse of James* from Nag Hammadi it is Jesus himself who gave instructions: he admonishes his disciples to be confidential since, after his grievous way through death, he will return and “appear for a reproof to the archons. And I shall reveal to them that he cannot be seized. If they seize him, then he will overpower each of them.”⁴⁷

The recipient of the holy revelation is rescued from the powers of *heimarmenê* and can depart from this dark world heading through the planetary spheres towards the pleroma. In order to fulfill this desire it seemed appropriate to examine thoroughly the planetary laws. Thus, the fight against the *stoicheia* led the Gnostic to another reaction than Paul who, subsequently, refuted astrology. What at first glance seems inconsistent becomes the Gnostics’ primary motivation for studying astrology. Just *because* Gnostic theology strives to overcome the demonic planetary chains it made extensive use of astrological tradition.

The Gnostic interest in astrology resulted in an extraordinary discourse of its own. Special treatises have come down to us elaborated

⁴⁶ Gruenwald 1988: 202 with no. 30. Cf. on this topic Dean-Otting 1984.

⁴⁷ *NHC* 5.3:30, 2-6 (Robinson 1988: 264). Cf. also the *2nd Book of Jeu* ch. 52; the *Left Ginza* 3:56; *NHC* 7.127:20f. Those documents witness the correctness of Origen’s bold remarks in *c. Cels.* 7.40 and 6.30f.

by *Markos* and *Theodotus*, both Valentinians, by *Bardaisan of Edessa* and — last not least — by *Mani*. The details cannot be spelled out here, since the discourse's meta-structure is my primary concern.⁴⁸ But to summarize the feature of Gnostic astrology one comes to the conclusion that, besides the topic of heavenly journeys and magical empowerment, it is the hermetic doctrine of correspondences that is of overwhelming importance.⁴⁹ This doctrine was applied to different areas such as the 12 apostles, to zodiacal geography, or zodiacal medicine (which is called *melothesia*). In most cases the doctrines of the astrological tradition were well-known, at times even to a very sophisticated degree. Of further interest is the fact that the influence of Egyptian doctrines, particularly the *decane* systems with their implementation of the numbers 36 and 72, had an important impact on Gnostic astrology's proceedings.

4.3. Fate, Volition, Piety

I now enter one of the most difficult discourses of late antiquity. The philosophical controversy about fate and volition made use of the concepts of *heimarmenê* and *tychê*, applying them either in a deterministic sense — mainly among stoic philosophers — or in an anti-fatalistic manner. The latter's argumentative paradigm was elaborated by Carneades and adopted by many scholars after him, including Cicero, Philo of Alexandria, or Origen.⁵⁰ If these concepts are contrasted with Jewish or Christian doctrines, several intriguing questions arise: given the dominance of fate how can we still speak of correct behavior from an ethical point of view? What is sin if

⁴⁸ For detailed analyses see von Stuckrad 1999.

⁴⁹ See esp. the doctrines of *Markos* as described in Irenaeus *Adv. haer.* 1.14,3-6; Epiphanius *Panarion* 34.5. *Theodotus* was the first to explore the correspondences between zodiacal signs and apostles, see *Excerpta ex Theodoto* 25.2. *Bardaisan* "has to be called the first significant astrologer within the wider perspective of Christianity" (Gundel 1966: 326); that was witnessed by Eusebius *Praep. evang.* 6.9,32. *Mani's* considerable contribution to monotheistic astrology is minutely examined in von Stuckrad 1999, ch. X.

⁵⁰ This was impressively shown by Amand 1945.

everything is controlled by the heavenly bodies? Does prayer and piety make any sense in a deterministic concept? What about redemption? Questions like these mark the center of monotheistic controversies about fatalistic doctrines. However, the answers were much more complicated than most scholars assume since the ancient writers were enthusiastically trying to cope with the challenges through an integration of different philosophies rather than simply denying the validity of *heimarmenê* concepts. Thus, the modern notion that Jewish and Christian religions are *per se* excluding every fatalistic component does not meet the standard of ancient discourses.⁵¹

In this respect it is to be remembered that volition “is an artificial concept. We have to study certain specialist theories in order to find out how it is to be manipulated.”⁵² Turning to ancient discourses the possibility has to be acknowledged that people were talking about volition and fate in a way that did not mirror modern concepts of determinism and clock-work doctrines of Newtonian provenance. The complex ambiguities of monotheistic interest in fatalistic argumentation can be shown in a variety of documents. In the following, I restrict myself to Josephus Flavius and the highly influential discussion of the talmudic rabbis in bShab 156ab. It will be shown that astrological doctrines were easily adopted as soon as free will was secured, thus establishing a unique Jewish astrology.

Josephus Flavius makes extensive use of the common concepts of free will, determinism, and providence. For example, in his description of the Second Temple’s destruction he chooses the following words: although one has to mourn for the loss of such a building “one gains affluent consolation in the notion that man’s works and cities are as dependent on fate as living creatures. However, one has to wonder about the accuracy regarding the turning of the times this fate exhibits

⁵¹ The simple and highly theoretical dichotomy of determinism/astrology and monotheistic religions — leading to the dichotomy of force and prayer — is still widely accepted, cf. especially Wächter 1969.

⁵² Ryle 1970: 61. The whole ch. 3 of Ryle’s book is fruitful for the present discussion.

because it correlates, as I have already mentioned, exactly to the month and even the same day the temple was first ignited by the Babylonians (*BJ* 6.267-270).” Josephus insists on the fact that the Temple’s destruction was determined by God from the outset, “and in the turning of the times the day scheduled by fate had now arrived (*parên de hê heimarmenê chronôn periodois [BJ 6.249-250]*).” The *periods of time* structure political and religious history, thus making future developments determinable. This, however, is only half of the truth because Josephus emphasizes the Jewish responsibility for the *success* of God’s plans: “To be sure,” he says, “this time the burning of the Temple was the fault and guilt of the Jews themselves (*BJ* 6.250).” What seems, at first glance, to be an inconsistency illuminates the very struggle Josephus fought to integrate the perspective of his Roman readers — which was his own, too — into the *Heilsgeschichte* of the Jewish people. Josephus argues that *heimarmenê* is to be regarded as the hand of Providence which is God’s own work. Thus, *heimarmenê* helps to make manifest the primordial plan. At the same time there exists a kind of meta-law that connects the unfolding of Jewish history with ethical notions known from deuteronomistic theology. Israel, through righteous or sinful behavior, is itself responsible for her fate. Consequently, God’s will is insolubly molded by *heimarmenê*.⁵³

Given the primordial blueprint of history and the responsibility of the Jewish people to make the plan come true, it is of crucial importance to understand God’s hidden message. A specialist is needed to interpret the heavenly signs and figure out the present point on the historical line. Here the astrological interpretation comes into play. Josephus tells us that before the Temple’s destruction God had given unmistakable signs that were ignored by the people (*BJ* 6.288-291). A comet was visible for one year indicating not the Jewish victory but the triumph of Vespasian: “But people are not able to escape their fate, even if they foresee it. The Jews interpreted some of the omens according to their wishes, ignored others light-minded, until the fall of their capitol and their own ruin convinced them of their stupidity (*BJ* 6.314-

⁵³ Cf. also *BJ* 6.99-110 and *AJ* 16.394-399.

315).”⁵⁴ There can be no doubt that Josephus (in his own perception) belonged to those who were able to read the heavenly signs correctly. His opposition was not directed against the validity of astrological interpretation but against those charlatans who — by means of selfish and foolish interpretations — led Israel astray.

An interesting parallel to Josephus’ account is found in the ambiguous position towards astrology adopted by the Sibylline Oracles of Jewish origin. On the one hand, a resolute refutation of cultic transgression such as divination, sorcery, and astrolatry is proposed,⁵⁵ on the other hand, the oracles make use of genuine astrological speech in describing the “clear signs” indicating the “end of all things on earth,” namely “when swords appear on the starry sky at night in the evening and also against dawn.”⁵⁶ The allusion to comet theories is apparent. Furthermore, the oracles employ the same matrix of fate and volition so prominent in Josephus. History is depicted as the result of foresight (*pronoia*) and fate (*tychê*) that mingles with cultic obedience or transgression by the Jewish people. About the politics of Nero the Sibyl finds the following words: “For murder and terrors are in store for all men because of the great city and because of the righteous people which is preserved throughout everything, which Providence held in special place.” Furthermore, “Arrogance, unstable one of evil counsels, surrounded by evil fates, the beginning and great end of toil for men when creation is spoiled and saved again by the fates (5:225-230).”

The peculiar combination of Jewish piety and astrological determination was not limited to hellenized Jews such as Josephus. Indeed, it is also found in the Christian claim that the star of Bethlehem signaled the Messiah’s birth. But even more interesting is the special emphasis

⁵⁴ The comet and other omens were usually interpreted similarly to Josephus’ account. Cf. Eusebius *Hist. Eccl.* 3.8,2; Hegesippus *Hist. Eccl.* 5.44; Tacitus *Hist.* 5.13 and Suetonius *Vespasian* 4.

⁵⁵ *Oracula Sibyllina* 3:218-233.

⁵⁶ *Oracula Sibyllina* 3:796-800. “Fiery swords” are also mentioned in 3:672-679; cf. *Oracula Sibyllina* 5:155-161 and 5:206-213. Book 5 has also an explicit messianic interpretation of Num. 24:17: “From the vaults of heaven came a blessed man carrying the scepter in his hands, which had been commissioned to him by God (5:414).”

rabbinical discourse laid on the hidden nexus between fate and piety. Whereas the Mishna's account on astrology was mainly concerned with cultic implications, midrashic and talmudic literature displays a deep-going interest in all aspects of heavenly prediction. The highest standard of argument was achieved in the Babylonian Talmud which is to be regarded as a coherent, partly pseudepigraphic piece of literature, created by an independent group of Jewish scholars who *used* tradition rather than simply interpreting it.⁵⁷ Hence, the sugya bShab 156ab, as *locus classicus* usually pulled up when the rabbis' attitude towards astrology is at stake, assembles diversified lines of argument attributed to different rabbinical names. The attribution to names never give access to a chronological development of rabbinical positions as has been assumed by many scholars. Instead, this sugya has to be interpreted as a constructed argumentation of later discourse that merely reflects previous developments. This does not mean, of course, that the Bavli is a-historical or ignorant with regard to Jewish tradition. It simply implies that bShab 156ab — as well as all other sugyot — must be studied on its own merits before we can ask for any textual or historical connection with other sources.

The passage under consideration consists of three parts. First, the text refers to Rabbi Jehoshua ben Levi's note book and its description of how people's fate will be like if they are born on Monday, Tuesday etc. The second part is introduced by Rabbi Chanina saying, "Go and tell the son of Levi: It is not the *mazzal* of the day but the *mazzal* of the hour that determines (people's fate)." In the following, the rulership of the planets is connected with the birth's hour, thus leading to a more individual interpretation of the zodiacal correspondence. In the third part, the concept of *mazzal* is explained in more detail, focusing on the question whether Israel has a *mazzal* of her own. Three small haggadic

⁵⁷ As can easily be recognized, in this assumption I follow the 'House of Neusner.' Cf. among many other publications Neusner 1992-93; Jacobs 1991: 17. Neusner's stress on the discourse analyses comes very close to my methodological assumptions; cf. Neusner 1997.

episodes are told in order to reveal the mysterious connection between Israel's piety and determination of fate.

In short, the rabbis display a considerable insight into astrological tradition. Most of the attributions of days of the week and planets to certain characteristics are in harmony with the *vulgata*, though a typical Jewish perspective had sometimes its impact on the interpretation, e.g., the correspondence between Wednesday — Mercury — and intellectual or rational competence or the gathering of information is the result of common astrological discourse, but the secondary explanation of this correspondence is rabbinical: The Hebrew word *or* stands either for good memory or the heavenly lights. The same is true for Thursday corresponding, as usual, with Jupiter and his jovial and generous nature. Either 'Jupiter' or 'generosity' is depicted with the Hebrew term *tsedeq/ts^e daqah*. This is also maybe an explanation for the ascription of fish and birds — both are symbols for multiplicity and superabundance (cf. Gen. 1:20-22) and do not fall under the halakhot on meat, thus signifying the generous freedom from religious laws.

A similar eclectic use of the astrological tradition is prevailing almost everywhere within the talmudic perspective. Since the relation between (planetary) fate and monotheistic volition is my present concern, I shortly turn to the concluding part of the sugya. The three episodes illuminating the rabbis' controversy about the influence of the *mazzal* all follow the same pattern: astrological prediction is contrasted with the factual results in such a way that the general 'energetic' interpretation remains true, although the 'levels' of the corresponding facts are altered due to Jewish piety.⁵⁸ The astrologer Ablat got it right when he prophesized that a snake will bite the man he was watching with Shmuel, but due to a good deed the (Jewish) man altered the manifestation and the snake was found in his bag cut in two pieces. Thus, this little story gives no evidence for Israel

⁵⁸ "Astrology was the 'hook' on which an extremely important theological confrontation took place; the confrontation between pagan fatalism and Jewish insistence on Divine Election, Divine Salvation, and Free Will; both through works (R. Samuel and R. Akiba) and through faith (R. Nachman) (Dobin 1983: 197)."

being completely independent of astrological notions. That “there is no *mazzal* for Israel” (*ain mazzal le-jisrael*) means that Israel — and *only* Israel — is freed from a simple-structured determination, thus giving way to an astrology without fatalistic implications. Through a pious life, according to torah, Jews are able to move freely across the ‘correspondence spectrum,’ whereas the accuracy of astrological prediction is never challenged.⁵⁹

4.4. The Imperial Utilization of Astrology

Heavenly signs always played a considerable role for the legislation of power. During imperial Roman times, when astrology shaped the very center of public discourse, the instrumentalization of heavenly signs culminated in a variety of senses. The emperor’s horoscope was publicly made known in order to emphasize that his claim for power corresponds with divine election and predetermination. In the course of time the imperial cult fostered a solarization of religion with the emperor’s divinization, on the one hand, and the extended use of astrological semantics on the other.

Such a political thinking was not limited to the Roman sovereigns. It was adopted by the Hasmonaeans, Herod, and the Christian emperors alike. But now the Jewish religious tradition was brought up, thus combining the contemporary discourses that looked forward to a change of time with one’s own religious identity. During intertestamental times a lot of documents raised yet another point of argument — the superiority of the Jewish religion over pagan claims. Those texts try to prove that scientific, ethical, and political knowledge had been elaborated and guarded by the Israelites since early times, whereas later developments were only possible due to Jewish transmission. Against this background the numerous legends about Abraham are to be understood teaching astrology to ‘Chaldeans’ or Egyptians. The hero can also be

⁵⁹ Neusner (1965-70, vol. 5: 192) correctly observes: “The rabbis generally accepted the accuracy of astrological predictions for Israel as a whole and for individual Jews.” Far too simple is Urbach’s comment: “Astrology not only contradicted the freedom of human choice, but also impaired the concept of Providence, that is, the doctrine of the free will and unrestricted power of God (1975: 277).”

Moses or Enoch — in every case the intention is to give evidence to Jewish superiority in religious matters.⁶⁰

With regard to Jewish and Christian discourses there emerged an own pattern of argument, clustering around the famous prophecy of Bileam in Num. 24:17: “A star will go out of Jacob, a scepter will rise from Israel.” The messianic connotation of this pagan prophecy⁶¹ captured the imagination of many Jews and Christians, especially of those striving for political power. A short summary may illustrate this:⁶²

The Hasmonaean kings made extensive use of astrological symbolism usually dragging on Bileam’s prophecy. During the reign of Alexander Jannaj a variety of coins were minted all bearing a star as prominent symbol. The *Hasmonaean star* can be depicted with eight rays or six points, with or without a circle, what Meshorer calls “perhaps the most common Jewish coin.”⁶³ To understand the astrological doctrine standing behind Alexander’s coins one has to take into account that his year of birth, 126 BCE, was marked by an important heavenly event, namely the so-called ‘great conjunction’ of Jupiter and Saturn in Pisces, i.e. a triple conjunction made possible by the planets’ retrograde movements.⁶⁴ In ancient cosmological thinking the cycles

⁶⁰ This claim is very old. It can be traced to Artapanos (2nd century BCE) and his Jewish history (*peri Ioudaiôn*) which is fragmentarily transmitted through Eusebius *Praep. Ev.* 9.8; 23; 27.

⁶¹ There can be no doubt about the messianic impact, since the targumim translate “King of Jacob” and “Messiah of Israel” (Targum Onkelos and Targum Pseudo-Jonathan), and the Codex Neofiti (FrgmT) has “Once a *King* will rise from the House of Jacob, and a *redeemer* and *emperor* from the House of Israel.” Cf. also the LXX rendering “A star will emerge from Jacob, a *man* (*antrôpos*) will rise from Israel.”

⁶² Von Stuckrad 1999, ch. III, gives a detailed analysis of the topic. Cf. also the bibliography presented there. Laato 1997 has shown that the messianic concept visible in Jewish and Christian discourse has its roots in Near Eastern royal ideology.

⁶³ Meshorer 1967: 119. Cf. also Kanael 1963 and Meshorer 1982.

⁶⁴ Actually, 126 BCE the great conjunction was not completed, since the retrograde phase of Jupiter ended with an orbis of 1°05′ to Saturn. The next exact great conjunction happened in 7 BCE (see below). The conjunction was calculated beforehand by Babylonian astrologers, cf. Kugler 1907-1935, vol. 2: 498f.

of Jupiter and Saturn were of extraordinary importance and the rare triple conjunctions always raised considerable speculations.⁶⁵ Jupiter was usually connected with kingship and royalty, whereas Saturn, being the seventh star and thus heralding the Sabbath, was attributed to the Jewish people. When Alexander — and his family — minted coins bearing the Hasmonaean star he laid claim on his sovereignty's divine election made visible by the great conjunction. His reign was the fulfillment of Bileam's prophecy.

Herod the Great, for his part, read the heavenly signs differently. Yet, he applied the same pattern of arguments. Being deeply engaged in the skilled astrological discourse, Herod saw himself as the Jewish Messiah who is to establish a divine reign for his people.⁶⁶ He was the new star rising from Israel. Given the astrological orientation of his politics Herod was extremely sensitive when it came to extraordinary heavenly spectacles. Taken this into account it is no longer surprising to find the king aggressively reacting to the challenge of his power during the years 7 and 6 BCE. What at first glance seems to be an outburst of persecution mania — the slaughtering of his wife, his sons, and a whole bunch of enemies⁶⁷ — turns out to be a 'reasonable' answer to the planetary threat. A great conjunction of Jupiter and Saturn took place in the last decade of Pisces, i.e. exactly on the vernal equinox of the time. Since the discovery of Hipparchus (2nd century BCE) the precession of the equinoxes was well-known and skilled people were aware of the extraordinary zodiacal place the planets gathered at in those years.⁶⁸

⁶⁵ A very good survey is given by Strobel 1987.

⁶⁶ Cf. the impressive biography of Schalit 1969 (for Herod's messianism see p. 476). In a speech Herod says, according to Josephus: "I think, through the will of god I helped the Jewish people to gain a level of wealth that was never known before (*AJ* 15.383) [...] But now, through God's will, I am the emperor, and there will be a long period of piece and superfluous wealth and income (*AJ* 15.387)."

⁶⁷ Josephus reports the events extensively in *AJ* 16.73-76.328-334.361-394. Cf. also Schalit 1967: 620-628.

⁶⁸ Cf. Strobel 1987: 1051.

The interpretation was now apparent: the last important conjunction of Jupiter and Saturn in 126 BCE brought forth a Jewish kingdom that was to last for 27 years and was extended enormously in area and influence; what more could be expected when it comes to a genuine great conjunction on the vernal equinox, stressed further by the planet Mars. No doubt, the events called for decided and resolute action and so Herod went for it. Furthermore, the king was driven by an enigmatic prophecy, once uttered by a Pharisee, that Herod was to lose his power “by God’s decree” (*AJ* 17.43f). Again, politics were deeply impregnated with astrological notions and Josephus himself raises the question whether these events are not to be regarded as the influence of necessity (*anankê*) or heavenly fate (*heimarmenê*).⁶⁹ This interpretation leads us right into the center of ancient discourses.

The Christian version of the triple conjunction’s ‘true meaning’ was near at hand. From this perspective, the birth of the Messiah was accompanied by a heavenly sign and the great conjunction was molded into the ‘Star of Bethlehem,’ thus ensuring the belief in Jesus’ divine origin. Generally, *the stars as signs* is a common motif within either canonical or non-canonical writings and the star of the Messiah intrigued the early Christians. From the second century on patristic literature discussed its theological implications. It is interesting to note that Origen’s reading of the planetary movements as the writing of God’s own hand (see above) was also applied to the birth of Jesus.

If it is right to say that the great conjunctions of Jupiter and Saturn had an astonishing impact on politics and self-definition one can assume that the next triple contact of the two would raise old questions anew. This was the case in the year 134 CE, during the Bar-Kokhba revolt, and it can be shown that astrological interpretation sheds light on the difficult psychological and historical circumstances of the Jewish rebellion. For this purpose, it is noteworthy to address the fact that Hadrian, who besieged Jerusalem and changed its name into *Aelia Capitolina* — a sanctuary for Jupiter, — was an astrologer him-

⁶⁹ *AJ* 16.397. Cf. Schalit 1969: 627 and Strobel 1987: 1073.

self.⁷⁰ He was by all means a skilled expert and there can be no doubt that he arranged his politics in accordance with astrological calculation.⁷¹ Turning to the Jewish rebels one finds a similar embeddedness. First, the very name of the leader — Bar Kokhba/aram. Bar Koseba, i.e. ‘son of the star’ — reveals not only a messianic expectation but also its astrological connotation. This notion was obviously common, even within Christian circles, for Eusebius of Caesaraea pretends: “The Jews’ leader was [a man] named Bar Kokhba [*Barchôchebas*] which means *star*. Although he was a bloodthirsty and rapacious man he was, due to his name, honored in a slavish manner as *lantern* [*phôstêr*] that had come down from heaven to help the oppressed and illuminating them (*Hist. Eccl.* 4.6,2).”

Second, during the revolt a number of coins were minted with a star as symbol above the temple front. In some cases the motif resembles a rosette or a small wave, so that no final decision is possible about its meaning.⁷² But the fact that Jews fashioned their most valuable coins, the silver tetradrachms, with a star-rosette on a marked position calls for explanation. The temple — and even more the *new* temple — was not mere decoration but program and propaganda.⁷³ Its interpretation as a star fits very well into the discourses of the day that were shared by pagans and Jews. Of importance is the fact that the conjunction of Jupiter and Saturn was observable all the time, thus enabling the Jews not familiar with astronomical calculus to make up their own minds about time’s quality.

⁷⁰ The renaming of the city can either be a thankful act to Jupiter *after* the victory over the Jews/Saturn or a preparing act *before* the siege. Thus, this interpretation does not solve the much-discussed difficulties of the termination of Hadrian’s decision.

⁷¹ Cf. Cramer 1954: 162ff.

⁷² Cf. Meshorer 1967 & 1982. Enthusiastically positive about the star is Strobel 1987: 1106; critical is Mildenberg 1984: 45. Sure about the star, but not about its messianic connotation, is Schäfer 1981: 65.

⁷³ Contra Mildenberg 1984: 45.

5. Results

Astrology is the key discipline for interpreting time. Based on the doctrine of correspondences it developed different branches where people sought to gain insight into the *meaning* of past, present, and future events. I described those branches in terms of various discourses that were much more intricate than modern scholarship, with its limited and preconceived perspective, usually acknowledges. As the dominant tool for analyzing time's quality, astrology was embraced and applied by Jews and Christians alike. Monotheism's criticism focused either on deterministic worldviews, not compatible with ethical propositions, or on the adoration of astral deities which is not in agreement with Jewish or Christian cult tradition. But to call this astrology means to neglect the refined standard of ancient discourses about the relation between both zodiac, stars, and earth as well as volition, fate, and ethics.

What is to be recognized in the Jewish and Christian documents, instead, is a serious attempt to blend astrological traditions with their own religious identities. In the course of this process astrological doctrines often had to undergo a transformation, sometimes necessitating a thorough-going modification. This can best be studied within the Manichaean context where the standard — and highly symbolic — number of seven 'planets' had to be modulated into a pentadic system due to Mani's preference for the number five.⁷⁴ Another example was the rabbinical discourse where the *primacy of religious coherence over astrological consistency* is also a key feature. Thus, the ancient monotheistic discourses were not ignited by questions of justification or refutation of astrology *as such*, but clustered around the *right interpretation* of heavenly signs. Each party claimed to have the correct knowledge of the 'message of God's hand' according to Jewish and Christian *Heilsgeschichte*. Each party made use of astrology as a helpful means for legitimizing their own religious position.

⁷⁴ Sun and moon were highly honored by Manichaean theology, so that they had to be removed from the 'seven archons' known from Gnostic contexts. For Manichaean astrology, up to now only merely examined, cf. von Stuckrad 1999: ch. X.

Future scholarship should not dismiss astrology's central status for Jewish and Christian thinking in late antiquity — and beyond.

University of Erfurt
 Department of Religious Studies
 Comparative Religion
 P.O. Box 307
 D-99006 Erfurt, Germany

KOCKU VON STUCKRAD

BIBLIOGRAPHY

Albani, M.

1993 "Der Zodiakos in 4Q318." In: *Mitteilungen und Beiträge der Kirchlichen Hochschule Leipzig, Forschungsstelle Judentum* 7: 3-42.

1994 *Astronomie und Schöpfungsglaube. Untersuchungen zum astronomischen Henochbuch* (Wissenschaftliche Monographien zum Alten und Neuen Testament 68). Neukirchen-Vluyn: Neukirchener Verlag.

Amand, D.

1945 *Fatalisme et liberté dans l'antiquité grecque. Recherches sur la survivance de l'argumentation morale antifataliste de Carnéade chez les philosophes grecs et les théologiens chrétiens des quatre premiers siècles*. Université de Louvain. New print Amsterdam 1973: Hakkert.

Barton, T.

1994 *Power and Knowledge: Astrology, Medicine and Physiognomics under the Roman Empire*. Ann Arbor.

1995 *Ancient Astrology*. 2nd ed. London & New York: Routledge.

Beckwith, R.T.

1996 *Calendar and Chronology, Jewish and Christian. Biblical, Intertestamental and Patristic Studies*. Leiden etc.: Brill.

Berger, P.L. & Th. Luckmann

1966 *The Social Construction of Reality*. Garden City, NY: Doubleday.

Bischoff, E.

1907 *Babylonisch-Astrales im Weltbilde des Thalmud und Midrasch*. Leipzig: J.C. Hinrichs.

Böttrich, Chr.

1997 "Astrologie in der Henochtradition." In: *Zeitschrift für die alttestamentliche Wissenschaft* 109: 222-245.

Bouché-Leclercq, A.

1899 *L'Astrologie Grecque*. Paris: E. Leroux.

Charlesworth, J.H.

1977 "Jewish Astrology in the Talmud, the Pseudepigrapha, the Dead Sea Scrolls and Early Palestinian Synagogues." In: *Harvard Theological Review* 70: 183-200.

1987 "Jewish Interest in Astrology during the Hellenistic and Roman Period." In: *ANRW* II.20.2: 926-950.

Charlesworth, J.H. (ed.)

1983-85 *The Old Testament Pseudepigrapha* 2 vols. Garden City & New York: Doubleday.

Chyutin, M.

1993 *The War of the Calendars in the Period of the Second Temple and the Redaction of the Psalms according to the Calendar* [Hebr.]. Tel Aviv: Modan.

Cramer, F.

1954 *Astrology in Roman Law and Politics* (Memoirs of the American Philosophical Society 37). Philadelphia: American Philosophical Society.

Cumont, F.

1937 *L'Egypte des astrologues*. Paris. New Print Brussels: Edition Culture et Civilisation 1982.

Cumont, F. & F.J. Boll (eds. [among others])

1898-1953 *Catalogus codicum astrologorum graecorum*. 12 vols. Brussels.

Dean-Otting, M.

1984 *Heavenly Journeys. A Study of the Motif in Hellenistic Jewish Literature* (Judentum und Umwelt 8). Frankfurt a. M. etc.: P. Lang.

Dethlefsen, Th.

1979 *Schicksal als Chance. Das Urwissen zur Vollkommenheit des Menschen*. München: C. Bertelsmann.

Dobin, J.C.

1983 *The Astrological Secrets of the Hebrew Sages. To Rule Both Night and Day*. Rochester: Inner Traditions.

Faivre, A.

1994 *Access to Western Esotericism*. Albany: State University of New York Press.

Faivre, A. & J. Needleman

1992 *Modern Esoteric Spirituality*. New York: Crossroad.

Fowden, G.

1986 *The Egyptian Hermes*. Cambridge: Cambridge University Press.

Gager, J.G.

1992 *Curse Tablets and Binding Spells from the Ancient World*. Oxford: Oxford University Press.

Glessmer, U.

1991 "Der 364-Tage-Kalender und die Sabbatstruktur seiner Schaltungen in ihrer Bedeutung für den Kult." In D.R. Daniels et al. (eds.): *Ernten, was man sät. Festschrift für Klaus Koch zu seinem 65. Geburtstag: 379-398*. Neukirchen-Vluyn: Neukirchener Verlag.

1996 "The Otot-Texts (4Q319) and the Problem of Intercalations in the Context of the 364-Day-Calendar." In H.-J. Fabry, A. Lange & H. Lichtenberger (eds.): *Qumranstudien. Vorträge und Beiträge der Teilnehmer des Qumranseminars auf dem internationalen Treffen der Society of Biblical Literature 1993*: 125-164. Göttingen: Vandenhoeck & Ruprecht.

Goodenough, E.R.

1953-68 *Jewish Symbols in the Greco-Roman Period*, 8 vols. New York: Pantheon Books et al.

Graf, F.

1996 *Gottesnähe und Schadenzauber Die Magie in der griechisch-römischen Antike*. München: C.H. Beck.

Gruenwald, I.

1980 *Apocalyptic and Merkava Mysticism* (Arbeiten zur Geschichte des antiken Judentums und des Urchristentums 14). Leiden etc.: Brill.

1988 *From Apocalypticism to Gnosticism. Studies in Apocalypticism, Merkavah Mysticism and Gnosticism* (Beiträge zur Erforschung des Alten Testaments und des antiken Judentums 14). Frankfurt etc.: P. Lang.

Gundel, W. & H.G. Gundel

1966 *Astrologumena: Die astrologische Literatur in der Antike und ihre Geschichte* (Sudhoffs Archiv 6). Wiesbaden: Steiner.

Gundel, H.G.

1968 *Weltbild und Astrologie in den griechischen Zauberpapyri* (Münchener Beiträge zur Papyrusforschung und antiken Rechtsgeschichte 53). München: C.H. Beck.

Hanegraaff, W.J.

1995 "Empirical Method in the Study of Esotericism." In: *Method & Theory in the Study of Religion* 7:2, 1-49.

1996 *New Age Religion and Western Culture. Esotericism in the Mirror of Secular Thought* (Studies in the History of Religions 72). Leiden etc.: E.J. Brill.

Haran, M.

1978 *Temple and Temple Service in Ancient Israel*. Oxford: Clarendon.

Jacobs, L.

1991 *Structure and Form in the Babylonian Talmud*. Cambridge: Cambridge University Press.

Kanael, B.

1963 "Ancient Jewish Coins and Their Historical Importance." In: *Biblical Archaeologist* 36: 38-62.

Koselleck, R.

1995 *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten*. 3rd ed. Frankfurt a. M.: Suhrkamp.

Kugler, F.X.

1907-1935 *Sternkunde und Sterndienst in Babel. Assyriologische, astronomische und astralmythologische Untersuchungen*. Münster: Aschendorff.

Laato, A.

1997 *A Star is Rising. The Historical Development of the Old Testament Royal Ideology and the Rise of the Jewish Messianic Expectations*. Atlanta, GA: Scholars Press.

Levine, A.B.

1974 *In the Presence of the Lord. A Study of Cult and Some Cultic Terms in Ancient Israel*. Leiden: Brill.

Lindsay, J.L.

1971 *Origins of Astrology*. London: Muller.

Mach, M.

1992 *Entwicklungsstadien des jüdischen Engelsglaubens in vorrabbinischer Zeit* (Texte und Studien zum antiken Judentum 34). Tübingen: Mohr.

Mack, B.L.

1995 *Who Wrote the New Testament? The Making of the Christian Myth*. San Francisco: Harper.

Maier, J.

1990 "Zu Kult und Liturgie der Qumrangemeinde." In: *Revue de Qumran* 14 (56): 543-586.

1995 *Die Qumran-Essener: Die Texte vom Toten Meer*. 3 vols. (Vol. 3 publ. 1996). München & Basel: Ernst Reinhardt.

Meshorer, Y.

1967 *Jewish Coins of the Second Temple Period*. Tel Aviv: Hassefer & Massada.

1982 *Ancient Jewish Coinage*. 2 vols. Dix Hills, NY: Amphora Books.

Meyer, M. & P. Mirecki (eds.)

1995 *Ancient Magic and Ritual Power*. Leiden etc.: Brill.

Meyer, M. & R. Smith (eds.)

1994 *Ancient Christian Magic: Coptic Texts of Ritual Power*. San Francisco: Harper.

Mildenberg, L.

1984 *The Coinage of the Bar Kokhba War*. Aarau etc.: Sauerländer.

Milgrom, J.

1983 *Studies in Cultic Theology and Terminology*. Leiden: E.J. Brill.

Morgan, M.A.

1983 *Sepher ha-Razim* (SBL Texts and Translations 25: Pseudepigrapha series 11). Chico, CA: Scholars Press.

Müller, K.E. & J. Rüsen (eds.)

1997 *Historische Sinnbildung. Problemstellungen, Zeitkonzepte, Wahrnehmungshorizonte, Darstellungsstrategien*. Reinbek: Rowohlt.

Naveh, J. & Sh. Shaked

1987 *Amulets and Magic Bowls: Aramaic Incantations of Late Antiquity*. 2nd. ed. Jerusalem: Magnes Press.

1993 *Magic Spells and Formulae. Aramaic Incantations of Late Antiquity*. Jerusalem: Magnes Press.

Neusner, J.

1965-70 *A History of the Jews in Babylonia*. 5 vols. Leiden: Brill.

1992-93 "Das Problem des babylonischen Talmud als Literatur: Der Bavli und seine Quellen." In: *Kairos* 14/15: 64-74.

1997 *The Ecology of Religion. From Writing to Religion in the Study of Judaism*. Atlanta, GA: Scholars Press.

Newsom, C.

1985 *Songs of the Sabbath Sacrifice: A Critical Edition* (Harvard Semitic Studies 27). Atlanta, GA: Scholars Press.

Nilsson, M.P.

1974 *Geschichte der griechischen Religion*. Vol. II: *Die hellenistische und römische Zeit*. 3rd edition. Munich: C.H. Beck.

North, J.

1994 *The Fontana History of Astronomy and Cosmology* (Fontana History of Science). London: Fontana Press.

Patai, R.

1994 *The Jewish Alchemists. A History and Source Book*. Princeton: Princeton University Press.

Riedinger, U.

1956 *Die Heilige Schrift im Kampf der griechischen Kirche gegen die Astrologie von Origenes bis Johannes von Damaskos. Studien zur Dogmengeschichte und zur Geschichte der Astrologie.* Innsbruck: Wagner.

Robinson, J.M. (ed.)

1988 *The Nag Hammadi Library in English.* 2nd ed. (¹1977). Leiden etc.: Brill.

Rorty, R.

1979 *Philosophy and the Mirror of Nature.* Princeton: Princeton University Press.

1989 *Contingency, Irony, and Solidarity.* Cambridge, MA: Cambridge University Press.

Ryle, G.

1970 *The Concept of Mind.* First publ. 1949. 3rd reprint. Harmondsworth: Penguin Books.

Schäfer, P.

1981 *Der Bar Kokhba-Aufstand. Studien zum zweiten jüdischen Krieg gegen Rom (Texte und Studien zum antiken Judentum 1).* Tübingen: Mohr.

Schäfer, P. & H.G. Kippenberg (eds.)

1997 *Envisioning Magic. A Princeton Seminar and Symposion (Studies in the History of Religions 75).* Leiden etc.: Brill.

Schalit, A.

1969 *König Herodes. Der Mann und sein Werk (Studia Judaica. Forschungen zur Wissenschaft des Judentums 4).* Berlin: de Gruyter.

Smelik, W.F.

1995 "On Mystical Transformation of the Righteous into Light in Judaism." In: *Journal for the Study of Judaism* 26.2: 122-144.

Smith, J.Z.

1990 *Drudgery Divine. On the Comparison of Early Christianities and the Religions of Late Antiquity.* Chicago: University of Chicago Press.

Strobel, A.

1977 *Ursprung und Geschichte des frühchristlichen Osterkalenders (Texte und Untersuchungen 121).* Berlin: Akademie-Verlag.

1987 "Weltenjahr, Große Konjunktion und Messiasstern." In: *ANRW* II.20.2: 988-1190.

Stuckrad, K. von

1996 *Frömmigkeit und Wissenschaft. Astrologie in Tanach, Qumran und frühbabylonischer Literatur (Europäische Hochschulschriften XXIII/572).* Frankfurt a. M. etc.: Peter Lang.

1999 *Das Ringen um die Astrologie. Jüdische und christliche Beiträge zum antiken Zeitverständnis* (Religionsgeschichtliche Versuche und Vorarbeiten 49). Berlin & New York: Walter de Gruyter.

1999a "Entsprechungsdenken als Grundform esoterischer Wirklichkeitsdeutung: Das Beispiel Astrologie." In: *Spirita* (forthcoming).

Talmon, S.

1986 *King, Kult and Calendar in Ancient Israel* (Collected Essays 1). Jerusalem: Magnes Press.

Thorndike, L.

1923 *A History of Magic and Experimental Science*. New York: Columbia University Press.

Urbach, E.E.

1975 *The Sages. Their Concepts and Beliefs*. Jerusalem: Magnes Press.

Wächter, L.

1969 "Astrologie und Schicksalsglaube im rabbinischen Judentum." In: *Kairos* 11: 181-200.

Waerden, B.L. van der

1968 *Die Anfänge der Astronomie. Erwachende Wissenschaft* 2. Groningen: P. Noordhoff. ²Boston/Basel/Stuttgart 1980.

White, H.

1973 *Metahistory: The Historical Imagination in Nineteenth-Century Europe*. Baltimore: The Johns Hopkins University Press.

1978 *The Tropics of Discourse: Essays in Cultural Criticism*. Baltimore: The Johns Hopkins University Press.