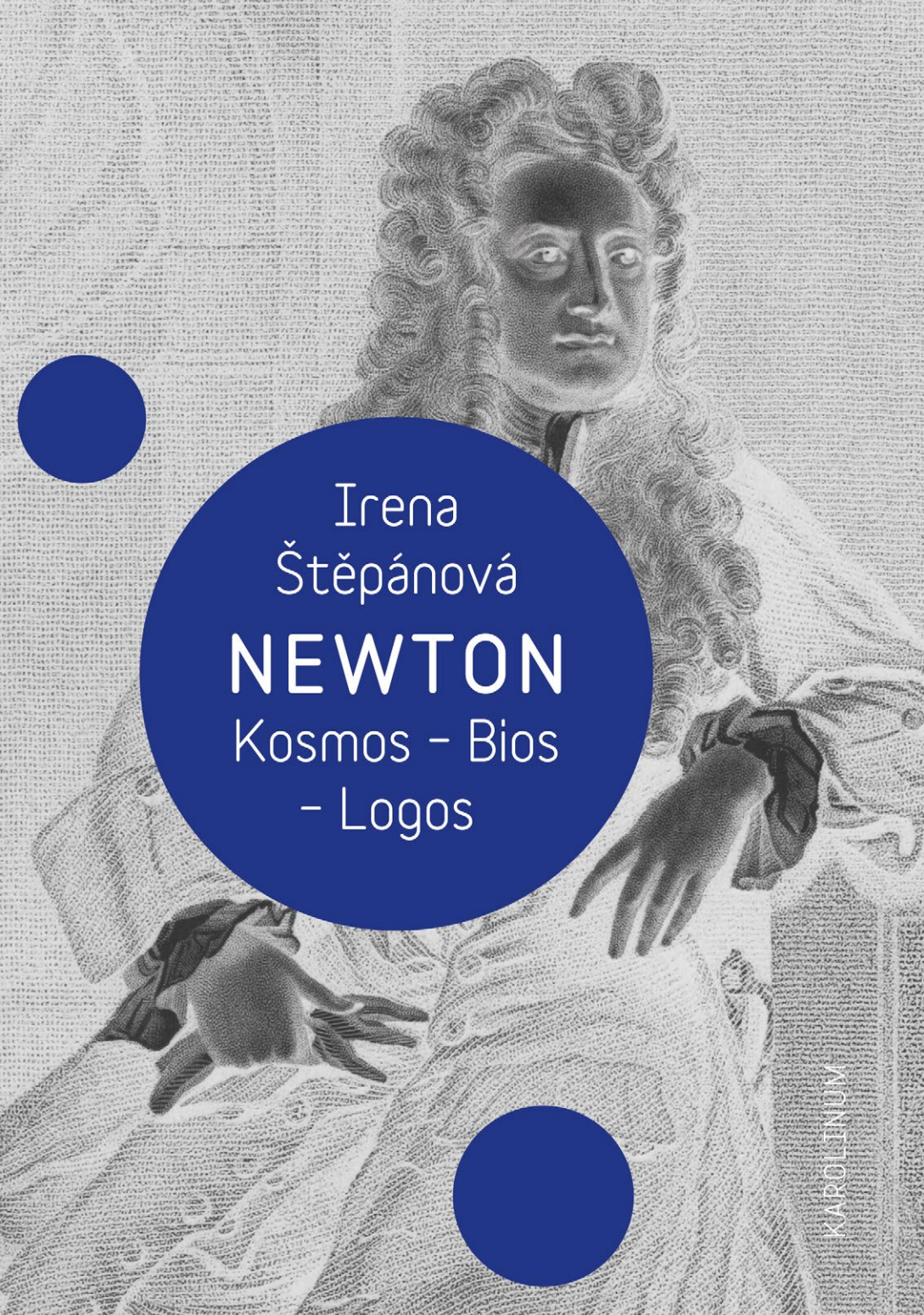

Irena Štěpánová

NEWTON

Kosmos – Bios – Logos

KAROLINUM

Newton
Kosmos – Bios – Logos

Irena Štěpánová

———

Reviewed by:
Stephen David Snobelen, Associate Professor, History of Science and Technology Programme, Director of Newton Project Canada

Published by Charles University in Prague, Karolinum Press
Edited by Alena Jirsová
Layout by Jan Šerých
Typeset by Karolinum Press
First English edition

ISBN 978-80-246-2379-5
ISBN 978-80-246-2389-4 (online : pdf)

Univerzita Karlova v Praze
Nakladatelství Karolinum 2015

www.karolinum.cz
ebooks@karolinum.cz

Content

Acknowledgements

My greatest thanks go to Zdenek F. Danes, whose help with the translation of my original text was crucial.

And I would also like to appreciate the three ladies, whose help was great: editors Alena Jirsová and Martina Pranic, and my daughter Petra.

I. Introduction

> *Newton was not the first of the age of reason. He was the last of the magicians, the last of the Babylonians and Sumerians, the last great mind which looked out on the visible and intellectual world with the same eyes as those who began to build our intellectual inheritance rather less than 10 000 years ago. Isaac Newton […] was the last wonderchild to whom the Magi could do sincere and appropriate homage.*
> John M. Keynes[1]

A belief that our comprehension of this world keeps increasing as if our heads were some endlessly inflatable balloons is common. However, the reality is different. Our knowledge resembles sedimentation: new information covers up old knowledge and pushes it into oblivion. While gaining new insights, we lose the wisdom of old. Certainly, some of that loss we may never regret: but the process of sedimentation may also obscure what should have been remembered. We thus may have lost a part of ourselves.

Fortunately, from time to time, and often after years of concentrated effort, we happily return to long-forgotten, even rejected, knowledge. A case in point is *hermetic philosophy*: not just as an example of "recurring" knowledge, but also as a record of gradual change of the overall frame of our learning, of our method, and, eventually, of our way of thinking. Hermetic philosophy (and alchemy as its practical part) represents an entirely different relation to natural world from what corresponds to our abstract rational approach. In fact, it seems to be an ideal topic to study the "history of ideas."

---

1 John Maynard Keynes: "Newton, the man," in *Essays and Sketches in Biography*, New York: Meridian Books 1956, p. 280.

The present book is a brief effort to show whether, and to what extent, hermetic philosophy may have inspired one of the founders of modern European science.

II. Sources of Newton's Inspiration

> *Nemo suscipiet caelum; religiosus pro insano, inreligiosus putabitur prudens, furiosus fortis, pro bono habebitur pessimus [...] Haec et talis senectus ueniet mundi: irreligio, inordinatio, inrationabilitas bonorum omnium.*
> Asclepius, c. 2nd century.[2]

> *Wisdom has irretrievably succumbed to news reporting, shallow entertainment and demand. While the past all was (allegedly) rational and serious, now we are prisoners of reports. They float like dust and make existential appropriation of being – as the philosophers call it – impossible.*
> Petra Gümplová, 2007.[3]

In every age there were people who clearly saw that in the course of time the human spiritual level changes in a strange way: while knowledge naturally increases, spiritually mankind sinks ever lower. More than eighteen centuries separate the two quotations presented as the central pieces of this chapter, yet both say the same: in earlier times mankind was, spiritually, better off. It was closer to the mystical Beginning. And this idea, too, is characteristic for Isaac Newton: it haunted him.

For some time, it has been clear and generally accepted that Newton believed in *prisca sapientia,*[4] that he frequently quoted authors from

2 Asclepius, verses 25–26. In: A.-J. Festugiére (ed.): *Corpus hermeticum*, *Tome 2 – Traités 13–18, Asclepius*, Paris: Belles-Lettres, 1983, p. 329. "Nobody will look up to heavens. Religious will be called insane, irreligious prudent, furious strong, the worst one will be called good... This is the world's senility: lack of religion, lack of order, lack of all reasonable goods."

3 Petra Gümplová: "Ztraceno v blábolu," in: *Pátek Lidových novin*, 16. 3. 2007.

4 E.g., Steven D. Snobelen: "God of Gods, and Lord of Lords: the theology of Isaac Newton's General Scholium to the Principia," *Osiris* 16, pp. 169–208, here p. 185.

antiquity and that he – so to speak – felt that he was continuing in the antique priest-scientist tradition.[5]

We shall see that he saw himself more as a person who revives the half-forgotten antique wisdom than as a discoverer of entirely new ways of thinking. However, it has not yet occurred to anyone that Newton and his intellectual world literally derived from antiquity. Perhaps no one has yet seriously considered the possibility that the father of European science could have bypassed centuries of evolving European ideas and resumed an ancient line of thought. Nevertheless, we shall try to prove that modern science owes its beginning to Newton's precise following of some thinking patterns that date precisely from ancient times.

Newton's inspirations have been thoroughly studied by a number of authors; e.g. the prominent American scholar, Betty Jo Teeter Dobbs, dedicates a substantial portion of her books on Newton-the-Alchemist to this very problem.[6]

For our purposes, we shall use those sources that may enrich present scholarship in Newtonian studies and open up new topics in them.

The Hexameral literature and the Bible

By Hexameral literature[7] we mean those texts that study the six days of creation according to the First Book of Moses, Genesis, Ch. 1, verses 1–27.[8] Although that type of literature is of a very ancient date, starting with Origen around the middle of the 3rd century and ending with John Milton in the 17th century, in Newton's time it was still a matter of interest.

The creation of the world according to the Bible is a mythical event, and, as such, has a timeless meaning: being a myth, it gives man a chance to think about himself and about his place in the world. Newton was certainly one of those who were fully aware that they have to deal with a truth of a higher order, which not only agrees with reality but also raises moral demands, and wields a great power, because it reaches

5 Ibid., p. 187.

6 Betty Jo Teeter Dobbs: *The Foundations of Newton's Alchemy*, Cambridge: Cambridge University Press, 1975. Betty Jo Teeter Dobbs: *The Janus Faces of Genius*, Cambridge: Cambridge University Press, 2002.

7 From Greek ἕζ – six, and ἡμέρά – day.

8 We use here the King James Bible.

beyond plain reason. Myth reaches all the way into the realm of values and emotions.[9]

In the 14th century, Henry von Langenstein wrote an influential book, *Lecturae super Genesim*,[10] where he quotes sixty-four authors and their explanations of the creation of the world; the authors are not only Christian, but also pre-Christian, Arabic, Greek, Roman and Jewish writers. The Hexameral commentaries may be understood as the focus of the beginning of European science. Those studies always tried to find a common ground between Moses' mythical concept of creation and the results of natural philosophy. Perhaps, with some exaggeration, we may claim that natural science gradually arose in the emancipation of Hexameral authors from the confines of Biblical exegesis.

Newton possessed a thorough knowledge of the Bible, and there is no doubt that, due to his profound religiousness, it was an important source of inspiration throughout his life. Here is an instance of Newton's Hexameral commentary touching upon the actual duration of those six days of creation. Newton's acuity is conspicuous:

> You may make ye first day as long as you please & ye second day too if there was no diurnal motion till there was a terraqueous globe, that is till towards ye end of that days work.[11]

We think, moreover, that Hexameral literature influenced Newton's methodology: his division of the world is based on Biblical Genesis, 1,1–27.

The text describes the creation of the world in three steps. Three times the text uses the Hebrew word *bara* which, in the Old Testament, is exclusively reserved for Divine activity. We translate it as "create," however, the Hebrew original has a profound meaning which we no longer recognize at the present time. Creation in the Hebrew meaning is far beyond human capability. Man always makes one thing out of another: divine Creation is something out of nothing. Not only that, God always made something absolutely new, something that existed never before and did not follow from anything that had been created earlier. Triple use of the word *bara* means that the world was made in three steps, the later and higher levels always being something absolutely, revolutionary new.

---

9 Jan Assmann: *Kultura a paměť* (i.e. *Culture and Memory*), Praha: Prostor 2001, p. 70.

10 Betty Jo Teeter Dobbs: *The Janus Faces of Genius*, p. 58.

11 Betty Jo Teeter Dobbs: *The Janus Faces of Genius*, p. 62.

We thus reason that the division according to Genesis influenced the Newton's methodological thinking and division of his work. We try to show it in the following table. Corresponding Biblical verses are in the left column. It helps to read the table from the left lower corner and read upward and toward the right side.[12]

3.	*Gen 1,27: So God created man in his own image, in the image of God created he him; male and female created he them.*	***LOGOS*** *Domain of meaning. Man as God's image + Divine Providence.*	***Freedom** of law and determination.*	***History and theology*** *as study of man's action and God's providence. (Nowadays Humanities, but with a major drawback: man is not an object.)*
2.	*Gen 1,21: And God created great whales, and every living creature that moveth, …*	***BIOS*** *Life is implanted into matter.*	***Determination*** *often paradoxical with respect to level 1.*	***Alchemy*** *(nowadays Biology, but, so far, does not know what life is.)*
1.	*Gen 1,1: In the beginning God created the heaven and the earth.*	***KOSMOS*** *Lifeless matter.*	***Natural laws*** *are valid.*	***Natural philosophy*** *(nowadays Natural Sciences).*

The First Domain (starting from the bottom) is Nature without life. God is understood in His intelligent plan that seems to require an Intelligent Creator (the so-called *Design Argument*, see chapter V).

The Second Domain is the domain of Life. Since times immemorial, it was the subject matter of alchemy, which profoundly occupied Newton for a long time. We shall return to it in Chapter IV.

The Third Domain is the most mysterious. For the time being, we shall call it the Domain of the Logos.

The Greek word λογοσ (logos) has several meanings: word, language, even idea.[13] Originally, it meant a collection, an assembly of items that naturally fit together.

---

12 Our inspiration came from two publications: Zdeněk Trtík: *Vztah já-ty a křesťanství*, (ie. *Relation Me-You and Christianity*) Praha: Ústřední rada CČSH, 1948, and Zdeněk Neubauer: "Apotheosy of Metamorphosis," in *Akademie u sv. Mikuláše, Anthology 2004/2005*, Praha: Blahoslav, 2005.

13 Berry, George Ricker: *The Classic Greek Dictionary*, Follett Publishing Co., New York, Chicago, Pasadena, 1958:
ὁ λόγος word, language, talk, pretence, saying, expression, oracle, maxim, proverb, conversation, discussion, conference, interview, speaking, talking, rumor, tale, story, fable, narrative, history,

Gradually, its meaning was reduced to linguistic usage and it best fits our word "meaning."

"Meaning" points toward "togetherness," it is an interconnection of what meaningfully belongs together. We can express such a meaning only by means of language (again *logos*), a unique possession of man as God's image.

Human language is the only means of comprehending the world and pointing toward its meaning. And language is in fact the only way to carry out this comprehending: it creates a web connecting all those individual events.[14] Those events make up the essence of the world's history.

We believe that Newton understood the Third Domain as the domain of history, where God and man cooperate as active partners. That is also a heritage of the Old Testament: history is a realm both human and divine. God and man work together in making history. More on that matter will follow in Chapter III.

Newton was not only a modern scientist: he also enjoyed solving the riddles so very popular in the Renaissance. We believe that it was the mystical event from Biblical Genesis and its commentary that directed his methodological conclusions in that field.

Philo of Alexandria (15 B.C. – A.D. 50)

Philo of Alexandria was a Greco-Jewish philosopher educated in the tradition of the Book of Wisdom. He was well-versed in the Old Testament as well as in Poseidonius, and made full use of that knowledge in his work.[15] Today, he represents the mid-Platonic philosophy. Philo tried to join two mutually exclusive domains – philosophy and faith. This alone interested Newton[16] who, likewise, tried to combine the opposites in se-

---

chronicle, fable, prose, book, speech, eloquence, account, consideration, esteem, regard, calculation, reckoning, relation, proportion, analogy, condition, reason.
In the New Testament: Λόγος Jesus Christ.

14 Zdeněk Neubauer: "Do světa na zkušenou" (ie. an essay about Tolkien's work), in: *Dodatky k Silmarillionu, Studijní materiál pro potřeby Tolkienovského semináře při Parconu*, ed. Michal Bronec, 1990, p. 39. Furthermore Gregory Bateson: *Mind and Nature: A necessary unity*, Cresskill, N.Y.: Hampton Press, 2002.

15 Zdeněk Kratochvíl: *Prolínání světů*, Praha: Herrmann a synové, 1991, p. 15.

16 According to the book by John Harrison: *The library of Isaac Newton*, Cambridge and New York: Cambridge University Press, 1978, p. 216, Newton had in his library a book by this author: 1300 PHILO, Judaeus: *Omnia quæ extant opera. Ex accuratissima S. Gelenii, & aliorum interpretatione... (Greek & Latin)*, Lutetiæ Parisiorum, 1640.

veral disciplines. We are interested in his work, too, when we investigate the influence of emotional matters upon strictly rational thinking.

Such a joining of wide-ranging influences, typical for Philo's times, is what we now call *syncretism*. Philo was the first who tried to transform the Hebrew legacy into a new doctrine similar to Greek philosophy. He is today known as an inventor of new method, called allegorical exegesis. Philo felt the pressure that the modern man knows quite well: how to retain one's piety when rational criticism threatens the meaning of a sacred text.

Philo interpreted the texts allegorically in order to express their spiritual message. He tried to extend their meaning to encompass the wholeness of the world by means of interpretation, which in fact made up the translation between two cultural areas, Hebrew and Hellenic. It requires a conscious categorization of events into principles, and can be done only at the philosophical level of thinking.[17]

Although Philo tried to see God as a living entity, close to the Stoic interpretation, he simultaneously shared the Platonic resistance toward everything material.

Thus God fills everything and encompasses everything in His vital activity, yet He Himself cannot be comprehended: He is One and Everything (*heis kai to pan*; with the Neo-Platonists that term is transformed back into the neuter *to hen kai pan*).[18]

Philo finds that matter is the ultimate evil. Therefore his concept of God is purely transcendental.[19] Although Philo had a considerable influence upon Newton, in this fundamental respect Newton departed from him. This will be shown in the analysis of Scholium generale in Chapter VI.

Philo is also connected with the origins of the Alexandrean Metaphysics of the Logos, which, unlike the classical metaphysics, is dynamic. It is therefore questionable whether it is metaphysics at all.

As a rule, European metaphysics studies unchangeable, transcendental principles beyond experience, and examines rational cases. On the other hand, mid-Platonic Philo investigates existence and comprehensibility. Those depend on movement, not on immobility.[20]

---

17 Zdeněk Kratochvíl: *Prolínání světů*, p. 25.

18 Ibid., p. 28.

19 František Kovář: *Filosofické myšlení hellenistického židovstva*, Praha: Herrmann a synové, 1996, p. 183;
Ivo Tretera: *Nástin dějin evropského myšlení*, Litomyšl: Paseka 2002, p. 127.

20 Zdeněk Kratochvíl: *Prolínání světů*, p. 30.

Ancient Egypt

The Old Testament describes Egypt as a place of utmost decadence, idolatry, zoophilia, superstition and all kind of abomination that may be overcome by nothing less than exodus and, eventually, by complete oblivion. In other words: it demands an active removal of all reminiscences.

This attitude prevailed in Christianity until the Renaissance, when the opinion changed dramatically. Egypt became a source of everything worthy that came later. It then became the true beginning of the spiritual evolution which advanced via the exodus and Judaism and progressed toward Christ and Christianity. And the 17th century turned the ideas about ancient Egypt into a complete Egyptomania, one that reached its climax in the time of the Enlightenment.[21]

Of course, Christian scholars could not immediately study Egypt, since, for the orthodoxy, Egypt was still the hated paganism incarnate. Such scholars could be accused of heresy and persecuted. But those Biblical scholars who wanted to study secrets of ancient Egypt without prejudice found a way around, due to their thorough knowledge of the Scriptures.

Scholars of Newton's times protected themselves from possible persecution by a single verse from the New Testament, the Book of Acts of the Apostles 7,22.

Stephen the Martyr, in his farewell address before he was executed by stoning, said about Moses:

> And Moses was learned in all the wisdom of the Egyptians, and was mighty in words and in deeds.

In the entire Bible, that is the only favourable sentence about Egypt. In the sub-chapters about Spencer and Cudworth, we shall show how this single sentence opened the door for their unexpected and enormous intellectual achievements.

Maimonides (1135–1204)

The Jewish scholar Maimonides[22] (Rabi Moses ben Maimon) was the supreme authority for the Protestant scholars of the 17th century. With

21 Jan Assmann: *Moses the Egyptian*, Frankfurt am Main: Fischer Taschenbuch Verlag 2004, p. 85 and afterwards.

22 Ibid., pp. 88–92.

his ideas, more than five centuries old, he created a way out for their further studies.

At Cambridge, his ideas were taught by two prominent scholars:[23] John Spencer (1630–1693), an expert on Hebrew, and Edward Pococke (1604–1692), expert on Hebrew and Arabic.[24]

In his library, Newton had several books by Maimonides,[25] so that he had first-hand access to his ideas. Maimonides was also Newton's main source for his study of Jewish history.[26] Besides, he was indirectly exposed to his ideas, as will be shown in the next chapter.

Like the aforementioned Philo, Maimonides had to deal with the conflict between rationality and sacred Jewish texts. He came up with the idea that every one of the 613 commandments of the Torah must have had some rational purpose; and if we cannot find it, we have to look for a historical explanation. According to Maimonides, God creates human history in the same way as He created nature. There are no sudden breaks. Everything follows organically from what preceded: *Natura non facit saltus* – Nature does not take leaps. From one extreme to another, things progress through a series of infinitesimal small steps. Incidentally, this idea may have inspired Newton for his infinitesimal calculus as a mathematical method of studying infinitely small quantities and their changes.

According to Maimonides, divine wisdom is revealed in those continuous and infinitely small movements, gradual changes and natural growth. This was a very serious step: it was contrary to the traditional division of natural and revealed religion. According to Maimonides, even

---

23 Frank E. Manuel: *The Religion of Isaac Newton*, p. 66.

24 Edward Pocock is referred to by Newton as "our Pocock" right in his *Scholium Generale*. According to the book that gives a complete catalogue of Newton's library:
John Harrison: *The library of Isaac Newton*, Cambridge and New York: Cambridge University Press, 1978, p. 219, Newton had Pococke's book that connects with Maimonides:
Pococke, Edward: Porta Mosis, sive dissertatioaliquot a R. Mose Maimonide (2 pts.), 1655.

25 Here we list the titles and catalogue numbers of books according to: John Harrison: *The library of Isaac Newton*, p. 186:
1018 Maimonides: *De cultu divino ex R. Mosis Majemonidæ secunda lege, seu Manu forti liber VIII*, Parisiis, 1687.
1019 Maimonides: *De idolatria liber, cum interpretatione Latina & notis D. Vossi*, Amsterdami, 1641.
1020 Maimonides: *De sacrificiis liber. Accesserunt Abarbanelis Exordium*. Londini, 1683.
1021 Maimonides: *Porta Mosis, sive Dissertationes aliquot…Nunc primum arabice… &Latine editæ… Opera & studio E. Pocockii*, Oxoniæ, 1655.
1022 Maimonides: *Tractatus de iuribus anni septimi et iubulaei*, Francofurti ad Meonum, 1708.

26 Matt Goldish: Newton on Kabbalah, in *The book of nature and scripture, recent essays on natural philosophy, theology, and Biblical criticism*, eds. James E. Force – Richard H. Popkin, Dordrecht: Kluwer Academic Publishers, 1994, p. 90.

revelation is a natural historical process; and, likewise, natural phenomena are guided by God's hand.

Maimonides was inspired by Manetho[27] and followed his concept of "normative inversion." To this day, Manetho is one of our sources of information about ancient Egypt. He came up with the idea of a "counter-community," an organized group of people who turn everything upside down. Whatever is mandatory in the original society, will be forbidden. And vice versa, whatever was forbidden, will be mandatory. This will in turn create something akin to "counter-laws."[28] Maimonides was not yet a historian in our sense of the word. His deductions may be called something like "historical apologetic theology." Maimonides started from the known history of the Jews and literally invented, according to Manetho's paradigm, their counter-society that worshipped everything that the Jews deplored, and forbade whatever the Jewish laws commanded.

Maimonides thus created the "Sabians," a fictitious nation, shaped perhaps after the Persians. Nevertheless, Maimonides herewith prepared the field for later actual historians, who replaced the fictitious Sabians, spiritual opponents of the Jews, by a real nation, the Egyptians.

The Cambridge Platonists

The Cambridge Platonists were a group of professors at Cambridge University toward the end of the 17th century. Their philosophy may be approximately defined as a combination of Neo-Platonism with stoicism and other influences. Their predecessors are mainly Philo of Alexandria and Justus Lipsius. One of the principal ideas of the Stoics, *pneuma*, a fine, fiery, all-penetrating substance, later refined into the neo-platonic non-material *aether*, was a concept that, for a long time, also interested Newton. It opened for him a new approach to the concept of force. Unlike his contemporary mechanists, for whom all forces acted by direct physical contacts, Newton, by means of this aether, could explain actions at a distance.

---

27 Manetho was an Egyptian priest who, in the mid-3rd century B.C., composed a book on the history of Egypt for the ruler, Ptolemaios II.

28 It would take us too far from our subject if we were to elaborate on the conditions that Manetho applied in his theory of counter-society and counter-laws: briefly, he tried to analyze the great trauma of Egyptian history, i.e. Akhaneton's forceful and unsuccessful experiment of a religious reform. Compare chapter Corpus hermeticum II. Jan Assmann: *Moses the Egyptian*, p. 55 et al.

Cambridge Platonists influenced not only Newton as a philosopher and physicist, but also Newton as a historian. It even impressed his concept of God.

Henry More (1614–1687)

Henry More is a more mystical, in fact theosophical, Cambridge Platonist. Later in life, he completely abandoned his strict Calvinist upbringing and devoted his life to the study of philosophy, mainly Neo-Platonic. It became his interest and perpetual joy for the rest of his life. More was highly productive and the brilliance of some of his early writings delights us to this day. We shall follow some of his ideas in Chapter V.

For instance: he used the term "spissitude," density, to describe the power of the spiritual realm in a particular place. Similar to the dimensions of a body, he used the terms "ana/kata". [29]

Newton owned several of his books,[30] one with a dedication written in the author's hand.

John Spencer (1630–1693)

John Spencer followed the ideas of Maimonides, but studied real history and found that the principle of *normative inversion* was hidden between

---

29 From Greek ανα – up, and κατα – from above, down, inside. These Greek prepositions are to this day used in technical terminology, although with a meaning different from More's: e.g., in medicine: *katabolism*.

30 According to: John Harrison: *The library of Isaac Newton*, pp. 195–6, Newton had several books by this author in his library, with the following titles and catalog numbers:
1110 More, Henry: *An antidote against atheisme,* London, 1653.
1111 More, Henry: *Apocalypsis Apocalypseos: or the Revelation of St. John unveiled*, London: 1680.
1112 More, Henry: *Discourses on several texts of scripture*, London: 1692.
1113 More, Henry: *The immortality of the Soul, so farre forth as it is demonstrable from the knowledge of nature and the light of reason*, London, 1659.
– *Observations upon Antroposophia theomagica, and Anima magica abscondita*, by Alazonomastix Philalethes [i.e. H. More], 1650, see 1199.
– *Paralipomena prophetica, containing several supplement and defences of Dr. Henry More*, 1685.
1114 More, Henry: *Philosophical poems*, Cambridge, 1647.
1115 More, Henry: *A plain and continued exposition of the several prophecies or divine visions of the Prophet Daniel*, London, 1681.
– *Remarks on Dr. Henry More's Expositions of the Apocalypse and Daniel*, 1690, see 1391.
1116 More, Henry: *Tetractys anti-astrologica, or, The four chapters in the Explanation of the grand mystery of Godliness*, London, 1681. With the author's dedication: *"Isaac Newton Donum Reverndissimi Auctoris."*

the Jews and the Egyptians. He interpreted ingeniously the Sabians of Maimonides as pagans in general.[31]

He maintained a life-long interest in the ritual laws of the ancient Jews. It resulted in his book *De Legibus Hebraeorum Ritualibus et Earum Rationibus*. Newton owned a copy.[32] He transferred the interest from the conflict of Judaism and Christianity to an older one of Israel and Egypt.

Thanks to Spencer, pagan religion became for the first time a subject of serious scholarly study. His book on Egyptian rites was one of the sources of the Egyptomania of the 17th century. Spencer's actual knowledge of ancient Egypt became the precursors of modern religious studies and Egyptology despite the fact that he had to gather his information from Greek and Hellenic authors only. Spencer was a magnificent innovator. Unlike the earlier apologetic historical theology of Maimonides, Augustine, and Thomas Aquinas, Spencer's is a real historical research. He compared the canonical tradition with archaeological, epigraphic (non-canonical) and linguistic discoveries.

Spencer managed to show – and he did not deny that he owes it to the thoughts of Maimonides – that the Jewish ritual laws are evidently based on a denial of a previous, older religion, i.e. the religion of ancient Egypt; and that they arise from those antagonistic forces and negative potential of two *counter-religions*. According to that idea, Moses did not create his laws out of thin air: he just transformed the original idolatrous commandments.

Spencer made use of Maimonides' discovery that what we cannot achieve individually, we may accomplish as a society: we are capable of actively erasing *collective memory*. It was a great accomplishment. It meant that the only way to erase idolatry was a commandment of an exactly opposite rite to the common one.

Maimonides applied Manetho's original idea of *counter-community* in the sphere of religion. And here Maimonides applied his construct of *God's cunning*: The Jewish God dissolved the old rites by prescribing new, entirely opposite ones. That is the *normative inversion* of Maimonides. An example of this *inversion* is mentioned as far back as in Tacitus: the Jews sacrificed a lamb in fact to ridicule the supreme Egyptian god Amun, because the lamb was his sacred animal. Of course, God's *cunning* was

31 Jan Assmann: *Moses the Egyptian*, pp. 92–117.

32 In the catalog of his books: John Harrison: *The library of Isaac Newton*, p. 242:
1545 Spencer, John: *De Legibus Hebraeorum Ritualibus et Earum Rationibus*, Cantabrigiæ, 1685, p. 782.