

The Measure of Heaven.

Time, Space and Geometry as found in the texts of Enochian literature.

Andy Thomson, 35858984. April 19, 1999.

2 "Examine all the activit(ies which take place) in the sky and how they do not alter their ways, (and examine) the luminaries of heaven, how each one of them rises and sets; each one is systematic according to its respective season; and they do not divert from their appointed order. And look at the Earth and turn in your mind concerning the action which is taking place in her from the beginning to the end: how all the work of God as being manifested does not change. And behold the summer and the winter, how the whole Earth is filled with water and clouds and dew, and he causes rain to rest upon her." Enoch 1.

We see that this is a description which is familiar to our own experience, it is a preface to a voyage of the extraordinary origins of these phenomena, a voyage to the East, West, North and South respectively, far beyond the extent of the Earth and above the four winds which bear the Earth. What is revealed to Enoch is an expanded vision of the workings of - not heaven - so much as heaven with respect to the Earth. The descriptions offered use geographic and geometric terms to describe the directions, relative sizes or distances, quantities and brightnesses and qualities; and as such can be used to construct a model of this experience regardless whether it be merely physical or analogous to the metaphysical.

The spatial parameters and astronomical distances spoken of are difficult to ascertain, and what we might today speak of as equations of the ratios of orbits of the planets vis a vis gravity are in Enoch spoken of as Oaths taken which correspond not to quantities but virtues and qualities, such as faithfulness.

The order represented is of such importance, that the failure of the punctual arrival of some (stars?), represents a transgression of the commandments of God, which were from the beginning impounded to atone for their sin of not having arrived punctually. (Enoch 1/ch.18)

interesting points
at discussion
introduce
a clear thesis

But what is to arrive punctually? We have definite notions of this today, but what understanding of time was available to the people existing *at the time this text was written*? How exact could it have been, what was their understanding of time? And what of their understanding of space? And geometry? Why does a circle consist of 360 degrees and not say, 100?

This paper is an exploration of the numerical content of the books of Enoch from which a logical speculation on nature of the numerological, mathematical, geometrical and astronomical systems were employed by the culture(s) generating this text. ✓ good

I will attempt to speak on the nature of early symbolic numbers in contrast to our understanding of them today (as primarily a sequence of quanta for the measure of objects or qualities of objects such as weight, temperature, velocity, etc.). ✓ good

I will also speak of the geographical descriptions given by Enoch as supported by the cosmology of the time of the text, including cardinal points, and what proceeds from them, etc. as well as elements of the calendar and the origins of the 12, 28/30, 364/365.25 etc. which stem from particular astronomical observations. (what planetary observations are required or inferred and from what cultures in what epoch – can Enoch be dated this way?). ✓ good

The measures and calculations of heaven, as it is repeatedly emphasized, is an occupation of the highest importance as it is carried out by the angels, etc. This paper is an exploration of the numerical content of the books of Enoch from which a logical speculation on nature of the numerological, mathematical, geometrical and astronomical systems were employed by the culture(s) generating this text. (ie. what planetary observations and from what cultures does this data infer or require?)

Lastly, and in connection with the symbolology of the numbers, I will describe their metaphysical, geometrical nature in terms of two-dimensional and three dimensional forms, as such systems have been in use by different religious orders throughout the aeons, namely:

avoid repetition

so it expanded from 10 months to 12 by the Romans (Emperors Augustus and Julius – August and July). The Europeans attempted further reconciliations with their Julian and later Gregorian modifications, which is what we are using today.

However, the old Jewish calendar consisted of a 12 month lunar year (28 day months with the waning moon on the 15th day and its leap months 12+1, the author admits here very little understanding of this calendar and would appreciate any comments, as his misunderstanding becomes more evident in the numerical appendix! $12 \times 28 =$ only 336 days!) ✓

Em-
Siddur
is a good
starting
point

So what calendrical and observational system is spoken of by Enoch, and was it really a revelation by the angels, or the highest of priestly secrets at the time? When were the astronomical chapters actually written, and were they always describing the same system? And how was a solar year of 364 days to be calculated?

The escapement, effectively regulating the intervals of the descent of a weight against a counterweight provided the missing link. Fostered by a growing obsession with mechanics, town clocks began to appear all over Europe around the time of the mid 14th century and indicated not only the time, but local prestige and achievement. The symbolic and numerological qualities of hours and days became a mechanical certainty that introduced a notion of time as existing in and of itself, or rather, no longer measured merely by its contents. With this came its abstract relationship to space and the infinite, where "...formerly infinity meant the antithesis of time, not its extension"² The transition to a collectively recognized (or enshrined) time was by no means a sudden change and did not immediately include any standards of its vaster counterparts of months and years. In 1322 there was no way to project the date of 1998 or 500 B.C. as the calendar of 1322 was by no means the same all over Europe, and neither did it have a consensual origin (ie. date for creation). Creation had to be modified on discovery of Egyptian texts predating Genesis. Crosby describes the dates recorded by various merchants, scientists, and philosophers of the renaissance as "...no more than approximate in shape, like an octopus."³ and its advantages to the world of commerce not immediately grasped (such as hourly wages for the competitive production of definite quantities of work). The knowledge of abstract time for many years remained the privilege of scholars

is such
with
historical
perspective
relevant
to
the
focus
not
why
the
ancient
world
East

and the church fathers or 'schoolmen'.

The implications of 'accurate' clocks were as vast as the oceans. Together with a 'new anticipatory science' and 'more powerfully engineered ships'⁴, They allowed navigation on open waters by providing the tool to measure 'position' by longitude, which had very direct consequences for the propagation of the European empires. This everyday geography is not unrelated to the cosmological geography as set down in Enoch. Indeed the divisions of 'gates' or altitudes, six in the East and six in the West (corresponding to months, highest gate 6 at summer solstice) and their twelve equal openings which issue from the fourth gate suggests a recognition of Ptolemy's astrological treatises, probably originating in China (12 signs of the Zodiac, 12 yrs. of Jupiter's orbit). This system was the antecedent of the much later, renaissance system of latitudes transcribed on the surface of the Earth, rather than 12 openings in the fourth gate of heaven (12 hrs. of daylight, 24 in all based on doubling of 12). These 'forgotten texts' of Ptolemy from ca. 200 BC arrived in 1400 in Florence from Constantinople, which greatly altered the prevailing European cosmology and ideas of geographic space.

it is important to stay within the context of Enoch's Ancient Near East

That some were becoming familiar with the idea of abstract time as such was demonstrated by the operation of time in the polyphonic music of the day. With parts marching forwards while the same part marched backwards, three tempos phasing in and out of one another and symmetrical but inverted melodies it was too complicated to be heard directly, but on the page, it demonstrated the first of graphs of time with notes and rests marking what is - alongside with what is not.

interest elaborate further

"Theorists validated and systematized what practical musicians had invented in the years around 1200: not time as its contents, but time as a measuring stick of independent existence with which you could measure things or even their absence - abstract time."⁵

So how does the fixing of clock time in our representation of the world relate to the cognition of time in the periods when Enochian texts were written? It would seem that discussions of time would be found only in circles where the highly learned met. This is where we would see the importance of 'punctuality', as deferring to a

power from without (consistent abstract time).

Nevertheless, time is a fluid, cyclical organism dependent as much on season as quantities of materials and the specific local and global interexchanges of countless species of organisms. As contemporary science affirms by relativity and quantum mechanics, time as a thing in itself is not empirical vis a vis the second, the minute or the hour.

Advances in the conceptualization of time 'paralleled' the emerging idea of abstract and geographic space, which withdrew the familiar and left in its place a yawning chasm. Philosophers could no longer speak of celestial space in terms of walking distances.⁷ (ie. Myriads of Parasangs or walking journeys of 2000 yrs. - another several orders of magnitude from such a thing as a parsec or light year.)

'The West's distinctive intellectual accomplishment was to bring mathematics and measurement together and hold them to the task of making sense of a sensorially perceivable reality, which Westerners, in a flying leap of faith, assumed was temporally and spatially uniform and therefore susceptible to such examination.'⁸

Could this assumption be seen as stemming from faith in the mystical texts, since Enoch even describes the progression of hours as coming "one after another in a constant order", and planets 'faithfully' returning to their starting place in the east.

'Wherefore in all great works are Clerks so much desired? Wherefore are auditors so well fed? What causeth Geometricians so highly to be enhaused? Why are Astronomers so greatly advanced? Because that by number such things they finde, which else would far excell mans minde'

- Robert Recorde 15406

The early texts of Enoch probably far excelled the reader's mind, maybe not so much as our own because of our scientific understanding of the physical systems described in Enoch's cosmology, but the degree of learning required to understand this text would at the time be very great. Indeed it would seem that such a complete

interest

cosmology could only have been revealed by the Divine. It must be remembered that notions of cosmic time and space were arbitrary and flexible if comprehensible at all and the cosmology found in the Enochian text was by no means common knowledge. ✓

The ideal world of former philosophical systems used numbers and symbols to describe the ideal world, or heaven, and not to quantify objects of our experience on Earth. These forms were seldom taken as a means to describe or quantify rocks or nations. The Earth, as much as it may be seen to have an underlying and divine order (see CH2 quoted at intro), it was assumed by early Christians that the Earth was a changeable, low place, subject to sin, misguidance, etc., but the Enochian texts seem to suggest otherwise – that the heavens were not perfect (with respect to falling angels, angels imprisoned, etc), and neither was what took place on Earth. *spe. examples ref. in context*

Neither were notions of cosmic space or Earthly geography elaborated with the Arabic numerals, which appeared in Europe only after the rediscovery of the abacus in late medieval times. So how were these numbers written in the original texts discovered? ✓

In the days of the Enochian literature, maps generally offered a sense of place in quite another sense of the word and spoke of a grand cosmic hierarchy from the perfect, unchangeable Heavenly Spheres (as represented by prime numbers in E3) down to the imperfect and changeable Earth (described in terms of numbers divisible by 2, 3, 4 etc.) They embodied qualities according to the elements and planetary natures and were oriented towards the East, with Jerusalem at their centre.

“Their map was a nonquantificational, nongeometrical attempt to supply information about what was near and what was far - and what was important and what unimportant. It was more like an expressionist painting than an identification photo. It was for sinners, not navigators.” 9b But despite the purported inexactitude of maps and calendars of even the early medieval, we find a great accuracy in the calendars of the Enochian texts, and a surprising correspondence with the Gregorian calendar of 1500, how can this be? ✓

