

MNEMOTECHNICS IN THE *SEFER YEŠIRAH*?*

The *Sefer Yeširah* (henceforth SY) is known to be a pre-qabbalistic treatise which tries to expound upon the act of formation of the cosmos through what it calls the “thirty-two paths of wisdom”, represented by the twenty-two letters of the Hebrew alphabet and the ten *sefirot belimah*.

Its date and place of composition have always been puzzling to scholars, especially because of its extremely complex redactional history, which turned out to be so difficult to reconstruct that its first complete critical edition, which appeared only in recent times, renounces to try to individuate a definitive *Urtext* and

only reconstructs what it defines as an “earliest recoverable text”.¹ Different datings have been suggested, spanning from the III to the VI,² to the VII³ or to the IX⁴ centuries. Although it contains elements found in III century Syriac texts,⁵ it also presents linguistic speculations that are typical of much later periods, namely the VIII-IX centuries. If we take all these elements into account, the extant versions of the SY can be considered the result of a later redaction that could have begun at least in the VI century, if we assume that the text is to be identified with the one mentioned in the Talmud.⁶ In any case, the *terminus ante quem* is the beginning of the X

* I am deeply grateful to Jeremy Bonney for proofreading this article. I remain the sole responsible for any mistake.

¹ The present article is based on the “earliest recoverable text” as defined and reconstructed in A.P. HAYMAN, *Sefer Yeširah*, p. 49, ff. Before Hayman, which defined the search for the original text as a “scholarly illusion” (*The ‘Original Text’: A Scholarly Illusion?*, in J. DAVIES, G. HARVEY, W.G.E. WATSON (eds.), *Words Remembered, Texts Renewed. Essays in Honour of John F. A. Sawyer*, Sheffield Academic Press, Sheffield 1995, pp. 434-449) the previous attempt to a critical edition of the SY was a preliminary work by Ithamar Gruenwald, who also stresses the difficulty of the task: I. GRUENWALD, *A Preliminary Critical Edition of Sefer Yezira*, in «Israel Oriental Studies» 1 (1971), pp. 132-177. The question of the redactional complexity is further discussed in E.R. WOLFSON, *Text, Context and Pre-text: Review Essay of Yehuda Liebes’s Ars Poetica in Sefer Yezira*, in «The Studia Philonica Annual» XVI (2004), pp. 218-228.

² See, for instance, G. SCHOLEM, *Origins of the Kabbalah*, Princeton University Press, Princeton 1990 (or. ed. *Ursprung und Anfänge der Kabbala*, Walther de Gruyter, Berlin 1962), p. 25.

³ G. BUSI - E. LOEWENTHAL, *Mistica ebraica. Testi della tradizione segreta del giudaismo dal III al XVIII secolo*, Einaudi, Turin 2006 (1st ed. 1995), p. 33.

⁴ See for example S.M. WASSERSTROM, *Sefer Yeširah and Early Islam: A Reappraisal*, in «Journal of Jewish Thought and Philosophy» 3 (1993), pp. 1-30 (p. 8, ff.); ID., *Further Thoughts on the Origins of the Sefer yeširah*, in «Aleph» 2 (2002), pp. 201-221.

⁵ As Pines has shown, the SY seems to contain influences from III century Syriac works, such as the four elements not being the four classical ones, but with Light instead of Earth and the role of the six directions of space as foundations of the cosmos: see SH. PINES, *Points of Similarity between the Exposition of the Doctrine of the Sefirot in the Sefer Yezirah and a Text of the Pseudo-Clementine Homilies: The Implications of this Resemblance*, in W.Z. HARVEY, M. IDEL (eds.), *Studies in the History of Jewish Thought* (The Collected Works of Shlomo Pines V), pp. 94-173, The Magnes Press, Jerusalem 1997. On the possible source for the idea of the *sefirot* as they appear in the SY, see also: G.G. STROUMSA, *A Zoroastrian Origin to the Sefirot?*, in SH. SHAKED, A. NETZER (eds.), *Irano-Judaica*, vol. III, pp. 17-33, Ben-Zvi Institute, Jerusalem 1994.

⁶ A certain *יצירה ספר* is mentioned in bSanhedrin 65b, where it is said that r. Ḥanīna e r. Oša‘ya used it to create a calf on Shabbat’s eve, which they then they proceeded to eat. The same passage is repeated in bSanhedrin 67b, where it is called *הלכות יצירה*. If we assume that the Talmud is referring to an actual text and if that text is the same SY with which we are

century, when its first commentaries started to appear:⁷ the first known of these was composed in Arabic by Sa'adia Gaon in Mesopotamia, the second was composed in Hebrew by Shabbetai Donnolo in Southern Italy and the third in Arabic by Dunash ibn Tammim in Kairouan.

Three different versions of the text are extant: a so-called “short” recension, a “long” one and the “Sa'adian” one, which is based on the short one and contains some passages from the long one, but presents its sections arranged in a different sequence than the other two.⁸ Pseudepigraphically attributed to Abraham,⁹ the treatise appears to be composed of loosely connected independent textual units.¹⁰

One of its most notable features is represented by the first attestation of the ten *sefirot belimah*, which are not yet intended as divine attributes or emanations, as they will be interpreted in later Qabbalah. By the same term *sefirot*, the SY refers to elements belonging to two different ontological categories. The first category is constituted by the four basic elements of creation which came forth in a certain sequence:

Spirit, Wind, Water and Fire. The remaining six elements are each identified with a special direction and are, respectively: Up, Down, East, West, North and South.

While the letters are systematically referred to as *otyot yesod*, namely “letters of foundation”, the term *sefirot* is usually followed by the apposition *belimah* (בלִימָה), the meaning of which is, in Scholem's words, «a matter of speculation».¹¹

In addition to the *sefirot*, the other types of building blocks of creation in the SY are represented by the twenty two letters of the Hebrew alphabet, which are divided into three categories: three so-called “mothers” (א, מ, ש), seven “double” (ב, ג, ד, כ, פ, ר, ת) and twelve “simple” letters (ה, ו, ז, ח, ט, י, ל, נ, ס, ע, צ, ק). Each group (פּרָס) is made to correspond to an element of one of the three realms of creation, that the text calls ‘witnesses’ (עֵדִים),¹² namely the world (עוֹלָם), the year (שָׁנָה) and the human being (נַפְשׁוֹ), always presented in that precise order. The lists of elements that are associated through the letters reprise the ancient motive of the correspondence

dealing here, it could mean that some earlier version of the treatise was already circulating at the times of the Savoraim (VI century). Alternatively, the redaction of SY could have occurred later and its title can be considered a reference to those Talmudic passages. About the absence of clear references to the Talmud, see: I. GRUENWALD, *Some Critical Notes on the First Part of Sefer Yezira*, in «Revue des Études Juives» 132 (1973), pp. 475-512 (p. 477).

⁷ P.B. FENTON, *Georges Vajda et l'étude du Sefer yeširâh*, in P.B. FENTON (ed.), *La consolation de l'expatrié spirituel*, Éditions de l'éclat, Paris 2008, pp. 9-18 (p. 12).

⁸ «La suite des chapitres, chez Saadya, est logique; chez les autres, elle est mnémotechnique» (emphasis mine): M. LAMBERT, *Commentaire sur le Séfer Yesira ou Livre de la Création par le Gaon Saadya de Fayyoun*, Émile Bouillon Éditeur, Paris 1891, p. VI.

⁹ Following Gen. 15:5 and maybe 22:17, and probably because of the mention in the Bible of his Chaldaean origins, Abraham was associated with stars and astronomy, at least in medieval traditions, making this particular patriarch suitable for the attribution of a cosmological treatise.

¹⁰ GRUENWALD, *Some Critical Notes*, cit., p. 479.

¹¹ G. SCHOLEM, *Major Trends in Jewish Mysti-*

cism, Schochen, New York 1946, p. 77. A number of interpretations have been suggested for this term, ranging from “without determination” (*beli-mah*) to “primordial” (in G. VAJDA, *Le Commentaire sur le Livre de la Création de Dūnaš ben Tāmīm de Kairouan (Xe siècle). Nouvelle édition revue et augmentée par Paul B. Fenton*, Peeters, Paris-Louvain 2002, p. 42) to a meaning derived from the root *b l m*, which refers to silence and in general to the closing of the mouth: BUSI - LOEWENTHAL, *Mistica ebraica*, cit., p. 35, n. 3; see also G. VAJDA, *Recherches sur les commentaires du Livre de la Création*, in *La consolation de l'expatrié spirituel*, Éditions de l'éclat, Paris 2008, pp. 19-107, p. 24. As pointed out by Hayman (HAYMAN, *Sefer Yeširah*, cit., p. 66), the term appears in Jb. 26:7 with the meaning of an invisible and intangible foundation on which the cosmos has been built, basically a synonym of *yesod*. If we adopt this interpretation, then, by the consistent coupling of the two different synonyms of “foundation”, *yesod* and *belimah*, with *otyot* and *sefirot* respectively, the redactor appears to stress the difference between the two kinds of “paths of wisdom” and, at the same time, their similar function as foundations of the cosmos.

¹² Witnesses of the unity of God: SY § 43c. See HAYMAN, *Sefer Yeširah*, cit., p. 50.

Mnemotechnics in the *Sefer Yeşirah*?

between the human body and the cosmos, which constituted a fundamental part of pre-modern philosophies across the Mediterranean.¹³

The three “mother” letters are made to correspond to one of the three¹⁴ elements (Air, Water and Fire) in the world, to one of the three seasons (wet, cold and hot) in the year and to a section of the body (head, torso, abdomen) in the human being. The seven double letters each correspond to a planet in the world, to a day

of the week in the year and to an orifice of the human head. With the exception of the mouth, the openings in the head are double, like the letter they were formed with, according to the SY. When the text calls the letters “double”, it refers to the double pronunciation, usually fricative and occlusive, that these can yield. Lastly, the remaining twelve simple letters are made to correspond each to a constellation of the Zodiac in the world, to a month in the year and to an inner

| “Mothers” | Element | Season | Human body |
|-----------|---------------|-----------------|---------------|
| א | Air | wet | head |
| מ | Water | cold | thorax |
| ש | Fire | hot | abdomen |
| “Double” | Planet | Day of the week | Opening |
| ב | Saturn | Shabbat | mouth |
| ג | Jupiter | First | right eye |
| ד | Mars | Second | left eye |
| ה | Sun | Third | right nostril |
| ו | Venus | Fourth | left nostril |
| ז | Mercury | Fifth | right ear |
| ח | Moon | Sixth | left ear |
| “Simple” | Constellation | Month | Organ |
| ט | Aries | Nisan | liver |
| י | Taurus | Iyar | gall bladder |
| יא | Gemini | Sivan | spleen |
| יב | Cancer | Tammuz | stomach |
| יג | Leo | Av | right kidney |
| יד | Virgo | Elul | left kidney |
| טו | Libra | Tišri | intestines |
| טז | Scorpio | Marḥešvan | esophagus |
| יז | Sagittarius | Kislev | right hand |
| יח | Capricorn | Ṭevet | left hand |
| יט | Aquarius | Ševat | right foot |
| כ | Pisces | Adar | left foot |

Table 1: The letters and their correspondences in the *Sefer Yeşirah*.

¹³ A.J. FESTUGIÈRE, *La révélation d’Hermès Trismégiste*, vol. 1, *L’astrologie et le sciences occultes*, Les Belles Lettres, Paris 1949, p. 92.

¹⁴ In the SY, Earth is apparently not considered

one of the constituting elements of creation, but was later formed by condensation of water (§ 13). In the process of creation in the SY, Spirit often replaces Earth as the first of four elements.

organ in the abdomen or a limb¹⁵ of the human body. The seven double and the twelve simple letters are additionally associated with moral qualities and with body activities, respectively.

As already pointed out, the idea of a metaphysical connection between the human being and the cosmos is of course much older than the SY: it is as ancient as Western philosophy itself, since it is attested in fragments ascribed to Anaximandros (VIII-VII centuries b.c.e.), the first philosopher of which we have written records. The ways through which the connection between the human being and the cosmos were intended throughout the history of thought are numerous, but they could be grouped into a few categories.¹⁶ For the purpose of this paper, only the four relevant ones will be briefly explained. The simplest of these is the purely visual association of elements in the cosmos to those in the human body, e.g. the trees and the grass are compared to human hair, the rivers to blood vessels, and so on. Another very common type of microcosmism is the one theorized by Plato in his *Timaeus*,¹⁷ in which the philosopher states that both the human being and the cosmos share the same threefold structure of Intellect, Soul and Body/Matter. According to Aristotle,¹⁸ however, the human intellect shares the same nature with the intelligible things and it contains them in potential: knowledge of sensible things means gradually putting this potentiality into actuality, making the intellect more and more connected to

the world, to use current parlance. Lastly, one particular way of interpreting the connection between man and the cosmos is the so-called melothesia, namely the alleged correspondence between the constellations of the Zodiac and the parts of the human body.

Melothesia appeared in Hellenistic times as a result of the combination of the Babylonian Zodiac with different philosophies that dealt with the micro-macrocosm correspondence, like neoplatonism or stoicism, to name the most common. The presence of some kind of belief according to which the planets had an influence on the health of particular organs can be inferred in some Babylonian texts,¹⁹ but in the current state of affairs further research is needed in order to reconstruct the underlying philosophy.²⁰ Hellenistic astrology combined the use of the twelve Babylonian constellations with the Egyptian thirty six decans (originally Egyptian deities ruling over the stars along the Ecliptic) and gave birth to the individual horoscope.²² Additionally, an increasingly systematic model for the alleged influences of the constellations on the human body was elaborated especially around the I-II centuries A.D.: earliest attempts at a systematization of this set of correspondences are attested in the fragments ascribed to Nechepso-Petosiris,²³ in Claudius Ptolemy's *Tetrabiblos*²⁴ and in Hermetic works such as the *De triginta sex decanis*.²⁵ In the first centuries A.D., a definitive model was established in works such as,

¹⁵ Incidentally, the meaning of the Hebrew term תְּבִיבָה encompasses both 'inner body' and 'membrum' (M. JASTROW, *Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature*, Peabody 1903, pp. 220-221).

¹⁶ R. ALLERS, *Microcosmus. From Anaximandros to Paracelsus*, in «Traditio» 2 (1944), pp. 319-407, classified six typologies of microcosmism, which Finck expanded to twenty-one: R. FINCKH, *Minor Mundus Homo. Studien zur Mikrokosmos-Idee in der mittelalterlichen Literatur*, Vandenhoeck & Ruprecht, Göttingen 1999 (Palaestra 306), pp. 469-471.

¹⁷ *Timaeus* 30b.

¹⁸ *De anima* III, 8 (431 b 20).

¹⁹ For example SBTU I 43 and LBAT 1597.

²⁰ M.J. GELLER, *Melothesia in Babylonia. Medicine, Magic and Astrology in the Ancient Near East*, Berlin 2014, p. 1.

²¹ See O. NEUGEBAUER, *Astronomy and History*.

Selected Essays, Springer, New York 1983, p. 205.

²² F. ROCHBERG, *The Heavenly Writing. Divination, Horoscopy, and Astronomy in Mesopotamian Culture*, Cambridge 2007 (1st ed. 2004), pp. 100-101.

²³ D.E. PINGREE, *Petosiris*, in C.C. GILLISPIE (ed.), *Dictionary of Scientific Biography*, vol. 10, Charles Scribner's Sons, New York 1975, pp. 547-549. The fragments are edited in E. RIESS (ed.), *Nechepsonis et Petosiridis fragmenta magica*, Bonn 1890.

²⁴ S. FERABOLI (ed.), *Le previsioni astrologiche (Tetrabiblos)*, Fondazione Lorenzo Valla - Arnoldo Mondadori Editore 1998 (1st ed. 1985).

²⁵ S. FERABOLI (ed.), *Hermetis Trismegisti De triginta sex decanis*, Brepols, Turnhout 1994 (*Corpus Christianorum, Continuatio Mediaevalis* 144). See also P. SCARPI (ed.) *La rivelazione segreta di Ermete Trismegisto* (vol. II), Fondazione Lorenzo Valla - Arnoldo Mondadori Editore, Milano 2011, pp. 169 ss.

Mnemotechnics in the *Sefer Yeşirah*?

for example, Manilius's *Astronomica*,²⁶ Vettius Valens's *Anthologia*,²⁷ Sextus Empiricus's polemic work *Against teachers*²⁸ and Firmicus Maternus's *Mathesis*.²⁹ This model, here defined as "classic" melothesia, consists of a correspondence between the constellations of the Zodiac and the human body in a precise sequence *a capite ad calcem* (i.e. "from head to toe"), in which Aries is said to rule the head, Taurus the neck, Gemini the arms, and so on and so forth, up to Pisces that, according to this model, govern the feet. In addition to the zodiacal melothesia already

described, different systems of a planetary melothesia theorizing the influence of planets on organs, particularly on the seven openings in the human head, were elaborated in Late Antiquity and throughout the Middle Ages.

Classic melothesia soon became ubiquitous and virtually every Medieval text dealing with the correspondences between the celestial bodies and the human body presented the *a capite ad calcem* model. Compared to classic melothesia texts, the SY stands out for the different sequence that it presents. As we can see in Ta-

| Constellation | Classic melothesia | In the <i>Sefer Yeşirah</i> |
|---------------|-----------------------|-----------------------------|
| Aries | head | liver |
| Taurus | neck | gall bladder |
| Gemini | arms | spleen |
| Cancer | ribcage or heart | stomach |
| Leo | heart or solar plexus | right kidney |
| Virgo | stomach | left kidney |
| Libra | belly | intestines |
| Scorpio | genitalia | esophagus |
| Sagittarius | thighs | right hand |
| Capricorn | knees | left hand |
| Aquarius | calves | right foot |
| Pisces | feet | left foot |

Table 2: The "classic" melothesia compared to the correspondences in the *Sefer Yeşirah*.

ble n. 2, there is practically nothing in common between the two different systems.

Around the middle of the X century, Šabbetai Donnolo in his *Sefer Ḥakhmoni* already pointed out this discrepancy between the correspondences found in the SY and the ones found in his astrological sources, which are consistent with any other Medieval astrological and astronomical work, since virtually all of them were based on Ptolemy's *Tetrabiblos* and *Almagest*. When addressing the issue, he notices that in

contrast with any other source he found, the SY does not explicitly refer to an influence of the constellations on the body. Donnolo shows that the *Book of Formation* in fact simply states that by means of a certain letter, a constellation and an organ or a limb were created. It means that if a certain constellation and a part of the body were created through the same letter, that does not mean that the same constellation has an influence over that part of the body. So for example, although through the letter א Aries and the

²⁶ *Astronomica* II, 453-465, see S. FERABOLI, E. FLORES, R. SCARCIA (eds.), *Manilio. Il Poema degli astri (Astronomica)*. Fondazione Lorenzo Valla - Arnoldo Mondadori Editore, Milano 1996, vol. I, p. 141.

²⁷ G. BEZZA, *Arcana Mundi. Antologia del pen-*

siero astrologico antico. Rizzoli, Milano 1995, vol II, pp. 722-731. See also D.E. PINGREE (ed.), *Vettius Valens. Anthologiarum libri novem*, Leipzig 1986.

²⁸ *Adversus Mathematicos* V, 4.

²⁹ V, 132, ff.

liver were created, Aries does not rule over the liver, but over the head instead and, although both the Taurus and the gall bladder were created by means of the letter ט , the constellation governs the neck instead of the gall bladder, and so on and so forth.³⁰

Not only does the sequence of organs and limbs in the SY not seem to follow a definite order, but it also seems to lack the mention of central organs such as the brain, the heart and the lungs. Although not in this context, the heart is indeed mentioned elsewhere. In addition to the twelve constellations and the seven planets, the SY traces a further correspondence between three more elements, with the usual sequence of cosmos, year and human being. The three elements are the *tli*, the *galgal* and the heart:

חק עשרה שלשה ושבעה ושנים עשר פקודין בתלי וגלגל ולב.
תלי בעולם כמלך על כסאו גלגל בשנה כמלך במדינה לב בנפש
כמלך במלחמה

In all likelihood, the term *tli* refers to the imaginary dragon that, in Syriac astronomy, was held responsible of solar and lunar eclipses³¹. Not only is its identification with a celestial object consistent with the general pattern, namely world – year – man, that the SY shows when presenting micro-macrocosm associations, but also its name, *tli*, that Hayman translates as “hook”,³² is related to the Syriac *ātālyā*.³³ The second term of the sequence, the *galgal*, has been generally identified with the whole celestial

sphere,³⁴ but it can be argued that it should be intended as referring to the Zodiac alone. This interpretation is not only closer to the more literal meaning of “wheel”, but it is also linked with the measurement of time, since the wheel of the Zodiac represents the path of the Sun in one year.³⁵

The wheel of the Zodiac, with the *tli* rotating in it, is not the only wheel mentioned in the SY: the other one is a wheel of letters, through which, according to the text, everything in the world was created. In the SY, the letters are not only effective *per se*, but their power is manifested when they are combined. For instance, each of the six directions in space (each corresponding to a *sefirah*, as we have seen earlier) has been sealed with one of the six different permutations of the letters *yod*, *he*, *waw*, i.e. the letters that form the Divine Name. The importance of permutations is stressed in § 18, where the text mentions that the *otyot yesod* are fixed on a wheel of two hundred and thirty one³⁶ gates:

עשרים ושתיים אותיות קבועות בגלגל חזר גלגל פנים ואחור
סימן לדבר אין בטובה למעלה מעונג ואם ברעה למטה בנגע³⁷

In § 40, by using the metaphor of houses and stones (i.e. bricks), the treatise explains how a relatively small quantity of elements (“bricks”) can generate a surprisingly large number of permutations (“houses”):

³⁰ See P. MANCUSO, *Shabbetai Donnolo's Sefer Hakmoni. Introduction, Critical Text, and Annotated English Translation*, Brill - Leiden 2010, p. 317.

³¹ *Ivi*, p. 70 and *passim*.

³² HAYMAN, *Sefer Yeşirah*, cit., p. 98 and *passim*.

³³ In Late Antiquity the term originally referred to the eclipses, but in the early Middle Ages, especially in the East Mediterranean, it indicated the imaginary dragon that was held responsible for the darkening of the luminaries: A. PIRTEA, *Is There an Eclipse Dragon in Manichaeism? Some Problems Concerning the Origin and Function of ātālyā in Manichaean Sources*, in *Zur lichten Heimat. Studien zu Manichäismus, Iranistik und Zentralasienkunde im Gedenken an Werner Sundermann*, Harassowitz

Verlag, Wiesbaden 2017, pp. 535-554 (547). About the correlation with the Hebrew *tli*, see *ivi*. p. 549.

³⁴ See for instance HAYMAN, *Sefer Yeşirah*, cit., p. 168, 176 and also its translation as “Himmelsphäre” in K. HERRMANN, *Sefer Jezira. Buch der Schöpfung*, Verlag der Weltreligionen, Frankfurt am Main - Leipzig 2008, p. 76.

³⁵ The division of the circle into 360 degrees, which is close to the number of days in a year, is a Babylonian legacy: O. NEUGEBAUER, *The Exact Sciences in Antiquity*, Dover, New York 1969, pp. 102-103.

³⁶ The long recension of the text has two hundred twenty one, but the other number is to be considered correct because it corresponds to the number of unique couples taken from twenty-two elements.

³⁷ HAYMAN, *Sefer Yeşirah*, cit., p. 50.

כאיזה צד צרפן שתי אבנים בונות שני בתים שלוש בונות ששה בתים ארבע בונות עשרים וארבע בתים חמש בונות מאה ועשרים בתים שש בונות שבע מאות ועשרים בתים שבע בונות חמשת אלפים וארבעים בתים מיכאן ואילך צא וחשוב מה שאין הפה יכולה לדבר ומה שאין האוזן יכולה לשמוע³⁸

The passage refers to the permutations that can be generated from a group of letters. Two letters can be permuted in only two ways, three can form six different combinations, and so on and so forth, with seven elements yielding two thousand and forty combinations. With the addition of each new number the number of possible unique combinations grows less than exponentially each time one more letter is added. The progression here is clear: each time a new number is added to the sequence, it is multiplied by the previous result.³⁹

In the § 18 of the SY it is stated that only two hundred and thirty one permutations are created by the wheel of letters. This number is much smaller than what we would expect if it were calculated by bringing the progression described above up to twenty two. Two hundred and thirty one does not in fact represent all the possible unique combinations, but only the number of possible unique couples that can be created with twenty two letters.⁴⁰ This distinction of two different kinds of permutations demonstrates a certain knowledge of combinatorics, a branch of mathematics that is already attested in VI century India.⁴¹

But the question arises: what is the meaning of this wheel that creates permutations of couples of letters, each of which is tied through a network of correspondences with several elements in the cosmos at once? The answer could be found by a comparison with works that do not belong to the Jewish tradition.

For a long time, writing materials such as papyrus or parchment were quite expensive, so

they would be used (and often reused, as is the case of palimpsests) only for the most important works, such as sacred books. Moreover, the writing process altogether was too inconvenient for relatively trivial tasks such as taking notes. Wax tablets, which were used for short-term writing, were probably too fragile to be safely carried outdoors. For these and other reasons, in antiquity and throughout the Middle Ages, different memory systems were devised in order to help remember sequences of items, such as parts of speeches, lists, and many other applications.

Mnemonics usually worked with a set of items, such as a series of images or places, that were ordered in a certain established sequence, which was so ingrained in the operator's mind that it could be recollected with little to no effort. These items were used as mental hooks onto which the ideas that needed to be remembered were tied, through the use of association and with the help of active imagination.⁴² In other words, each symbol in the first established series held a distinctive trait which was easy to be retained in memory, especially in a predetermined sequence, and was then linked, through visualization, to an item that needed to be memorized. Instances of sequences could have been comprised of places that were well known to the practitioner, or letters of the alphabet, or the constellations of the Zodiac, numbers, etc. When it was time to recollect, the operator only had to recall the familiar sequence of elements that was used as a series of hooks and then, by association, the other elements could be recalled. This system allowed the operator to recollect the items starting for example from the middle, and it could even be used to recite the sequence backwards, a feat which is not so easy and not so quick to perform in a case where the list had been memorized with the more common rote technique.

³⁸ *Ibid.*

³⁹ Called "factorialization" in modern mathematics, this operation is indeed used to calculate all the possible unique combinations of a given number of elements.

⁴⁰ In some manuscripts of the SY and of Donnolo's *Sefer Hakhmoni* as well, all the possible unique permutations of couples of letters are enumerated.

⁴¹ N.L. BIGGS, *The Roots of Combinatorics*, in «*Historia Mathematica*» 6 (1979), pp. 109-136 (pp. 115, ff.).

⁴² M. CARRUTHERS, *The Craft of Thought. Meditation, Rhetoric and the Making of Images, 400-1200*, Cambridge University Press, Cambridge 2008 (1st ed. 1998), p. 14.

During the time of Charlemagne, although memory techniques were already in use, there were no circulating treatises on the matter⁴³ and new mnemotechnic works began to appear for the first time after the fall of Western Roman empire only from the XI century on.⁴⁴ Until that time, the two treatises on memory that knew a widespread circulation came from Antiquity.

One is called *Ad Herennium*: pseudepigraphically attributed to Cicero, it was composed in Latin in the early I century b. c. e. The work is a rhetoric handbook that explains how to memorize a speech by mentally crafting images corresponding to its main topics and putting those images into a sequence of places, real or imaginary, that the orator knew very well. When it was time to recall the topics, the orator would mentally walk by those places (*loci*) and recall the related images and subsequently the topics associated to them, thus being able to remember all the key points of his speech without the need of an external aid.

The other famous treatise was older than the aforementioned one and was composed by Aristotle. The philosopher, in addition to a brief mention in his *De insomnis*, theorized about memory and its relation to the soul in his *De anima*,⁴⁵ of which the treatise *On Memory and Recollection* (Περὶ μνήμης καὶ ἀναμνήσεως) can be considered an appendix. As the title suggests, in this latter work, the philosopher distinguishes the two different activities involved in the soul's faculty of memory, namely the memorization itself and the recollection. In this treatise, the Stagirite stresses the importance of an established sequence to which the items meant to be memorized are supposed to be linked:

Those that have some sort of order are easily remembered, for instance, the mathematical objects, while the others are only badly remembered and it is difficult to do so.⁴⁶

Further on, he proceeds to make a reference to the letters being used as items of a sequence, which allows the practitioner to start to recollect from any point:

Generally speaking, it seems that in all things the middle is the starting point; for if one does not recall before, he will recall when he comes to the middle, or else he will not recall from any other place, as in an example where one thinks about a series represented by the letters ABCDEFGH: For if one does not recall at H, the sought item is recalled at F; for from here it is possible to be moved in both directions, both to G and to E.⁴⁷

So the question arises whether parts of the SY can be read as mnemotechnic supports as well. This hypothesis could explain why the series of correspondences between the constellations and the human body appears to be arbitrary. What the text does is simply associating elements belonging to three different realms (the world, the year and the human being) by means of the letters of the alphabet, thus creating a set of mnemotechnic correspondence.

This is not to say, of course, that the sole function of the SY was to be a memory aid, since large parts of it are dedicated to the recount of the act of creation and most of all because the extreme complexity of its redaction makes any effort to find a unitary purpose to the treatise futile. For example, Liebes suggested that the main point of the SY is to show that human *poiesis* constitutes a reflection of the divine act of creation of the cosmos and that the SY was meant to replace cosmology with a more mystical description of creation.⁴⁸ The problem with Liebes's explanation is that not only is there no way, at the moment, to positively claim the existence of a unique purpose for a text that appears to be the result of the redaction of multiple different sources, but that there is also a cosmology present in the SY (although not a sophisticated

⁴³ M. CARRUTHERS, *The Book of Memory. A Study of Memory in Medieval Culture*, Cambridge University Press, Cambridge 2008 (1st ed. 1990), p. 179.

⁴⁴ *Ivi*, p. 195.

⁴⁵ F. YATES, *The Art of Memory*, Routledge, London 2014 (1st ed. 1966), p. 46.

⁴⁶ D. BLOCH, *Aristotle on Memory and Recollection*.

Text, Translation, Interpretation, and Reception in Western Scholasticism, Brill, Leiden - Boston 2007, p. 41.

⁴⁷ *Ivi*, p. 43.

⁴⁸ Y. LIEBES, *Ars Poetica in the Sefer Yeširah*, Schochen, Tel Aviv 2000 (in Hebrew), p. 11.

one) as described by a cubic-shaped cosmos with the Temple in the middle.⁴⁹ Using Liebes's interpretation, though, and without applying it to the whole text, it could be speculated that at a certain point, a redaction of the *SY* could have been driven by mnemotechnic principles. Human *poiesis* can thus represent the imaginative faculty that is required to create mnemotechnic associations. This explanation would fit within the Aristotelean approach to the micro-macrocosm correlation that we have seen earlier and Aristotelean philosophy could be implied by the use of the word *yeşirah* itself. Passages in the *SY* such as § 12 - 15 and especially § 20 could be interpreted as a description of the gradual transition from matter to form, in the Aristotelean sense.

Moreover, in this case, when the operator mentally creates the wheel of letters that form permutations, his heart, which is considered the seat of the intellect both in Aristotle and in Medieval Jewish sources, becomes similar to the *tli* that moves the *galgal* of constellations from its center, and the invitation to silence one's heart in § 5 could be referring to the state of relaxedness necessary to better visualize the items before applying memory techniques.

This is, of course, a matter of speculation. Nevertheless, a merely comparative approach seems to indicate that parts of the earliest recoverable text of the *SY* share similarities with a mnemotechnic treatise, especially with its mention, in § 18 - 19, of a wheel of letters that form different permutations arranged in pairs.

Wheels of letters are a key feature of Ramon Llull's *Ars Magna*, the work which was com-

posed in XIII century Catalonia by the Franciscan monk and which shares some similarities with the *SY*.

Grossly simplifying, he designed a mental system based on sets of letters placed on wheels. Each letter was associated with an idea and each wheel to a category. By rotating and thus creating different permutations, basic sentences were created, the purpose of which was to mechanically formulate every single possible true and necessary statement about reality.

Lull's relationship with Jewish mysticism has been ruled out by Umberto Eco in several occasions,⁵⁰ but later scholarship suggests that the *Uns al-gharib*, a qabbalistic commentary to prayers composed in Judeo-Arabic which references the *SY*, was composed in XIII century Catalonia and not in XIV century North Africa, as previously thought.⁵¹

If this is the case, it means that the text, which has been attributed to Yehudah ben Nissim ibn Malka, was composed in the same region and at the same time in which Llull lived. That would allow us not to rule out a contact with Jewish works, although at the moment it can not be proved. Still, the *SY*, in the three extant recensions that were already circulating at the time of Lull fit the encyclopedic trend of his time. What can be said of the *SY*, whether in its earlier recoverable text or in its later redactions, is that its stress on the underlying link between the world, the year (i.e. time) and the human being, that is granted by the transcendent properties of language, falls into the category that Wasserstrom called "gnostic encyclopedism".⁵² With

⁴⁹ *SY* § 7, § 47. For the cosmology in the *SY*, see R. MEROZ, *Cosmology in the Short Recension of the Sefer Yeşirah: Some Notes*, in «Qabbalah» 36 (2017), pp. 227-259 (in Hebrew), and bibliography.

⁵⁰ U. ECO, *Pourquoi Lulle n'était pas un kabbaliste*, in AA.VV., *Magie du Livre, Livres de Magie*, pp. 85-94. La Table d'Émeraude, Paris 1993. ID., *I rapporti tra Revolutio Alphabetaria e lullismo*, in Giovanni Pico della Mirandola. *Convegno internazionale di studi nel cinquecentesimo anniversario della morte (1494-1994)*, Mirandola 4-8 ottobre 1994, vol. I, pp. 13-28. Olschki, Firenze 1997. ID., *Su Lullo, Pico e il lullismo*, in *Dall'albero al labirinto. Studi storici sul segno e l'interpretazione*, pp. 349-382, Bompiani, Milano 2007.

⁵¹ M. IDEL, *Reshit ha-qabbalah be-tzafon Afriqah? Te'udah shekuchah shel R. Yehudah ben Nissim Ibn Malkah*, in «Pe'amim» 43 (1990), pp. 4-15; see also S. CAMPANINI (ed.), *Yehudah ben Nissim ibn Malka, Perush ha-tefillot*, in G. BUSI, *Catalogue of the Kabbalistic Manuscripts in the Library of the Jewish Community of Mantua with an Appendix of texts edited together with Saverio Campanini*, Cadmo, Fiesole 2001, pp. 217-358 (pp. 228-229). For an assessment of the *status quaestionis* see S. CAMPANINI, *Una fonte trascurata sul rapporto tra qabbalah e combinatoria lulliana in Pico della Mirandola: il commento alle preghiere di Yehudah Ibn Malka*, in «Studia Lulliana» 55 (2015), pp. 83-127.

⁵² WASSERSTROM, *Sefer Yeşirah and Early Islam*,

this phrase, the author refers to an approach, attested near the Eastern Mediterranean in the IX century, that integrated knowledge from different fields such as linguistics (“cosmic semiotics”, in his words), arithmology, astrology and alchemy, which resulted in unifying cosmologies. In his words: «SY belongs to this form of discourse logically, historically and (it is hoped) demonstrably». ⁵³

Finally, currently undergoing studies, such as the one which is being carried out by the sinologist Martha Hanson and the romance philologist Stefano Rapisarda, are demonstrating the mnemotechnic use of Medieval texts, composed in China and in Europe, dealing with melothesia. ⁵⁴ It means that in different cultures, the correspondence between the constellations and the human body has been used as a memory aid

as well. The SY, by setting correlations between parts of the human body and planets and constellations through the use of Hebrew letters, could represent a Jewish version of a theme that seems to be recurring apparently independently in different cultures.

So, since current independent research carried out in different fields is providing similar results, further investigation on a possible mnemotechnic use of the SY and of other Jewish texts is required. Further research of mnemotechnic works in Arabic and possibly Syriac sources ⁵⁵ will show whether there was a continuity between two encyclopedisms on both sides of the Mediterranean, with the *Sefer Yeşirah* constituting one possible link.

Giuseppe M. Cùscito
e-mail: giuseppe.cuscito@uniroma1.it

SUMMARY

When compared to any other text dealing with the micro-macrocosm correspondence, whether Jewish or non-Jewish, the *Sefer Yeşirah* seems to stand out: although it presents a set of correspondences between the celestial bodies and the human body, the sequence it proposes strongly differs from any other treatise dealing with such an association. A hypothesis is presented, which tries to explain this and other peculiarities of the text by suggesting the existence of a mnemotechnic criterion that concurred in the redaction of the extant versions of the treatise.

KEYWORDS: *Sefer Yeşirah*; Mnemotechnics; Melothesia.

cit., p. 26.

⁵³ *Ibid.*

⁵⁴ M. HANSON - S. RAPISARDA, *The “Zodiac Man”. as a Mnemonic Table. Comparing Bodily Arts of Memory in Europe and China*, (forthcoming: I personally thank Stefano Rapisarda for showing me the draft of the article).

⁵⁵ Like the one carried out in CARRUTHERS, *The*

Craft of Thought, cit., pp. 95-96, in which the author showed the mnemotechnic use of cosmological texts, such as Cosmas Indicopleustes’s *Topographia Christiana*. See also SH. LADERMAN, *Images of Cosmology in Jewish and Byzantine Art. God’s Blueprint of Creation*, Brill, Leiden - Boston 2013, p. 10, ff.