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Reading the human body

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CHAPTER V

FUNCTIONS AND CONTEXTS OF PHYSIOGNOMIC AND ASTROLOGICAL LEARNING IN THE DEAD SEA SCROLLS AND SECOND TEMPLE PERIOD JUDAISM

INTRODUCTION

In the previous chapters, I have been concerned with the reconstruction and interpretation of the remains of the physiognomic catalogues preserved in *4QZodiacal Physiognomy* and *4QPhysiognomy ar*. In this final chapter the scope will be broadened to include questions about the possible function, context, and status of these physiognomic catalogues and the knowledge that they convey to the intended reader inside and outside the Qumran community.

Any extrapolation from physiognomic texts, such as the two lists from Qumran, to social functions and contexts must remain tentative. There are few references in the ancient literature that reveal in what setting, by whom, and how such texts and the learning contained in them were used, and these must be weighed carefully.¹ In Chapter Two some insight was gained concerning the social background of those involved in the cultivation of physiognomic learning in the Babylonian and Greco-Roman traditions. Although our knowledge remains limited, this may clarify some aspects of the social context of physiognomic and, for that matter, astrological learning in Second Temple period Palestine.

Before speculating in more detail about the social and cultural locus of the people transmitting, reading, and using texts such as *4QZodiacal*

¹ Compare this, for instance, with what is known about the authors of ancient Jewish dreams. See F. Flannery-Dailey, *Dreamers, Scribes, and Priests: Jewish Dreams in the Hellenistic and Roman Eras* (JSJSup 90; Leiden: Brill, 2004). Regarding the issue of people or social groups behind texts, cf. also M.E. Stone, "The Book of Enoch and Judaism in the Third Century B.C.E.," *CBQ* 40 (1978): 479-92, at 483: "Caution in such matters is wise, for the movement from tendencies of thought discerned in the analysis of texts to the positing of the existence of otherwise unattested social groups is fraught with peril. Yet, that danger is one that the scholar must brave if his analysis is conducted in terms that imply a sociological matrix for the development of ideas." See also the cautious remarks with regard to the Dead Sea Scrolls by P.R. Davies, "Sects from Texts: On the Problems of Doing a Sociology of the Qumran Literature," in *New Directions in Qumran Studies: Proceedings of the Bristol Colloquium on the Dead Sea Scrolls, 8-10 September 2003* (eds. J.G. Campbell, W.J. Lyons and L.K. Pietersen; LSTS 52; London: T&T Clark, 2005), 69-82.

Physiognomy and *4QPhysiognomy ar* some attention needs to be devoted to the type of knowledge offered by these texts. Should they be, as has been suggested, regarded as scientific writings? Can more be said about the nature of the learning transmitted by these texts? If *4QZodiacal Physiognomy* draws connections between different elements, such as the human body, zodiacal signs and spirits, and stones, is it possible to recognize a specific attitude behind the collection of these various aspects in one text?

Who was interested in these expressions of physiognomic and astrological learning? If, as has been suggested, for example, for the astronomical and geographical parts of Enochic literature, these texts from Qumran represent learned, scientific texts, then their authors or readers too were presumably part of a well-educated body of people in ancient Jewish society. How did people become familiar with physiognomic and astrological learning? Is it possible to be more precise and locate the education in and transmission of that knowledge with, say, priestly or secular scribes and scholars? Taking into account Babylonian and Hellenistic physiognomic and astrological traditions and the cultural exchange of ideas that went on in the Persian and Hellenistic period,² outside influences on Hellenistic-Early Roman period Palestine seem likely in the case of *4QZodiacal Physiognomy* and *4QPhysiognomy ar*, and scholars have suggested this. Is it possible to trace the cultural origin of the concepts operative in these Qumran texts to Babylonian or Hellenistic influence? Finally, inquiries into ancient Jewish science by scholars have focused primarily on material provided by *1 Enoch* and the lists of revealed things in apocalyptic literature. What can texts like the physiognomic catalogues from Qumran contribute to our understanding of ancient Jewish science?

Some scholars assume that *4QZodiacal Physiognomy* was of marginal interest to members of the Qumran community, while others think it was very important for the community, especially for its leadership. What was the status of physiognomic and astrological learning? With regard to the latter the controversial character of it surfaces again and again in different sources. Astrology was condemned and criticized by some, but also accepted and admired by others. How does this controversial nature bear on the presence of the physiognomic-astrological text *4QZodiacal Physio-*

² For cultural exchanges between Mesopotamia and Greece, see e.g. A. Kuhrt and S. Sherwin-White (eds.), *Hellenism in the East: The Interaction of Greek and Non-Greek Civilizations from Syria to Central Asia after Alexander* (Berkeley: University of California Press, 1987); W. Burkert, *The Orientalizing Revolution: Near Eastern Influence on Greek Culture in the Early Archaic Age* (RevAnt 5; Cambridge, Massachusetts: Harvard University Press, 1992); Dalley et al., *Legacy of Mesopotamia*; W. Burkert, *Babylon, Memphis, Persepolis: Eastern Contexts of Greek Culture* (Cambridge, Massachusetts: Harvard University Press, 2004).

gnomy in the collection of manuscripts from Qumran? Is the inverted and mixed writing of the manuscript in some way related to its status?

Finally, were people interested in the relationships between a person's body and his fate, and a person's body and his zodiacal sign and its spirit, just for the sake of it, or was there also a more practical relevance and application of that learning? If *4QZodiacal Physiognomy* is concerned with establishing the division between light and darkness of a person's zodiacal sign and its spirit in relation to the appearance of the human body, then the question may be raised whether there was any further practical relevance and function to that knowledge and, if so, in what way. Scholars have suggested that physiognomic learning may have functioned in the context of an admission procedure for the Qumran community, but if *4QZodiacal Physiognomy* assesses the zodiacal instead of the human spirit, is such a context still conceivable? Also, taking into account that the Qumran physiognomic catalogues are non-sectarian compositions, can a function and practical relevance for them be thought of outside of the Qumran community, i.e. in a non-sectarian context?

ANCIENT SCIENCE AND UNDERSTANDING COSMIC CONNECTIONS

The manuscripts *4QZodiacal Physiognomy* and *4QPhysiognomy ar*, or *4QZodiology and Brontology ar* for that matter,³ are invaluable evidence for a Jewish interest during the Second Temple period in the workings of nature and the cosmos. These texts complement in an important way the evidence from Enochic and apocalyptic literature.⁴

4QZodiacal Physiognomy and *4QPhysiognomy ar* demonstrate the existence and dissemination of certain forms of physiognomic and astrological knowledge in Palestine during the Hellenistic-Early Roman period. Modern definitions of science or distinctions such as "science" and "pseudo-science" may distort our understanding of the function and context of these texts in ancient Jewish society in Palestine.

Comparison with similar texts from Babylonian and Greco-Roman cultures, taking their socio-cultural background into account too, suggests that these two physiognomic lists from Qumran represent examples of ancient

³ The *Treatise of Shem* is possibly another astrological example, but the dating to the first century BCE is far from certain. Cf. J.H. Charlesworth, "Treatise of Shem," *OTP* 1:473-86; A. Mengozzi, *Trattato di Sem e altri testi astrologici* (TVOa 7, LSc 1; Brescia: Paideia, 1997); J.H. Charlesworth, *Die Schrift des Sem* (JSHRZ-NF 2.9; Gütersloh: Gütersloher Verlaghaus, 2005).

⁴ See Stone, "Lists of Revealed Things"; P.S. Alexander, "Enoch and the Beginnings of Jewish Interest in Natural Science," in *The Wisdom Texts from Qumran*, 223-43.

Jewish science.⁵ Furthermore, the nature of the learning exhibited in these texts from Qumran can be characterized as an expression of the notion of cosmic sympathy. This is less clear with *4QPhysiognomy ar* because the extant fragments do not attest to the combination of other branches of learning than physiognomics, but seems an appropriate characterization for *4QZodiacal Physiognomy*.

Physiognomics and Astrology as Ancient Science

Within the historiography of science it is a debated issue whether the classification of physiognomic and astrological texts as scientific is correct. The methods and reasoning of ancient physiognomic and astrological learning do not compare with modern standards of scientific research, nor can it be assumed that, comparable to the modern period, a notion of natural science as a separate domain of intellectual inquiry was perceived.⁶ This, however, does not invalidate characterizing these arts and their interest in the fabrics of reality as scientific. Science is not detached from social reality, it is a historically defined activity conducted by people in different contexts. What counts as scientific knowledge may differ over time and place depending on context.⁷

Like medicine, Greek culture characterized physiognomic and astrological learning as τέχναι (arts), indicating it to have been crafts requiring much practice and experience. These arts were regarded as conjectural bodies of knowledge in which the practitioner could end up with the wrong results, but without disqualifying the presuppositions of the arts themselves.⁸ Risking an anachronism with the characterization “scientific,” the term is helpful too in drawing attention to the learned character and possibly high status of the knowledge contained in the Qumran physiognomic texts. Like the τέχναι (arts) of astrology, physiognomics, and medicine in Greco-Roman society, the appropriation of these bodies of knowledge within Palestinian Judaism of the Hellenistic-Early Roman period would have presupposed practice and experience. This pursuit of knowledge required not only the

⁵ Alexander, “Physiognomy,” 389; Alexander, “Beginnings of Jewish Interest in Natural Science,” 230-31.

⁶ It is possible that in Babylonia a mathematical astronomical interest may have existed purely for its own sake. Cf. Swerdlow, *Babylonian Theory of the Planets*, 174.

⁷ On science in antiquity, see e.g. G.L. Irby-Massie and P.T. Keyser, *Greek Science of the Hellenistic Era: A Sourcebook* (London: Routledge, 2002); G.E.R. Lloyd, *Ancient Worlds, Modern Reflections: Philosophical Perspectives on Greek and Chinese Science and Culture* (Oxford: Clarendon, 2004). On the classification of ancient astrology and physiognomics as science, see e.g. Barton, *Power and Knowledge*; Rochberg, *The Heavenly Writing*.

⁸ Cf. Pseudo-Aristotle, *Physiognomica* 806a 15; Plutarch, *Sulla* 5.5-6; Ptolemy, *Tetrabiblos* 1.2.13 (1.3.18). Cf. Barton, *Power and Knowledge*, 2, 16 n. 57; Vogt, *Physiognomica*, 307; Sassi, *Science of Man*, 179-83.

means to devote one's time to such an activity of learning, but also higher education.

The arts of physiognomics and astrology were a means to get a grip on reality in a systematic way. Physiognomics claimed to understand certain aspects of individual people by classifying types of people in a certain fashion. In Babylonian tradition the human body was one of the means through which the gods communicated their messages about people's fates. This notion was worked out in the huge catalogue of *Alamdimmû* that listed all sorts of possible signs in the appearance and shape of the human body and their meaning for people's fates. In Greco-Roman tradition physiognomics was a sophisticated means of codifying certain social values about types of people, their characters and the visibility of a character through a person's body. It was not only accompanied by a logico-semiotic reasoning, but also by a physiological foundation through the notion of humors and their mixture that was considered responsible for the configuration of people's bodies and characters.

Astrology and astronomy developed in such a way as to enable people to predict the movements of sun, moon, and planets, and also to predict, from their perceived character in relation to the zodiacal signs, their influences on earthly affairs and the lives of people.⁹ Not only was there a sense of analogy between heavenly and earthly matters ("as above, so below"), but the notion also developed that the whole structure of reality was such that everything in it was intricately interwoven with everything else.¹⁰ The four elements, for example, were believed to constitute the entire universe. This accounted for the connections between heavenly elements such as planets and zodiacal signs and types of people. The mixture of a planet had a distinct effect on the mixture of the human body.¹¹

Cosmic Sympathy and the Understanding of Cosmic Correspondences in 4QZodiacal Physiognomy (4Q186)?

The combination of different elements of learning in *4QZodiacal Physiognomy* reveals a tendency to bring various branches of knowledge together

⁹ Cf. Ptolemy, *Tetrabiblos* 1.1.1.

¹⁰ Von Stuckrad, *Ringgen um die Astrologie*; K. von Stuckrad, "Jewish and Christian Astrology in Late Antiquity – A New Approach," *Numen* 47 (2000): 1-40, does not sufficiently take this element into account, but he, rather one-sidedly, defines astrology as a matter of understanding the quality of time in terms of analogy and correspondence. Such a definition does not fully capture the sense of ancient astrology, which certainly also contained the notion of a more direct causation between heavenly and earthly elements. Cf. J. Dillon, "Plotinus on Whether the Stars are Causes," in *La science des cieux: Sages, mages, astrologues* (ed. R. Gyselen; ResOr 12; Bures-sur-Yvette: Groupe pour l'Étude de la Civilisation du Moyen-Orient, 1999), 87-92.

¹¹ Cf. Ptolemy, *Tetrabiblos* 3.12. See further the section in Chapter Two on the connection between physiognomics and astrology.

in one type of text. In addition, this sort of text may also indicate a particular attitude towards various aspects of the cosmos. The connection between physiognomics and astrology not only demonstrates the all-pervasive influence of the astrological worldview, but also shows that different things in the universe were seen as interrelated.¹²

In Greco-Roman tradition, Stoic philosophy formulated the notion of a cosmic harmony (συμπάθεια) between all elements in the universe in which everything had connections with everything else. This notion “is related to the idea of correspondences, which designated animals, plants and stones as sympathetic or antipathetic to particular conditions, which might or might not be seen to be caused by the heavenly bodies.”¹³ The Stoic idea of universal sympathy was the philosophical basis for Greco-Roman astrology in which the heavenly elements had causative force upon all earthly matters. The notion of cosmic sympathy between all elements in the universe makes the connections between different sorts of areas of learning understandable. In order to understand the nature and effect of specific stones, plants, or herbs in certain circumstances, one needed to understand their connections with other elements from the universe and how this in turn determined their mutual influence.¹⁴ Astrology was not only related to physiognomics, but also to medicine and magic, illustrating the interrelatedness of everything.¹⁵

Nils Heeßel has argued recently that Babylonian scholarly tradition experienced a paradigm shift during the Persian and Hellenistic periods. He suggests that the Babylonian scholars moved away from the traditional framework of analogical thought to one of cosmic sympathy in which the universe is thought to be alive. The notion of cosmic sympathy goes further than a semantic correspondence between various elements. It claims that all things are interrelated and that there is not just one sense to be discovered behind every sign. According to Heeßel, Babylonian scholars needed to know the exact workings of things in different configurations to understand the relations between them. This explains how procedures of medicine, which involve the use of such things as plants and stones, are related to astrological conditions.¹⁶

The Late Babylonian text *LBAT* 1593 connects astrological circumstances with medical treatment, when it says to the reader:

¹² Cf. the section in Chapter One on magico-medicinal stones and Chapter Two n. 210.

¹³ Barton, *Ancient Astrology*, 103.

¹⁴ Cf. Barton, *Ancient Astrology*, 103-4; Barton, *Power and Knowledge*, 38; J.-P. Brach and W.J. Hanegraaff, “Correspondences,” in *Dictionary of Gnosis and Western Esotericism* (ed. W.J. Hanegraaff et al.; vol. 1; Leiden: Brill, 2005), 275-79.

¹⁵ Cf. Barton, *Ancient Astrology*, 185-97. See also Chapter Two n. 216.

¹⁶ Heeßel, “Stein, Pflanze und Holz.”

you salve, feed, and fumigate the patient with the stone, herb, and wood (respectively).¹⁷

Heeßel suggests that a worldview of cosmic sympathy is behind this Late Babylonian text, a text that in another section also combines astrology and physiognomics.¹⁸ Together with Greek astrological texts, it provides valuable comparative material for interpreting the interest in the connections between zodiacal signs, their spirits, human beings, and magico-medicinal stones in *4QZodiacal Physiognomy*.

4QZodiacal Physiognomy relates zodiacal signs and their spirits to human beings. This demonstrates an interest in cosmic matters and relationships between heavenly elements and human beings. The impression that a notion of cosmic sympathy may have determined the interest of the text is further strengthened by the mention of a sort of granite stone in 4Q186 1 ii 2. The reference to specific stones was possibly an important element in the text. Within the network of intricate relationships between heavenly elements and earthly matters the properties of stones were important, as is clear from Babylonian and Greek astrological texts.¹⁹ One should allow for the possibility that in *4QZodiacal Physiognomy* stones were related to different zodiacal signs and the nature of their spirits, perhaps for magical or medicinal reasons. This suggests that a worldview of cosmic sympathy may be behind the combination of these different elements in this physiognomic-astrological text from Qumran.

THE SOCIAL AND CULTURAL LOCUS OF PHYSIOGNOMICS AND ASTROLOGY IN HELLENISTIC-EARLY ROMAN PERIOD PALESTINE

For Jewish society in Palestine during the Hellenistic-Early Roman period, we lack the evidence that is available for the social and cultural locus of physiognomic and astrological learning in Babylonian and Greco-Roman societies. Nevertheless, it seems likely that texts such as the Qumran physiognomic catalogues circulated only within a limited segment of society, restricted to an educated elite.

Learning the Physiognomic and Astrological Arts

In both Babylonian and Greco-Roman traditions, the arts or sciences of physiognomics and astrology were the domain of intellectual elites: the *āšipu* (“magician-exorcist”), philosopher, doctor, or astrologer. These were

¹⁷ Reiner, “Early Zodiologia,” 424. For this text see also the section in Chapter Two on the connection between physiognomics and astrology.

¹⁸ Heeßel, “Stein, Pflanze und Holz,” 15-16.

¹⁹ See the section in Chapter One on magico-medicinal stones.

the few people who had or were afforded the means to devote their time to something not of immediate practical value; education would have been a necessary prerequisite for this pursuit of knowledge.²⁰

During the Hellenistic period physiognomic and astrological learning would have been transmitted in the Babylonian temples, probably under the control of *āšipu*-families. In the Greco-Roman world some basic aspects of astronomy were on the Greek school curriculum, but the level of education in this subject must not be exaggerated. The more advanced, mathematical aspects of astronomy were for specialists; individual teachers may have gathered some students around them.²¹

There is not much evidence for education in the sort of learning one finds in physiognomic and astrological handbooks. We do not know exactly how people became familiar with such learned knowledge and on what level. The subject matter may have been of interest to more people who perhaps picked up some general physiognomic or astrological notions. Interest, however, in the texts themselves, such as, for example, the text of the pseudo-Aristotelian *Physiognomonica*, would have been very limited. It is unlikely that such specialized, technical texts circulated widely across many levels of society. Of course, the main condition for access is advanced literacy, which already narrowed down considerably the potential readership in antiquity.²²

²⁰ Cf. R. Gordon, "Quaedam veritatis umbrae: Hellenistic Magic and Astrology," in *Conventional Values of the Hellenistic Greeks* (eds. P. Bilde et al.; SHC 7; Aarhus: Aarhus University Press, 1997), 128-58; D. Konstan, "Conventional Values of the Hellenistic Greeks: The Evidence from Astrology," in *Conventional Values*, 159-76, at 160, 170; P. Magdalino, "The Byzantine Reception of Classical Astrology," in *Literacy, Education and Manuscript Transmission in Byzantium and Beyond* (eds. C. Holmes and J. Waring; MMed 42; Leiden: Brill, 2002), 33-57, at 34-37.

²¹ See H.-I. Marrou, *Histoire de l'éducation dans l'Antiquité* (2 vols; Paris: Seuil, 1948; repr., 1981), 1:263-77; 2:45, 84-85; M.L. Clarke, *Higher Education in the Ancient World* (London: Routledge & Kegan Paul, 1971), 49-52; S.F. Bonner, *Education in Ancient Rome: From the Elder Cato to the Younger Pliny* (London: Methuen, 1977), 77-78; R. Criboire, *Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt* (Princeton: Princeton University Press, 2001), 3. On the more social and political dimensions of education in Greek and Roman antiquity, see also Y. Lee Too (ed.), *Education in Greek and Roman Antiquity* (Leiden: Brill, 2001); R.F. Hock, "The Educational Curriculum in Chariton's *Callirhoe*," in *Ancient Fiction: The Matrix of Early Christian and Jewish Narrative* (eds. J.A. Brant, C.W. Hedrick and C. Shea; SBLSymS 32; Leiden: Brill, 2005), 15-36.

²² On ancient literacy see e.g. W.V. Harris, *Ancient Literacy* (Cambridge, Massachusetts: Harvard University Press, 1989); A.I. Baumgarten, *The Flourishing of Jewish Sects in the Maccabean Era: An Interpretation* (JSJSup 55; Leiden: Brill, 1997), 114-36; J.L. Crenshaw, *Education in Ancient Israel: Across the Deadening Silence* (New York: Doubleday, 1998), 29-49; C. Wilcke, *Wer las und schrieb in Babylonien und Assyrien: Überlegungen zur Literalität im Alten Zweistromenland* (BAWPHK.S 6; Munich: C.H. Beck, 2000); A. Millard, *Reading and Writing in the Time of Jesus* (BibSem 69; Sheffield: Sheffield Academic Press, 2000); C. Hezser, *Jewish Literacy in Roman Palestine* (TSAJ 81; Tübingen: Mohr Siebeck, 2001); Criboire, *Gymnastics of the Mind*, 147-59, 162-64, 180-83; P.S. Alexander, "Literacy among Jews in Second Temple Palestine: Reflections on the Evidence from Qumran," in

One possibility is that knowledge was gained through reading the handbooks. Polemo said that one could not put all physiognomic learning in one book, but for some people this may have been enough to know about the subject, even if in an inadequate way. Extracts may perhaps have been available in books that people could have picked up in passing, just like Aulus Gellius with the bundle of *mirabilia* books he came across in Brundisium.²³

Another possibility is that people who wanted to know the physiognomic art more seriously learned it under the guidance of someone who was an expert in it, either in a one-to-one relationship or within a group of students. A large part would have been transmitted orally, as the texts alone did not suffice.²⁴ The situation for astrology would not have been much different.²⁵ Individual readers of the handbooks would not get very far. Vettius Valens referred to pupils he instructed further about his book. Most likely, people would have learned the different aspects of the astrological art through direct communication in an apprenticeship with a master astrologer.²⁶

It is difficult to determine who exactly may have become familiar with learned knowledge of physiognomic and astrological arts in Second Temple period Judaism and how this would have happened.²⁷ Presumably, schol-

Hamlet on a Hill: Semitic and Greek Studies Presented to Professor T. Muraoka on the Occasion of his Sixty-Fifth Birthday (eds. M.F.J. Baasten and W.Th. van Peursen; OLA 118; Leuven: Peeters, 2003), 3-24.

²³ See Chapter Two n. 160.

²⁴ On the importance of direct, oral instruction, the "living voice," see L. Alexander, "The Living Voice: Scepticism towards the Written Word in Early Christian and in Graeco-Roman Texts," in *The Bible in Three Dimensions: Essays in Celebration of Forty Years of Biblical Studies in the University of Sheffield* (eds. D.J.A. Clines, S.E. Fowl and S.E. Porter; JSOTSup 87; Sheffield: Sheffield Academic Press, 1990), 221-47; J. Mansfeld, "Galen, Papias, and Others on Teaching and Being Taught," in *Things Revealed: Studies in Early Jewish and Christian Literature in Honor of Michael E. Stone* (eds. E.G. Chazon, D. Satran and R.E. Clements; JSJSup 89; Leiden: Brill, 2004), 317-29.

²⁵ The reference to the Babylonian priest Berossos who founded a school on the Greek island of Cos does not shed much light on the exact nature of this school. See Vitruvius, *On Architecture* 9.6.2. Regarding the schools of "Chaldean astrologers," cf. Gordon, "Hellenistic Magic and Astrology," 132.

²⁶ See Barton, *Ancient Astrology*, 134-39.

²⁷ Similar questions may also be asked regarding the emergence of an interest in medicine in the third-second centuries BCE, as indicated by the physicians that Ben Sira refers to (Sir 10:10; 38:7.12.15, although we know nothing of the state of their learning) and the interest in medicinal knowledge in the *Book of Tobit* or *Jub.* 10:10-13 (cf. B. Kollmann, "Göttliche Offenbarung magisch-pharmakologischer Heilkunst im Buch Tobit," *ZAW* 106 [1994]: 289-99). Medicinal knowledge and treatment skills were passed on in a direct, practical context, just like other crafts in antiquity. In *Jub.* 10:10-13 medicine is instructed orally to Noah, who then also writes it down in a book that he gives to his son Shem for further transmission. For the learning of skills and practical insight in ancient medicine besides the knowledge in books, see e.g. O. Temkin, "Greek Medicine as Science and Craft," *Isis* 44 (1953): 213-25. For the mainly oral transmission of craft knowledge, see Long, *Openness*.

arly scribes and teachers would have been the sort of people to have access to texts such as *4QZodiacal Physiognomy* and *4QPhysiognomy ar*, being interested in the knowledge they contained and perhaps also responsible for copying them. Although the localization of this interest with learned people is plausible, it remains rather vague.

There is little concrete evidence for education in Palestine during the Hellenistic and Early-Roman period.²⁸ Wisdom to manage oneself in various areas of life vis-à-vis the aristocratic upper class and the rural lower class could be passed on by individuals such as Ben Sira, who, around the turn of the third-second centuries BCE, probably provided private instruction at his home. Teachers like Ben Sira would have transmitted most of their knowledge orally. Actual texts played a minor role in the transmission of tradition through education.²⁹ This was probably also the case later at Qumran during the first century BCE until the first century CE.³⁰

There are no clear data for institutionalized schools in this period. Writing and scribal training, for example, may have been in the hands of both priestly scribes and secular scribal guilds, the latter perhaps being responsible for administrative and business documents of ordinary citizens and merchants, but this is no more than conjecture.³¹ Moreover, ancient Jewish scribes could perform different functions in different contexts, which would entail different levels of training. One needs to be careful positing the existence of a well-defined, homogenic class or group of scribes in Palestine during the Hellenistic-Early Roman period. Sometimes scribes would have been no more than copyists, while in other instances there could have been overlap between scholarly and scribal activity.³² Nonetheless, contrary to Greco-Roman societies where the aristocratic elites did not have a high regard for teachers and scribes, writing and learning would have had more

²⁸ Cf. Hezser, *Jewish Literacy*, 39-109. On Jewish upper-class education in Alexandria, see Crenshaw, *Education in Ancient Israel*, 11-15.

²⁹ Cf. O. Wischmeyer, *Die Kultur des Buches Jesus Sirach* (BZNW 77; Berlin: Walter de Gruyter, 1995), 174-200; J.L. Crenshaw, "The Primacy of Listening in Ben Sira's Pedagogy," in *Wisdom, You Are My Sister: Studies in Honor of Roland E. Murphy, O.Carm., on the Occasion of His Eightieth Birthday* (ed. M.L. Barré; CBQMS 29; Washington, DC: Catholic Biblical Association of America, 1997), 172-87; Crenshaw, *Education in Ancient Israel*, 228-30, 269-72; R. Doran, "The High Cost of a Good Education," in *Hellenism in the Land of Israel* (eds. J.J. Collins and G.E. Sterling; CJAS 13; Notre Dame, Indiana: University of Notre Dame, 2001), 94-115; D.M. Carr, *Writing on the Tablet of the Heart: Origins of Scripture and Literature* (New York: Oxford University Press, 2005), 201-14.

³⁰ Alexander, "Literacy among Jews in Second Temple Palestine," 20-21.

³¹ Crenshaw, *Education in Ancient Israel*, 112-13.

³² Cf. C. Schams, *Jewish Scribes in the Second Temple Period* (JSOTSup 291; Sheffield: Sheffield Academic Press, 1998). For comparative data on scribes of early Christian literature, cf. K. Haines-Eitzen, *Guardians of Letters: Literacy, Power, and the Transmitters of Early Christian Literature* (New York: Oxford University Press, 2000).

social standing in Second Temple period Palestine, but their status should not be exaggerated.³³

We do not know whether sciences such as astronomy/astrology or physiognomics were on an educational or scribal curriculum, but it is very doubtful. Scholars assume that ancient Jewish education in reading and writing was primarily centered on Torah study, but that instruction in certain general skills such as to count, weigh, measure, and calculate may have been taught by parents or relatives.³⁴ It is also plausible that such skills were taught in practice whenever certain crafts required such knowledge. Be that as it may, one should allow for the possibility that expertise in physiognomic and astrological learning circulated with individual, scholarly scribes or teachers from Jewish society who presumably attracted some students. Whether these scholars came from a priestly or secular milieu is impossible to determine; neither can be ruled out. Such people would have been responsible for the transmission of learned physiognomic and astrological texts in Second Temple period Palestine. Familiarity with these arts was probably due to direct or indirect contacts with Babylonian and/or Hellenistic culture.³⁵

Alien Wisdom

In the case of the physiognomic and astrological learning exhibited by the Qumran catalogues, it is likely that we are dealing with the appropriation of “alien wisdom” in Hellenistic-Early Roman period Judaism.³⁶

With regard to scientific learning in different strands of Enochic literature – *I Enoch* as a whole as well as its different parts being composite texts – scholars have rightly pointed to a Mesopotamian background for the astronomical aspects of the *Astronomical Book* (*I En.* 72-82).³⁷ For certain

³³ Cf. Crenshaw, *Education in Ancient Israel*, 178-79; Alexander, “Literacy among Jews in Second Temple Palestine,” 17.

³⁴ Cf. Hezser, *Jewish Literacy*, 73-74. Consider, however, also the pedagogical function of the metrological number and measure notations in the *Aramaic Levi Document* 31-47. See H. Drawnel, *An Aramaic Wisdom Text from Qumran: A New Interpretation of the Levi Document* (JSJSup 86; Leiden: Brill, 2004), 280-93.

³⁵ On Hellenism in Palestine, see e.g. Hengel, *Judentum und Hellenismus*; Collins and Sterling, *Hellenism in the Land of Israel*.

³⁶ Cf. A. Momigliano, *Alien Wisdom: The Limits of Hellenization* (Cambridge: Cambridge University Press, 1975); Gordon, “Hellenistic Magic and Astrology,” 132; Alexander, “Beginnings of Jewish Interest in Natural Science,” 232.

³⁷ See e.g. O. Neugebauer, “The ‘Astronomical’ Chapters of the Ethiopic Book of Enoch (72 to 82),” in *The Book of Enoch or 1 Enoch: A New English Edition* (M. Black; SVTP 7; Leiden: E.J. Brill, 1985), 386-414, at 387, 394-95; Albani, *Astronomie und Schöpfungsglaube*, 155-72; Ben-Dov, *Astronomy and Calendars*. For the Mesopotamian background of other features too, see J.C. VanderKam, *Enoch and the Growth of an Apocalyptic Tradition* (CBQMS 16; Washington, DC: Catholic Biblical Association of America, 1984); H.S. Kvan-

elements of cosmography and geography in the *Book of the Watchers* (1 En. 1-36), however, a Greek background besides a Mesopotamian one is also possible.³⁸ A Babylonian origin for the transmission of scientific ideas into Second Temple period Judaism is further strengthened by Qumran calendar texts that use elements of a Babylonian lunar system.³⁹ It seems probable that this westward transmission of scientific ideas from Babylonia occurred through Aramaic sources.⁴⁰ If these available sources indicate predominantly a Babylonian origin for much of the learned knowledge in Second Temple period texts, then the question is how the physiognomic texts from Qumran fit in this picture.

The Aramaic physiognomic catalogue *4QPhysiognomy ar* may have a Babylonian background, but, apart from its language, the text provides no conclusive evidence for this. It is possible that Mesopotamian examples stand behind the text, but, as has been argued in Chapter Two in the section on the literary dependency of the physiognomic catalogues, a Hellenistic origin cannot be excluded.

If the modified ascendant interpretation for the Hebrew physiognomic catalogue *4QZodiacal Physiognomy* is correct, then this text presents significant evidence for a Hellenistic origin and transmission of certain scientific ideas into Palestine during the Hellenistic-Early Roman period. The text's concern with the ascendant part of the zodiacal sign at the moment of birth points decisively in the direction of Greek astrology. Even more, if *4QZodiacal Physiognomy* stands in the tradition that merges *melothesia* and *dodecatemoria*, it is possible that Jews in Palestine appropriated Hellenistic astrology through Egyptian channels, perhaps through Alexandria. The oldest example of this tradition is Teucer, who was active in Egypt, being most likely of Greek descent, probably during the first century BCE.⁴¹ Amidst much evidence for the Babylonian origin of scientific ideas in Second Temple period Judaism, then, one should allow for the possibil-

vig *Roots of Apocalyptic: The Mesopotamian Background of the Enoch Figure and the Son of Man* (WMANT 61; Neukirchen-Vluyn: Neukirchener Verlag, 1988).

³⁸ Cf. Nickelsburg, *1 Enoch 1*, 61-62, 279-89; K. Coblentz Bautch, *A Study of the Geography of 1 Enoch 17-19: "No One Has Seen What I Have Seen"* (JSJSup 81; Leiden: Brill, 2003), 231-57.

³⁹ Cf. Ben-Dov and Horowitz, "Babylonian Lunar Three."

⁴⁰ Cf. Greenfield and Sokoloff, "Astrological and Related Omen Texts," 202; Alexander, "Beginnings of Jewish Interest in Natural Science," 238-39. J. Ben-Dov, "Mesopotamian Science in West Semitic Sources: The Case of Qumran," in *The Interpretations of Ancient Astral Science* (eds. H. Falk and D. Brown), *forthcoming*, has recently argued that concrete evidence for an Aramaic medium is lacking for the spread of scientific astronomy from Babylonia to Greece and Egypt, which seems to have been rendered immediately into Greek. In the case of celestial divination, Aramaic sources may have transmitted Babylonian lore. Cf. also Chapter Two nn. 23 and 205. I am grateful to Jonathan Ben-Dov for sending me his Berlin paper.

⁴¹ See Chapter Three nn. 77, 219.

ity that *4QZodiacal Physiognomy* testifies to a Greco-Egyptian background. What to us may seem enigmatic terminology – the “second column,” or the “house of light” and the “house of darkness” – possibly represents an effort on the part of an ancient Jewish author to translate and appropriate foreign learning and unfamiliar words and concepts.

Although a Jewish interest in matters such as physiognomics and astrology may already date to the Persian period, like Enochic astronomy,⁴² the Hellenistic period is more likely, at least as far as the astrological notions in *4QZodiacal Physiognomy* are concerned. The Qumran manuscripts are the oldest Jewish texts available on this matter, dating to the second half of the first century BCE, and there is no need to push the date back much further. This temporal limitation, however, does not imply a limitation in geographic region. It is possible that physiognomic learning was also received from Mesopotamian culture. Cultural contacts during the Hellenistic-Early Roman period were not limited to one geographic area. Thus, it is possible for *4QPhysiognomy ar* to have a Mesopotamian background, while *4QZodiacal Physiognomy* may have a Greco-Egyptian one.

Martin Hengel argues that these texts were an expression of a rationalistic interest in Hellenistic sciences by the Essenes. He limits this interest to the early period of the Qumran community around the middle of the second century BCE.⁴³ The date, however, of the manuscripts seems at odds with this limitation. Those responsible for writing or copying the texts during the second half of the first century BCE apparently regarded them worthwhile enough to do so, which demonstrates an interest in the subject matter they convey. Although it is doubtful whether the interest in matters of astrology and physiognomics should be characterized in terms of rationalism, it seems likely that it presupposes openness to the scientific notions that were current in surrounding cultures. Given the non-sectarian character of these texts, however, they not only demonstrate an interest in these matters on the part of the Qumran sect, but also of Judaism at large.

Ancient Jewish Science and Revealed Things

Scholars have regarded Jewish interests in natural science and the cosmos and its workings as an integral part of Enochic literature as well as of other apocalyptic texts in which lists of revealed things play a central role. That literature would evince an attitude according to which esoteric knowledge concerning man, nature, and the cosmos did not remain hidden for all of mankind but was revealed to some special individuals through heavenly

⁴² Alexander, “Beginnings of Jewish Interest in Natural Science,” 231-32, 240.

⁴³ Hengel, *Judentum und Hellenismus*, 432-38. See also M. Hengel, “Qumran and Hellenism,” in *Religion in the Dead Sea Scrolls* (eds. J.J. Collins and R.A. Kugler; SDSSRL; Grand Rapids, Michigan: Eerdmans, 2000), 46-56, at 54.

mediation. Interest in these matters in apocalyptic literature has led scholars to see the people behind it as part of a well-educated body of people from Jewish society, possibly active in and/or around the Jerusalem Temple, which entertained speculations about the cosmos and humankind's position in it. Around the turn of the third-second centuries BCE, people transmitting texts like the Enochic *Astronomical Book* and the *Book of the Watchers* may have been in opposition with a wisdom teacher like Ben Sira who was critical of investigations into realms of knowledge that had not been revealed for all to see, as opposed to the revealed exoteric wisdom transmitted by himself.⁴⁴

In their efforts to understand ancient Jewish scientific interests scholars have mainly focused on the material provided by *1 Enoch* and the lists of revealed things in apocalyptic texts. This is not the place to raise the issues of origins, developments, and attitudes towards science in Second Temple period Judaism in depth, but two brief comments should be made when the physiognomic and astrological lists from Qumran are taken into account.

First, although it is possibly an anachronism to argue for a separate domain of scientific inquiry in Second Temple period Judaism, one should allow for the possibility that the physiognomic and astrological texts from Qumran were not framed by a religious interest in divine, eschatological judgment, as is the case with the Enochic and apocalyptic material.⁴⁵ Although the original, complete texts may have given these lists in a revelatory, apocalyptic framework, this seems unlikely.⁴⁶ The Qumran physio-

⁴⁴ Although these different attitudes have been related to social groups, their exact identities, social positions, and mutual connections remain debated issues. See e.g. Stone, "Lists of Revealed Things"; Stone, "Book of Enoch"; M.E. Stone, *Scriptures, Sects and Visions: A Profile of Judaism from Ezra to the Jewish Revolts* (Cleveland: Collins, 1980), 27-47; M.E. Stone, "Enoch, Aramaic Levi and Sectarian Origins," *JSJ* 19 (1988): 159-70; M. Himmelfarb, *Ascent to Heaven in Jewish and Christian Apocalypses* (New York: Oxford University Press, 1993), 72-94; R.A. Argall, *1 Enoch and Sirach: A Comparative Literary and Conceptual Analysis of the Themes of Revelation, Creation and Judgment* (SBLEJL 8; Atlanta: Scholars Press, 1995); Nickelsburg, *1 Enoch 1*, 65-67; Alexander, "Beginnings of Jewish Interest in Natural Science"; B.G. Wright III, "Putting the Puzzle Together: Some Suggestions concerning the Social Location of the Wisdom of Ben Sira," in *Conflicted Boundaries in Wisdom and Apocalypticism* (eds. B.G. Wright III and L.M. Wills; SBLSymS 35; Atlanta: Society of Biblical Literature, 2005), 89-112; R.A. Horsley, "The Politics of Cultural Production in Second Temple Judea: Historical Context and Political-Religious Relations of the Scribes Who Produced *1 Enoch*, *Sirach*, and *Daniel*," in *Conflicted Boundaries*, 123-45; A.Y. Reed, *Fallen Angels and the History of Judaism and Christianity: The Reception of Enochic Literature* (Cambridge: Cambridge University Press, 2005), 24-83.

⁴⁵ Stone, "Lists of Revealed Things"; Stone, "Book of Enoch," 487; Nickelsburg, *1 Enoch 1*, 37-42; Alexander, "Beginnings of Jewish Interest in Natural Science," 234-36, 239; Reed, *Fallen Angels*, 67.

⁴⁶ In addition, it is unnecessary to invoke a religious orientation of the subject matter in order to understand it. Cf. the discussion of the interpretation of *4QZodiacal Physiognomy* within the dualistic framework of the *Two Spirits Treatise* discussed in Chapter Four. Moreover, what would be the religious orientation of the selenodromion and brontologion in

gnomic and astrological lists are more elaborate and explicit than the apocalyptic lists of revealed things and more complex than the simple arithmetical scheme in the *Astronomical Book of 1 Enoch*, although the astronomical material in this latter text might very well have existed independently before being incorporated into the Enochic framework.⁴⁷

Second, the physiognomic and astrological texts from Qumran demonstrate that during the Hellenistic-Early Roman period, Jews in Palestine were interested in contemporary scientific knowledge, and not just in “outdated” forms of Mesopotamian astronomy as in the *Astronomical Book*.

Michael Stone argued that the transmission of the *Astronomical Book* was “a deliberate act of archaism” by people who “faithfully preserved and cultivated views of natural science that were already antiquated at the time they were committed to writing.” This attitude was fostered either by “the conscious rejection of Greek science” or by “the creation of a social context into which such science did not penetrate.”⁴⁸ According to Stone the traditions of the *Astronomical Book* can be characterized as separatist, sectarian circles that kept themselves apart from contemporary culture, its learning and natural science. Moreover, the circles that studied the Enochic tradition were linked in some way to those people who founded the Qumran community.⁴⁹

Such an interpretation of ancient Jewish scientific interests, however, ignores the evidence provided by the physiognomic and astrological texts from Qumran. These texts demonstrate that contemporary scientific notions, such as the zodiac and the connection between physiognomics and astrology, found their way into Jewish society during the Hellenistic-Early Roman period. These two elements represent developments that post-date the older astronomical science in MUL.APIN and the *Astronomical Book*.⁵⁰ At

4QZodiology and Brontology ar? Pace García Martínez and van der Woude, “Groningen Hypothesis,” 522-23.

⁴⁷ With regard to the possibility of an independent existence of the lists of revealed things, see Stone, “Lists of Revealed Things,” 418-19.

⁴⁸ Stone, “Enoch, Aramaic Levi,” 164. Concerning theological motives for the reception of older Mesopotamian astronomy in the *Astronomical Book*, see Albani, *Astronomie und Schöpfungsglaube*, 273-350.

⁴⁹ Stone, “Enoch, Aramaic Levi,” 164-66. Cf. Alexander, “Beginnings of Jewish Interest in Natural Science,” 239-40. Alexander, “Beginnings of Jewish Interest in Natural Science,” 234, characterizes the group or groups behind Enochic literature as innovators and modernists who were open to the scientific thought of their day and attempted to integrate novel ideas in a new form of Judaism. But he does not raise the issue that a type of “outdated” Mesopotamian science was picked up. Cf. Reed, *Fallen Angels*, 68-69.

⁵⁰ The zodiac was not developed before the fifth century BCE. It does not figure in the earlier Mesopotamian text MUL.APIN, which was the source for the *Astronomical Book*, see Chapter Three. The connection between astrology and physiognomics occurs first in Late Babylonian sources (“An Esoteric Babylonian Commentary” and *LBAT* 1593) and Hellenistic astrology, see Chapter Two.

Qumran these “modern” ideas were apparently transmitted alongside “older” forms of science such as in the *Astronomical Book*.⁵¹ Such a situation demonstrates that in this respect the Qumran community cannot be described as isolationist or ignorant of what was going on in contemporary Babylonian and Hellenistic sciences. Regardless of the motivations of the initial transmitters of the *Astronomical Book* sometime in the fourth-third centuries BCE, it seems that during the first century BCE some people in Jewish society had an open mind for some of the more contemporary scientific developments.

THE STATUS OF PHYSIOGNOMIC AND ASTROLOGICAL LEARNING IN THE QUMRAN COMMUNITY AND SECOND TEMPLE PERIOD JUDAISM

Scholars disagree on the status of the physiognomic lists within the collection of the Dead Sea Scrolls. The discussion centers on *4QZodiacal Physiognomy*. According to some scholars its astrological learning was controversial and of minor interest to the Qumran community. Therefore, it is unlikely that this interest reflects any acceptance of astrology or its practice within the community.⁵² With the publication of all the Dead Sea Scrolls, and particularly wisdom texts such as *Instruction* and *Mysteries*, other scholars have drawn attention to various references to times of birth, the position of stars, and horoscopes in the wisdom texts. The references are couched in general terms and do not explicate any technical astrological notions, but it seems likely that they demonstrate the acceptance of certain astrological notions and concepts within these texts, probably in connection with ideas on predestination.⁵³

There is no indication that physiognomic learning in Hellenistic-Early Roman period Judaism was opposed in the way that astrology was by some people. Acceptation of the basic premise that the body signifies character seems implied by the instances of physiognomic consciousness in Jewish sources discussed in Appendix II. It is, therefore, likely that physiognomic learning was not as controversial as astrological learning, or at least did not receive as much attention as astrology did in the sources at our disposal.

⁵¹ Some of the Qumran calendars show that Late Babylonian methods of lunar schemes were partly known and recognized. Moreover, the lunar pattern in these texts has no bearing on the cult or the cycle of priestly courses in some of the other calendar texts, see Ben-Dov and Horowitz, “Babylonian Lunar Three.”

⁵² Cf. Lehmann, “New Light on Astrology”; Lange, “Essene Position on Magic”; Albani, “Horoscopes in the Qumran Scrolls,” 315-24.

⁵³ Cf. E. Tigchelaar, “Your Wisdom and Your Folly: The Case of 1-4QMysteries,” in *Wisdom and Apocalypticism*, 67-88; E. Tigchelaar, “Astronomie en kalenders; horoscopen en astrologie,” in *Fragmenten uit de woestijn*, 167-83, at 177-80; Kister, “From Ben Sira to *Mysteries*”; Schmidt, “Recherche son thème de géniture.”

There are no Jewish texts extant that explicitly criticize physiognomic learning, although Ben Sira cautions his readers not to depend blindly on people's looks.⁵⁴ Astrology, however, like magic, attracted much more attention, and attitudes towards astrology varied between favorable and unfavorable.

Ambivalent Attitudes: The Controversial Status of Astrology

The art of astrology has always enjoyed an ambivalent and controversial status. In antiquity astrology attracted its critics,⁵⁵ but it was also held in high esteem and could be called "the queen of sciences."⁵⁶ While there are both affirmative and unfavorable comments, the controversial status of physiognomic learning is less pronounced,⁵⁷ possibly because it was less in the center of political attention than astrology was. Scholars have shown that in the Roman Empire astrological knowledge functioned politically within the highest networks of power, being also a potentially subversive science that needed to be controlled.⁵⁸ Regarding physiognomic learning it has been argued that it functioned politically on a more local level of power as a means of social control.⁵⁹ Clear evidence, however, equivalent to that for Roman society, is lacking for the political function of astrology or physiognomics in Hellenistic-Roman period Palestine.⁶⁰

With regard to astrology an ambivalent attitude is attested in Jewish sources, demonstrating its controversial status. This is illustrated for exam-

⁵⁴ Sir 11:2. See Appendix II.

⁵⁵ Cf. Bouché-Leclercq, *L'astrologie grecque*, 570-93; Gundel and Gundel, *Astrologumena*, 99-102, 188-89, 296-99; A.A. Long, "Astrology: Arguments Pro and Contra," in *Science and Speculation: Studies in Hellenistic Theory and Practice* (eds. J. Barnes et al.; Cambridge: Cambridge University Press, 1982), 165-92; Barton, *Ancient Astrology*, 52-57; Barton, *Power and Knowledge*, 50-54, 65.

⁵⁶ Philo, *On the Preliminary Studies* §50. Philo is ambivalent in his appreciation. See e.g. von Stuckrad, *Ringens um die Astrologie*, 224-53, who argues that Philo opposed fatalistic (horoscopic) astrology, but did not deny astrology's signifying value regarding general events on earth. See Philo, *On the Creation of the Cosmos* §§58-59a (cf. Chapter Two n. 175). See also Gundel and Gundel, *Astrologumena*, 180-83.

⁵⁷ Cf. Chapter Two n. 7.

⁵⁸ See F.H. Cramer, *Astrology in Roman Law and Politics* (MAPS 37; Philadelphia: American Philosophical Society, 1954); Barton, *Power and Knowledge*, 27-94; W. Orth, "Astrologie und Öffentlichkeit in der frühen römischen Kaiserzeit," in *Kommunikation in politischen und kulturellen Gemeinschaften: Stätten und Formen der Kommunikation im Altertum V* (eds. G. Binder and K. Ehlich; BAC 24; Trier: Wissenschaftlicher Verlag Trier, 1996), 99-132; A. Schmid, *Augustus und die Macht der Sterne: Antike Astrologie und die Etablierung der Monarchie in Rom* (Cologne: Böhlau, 2005).

⁵⁹ See Barton, *Power and Knowledge*, 95-131.

⁶⁰ Von Stuckrad, *Ringens um die Astrologie*, 102-33, 141-58, argues that astrological considerations were prominent in political decisions made by Alexander Jannaeus, Herod the Great and Bar Kokhba. However, apart from adducing stellar imagery and referring to astrologically significant planetary positions at certain moments, he fails to provide convincing evidence for astrological reasoning behind the political motives of these three leaders.

ple by the debate on the origin of astrology. Most ancient astrological sources state that astrology originated in Egypt, while some acknowledge a Mesopotamian origin.⁶¹ On the one hand, there were Jewish writers, such as Artapanus (third-second century BCE), Pseudo-Eupolemus (prior to the first century BCE), and Josephus (first century CE), who contributed to this debate by claiming a Jewish origin for astrological learning with Enoch or Abraham. On the other hand, sources such as the Enochic *Book of the Watchers* (8:3) and *Jubilees* (8:3) traced astrological learning back to fallen angels (the Watchers) illicitly revealing secret knowledge to humankind who sinned because of this learning.⁶² The first position demonstrates pride in having a great ancestor teaching astrology to other peoples, while the second position shows wariness of its potential sinfulness in locating it with fallen angels who sin by disclosing astrological teachings to people.⁶³

It is not possible, or desirable, to define a monolithic stance on astrology within Hellenistic-Early Roman period Judaism.⁶⁴ In different contexts different attitudes will have existed, but each source needs to be evaluated on its own account first.⁶⁵ Considering, for example, the people behind Enochic literature, one should allow for the possibility that the appropriation of alien wisdom like astrology was initially considered favorable, but

⁶¹ Cf. Gundel and Gundel, *Astrologumena*, 9-51.

⁶² Cf. also the critical stance of *Jub.* 12:16-18.

⁶³ Cf. Bouché-Leclercq, *L'astrologie grecque*, 577-78; Gundel and Gundel, *Astrologumena*, 51-59; C. Böttrich, "Astrologie in der Henochtradition," *ZAW* 109 (1997): 222-45; G.H. van Kooten, "Enoch, the 'Watchers,' Seth's Descendants and Abraham as Astronomers: Jewish Applications of the Greek Motif of the First Inventor (300 BCE-CE 100)," in *Recycling Biblical Figures: Papers Read at a NOSTER Colloquium in Amsterdam, 12-13 May, 1997* (eds. A. Brenner and J.W. van Henten; STAR 1; Leiden: Deo, 1999), 292-316; Nickelsburg, *1 Enoch I*, 188-201; A.Y. Reed, "Abraham as Chaldean Scientist and Father of the Jews: Josephus, *Ant.* 1.154-168, and the Greco-Roman Discourse about Astronomy/Astrology," *JSJ* 35 (2004): 119-58; A.Y. Reed, "Heavenly Ascent, Angelic Descent, and the Transmission of Knowledge in 1 Enoch 6-16," in *Heavenly Realms and Earthly Realities in Late Antique Religions* (eds. R.S. Boustán and A.Y. Reed; Cambridge: Cambridge University Press, 2004), 47-66.

⁶⁴ This also applies to rabbinic Judaism. L. Wächter, "Astrologie und Schicksalsglaube im rabbinischen Judentum," *Kairos* 11 (1969): 181-200, construes strong opposition between astrology and Jewish religion and argues that rabbinic Judaism in Palestine was not really affected by astrological teachings. Lehmann, "New Light on Astrology," argues that astrology was a sectarian phenomenon at variance with normative Judaism. Both approaches fail to take account of the diversity of positions, and thereby downplay evidence for astrological interests. They also give too much weight to certain theological positions, but these do not necessarily result in the absence or marginalization of astrology within society.

⁶⁵ Cf. J.H. Charlesworth, "Jewish Interest in Astrology during the Hellenistic and Roman Period," *ANRW* II 20.2 (1987), 926-50; Von Stuckrad, *Ringens um die Astrologie*; Von Stuckrad, "Jewish and Christian Astrology in Late Antiquity"; M. Bar Ilan, "Astrology in Ancient Judaism," in *The Encyclopaedia of Judaism: Volume V, Supplement Two* (eds. J. Neusner, A.J. Avery-Peck and W.S. Green; Leiden: Brill, 2004), 2031-37. See also W. Hübner, *Zodiacus Christianus: Jüdisch-christliche Adaptationen des Tierkreises von der Antike bis zur Gegenwart* (BKP 144; Meisenheim: Anton Hain, 1983).

came to be regarded more critically at a later stage during the Hellenistic period.⁶⁶ If this model is appropriate for explaining the textual development of certain parts of the Enochic corpus, this does not, however, imply a linear development because later tradents of this literature may have chosen to emphasize the former, more positive stance.

Given the quantity, distribution, and nature of the sources at our disposal, it is not possible to draw detailed and definitive conclusions regarding the development of attitudes towards astrology. Scholars, however, should not simply lend more authority to sources or stages of tradition that exhibit a critical attitude when assessing the status of astrological learning at Qumran and beyond. The people behind the text of *Jubilees* may have been disinclined to accept lunar calculations for calendrical purposes, but this did not stop people at Qumran, where many copies of *Jubilees* have been found (implying its authoritative status for the community),⁶⁷ from engaging in such matters. Texts like *Jubilees* may have been authoritative at Qumran for certain matters, such as chronology, but not for others. Similarly, for the astrological learning in *4QZodiacal Physiognomy* or *4QZodiology and Brontology ar* it seems likely that these texts, together with the astrological references in texts like *Instruction* and *Mysteries*, represent more than just a critical interest in their subject matter, demonstrating a varied interest in astrology at Qumran.

*Inverted and Mixed Writing and Scribal Strategies of Secrecy*⁶⁸

When considering texts as cultural artifacts in themselves,⁶⁹ it is important to reflect on the inverted and mixed writing of *4QZodiacal Physiognomy* and its significance concerning the status of the text at Qumran. Why was *4QZodiacal Physiognomy* written or copied in the manner that it was?⁷⁰

⁶⁶ Cf. Alexander, "Beginnings of Jewish Interest in Natural Science," 234-36; Reed, *Fallen Angels*, 42-44, 60.

⁶⁷ The alleged authoritativeness is based on two arguments: 1. the number of copies; 2. the purported references to or quotations from the *Book of Jubilees* in CD 16:3-4 and 4Q228. On the first quotation, cf. most recently D. Dimant, "Two 'Scientific' Fictions: The So-Called *Book of Noah* and the Alleged Quotation of *Jubilees* in CD 16:3-4," in *Studies in the Hebrew Bible, Qumran, and the Septuagint Presented to Eugene Ulrich* (eds. P.W. Flint, E. Tov and J.C. VanderKam; VTSup 101; Leiden: Brill, 2006), 230-49.

⁶⁸ See also Popović, "Physiognomic Knowledge in Qumran and Babylonia," 166-76; M. Popović, "The Human Body, Astrology, and Writing in Code: Physiognomic Divination in the Dead Sea Scrolls," paper read at the CNRS Symposium *Divination et écriture, écriture de la divination*, Paris, December 9, 2005. The proceedings are to be published by J.-J. Glassner.

⁶⁹ Cf. Haines-Eitzen, *Guardians of Letters*; Alexander, "Literacy among Jews in Second Temple Palestine."

⁷⁰ The fact that the Aramaic physiognomic list *4QPhysiognomy ar* was not written in a cryptic manner does not render the following discussion obsolete. Similar to the use of the Cryptic A script, it is difficult to assess the reasons why some texts were written in this script and others of similar genre were not. See also the Introduction n. 30.

It is possible that the manner of writing was meant to convey a sort of scribal pride. It seems hardly the work of a beginning scribe. The writing is executed with a fine hand, which concurs with the effort it must have cost to write in the direction from left to right, different from the usual right to left.⁷¹ Together with the use of characters from various scripts, the inverted writing of the entire manuscript can be considered a distinguishing mark that indicates scribal craftsmanship and perhaps scholarly pride. These considerations may suggest that this manuscript was the work not only of a skilled scribe but also perhaps of a scholarly scribe.

In addition to the possibility of an intended magical effect,⁷² the inverted and mixed writing possibly represents a scribal strategy of secrecy, limiting the availability of and accessibility to the physiognomic-astrological learning in the text.⁷³ The manner of writing prevents people from easily reading the text and quickly obtaining knowledge of its subject matter.⁷⁴ Some scholars have suggested that the use of inverted and mixed writing is a literary style to restrict knowledge of the text's contents to a few initiates within the Qumran community, such as the *Maskil*.⁷⁵ The in-

⁷¹ People's names were sometimes written backwards – Ναδουοι (=Ἰουδαῖον [Judah]); מורלש (=שלוֹמֵה) [Salome] – which may be the result of confusion between Greek and Hebrew. See T. Ilan, *Lexicon of Jewish Names in Late Antiquity: Part I, Palestine 330 BCE – 200 CE* (TSAJ 91; Tübingen: Mohr Siebeck, 2002), 31, 115, 250. This phenomenon, however, does not explain the inverted writing in an entire text such as in *4QZodiacal Physiognomy*.

⁷² See the section on magico-medicinal stones in Chapter One.

⁷³ Epiphanius, *Panarion* 19.4.3, transmitting information ascribed to Elxai, gives an intriguing example of unintelligible words written in Greek that most likely render an Aramaic sentence when read from right to left (the inversion may have been there in the hypothetical Aramaic text). According to Elxai nobody should search for the meaning of these words. The sentence has effect in the (translated) Greek book. Perhaps it would have been readily understandable to Aramaic readers, but the question why it was written in an inverted way in the original text remains, even if the prohibition of not searching for its meaning was inserted by the translator. See G.P. Luttikhuisen, *The Revelation of Elchasai: Investigations into the Evidence for a Mesopotamian Jewish Apocalypse of the Second Century and its Reception by Judeo-Christian Propagandists* (TSAJ 8; Tübingen: J.C.B. Mohr [Paul Siebeck], 1985), 100-3, 124-25. Of course, this is not exactly the same as the text of *4QZodiacal Physiognomy*, but it may present an illustration of the mystery surrounding inverted writing.

⁷⁴ It took some time before modern scholars understood how to read the text, as is clear from Allegro's letters home. See Brown, *John Marco Allegro*, 29-30. This difficulty was later downplayed by Allegro. See Allegro, *The Dead Sea Scrolls: A Reappraisal*, 57.

⁷⁵ See Carmignac, "Les Horoscopes," 199; Hengel, *Judentum und Hellenismus*, 436; D. Mendels, "Hellenistic Utopia and the Essenes," in *Identity, Religion and Historiography: Studies in Hellenistic History* (D. Mendels; JSPSup 24; Sheffield: Sheffield Academic Press, 1998), 420-39, at 435-36 (originally published in *HTR* 72 [1979]: 207-22); Lichtenberger, *Studien zum Menschenbild*, 144; Charlesworth, "Jewish Interest in Astrology," 939-40; Alexander, "Physiognomy," 391. For the *Maskil*, see Chapter Four n. 27.

K. von Stuckrad, *Frömmigkeit und Wissenschaft: Astrologie in Tanach, Qumran und früh-rabbinischer Literatur* (EH 23/572; Frankfurt: Peter Lang, 1996), 123-24, argues that the encoding of *4QZodiacal Physiognomy* may be a reaction to the Roman imperial edicts prohibiting the practice of astrology and especially genethliology. His argument is not convincing and misunderstands *4QZodiacal Physiognomy* as a horoscope.

verted and mixed writing thus indicates that “the contents of the text were not intended for everybody, and that uttermost care was taken to keep them accessible only to a very few experts.”⁷⁶

Others argue that this was done because of the controversial nature of the contents and because astrology would have been valued negatively within the Qumran community.⁷⁷ According to Mathias Albani “the mixture of various sorts of scripts probably gave the impression of impurity to Jewish readers” and the cryptic script “could hardly be a sign of the special value of the contents of this document.”⁷⁸ This assumption, however, is contradicted by epigraphic evidence from Masada. Among three hundred and one small ostraca, some are inscribed with characters of the paleo-Hebrew script in combination with Greek letters, such as *alpha* and *beta*.⁷⁹ In addition, quite a few ostraca of another eighty tags with specific names combine characters from square, paleo-Hebrew, and Greek scripts.⁸⁰ These epigraphic examples from Masada make it clear that the use of various scripts need not have signaled a notion of impurity to Jews in antiquity. This suggests that it need not have been the possibly controversial character of the learning contained in *4QZodiacal Physiognomy* that caused the concealment.

It may, I suggest, rather have been the high status accredited to the kind of knowledge transmitted by the text that was the reason for the manner in which it was written. Whatever the attitudes at times of some people towards the arts of physiognomics and astrology may have been, submitted to writing in technical lists they unmistakably also represented higher forms of learning, handled by educated people. The utilization of the writing techniques of inverted writing and mixed scripts was a scribal means to limit the accessibility to and availability of this expert knowledge to those who were suitable to understand and use it. Literacy at Qumran may have been widespread, but must not be exaggerated. The inverted and mixed writing of *4QZodiacal Physiognomy* can thus have been effective enough to discourage insufficiently skilled and knowledgeable members of the community from taking account of its contents. In the context of the Qumran community this probably means that leadership figures like the *Maskil* were

⁷⁶ García Martínez, “Magic in the Dead Sea Scrolls,” 30.

⁷⁷ Cf. e.g. Albani, “Horoscopes in the Qumran Scrolls,” 318-21.

⁷⁸ Albani, “Horoscopes in the Qumran Scrolls,” 320-23. See also n. 52 above.

⁷⁹ Y. Yadin and J. Naveh, *The Aramaic and Hebrew Ostraca and Jar Inscriptions* (vol. 1 of *Masada: The Yigael Yadin Excavations 1963-1965, Final Reports*; Jerusalem: Israel Exploration Society/The Hebrew University of Jerusalem, 1989), 13, 16. See also Naveh, “Aramaic Magic Book from Qumran,” 254 n. 7.

⁸⁰ Yadin and Naveh, *Aramaic and Hebrew Ostraca*, 13, 17-19, 41-42. According to Naveh these shards might have been used as “tokens [...] in the food-rationing system at besieged Masada.” (18)

the ones with access to and in possession of the learned knowledge of *4QZodiacal Physiognomy*.⁸¹

The technical compendium *4QZodiacal Physiognomy* demanded a certain level of knowledge of those who were suitable to handle its learning, analogous to the demands expressed in the Babylonian *Esagil-kīn-apli Catalogue* or the prohibitions in Greco-Roman astrological treatises not to transmit knowledge to the uninitiated,⁸² which in turn affected the way the manuscript was written.

The manner of writing may, therefore, demonstrate some form of information control on the dissemination of certain forms of learning within the community of Qumran.⁸³ Accordingly, the possession of this prized piece of learning bestowed and confirmed power and prestige. The anthropologist Hugh Urban has studied the ways and strategies that people in the Śrīvidyā Indian Tantra and the Rectified Scottish Rite of French Freemasonry traditions use to conceal or reveal certain valued information, which in turn bestows status on the one controlling that knowledge. Urban argues that the concept of secrecy is best understood “in terms of its *forms* or *strategies* – the tactics by which social agents conceal or reveal, hoard or exchange, certain valued information. In this sense, secrecy is a discursive strategy that transforms a given piece of knowledge into a scarce and precious resource, a valuable commodity, the possession of which in turn bestows status, prestige, or symbolic capital on its owner.”⁸⁴ One can perhaps say that the written form of *4QZodiacal Physiognomy* signified the cultural capital that the text’s learning represented and that possession of the manuscript bestowed symbolic capital on the people in possession of it.

VALUE AND FUNCTION OF LEARNED KNOWLEDGE

The knowledge in the physiognomic and astrological lists may have been valued in itself as a piece of speculative, scientific learning about man and certain cosmic elements without any further more practical relevance.⁸⁵ It is possible that this knowledge was regarded as a valuable commodity in itself, bestowing status on those in possession of it.⁸⁶

⁸¹ Cf. Alexander, “Literacy among Jews in Second Temple Palestine,” 18-19.

⁸² See Chapter Two nn. 58, 158. Besides being literary *topoi*, one should allow for the possibility that in some texts such statements may also indicate a real concern with guarding knowledge from other people in one way or another.

⁸³ Cf. Chapter Two n. 62.

⁸⁴ Urban, “The Torment of Secrecy,” 210.

⁸⁵ Cf. Alexander, “Physiognomy,” 389.

⁸⁶ Apart from the status that the lists of revealed things may give to the one claiming to be in possession of the speculative knowledge enumerated in them, their function and role in

Pierre Bourdieu's ideas concerning "cultural capital," and social distinctions may be helpful in understanding the social value of knowledge here.⁸⁷ Education can be seen as an investment in cultural capital, but also as a mechanism reinforcing the social position of those already in possession of the necessary dispositions to enter into it. The cultivation of different forms of knowledge can function as a criterion for social distinctions between people. Education and knowledge bestow status. Tacitly they signal, confirm, and regulate existing relations of power by the inclusion or exclusion of people from certain circles or institutes of society.

Within this context of "cultural capital" the learning of *4QZodiacal Physiognomy* and *4QPhysiognomy ar* may be appreciated as a prized piece of knowledge signaling and confirming the status of those having access to and possessing it. These texts perhaps objectified the speculative, scientific interests of some elite members of Hellenistic-Early Roman period Jewish society or of the Qumran community. The pursuit and possession of that knowledge may have confirmed that elite status.

In addition to such an appreciation of the social value of the learning contained in *4QZodiacal Physiognomy* and *4QPhysiognomy ar*, it is also possible to venture some hypotheses on a more practical application of the knowledge conveyed by these texts in different contexts.

With regard to the possible function of *4QPhysiognomy ar* scholars have not made any suggestions, but regarding *4QZodiacal Physiognomy* it has been argued that it possibly functioned as part of a physiognomic test applied by leadership figures like the *Maskil* during the procedure of admission into the Qumran community.⁸⁸ As has been made clear in Chapter Two, distinction should be made between the texts and the knowledge contained in them when inquiring about the practical application. The actual texts need not have been used in an actual physiognomic practice, whatever that may be. One should, nevertheless, allow for the possibility that such catalogue texts could function as works of reference, whether at the moment of a physiognomic diagnosis or at another moment, for example, during education or study. Be that as it may, the knowledge conveyed by the texts may have served some practical purpose. In addition, another distinction to

apocalyptic literature are not entirely clear. Cf. Stone, "Lists of Revealed Things," 427, 443; Himmelfarb, *Ascent to Heaven*, 79.

⁸⁷ See e.g. P. Bourdieu, *Distinction: A Social Critique of the Judgement of Taste* (trans. R. Nice; London: Routledge & Kegan Paul, 1984); P. Bourdieu, "The Forms of Capital," in *Handbook of Theory and Research for the Sociology of Education* (New York: Greenwood, 1986), 241-58. Cf. N. Veldhuis, *Elementary Education at Nippur: The Lists of Trees and Wooden Objects* (Diss. Groningen, 1997), 137-46, for the use of Bourdieu's concept of "cultural capital" to explain the social uses of the science of writing in Old Babylonian education.

⁸⁸ See Chapter Four n. 57 and below in this chapter.

be made applies to the possible contexts in which the physiognomic and astrological learning may have functioned. Given that the two catalogues are non-sectarian compositions, one should acknowledge a non-sectarian context alongside a sectarian one.

THE PREDICTIVE FUNCTION OF PHYSIOGNOMIC LEARNING IN
4QPHYSIOGNOMY AR (4Q561)

It seems that the purpose of physiognomic divination in *4QPhysiognomy ar* is to discern the future and fate of the described individuals. In the discussion in Chapter Two about the functions of Babylonian physiognomic learning, it was remarked that it could have been used as a tool of social control exercising power over the social make-up of different circles such as the royal court or priests at temples. It remains, however, unclear whether and, if so, how the physiognomic omens functioned in such procedures.

Besides a mere intellectual interest in the subject matter and the social value it may have had for people, one can only speculate about the practical purpose of the learning listed in *4QPhysiognomy ar*. Its applied value is difficult to assess.

The predictive value of physiognomic learning in *4QPhysiognomy ar* may have been of interest in a divinatory practice in which people consulted a diviner or physiognomist in order to know what their future had in store for them. An example that comes to mind in another context is that of the family of Britannicus who sought the advice of a *metoposcopus* to inquire about the boy's fate as future emperor.⁸⁹ It is also possible that in the context of Qumran knowledge of people's future may have been relevant in understanding their situation. Perhaps the text of *4QPhysiognomy ar* had an eschatological focus or was given one by its readers. The descriptions of the human body may have been understood to somehow reveal certain eschatological information or indications, somewhat similar perhaps to the revelatory function of the description of Noah in *I En.* 106 (see Appendix II).

THE DIAGNOSTIC FUNCTION OF PHYSIOGNOMIC-ASTROLOGICAL LEARNING
IN *4QZODIACAL PHYSIOGNOMY* (4Q186)

In Chapter Four, I concluded that the concern of *4QZodiacal Physiognomy* is the discernment of the nature of people's zodiacal spirit. The division between the "house of light" and the "house of darkness" indicates this nature. This division is astrologically the result of the ascendant zodiacal

⁸⁹ Suetonius, *Lives of the Caesars: Titus* 2. Cf. Evans, *Physiognomics*, 52.

sign's position in relation to the eastern horizon (Chapter Three), but in this text it is consequently the zodiacal spirit that is divided between light and darkness.

Similar to the observation of the body in ancient medicine, physiognomic learning has a diagnostic function here.⁹⁰ According to *4QZodiacal Physiognomy* the human body signifies the division between light and darkness of people's zodiacal spirits, which has a close relationship with them since the moment of their birth. The diagnosis of people's bodies reveals the character of their zodiacal spirits. What was the importance of this knowledge? What could be the practical relevance and function of knowing someone's zodiacal sign, its position at birth, and the division of the zodiacal sign and its spirit between light and darkness? Apart from a scientific interest in cosmic sympathy between zodiacal signs, their spirits and human beings, and the classification of this knowledge in a catalogue, one should allow for the possibility of a more practical, diagnostic application of the knowledge contained in *4QZodiacal Physiognomy*.

The Importance of Knowing the Nature of People's Zodiacal Spirits

It was important to know what the nature was of the zodiacal spirit that attended someone because it could be a potentially dangerous and harmful being. The appreciation of zodiacal spirits in *4QZodiacal Physiognomy* is, I suggest, more in line with the negative evaluation of them in the *Testament of Solomon* and the Manichean *Kephalaia* than with the positive image in the Cairo Genizah amulet in which *Leo* is adjured.⁹¹ The *Testament of Solomon* speaks of the thirty-six decanal spirits as "the thirty-six demons that plague humanity."⁹² Zodiacal spirits could attack people, cause illnesses or other calamities and inconveniences during life.

Before too negative a picture of the zodiacal spirits emerges, one should bear in mind that the influences exerted by the zodiacal signs were of various kinds. Some of these were beneficial, some were less beneficial, and others not at all beneficial.⁹³ The zodiacal spirits were, just like the zodiacal signs, responsible for what happened to people during life and, therefore, also for people's illnesses or bad luck.

As indicated by *4QZodiacal Physiognomy*, the nature of someone's zodiacal spirit is modified according to the position of the zodiacal sign at the moment of birth. The number of parts within the "house of light" and the "house of darkness" serve, I suggest, to reveal the more or less beneficent or maleficent nature of people's zodiacal spirits. More parts of light would

⁹⁰ Cf. Chapter Two n. 109.

⁹¹ See the section on the *Testament of Solomon* and zodiacal spirits in Chapter Four.

⁹² *T. Sol.* 18:42.

⁹³ Cf. Hübner, *Eigenschaften der Tierkreiszeichen*, 201-38.

have been indicative of a beneficial character, while more parts of darkness of a maleficent one. One should allow for the possibility that more than just two opposing characters were indicated, that the situation was more nuanced. It was not a matter of simply beneficent or maleficent. For example, zodiacal spirits with more parts of light could still cause inconveniences, but these would have been of a less harmful nature than those caused by spirits with less parts of light. In other words, to the readers of the text of *4QZodiacal Physiognomy* the division of light and darkness indicated, I suggest, the degree to which zodiacal spirits were potentially harmful; whether a spirit could be really harmful or not very. The more light, the less harmful, the more darkness, the more harmful an attack by a zodiacal spirit would have been.

PRACTICAL APPLICATIONS OF PHYSIOGNOMIC-ASTROLOGICAL LEARNING IN
4QZODIACAL PHYSIOGNOMY (4Q186)

Regarding the practical application, people could have used the knowledge listed in *4QZodiacal Physiognomy* as a diagnostic tool during a physiognomic inquiry. The physiognomic diagnosis was believed to determine people's horoscopes and the nature of their zodiacal signs and spirits.

Knowledge of the nature of people's zodiacal spirit could be relevant in various contexts. Here I suggest two possible contexts, not mutually exclusive, for the diagnostic value of the physiognomic-astrological knowledge in *4QZodiacal Physiognomy*. First, knowing the nature of zodiacal spirits could have been important in a more general magico-medicinal context. Second, in line with earlier proposals, this knowledge could have been relevant in a sectarian context to control and regulate admission to the Qumran community.

A Magico-Medicinal Context: Diagnosing the Zodiacal Culprit

In a magico-medicinal context knowledge of a zodiacal sign's character could have been helpful to determine treatments. People could consult a medical astrologer, *magus*, or doctor with complaints of illness or bad luck for which their zodiacal spirit might be responsible, in which case astrological circumstances needed to be taken into account.⁹⁴ In antiquity, however, many people would not have known their time of birth or zodiacal

⁹⁴ For the connection between astrology and medicine (iatromathematics), see e.g. Bouché-Leclercq, *L'astrologie grecque*, 517-42; F. Cumont, *L'Égypte des astrologues* (Brussels: Fondation Égyptologique Reine Elisabeth, 1937), 93-94, 128-29, 171-74; A.-J. Festugière, *La révélation d'Hermès Trismégiste, I: L'astrologie et les sciences occultes* (2d ed.; CEA.EtB; 1950; repr., Paris: Les Belles Lettres, 1983), 123-86; Reiner, *Astral Magic*, 43-60; Sassi, *Science of Man*, 177-83.

sign. It was, therefore, important to discover these in order to identify the zodiacal culprit.

In this situation the medical astrologer could resort to a physiognomic examination diagnosing which zodiacal spirit was causing the affliction and what its nature was. In other words, knowledge of the zodiacal sign's character would have determined the diagnosis of the disease's nature; we would say, whether a disease was of benign or malicious character.

In terms of pneumatology, this understanding of diseases being caused by external spirits is matched by other texts that identify the cause of illnesses to be external and demonic, such as *T. Sol.* 18.⁹⁵ Other texts from Qumran also identify external spirits as the cause of diseases and afflictions, demonstrating that the spirits attacking people were believed to be of varying sorts. For example, the fragmentary Aramaic text 4Q560 (*4QExorcism ar*), which was originally some sort of demonic catalogue, listed adjurations against demons that cause pregnancy or childbirth problems, inflict various illnesses, and disturb people's sleep by dreams.⁹⁶ Although this text, as far as can be determined from its remains, does not speak of zodiacal spirits, one should allow for the possibility that zodiacal spirits were one kind of spirit imagined by members of the Qumran community and other Jews in Hellenistic-Early Roman period Palestine.

Magico-Medicinal Countermeasures and Apotropaic Stones

On the basis of his knowledge about the identity and nature of the zodiacal spirit, the medical astrologer could determine which appropriate magical-medical countermeasures to take to cure the patient and end the afflictions that are bothering him or her.

Knowledge of which zodiacal sign was responsible for what illness enabled astrologers, magicians, or doctors to take appropriate measures for curing people. For example, in one of his writings the second century CE physician Galen ridicules a certain Pamphilus for claiming to use the thirty-six sacred herbs of demons and decans from a Hermetic text and also for his use of incantations and spells when gathering these herbs.⁹⁷ Galen's criticism demonstrates that at least some people believed astrology, demonol-

⁹⁵ This sort of external cause of disease is in line with Babylonian medicine but not with Greek medicine, where illness is understood to have an internal cause resulting from the imbalance of the mixture (κρῶσις) of humors. Cf. Chapter Two n. 188.

⁹⁶ See Penny and Wise, "By the Power of Beelzebub"; Alexander, "Wrestling Against Wickedness," 329-30; Naveh, "Aramaic Magic Book from Qumran"; Garcia Martinez, "Magic in the Dead Sea Scrolls," 26-28. Cf. also the Cave 4 fragments of the Damascus Document that deal with the treatment of skin diseases and speak of a spirit that enters the body, see Chapter Two n. 187.

⁹⁷ Galen, *De simplicium medicamentorum temperamentis ac facultatibus* 6 pr = Kühn XI 796-98. See Barton, *Power and Knowledge*, 53-54.

ogy, and medicine to be connected with each other in an intricate way. In addition, Galen's comments about Pamphilus are also interesting because he ridicules him for relying on books and having no real acquaintance with the herbs he is talking about. This suggests that books could play an important role as a source of learning and shows that "inadequate" knowledge, though contested by some, could have value for others.

The connection between astrology, demonology, and medicine, as well as the harmful and dangerous character of zodiacal spirits, is also demonstrated by the *Testament of Solomon*. *T. Sol.* 18 lists the names of decanal demons, the harm they cause to humans, and the means for driving them away and curing people. Many of the decanal spirits control a certain part of the human body (*melothesia*), inflicting various illnesses and injuries.⁹⁸

During their interrogation by Solomon, however, these spirits not only tell him who they are and what they do, but also how they can effectively be defeated. In some cases, they can be subdued by calling upon the name of an angel. For example, if the first spirit hears "Michael, imprison Ruax," he tells Solomon that he retreats immediately. But in other cases, the demons advise Solomon to write down the angelic name or some other name on different surfaces such as papyrus, wood or ivy leaves, which should be hung around the neck, attached to doorways, or heaped up in a pile. Also, more complicated instructions are given to prepare herbs and ointments. For example, the sixteenth demon tells Solomon:

I am called Katrax. I inflict incurable fevers on men. If anyone wants to regain health, let him pulverize coriander and rub it on his lips, saying, 'I adjure you by Zeus, retreat from the image of God,' and I retreat immediately.⁹⁹

Philip Alexander rightly argues for the magical and medicinal purpose of the catalogue in *T. Sol.* 18 that combines demonology with astrology:

Demonology becomes a more rational, more predictable phenomenon. If a client comes to a magus complaining of illness or ill luck the magus can take cognizance of which star or which decan is in the ascendant at this point in time, and thus identify from the numerous demons the probable demonic culprit and apply the appropriate angelic restraint. Alternatively he could discover through the client's nativity which star or decan was in the ascendant at the time of his birth, which demon is *synastros* with him and therefore likely to be causing him problems. [...] Indeed, the magus can practice apotropaic medicine. Since there is a predictable system, he

⁹⁸ See the section on the *Testament of Solomon* and zodiacal spirits in Chapter Four.

⁹⁹ *T. Sol.* 18:20. Translation from Duling, "Testament of Solomon," 979. On the name Katrax, cf. Daniel, "Testament of Solomon XVIII 27-28, 33-40," 304.

can identify from which quarter the attack is likely to come and offer amulets and incantations to defend against it.¹⁰⁰

Although harmful, people believed that the influence exerted by zodiacal and decanal spirits could be stopped. It is possible that books and texts on these matters could have served some practical purpose. The text of *4QZodiacal Physiognomy* could have been used in a magico-medical practice that sought to establish the exact nature of the zodiacal spirit that caused a certain affliction.

A magico-medical context for *4QZodiacal Physiognomy* is supported by the mention in 4Q186 1 ii 2 of a specific sort of granite stone (אבן צונם). Although the text is fragmentary, it is very suggestive. *4QZodiacal Physiognomy* may have associated certain stones with zodiacal signs and spirits. These stones may have been listed and used for purposes of magico-medical treatment or as a preventive, apotropaic element. There are Babylonian and Greco-Roman astrological texts that list stones in connection with the signs of the zodiac, and also give instructions for medical treatment. A magical purpose is possibly also indicated by the way that the words אבן צונם (“a granite stone”) are written. These were not written in an inverted manner like the rest of the text, but in the regular order from right to left. This manner of writing may suggest its magical power.¹⁰¹

A Sectarian Context: Physiognomic Control over People's Entrance into the Qumran Community and the Fight against Evil Spirits

The possible use of physiognomics as a means for exercising social control has been discussed in Chapter Two. Analogous to some Greco-Roman examples, scholars have suggested that *4QZodiacal Physiognomy* was used as a means to manage and regulate the entrance of new members into the Qumran community.¹⁰² Whether physiognomic learning was really applied and, if so, in what manner, is impossible to determine, but it is evident from the ancient sources that it was understood or at least imagined as a real possibility. One should, therefore, bear in mind the option that a physiognomic test was applied during the procedure of admission into the Qumran community. However, instead of the human spirit being evaluated, it was, I

¹⁰⁰ Alexander, “Contextualizing the Demonology,” 632.

¹⁰¹ See the section on magico-medical stones in Chapter One and the section on cosmic sympathy above in this chapter.

¹⁰² In addition to the Babylonian and Greco-Roman contexts, mention should also be made of the medieval Jewish tradition that credited the circles of Merkavah mystics with the practice of physiognomics to guard their secrets by only sharing them with those deemed eligible. Cf. P.S. Alexander, “The Historical Setting of the Hebrew Book of Enoch,” *JJS* 28 (1977): 156-80, at 168; Schäfer, “Fragment zur Metoposkopie und Chiromantik,” 85-86; Alexander, “Physiognomy,” 392; J.R. Davila, *Descenders to the Chariot: The People behind the Hekhalot Literature* (JSJSup 70; Leiden: Brill, 2001), 60-67, 72-73.

suggest, the nature of a person's zodiacal spirit that may have determined whether someone qualified for group membership.

The physiognomic-astrological learning of *4QZodiacal Physiognomy* concerning the connections between people, their horoscopes and the nature of their zodiacal spirits may have been instrumental in exercising control over the composition of the Qumran community. Considering the potentially dangerous and harmful nature of the zodiacal spirits, they could pose a threat not only to individuals, but also, through individual people, to a whole group or community. Knowledge of whether people's zodiacal spirits were liable to cause serious harm could have determined whether an individual would be allowed to become a member of a social group such as the community of Qumran. Those persons whose zodiacal spirits had more parts in the house of light were presumably judged to be better off. They had to fear less from serious afflictions inflicted upon them by their zodiacal spirits. An individual person could, therefore, have been deemed eligible to join the community. In this case the community had also less to fear from attacks by his zodiacal spirit, which could not only harm him, but also others within the community through him.

As has been discussed in Chapter Four, Alexander argued for the use of physiognomic learning in controlling entrance into the Qumran community, as a divinatory tool in the eschatological fight between the community and the sons of darkness. The major difference between my understanding of the text of *4QZodiacal Physiognomy* and that of Alexander is that he regards the reference to רוח ("spirit") to mean the human spirit, whereas I take it to refer to the zodiacal spirit. This latter understanding, however, would fit even better in the world-view of the Qumran community, according to which the sons of light were battling the evil spirits of Belial and had to defend themselves against their attacks upon them. It is possible that when zodiacal spirits had more parts of darkness than light they were considered to be potential demonic minions of Belial.

Again, in terms of Qumran pneumatology, the zodiacal spirits could be seen as another sort of spirit or demon inhabiting the world and possibly causing trouble for the members of the Qumran community.¹⁰³ Therefore, adapting Alexander's interpretation, I suggest that the knowledge in *4QZodiacal Physiognomy* was used in a sectarian context like that of the Qumran community that wished to guard itself against demonic attacks. The physiognomic-astrological knowledge was used as the justification for a pre-emptive strike, so to speak, by denying entry into the community to people whose zodiacal spirits were found upon physiognomic inquiry to be

¹⁰³ Cf. n. 96 above in this chapter. See also P.S. Alexander, "The Demonology of the Dead Sea Scrolls," in *Dead Sea Scrolls After Fifty Years*, 331-53.

potentially too dangerous or maleficent. Such a pre-emptive, defensive function of *4QZodiacal Physiognomy* finds support in two manuscript copies, 4Q510 (4QShir^a) and 4Q511 (4QShir^b), which contain songs that were meant to be recited by the *Maskil* as defensive measures against attacks by different sorts of demons upon the community.¹⁰⁴

It is not necessary to assume that physiognomic inquiry was only limited in scope as a preventive measure taken before people were admitted to the community. Sectarian writings of the Qumran community such as the *Rule of the Community* demonstrate that the group was preoccupied with disciplining members, keeping them within the group, and out of the hands of the sons of darkness, because it was a real possibility and threat that members of the community could wander off the right track. Physiognomic divination could, therefore, have been used both as a preventive measure, which regulated membership of the group and prevented wrong people and their zodiacal spirits from entering and threatening the community, as well as a diagnostic tool, similar to the magico-medicinal context, to determine the kind of treatment and cure for community members attacked by zodiacal spirits of a less harmful nature.

¹⁰⁴ Cf. Alexander, "Wrestling Against Wickedness," 319-24; García Martínez, "Magic in the Dead Sea Scrolls," 21-23.