Ancient Forerunners to Theistic Evolution

The Cosmological Compromise and Ramifications of רקיע in the LXX

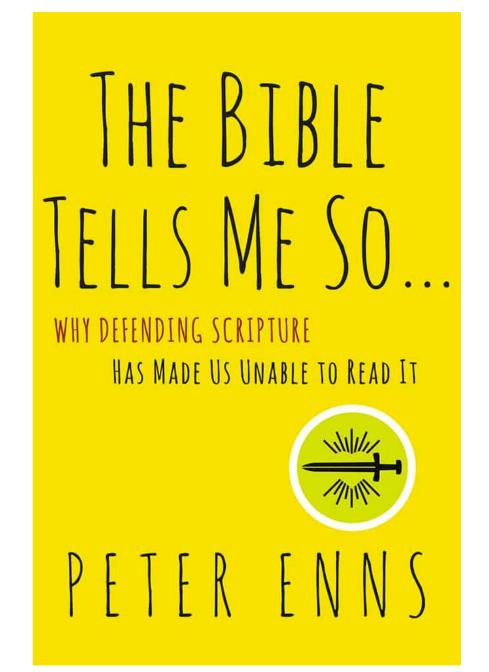
Overview

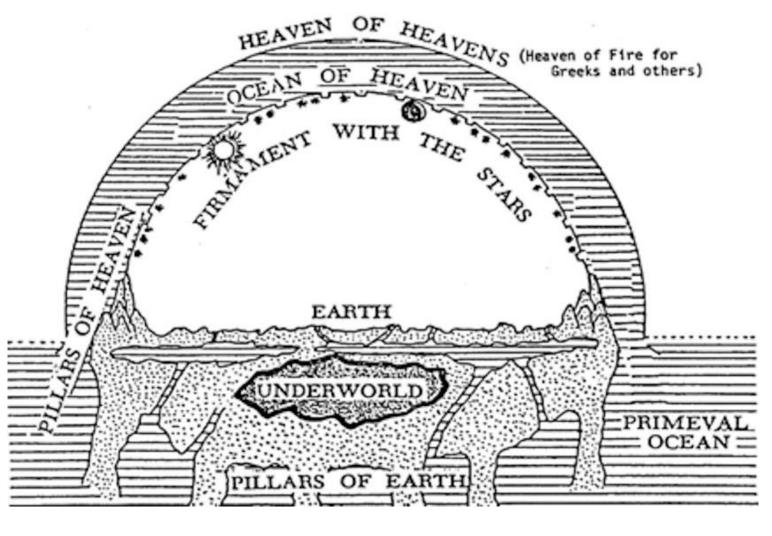
- Why it matters
- רָקִיעַ defined
- Στερέωμα in LXX
- The Aftermath



Denny's Diner

Evansville, Indiana, USA Tuesday morning, September 1st, 2015





Look, probably Moses was in fact using these sources [Babylonian, Sumerian, and Egyptian creation myths], some of the events and stories found in these other creation accounts...

He wanted to introduce Yahweh to the Israelites and so Moses chose a story with which they were very familiar and then he retold it so that he could set Yahweh apart from the gods and goddesses of those other creation myths.



Jeremy Myers



Jeremy Myers

...a literal, scientific reading of Genesis 1:6-8 completely contradicts reality.

...Moses is writing this creation account to subvert the Egyptian creation accounts that the Israelites would have known....

I wouldn't say that by using incorrect cosmology God is reinforcing it. Instead, he is using their incorrect cosmology to teach them something about Himself.



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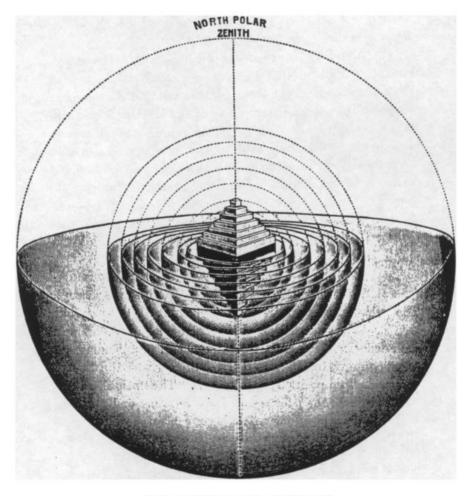
Jon: [The biblical authors] didn't know certain things that we take for granted... That the earth isn't flat...

Now, if you sat Moses down, and you said, "Explain to me the Rakia," he'd be like, "Yeah, it's this dome. It's this solid thing and the stars are in there...

Tim: Correct. Their cosmic geography was flat earth, solid dome. The earth's floating on the deep abyss of waters because if you dig down far enough, you eventually get to waters. But how does it not sink all the time? Well God put it on pillars. The foundations of the earth keep it suspended above the watery abyss. It's just the biblical conception of the physical construction of the world.

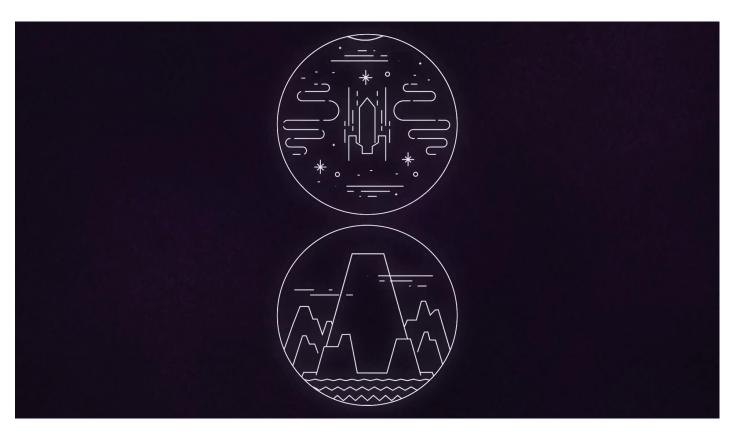


Tim Mackie and Jon Collins



THE BABYLONIAN UNIVERSE.

The upright central line is the polar axis of the heavens and earth. The two seven-staged pyramids represent the earth, the upper being the abode of living men, the under one the abode of the dead. The separating waters are the four seas. The seven inner homocentric globes are respectively the domains and special abodes of Sin, Shamash, Nabu, Ishtar, Nergal, Marduk, and Ninib, each being a 'world-ruler' in his own planetary sphere. The outermost of the spheres, that of Anu and Ea, is the heaven of the fixed stars. The axis from centre to zenith is 'the Way of Anu'; the axis from centre to nadir 'the Way of Ea.'



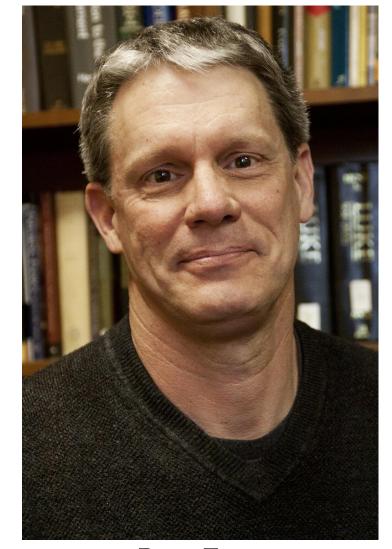
The Bible Project, "Intro to Spiritual Beings," https://www.youtube.com/watch?v=cBxOZqtGTXE

Warren, William F. "The Babylonian Universe Newly Interpreted." *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 1908, 977-83. Accessed August 7, 2020. www.jstor.org/stable/25210666.



Jon: The biblical authors, like all ancient people, saw [the sun, moon, and stars] as heavenly creatures that are glorious, shining bright, and high above... [To the biblical authors, the sky] is populated with creatures that have different kinds of bodies: shiny, spiritual bodies.

Tim: Okay, so almost all ancient cultures thought of the stars as divine beings, including the ancient Israelites. The debate over the nature of the *raqia* is not a central issue. It is a symptom of a deeper, more fundamental disagreement over what Genesis is and what it means to read it well. This is the level where the truly important discussion must take place.



Peter Enns

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רָקיע means *expanse*!!!



Like this!



Not like this!

Overview

- Why it matters
- רָקִיעַ defined
- Στερέωμα in LXX
- The Aftermath

...if Genesis is the word of the omniscient and truthful God, and only secondarily and derivatively communication from Moses, then the statements in Genesis about the דקיע must be interpreted as God understood them, not necessarily as Moses or his original readers may have understood them... Since God knew that the firmament was not solid, he would not have said or implied that it was, and therefore he did not inspire Moses to write דקיע with the meaning "a solid sky" or "dome," but rather "expanse" or the like.
-James W. Scott



Genesis 1:6–8 Hebrew "רָקיעַ" vs. KJV "firmament"

וַיָּאמֶר אֱלֹהִים יְהִי **רָקִיעֵ** בְּתִוֹדְ הַמְּיִם וִיהִי מַבְּדִּׁיל בֵּין מֵיִם לָמְיִם: וַיַּעַשׁ אֱלֹהִים אֶת⁻**הָרְקִיעֵ** וַיַּבְדֵּׁל בֵּין הַמַּׂיִם אֲשֶׁר מִתַּחַת **לָרְלִיע** וּבִין הַמַּיִם אֲשֶׁר מֵעַל **לְרָקִיע** וַיְהִי־בֵן: וַיִּקְרָא אֱלֹהֶים **לֵרְקִיע** שְׁמֵיִם וַיְהִי־עֶנֶרב וַיְהִי־בְּקֶר יָוֹם שֵׁנְי:

And God said, Let there be a **firmament** in the midst of the waters, and let it divide the waters from the waters. And God made the **firmament**, and divided the waters which were under the **firmament** from the waters which were above the **firmament**: and it was so. And God called the **firmament** Heaven. And the evening and the morning were the second day.

And God said, "Let there be an expanse in the midst of the waters... (ESV)

And God said, "Let there be an **expanse** between the waters... (BSB)

Then God said, "Let there be an expanse in the midst of the waters... (NASB)

Then God said, "Let there be an expanse between the waters... (CSB)

Then God said, "Let there be an expanse between the waters... (HCSB)

God said, "Let there be an expanse in the midst of the waters... (NET)

And God said, "Let there be an expanse in the midst of the waters... (NHEB)

Then God said, "Let there be an expanse in the midst of the waters... (NAS 1977)

And God said, Let there be an **expanse** in the midst of the waters... (DARBY)

God said, "Let there be an expanse in the middle of the waters... (WEB)

And God saith, 'Let an expanse be in the midst of the waters... (YLT)

Then God said, "Let there be a space between the waters... (NLT)

God said, "Let there be an expanse in the midst of the water... (JPS 1985)

- И СКАЗАЛ ВСЕСИЛЬНЫЙ: "ДА БУДЕТ **ПРОСТРАННСТВО** ПОСРЕДИ ВОДЫ... (SHAMIR) "space" Russian
- God het gesê: "Laat daar 'n **ruimte** wees tussen die waters en laat dit 'n skeiding maak tussen water en water." (PWL) "space" Afrikaans
- Und Gott sprach: Es werde eine Ausdehnung inmitten der Wasser... (SCH2000) "expansion" German
- Poi Dio disse: «Vi sia una **distesa** tra le acque, che separi le acque dalle acque». (NR1994) "expanse" Italian
- 하나님이 "물 가운데 넓은 공간이 생겨 물과 물이 나누어져라" 하시자 그대로 되었다. (KLB) "wide space" Korean
- Sinabi ng Diyos, "Magkaroon ng isang kalawakan sa gitna ng tubig at paghiwalayin nito ang tubig." (ABTAG2001)
 "galaxy" Tagalog
- ਫ਼ੇਰ ਪਰਮੇਸ਼ੁਰ ਨੇ ਆਖਿਆ, "ਪਾਣੀ ਨੂੰ ਦੋ ਹਿਸਿਆਂ ਵਿੱਚ ਵੰਡਣ ਲਈ **ਵਾਯੂਮੰਡਲ** ਹੋਵੇ!" (ERV-PA) "atmosphere" Punjabi
- Dumnezeu a zis: "Să fie o **întindere** între ape şi ea să despartă apele de ape." (RMNN) **"stretching"** Romanian
- Boh povedal: "Nech je obloha uprostred vôd a nech oddeľuje vody od vôd!" (SEBDT) "sky" Slovak
- In reče Bog: Bodi **raztežje** med vodami, da bo ločilo vode te in one. (CHR) "stretching" Slovenian

Akkadian Cognates to רקיע:

riāqum 'to be empty, idle'rīqum (rīq-) 'empty; idle'ruqqum, šuruqqum 'to empty; to leave idle'rīqūtum (rīqūt) 'emptiness; idleness'

rêqum 'to be(come) far,
distant'
rēqum (rēq-) 'far, distant'
ruqqum 'to make, keep distant'
šuruqqum 'to remove, move
away'

rīqūssu illak 'he will go empty-handed', lit.: 'in his emptiness' (*rīqūtum* 'emptiness', acc.);

John Huehnergard, A Grammar of Akkadian 3rd ed., pg. 327, 173, 516.

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rāqu 1) empty , vacant , void ; 2) available , free ,
unoccupied ; 3) at leisure , idle , unemployed , jobless (?)
; 4) futile , meaningless , vapid , valueless , worthless ;
5) neologism : a bird : a cuckoo ;
```

riāqu: 1) to be empty; 2) to be useless / idle; 3) noun: lack of work / unemployment / leave from work (?) / holiday (?); Š: to be free of work;

Association Assyriophile de France, Akkadian Dictionary, https://www.assyrianlanguages.org/akkadian/index_en.php

rēqam, "distant" (i.e., < rêqum/ruāqum [<Sem. √rḥq]) rīqum, "empty" ūm rēqūtum, "distant day" ūmum rīqum, "work-free day, holiday"

Abraham Winitzer, *Early Mesopotamian Divination Literature: Its Organizational Framework and Generative and Paradigmatic Characteristics*, pg. 82.

Biblical Hebrew Cognates to רקיע:

[רִיק] vb. Hiph. make empty, empty out — 1. empty vessels; keep empty, (i.e. keep hungry). 2. pour out or down, rain, oil. 3. empty out (i.e. draw) sword; of lance. Hoph. be emptied out from vessel; (of oinment, in sim.).

[בֵּיק], בַּק, adj. empty, vain — 1. empty, of vessels; of pit, lap, ears of grain. 2. empty, idle, worthless, ethically; אנשים ריקים a thing worthless fellows; < vain, unprofitable things; בְּבֶר ר' מִן a thing too empty (of significance) for you; love an empty thing (|| בוב), of abortive course of action.

רִיק n.[m.] emptiness, vanity; chiefly in adv. phr. לְרִיק in vain (of labour without benefit); and as adv. acc.

ביקְם adv. emptily, vainly — 1. in empty condition, empty = with empty hands; c. vb. of sending; of going forth, returning; = without an offering (cf. [בְּנֶה] II. 2, ראה Niph. 1 b). 2. in vain, without effect: c. שוב (poem.) [ריר] vb. flow (like slime) (Aram. רירא) — Qal flow.

[בִּיק], בַּק adj. empty, vain — 1. empty, of vessels; of pit, lap, ears of grain. 2. empty, idle, worthless, ethically; אנשים ריקים worthless fellows; < vain, unprofitable things; דְבָר ר' מִזן a thing too empty (of significance) for you; love an empty thing (// בזב), of abortive course of action.

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Richard Whitaker et al., The Abridged Brown-Driver-Briggs Hebrew-English Lexicon of the Old Testament (Boston; New York: Houghton, Mifflin and Company, 1906).

שפופרת ריק

שפופרת ריק (Vacuum tube) היא רכיב אלקטרוני שהומצא בתחילת המאה ה-20 על ידי לי דה פורסט המבוסס על שפופרת קתודית.

השפופרת מכילה בתוכה נימה הנמצאת בריק ופולטת אלקטרונים כאשר היא מחוברת למתח חשמלי, ומתחממת כתוצאה מזרם חשמלי העובר דרכה. הפעלת מתח חשמלי על השפופרת, יוצרת שדה חשמלי אשר מושך אלקטרונים אלו אל האנודה. מכיוון שהאנודה אינה פולטת אלקטרונים, אין זרם בכיוון ההפוך. כך משמשת שפופרת ריק מסוג דיודה ליישור זרם. בטריודה מופיע גם סריג בין הקתודה לאנודה, והמתח שלו מאפשר לשלוט על כמות האלקטרונים העוברים בה. כך משמשת הטריודה להגברת אותות.

שפופרות ריק שימשו בדור הראשון של המחשבים כמתגים בעלי שני מצבים^[1]. המצאת הטרנזיסטור בשנת 1948 דחקה את שפופרות הריק בהדרגה משימוש, עד שהפכו לרכיב נדיר במעגלים אלקטרוניים החל מאמצע המאה ה-20.

כיום השימוש העיקרי של שפופרות ריק הוא במגברי צליל במערכות שמע יוקרתיות. יש הטוענים כי בשל מספרם הרב של האלקטרונים בשפופרת מושג דיוק סטטיסטי רב יותר. אחרים מזהים "חמימות" בצליל. ה"חמימות" היא למעשה עיוות (distortion) הנגרם על ידי שפופרת הריק, חלק מחובבי ההאזנה מוצאים בטשטוש הצליל הנאה. זוהי 'רוויה-רכה' הנגרמת משימוש יתר (הכוונה לשימוש מעבר ליכולות השפופרת) בשפופרות, הגורמת למעגלים המשתמשים בשפופרות ותוכננו בצורה לקויה, להישמע טוב יותר ממעגלים שתוכננו בצורה לקויה המשתמשים בטרנזיסטורים.

שפופרות משמשות גם במגברים המשמשים גיטרות, שמתוכננים לשימוש יתר, היות שקיימת בהם התכונה של העברה לא-קווית (-non linear) יותר משקיימת בטרנזיסטורים, היוצרת תחום הרמוניות עיוותים נעימה יותר. משתמשים בשפופרות גם עבור מגברים בתדרי רדיו, זאת עקב הספק המוצא הגדול יותר שניתן להפיק מהן בהשוואה לטרנזיסטורים. כמו כן, בניסויים פיזיקליים מסוימים יש העדפה לשפופרות ריק בגלל יכולתן לעמוד בשינויי עומס גדולים יותר.

[עריכת קוד מקור | עריכה]

- טריודה
- שפופרת קתודית



The Controversial Cognates to רקיע:

[רְקִע] vb. beat, stamp, beat out, spread out — Qal stamp, beat (stamp) with thy foot, in token of contemptuous pleasure. Pi. goldsmith with gold overlayeth it (lit. beateth it out); beat them out as plating. Pu. silver beaten out. Hiph. canst thou make with (= like) him a spreading for clouds (spread out clouds)?

1. adj. thin. 2. adv. with restrictive force, only, altogether, surely (syn. אַד) — a. only. b. prefixed to sentences, to add a limitation on sthg. previously expressed (or implied), only to these men do nothing, רַק אֶת־בּנִי לֹא־תְשֵׁב הַנְּה, I will let you go ..., only go not far, only — it is nothing — let me pass through on my feet; emphasizing a command. c. emphasizing single words, esp. adj., only = nought but, altogether, יאָר רַק רַל רַע חַלְבוֹ רַק רַע is only evil, i.e. exclusively evil, nought but evil, רַק טוֹב בֹי אַם nothing but good; sq. as adv. d. after a neg., save, except (syn. רַק טוֹב 2 a). e. with an affirmative, asseverative force, only, altogether = surely. f. רַק אָם רַק וֹל prefixed for emph.) if only, provided only.

רָקִיק n.m. a thin cake, wafer always of unleavened bread.



Terry Mortenson

Raqa'is used with respect to gold, which is a soft metal, but also with bronze, which is much harder. You can use a hammer to beat or spread out a rock or a banana. The verbal action does not determine the meaning of the noun or tell you anything about the object's physical characteristics...

We also cannot assume a meaning of the noun (especially the physical shape, dimensions, material substance, or location of the *raqiya'*) simply from one of the various meanings of related verb.

There are over 100 words in the Hebrew Bible associated with metals or metallurgy... Note that in Ezekiel 1, the "expanse" (*raqia*') is not said to be metallic. The word there is "crystal" to denote a shine. It is also *not* said to be round...



Michael Heiser

Reexamining the Lexicon

[רְקַע] vb. beat, stamp, beat out, spread out — Qal stamp, beat (stamp) with thy foot, in token of contemptuous pleasure. Pi. goldsmith with gold overlayeth it (lit. beateth it out); beat them out as plating. Pu. silver beaten out. Hiph. canst thou make with (= like) him a spreading for clouds (spread out clouds)?

ךְקִיעַ n.m. extended surface, (solid) expanse (as if beaten out)
— firmamentum 1. (flat) expanse (as if of ice), as base,
support. 2. the vault of heaven, or 'firmament,' regarded by
Hebrews as solid, and supporting 'waters' above it.
[קקוּעַ] n.[m.] expansion — expansion.

*

רָקיע means *expanse*!!!



Like this!



Not like this!

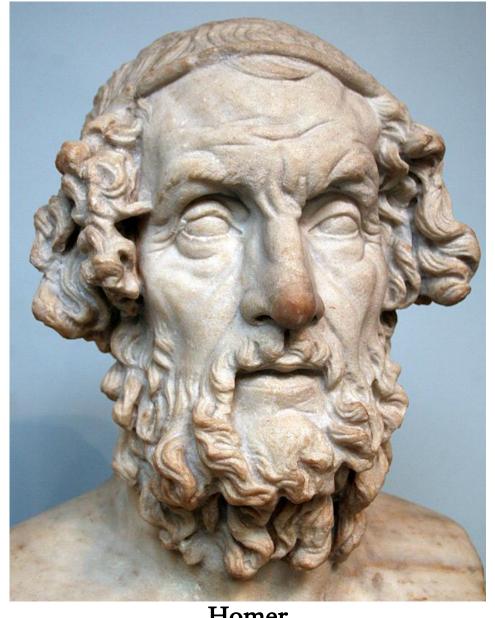
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αἰθήρ, -έρος [f., m.] 'clear sky, heaven' (II.). ∢IE *h₂eidh- 'kindle, ignite'>

- •COMP On αἰθήρ and αἴθρη as a second member (e.g. in ὑπαίθριος, ὕπαιθρος) see Sommer 1948: 151f.
- •DER αἴθρη, -ā 'id.' (Il.); αἰθρίη, -ία 'clear sky, nice weather'; αἴθριος, -ov [adj.] 'of the sky, bright' (IA); the ntr. αἴθριον, diminutive αἰθρίδιον was used in imperial times as a folk-etymological adaptation of Lat. $\bar{a}trium$.
- αἴθρος 'fresh, cold air' (ξ 318 αἴθρ ϕ καὶ καμάτ ϕ δεδμημένον). Cf. αἰθρεῖ· χειμάζει 'to expose to or pass the winter' (H.), αἰθρινόν· πρωϊνόν 'early' (H.); improbable Bouquiaus-Simon *Ant. class.* 31 (1962): 25ff.
- With full-grade of the suffix αἰθέριος 'in the air, heavenly' (trag.), beside which rare and late αἰθερώδης, αἰθεριώδης, αἰθερίτης, αἰθερόομαι.
- iθαρός 'cheerful, bright' (Alc.) may contain an old ablauting form of the root. The verb iθαίνειν (A. D., H.) could point to an r/n-stem.
- •ETYM Generally derived from ▶ αἴθω; perhaps the formation was influenced by ἀήρ.

- αἴθω [v.] 'to kindle', intr. med. 'burn (with light)' (Il.). ∢IE *h₂eidh- 'kindle'>
- VAR Only present.
- •COMP Cf. ► Αἰθίοπες. Οη κακ-ιθής see on κέγκει s.v. ► κάγκανος.
- •DER αἶθος [m.] 'burning heat' (E.) = Skt. édha- [m.] 'firewood', OHG eit [m.], OE ād 'blaze, pyre'; αἰθός 'sparkling, glowing', also 'dark-colored'; also αἴθων, -ωνος (Il.) and αἴθοψ (on the mgs. see Beekes Glotta 73 (1995-1996): 15-17).
- αἴθος [n.] 'fire' (A. R.); αἰθήεις 'sooty' (Nic.), also αἰθής 'burning' (Cratin. 88), if this does not stand for αἰθῆς from αἰθήεις; αἴθινος (H., EM).
- Perhaps related is αἰθόλικες 'pustule, pimple' (Hp., Gal.), cf. πομφόλυξ 'bubble' for the formation.
- αἰθύσσω 'to stir violently' (Sapph., Pi.), also prefixed with ἀν-, δι-, κατ-, παρ-, is usually considered cognate, but the development of meaning is strange. The verbal noun αἴθυγμα 'spark, glow' (Plb.) did not undergo the metaphorical development of αἰθύσσω, as opposed to αἰθυκτήρ 'stirring violently' (Opp.). But note that these are late derivations. Also καταῖθυξ ὅμβρος- ὁ καταιθύσσων 'which is floating down' (H.); diff. Pisani *Paideia* 15 (1960): 245f.
- αἴθυια [f.] name of a bird (see Thompson 1895 s.v.), also epithet of Athena, see Kock *Arch. f. Religionswiss.* 18 (1915): 127ff. but also Kretschmer *Glotta* 9 (1918): 229f., mostly explained as a color term, but rather a substrate word (Szemerényi 1964: 207, Beekes 1998: 25 on the suffix -υια.). On αἴθουσα 'hemlock, Conium maculatum' (Ps.-Dsc.) see *CEG* 4 (from 'black'). Cf. also ▶ αἰθήρ, ▶ αἰθάλη, ▶ αἴθουσα.
- •ETYM Old PIE verbal root, of which the zero grade *h₂idh- probably appears in iθαρός, iθαίνω. Sanskrit has the root form idh-, with a nasal present i-n-ddhé 'to kindle'. Thematic αἴθος can be of PIE date, cf. Skt. édha- [m.] 'firewood', OHG eit [m.], OE ād 'glow, funeral pyre'. αἴθος [n.] 'fire' (A. R.) and Skt. édhas- [n.] 'firewood' are independent formations, since the Greek word is late. Remarkable forms in other languages include Av. aēsma- [m.] 'firewood', Lith. íesmė 'id.', Lat. aedēs 'dwelling place, temple', aestās 'summer', aestus 'heat', and several Germanic forms, e.g. OHG eit (see above) and ON eisa [f.] 'burning coals'.



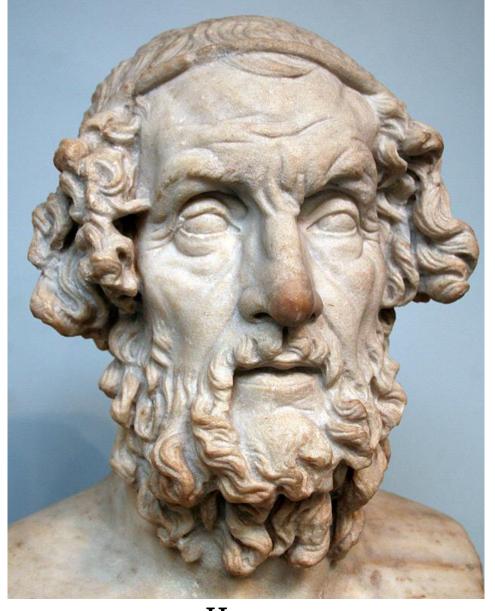
Homer c. 750 BC

τοῖσιν δ' εὐχόμενος μετέφη κρείων Άγαμέμνων: 'Ζεῦ κύδιστε μέγιστε κελαινεφὲς αἰθέρι ναίων

and in prayer lord Agamemnon spake among them, saying. "Zeus, most glorious, most great, lord of the dark clouds, that dwellest in the **heaven**

Ζεύς δέ σφι Κρονίδης ύψίζυγος αἰθέρι ναίων

Zeus, son of Cronos, throned on high, that dwelleth in the **heaven**



Homer c. 750 BC

Πιερίην δ' ἐπιβὰς ἐξ αἰθέρος ἔμπεσε πόντω: σεύατ' ἔπειτ' ἐπὶ κῦμα λάρω ὄρνιθι ἐοικώς, ὅς τε κατὰ δεινοὺς κόλπους άλὸς ἀτρυγέτοιο ἰχθῦς ἀγρώσσων πυκινὰ πτερὰ δεύεται ἄλμη: τῷ ἴκελος πολέεσσιν ὀχήσατο κύμασιν Ἑρμῆς.

On to Pieria he stepped from the upper air, and swooped down upon the sea, and then sped over the wave like a bird, the cormorant, which in quest of fish over the dread gulfs of the unresting sea wets its thick plumage in the brine. In such wise did Hermes ride upon the multitudinous waves.

Ζεὺς οἶδεν 'Ολύμπιος, αἰθέρι ναίων,

Olympian Zeus, who dwells in the sky

Homer, *Odyssey 5.50–54;* 15.523 (Trans. A.T. Murray)

An Anonymous Hymn to Ares (7–6 century BC)

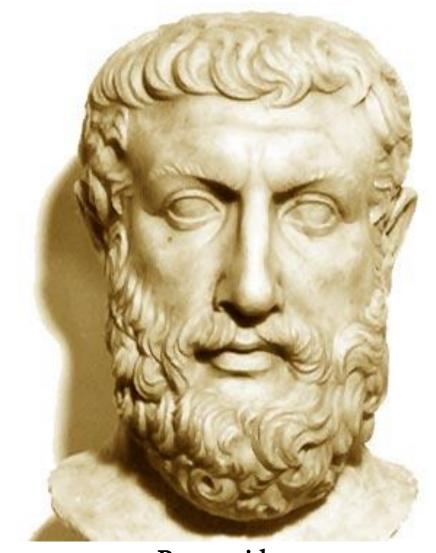
Αρες ὑπερμενέτα, βρισάρματε, χρυσεοπήληξ, όβριμόθυμε, φέρασπι, πολισσόε, χαλκοκορυστά, καρτερόχειρ, ἀμόγητε, δορισθενές, ἕρκος Ὀλύμπου, Νίκης εὐπολέμοιο πάτερ, συναρωγὲ Θέμιστος, 5άντιβίοισι τύραννε, δικαιοτάτων άγὲ φωτῶν, ηνορέης σκηπτοῦχε, πυραυγέα κύκλον έλίσσων αίθέρος έπταπόροις ἐνὶ τείρεσιν, ἔνθα σε πῶλοι ζαφλεγέες τριτάτης ύπερ ἄντυγος αίεν ἔχουσι: κλῦθι, βροτῶν ἐπίκουρε, δοτὴρ εὐθαρσέος ήβης, 10πρηὺ καταστίλβων σέλας ὑψόθεν ἐς βιότητα ήμετέρην καὶ κάρτος ἀρήιον, ώς κε δυναίμην σεύασθαι κακότητα πικρὴν ἀπ' ἐμοῖο καρήνου, καὶ ψυχῆς ἀπατηλὸν ὑπογνάμψαι Φρεσὶν ὁρμήν, θυμοῦ αὖ μένος ὀξὺ κατισχέμεν, ὅς μ' ἐρέθησι 15φυλόπιδος κρυερης ἐπιβαινέμεν: ἀλλὰ σὺ θάρσος δός, μάκαρ, εἰρήνης τε μένειν ἐν ἀπήμοσι θεσμοῖς δυσμενέων προφυγόντα μόθον Κῆράς τε βιαίους.

[1] Ares, exceeding in strength, chariot-rider, goldenhelmed, doughty in heart, shield-bearer, Saviour of cities, harnessed in bronze, strong of arm, unwearying, mighty with the spear, O defence of Olympus, father of warlike Victory, ally of Themis, [5] stern governor of the rebellious, leader of righteous men, sceptred King of manliness, who whirl your fiery sphere among the planets in their sevenfold courses through the aether wherein your blazing steeds ever bear you above the third firmament of heaven; hear me, helper of men, giver of dauntless youth! [10] Shed down a kindly ray from above upon my life, and strength of war, that I may be able to drive away bitter cowardice from my head and crush down the deceitful impulses of my soul. Restrain also the keen fury of my heart which provokes me to tread [15] the ways of blood-curdling strife. Rather, O blessed one, give you me boldness to abide within the harmless laws of peace, avoiding strife and hatred and the violent fiends of death.

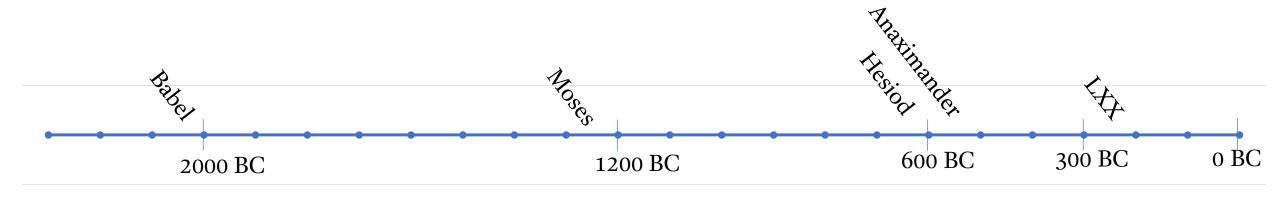
(Trans. Hugh G. Evelyn-White)

Αἱ γὰρ στεινότεραι πλῆντο πυρὸς ἀκρήτοιο, αἱ δ΄ ἐπὶ ταῖς νυκτός, μετὰ δὲ φλογὸς ἵεται αἶσα· ἐν δὲ μέσω τούτων δαίμων ἣ πάντα κυβερνῷ· πάντα γὰρ <ἣ> στυγεροῖο τόκου καὶ μίξιος ἄρχει

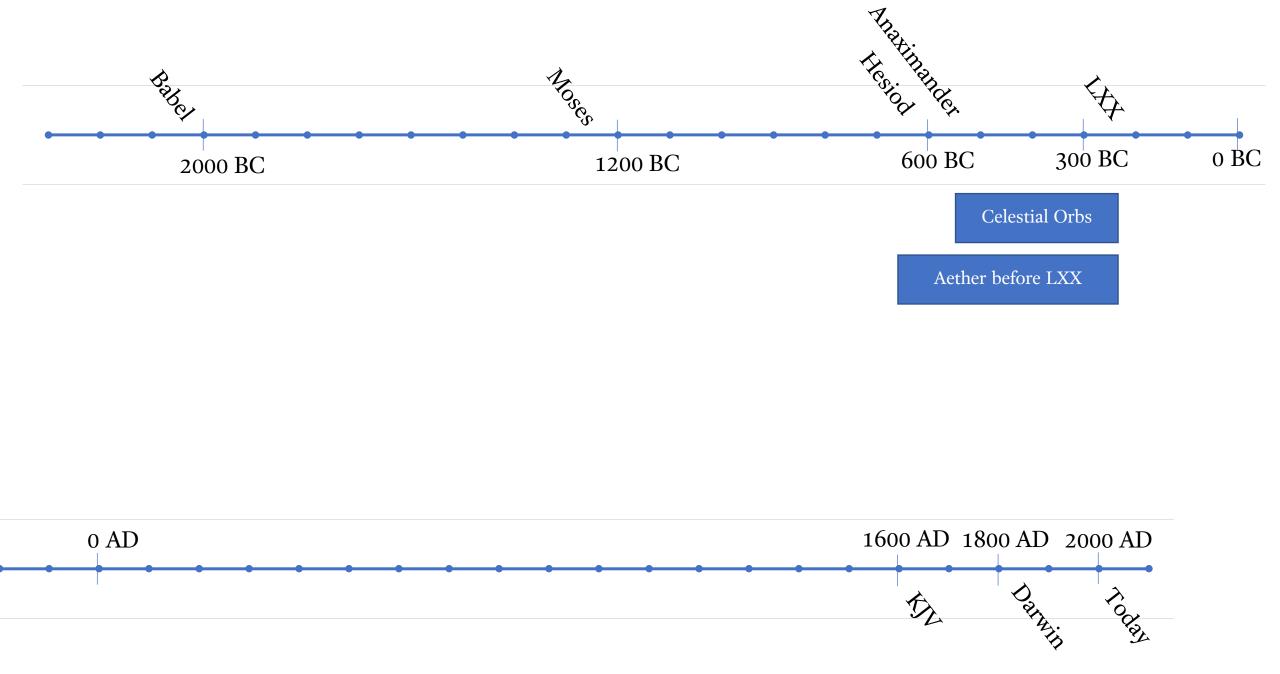
The narrower circles are filled with unmixed fire, and those surrounding them with night, and in the midst of these rushes their portion of fire. In the midst of these circles is the divinity that directs the course of all things; for she rules over all painful birth and all begetting,



Parmenides
Born c. 515 BC

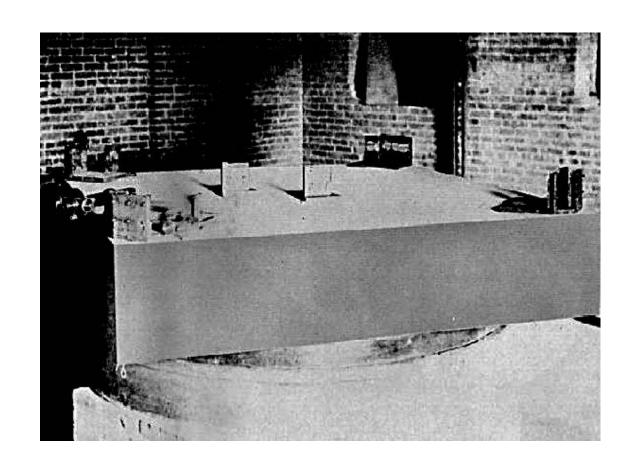


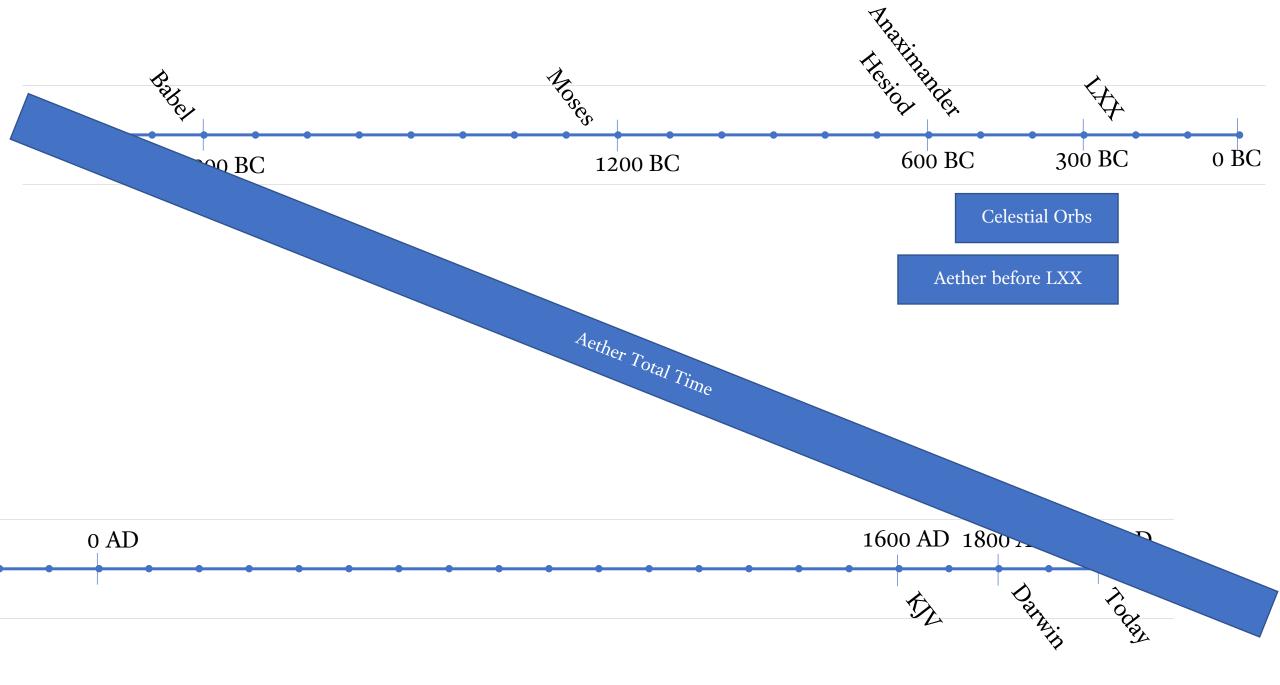


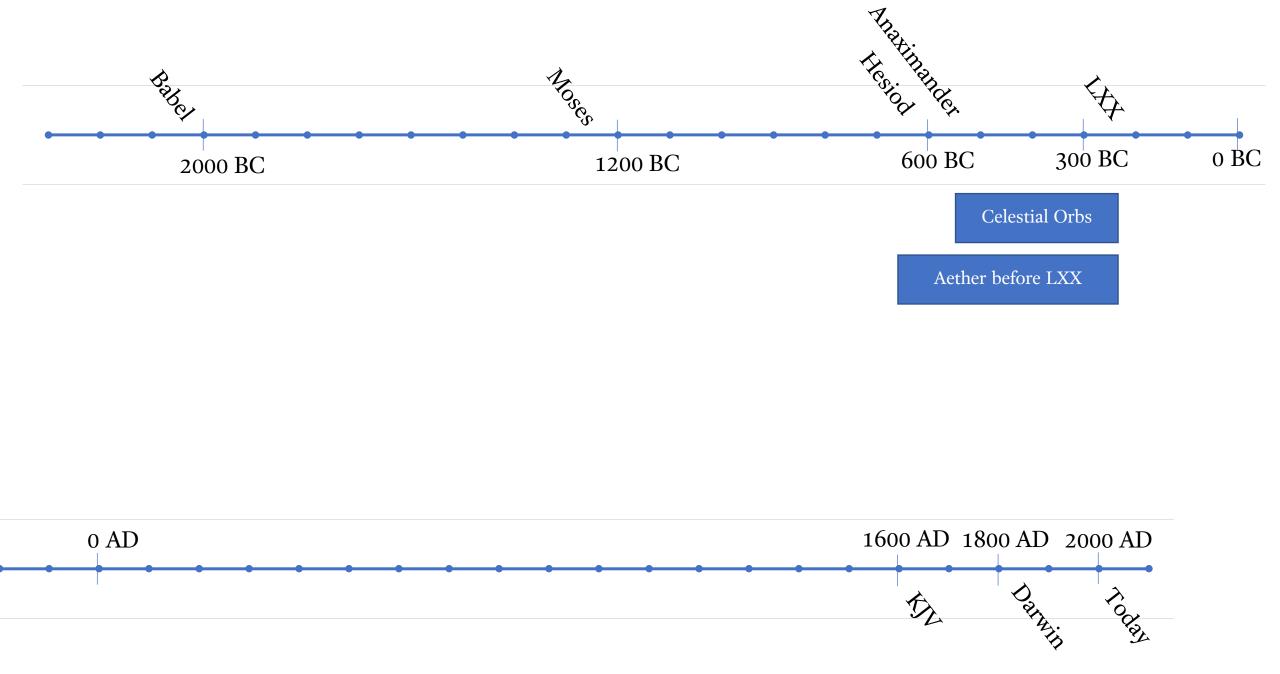


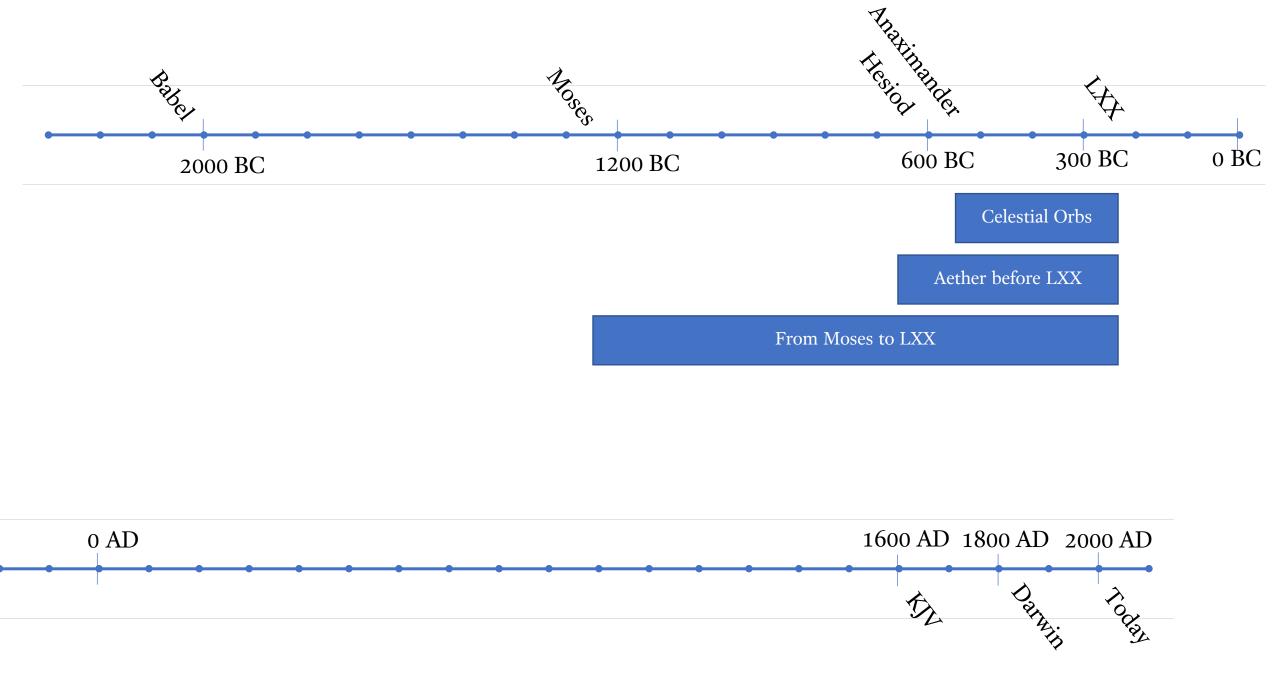
Michelson-Morley Experiment (1887)

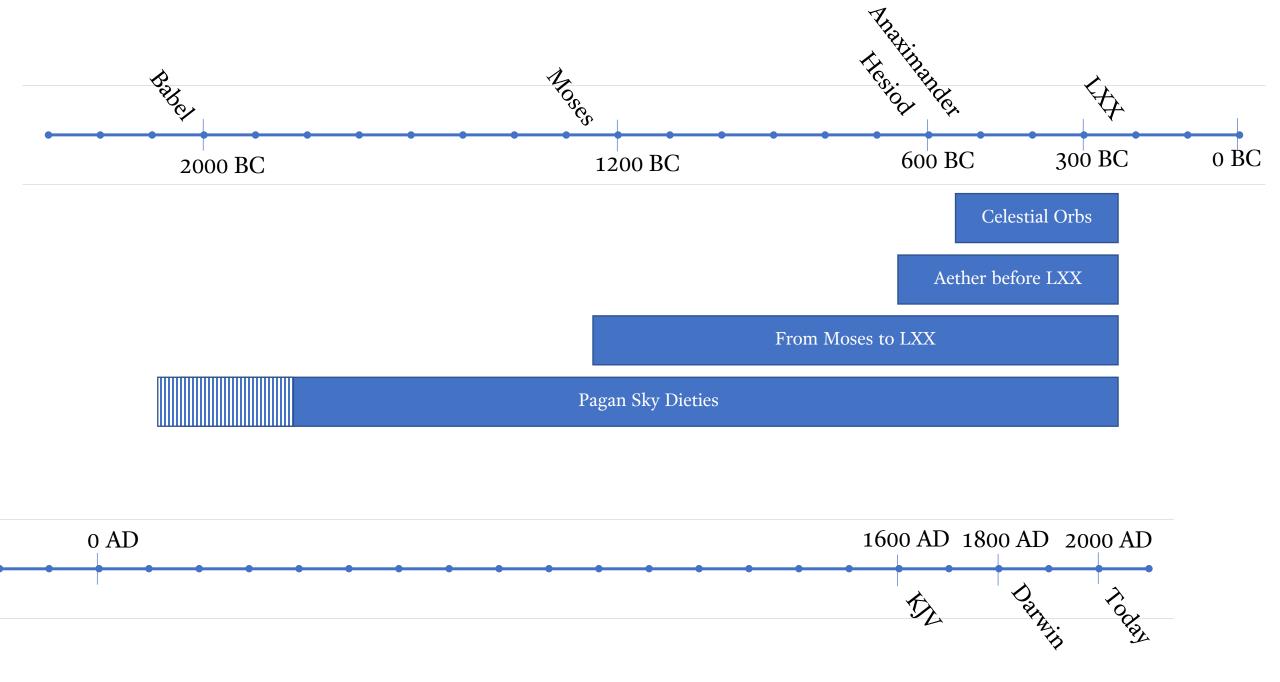
- Failed attempt to discover luminiferous aether
- Led to subsequent experiments
- Aether finally disproven in 1920s

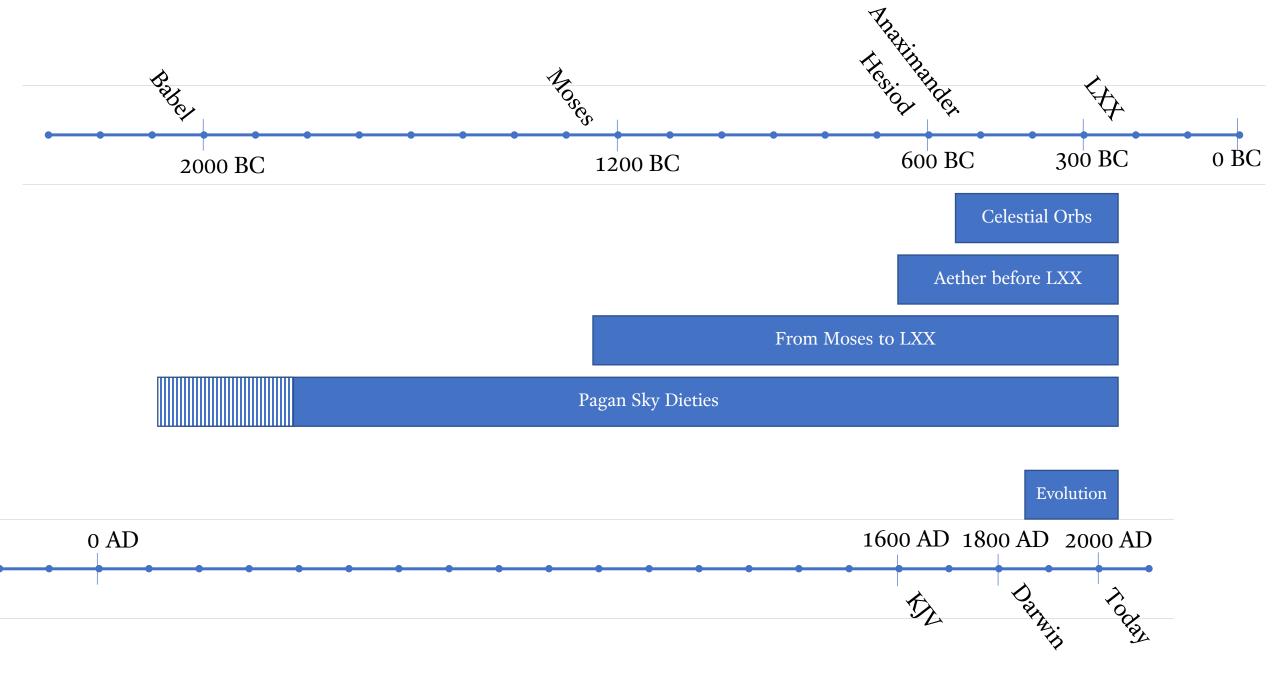












Genesis 1:7–9

Στερέωμα as a compromise with Paganism

Καὶ εἶπεν ὁ θεός Γενηθήτω στερέωμα ἐν μέσω τοῦ ὕδατος, καὶ ἔστω διαχωρίζον ἀνὰ μέσον ὕδατος καὶ ὕδατος· καὶ ἐγένετο οὕτως. καὶ ἐποίησεν ὁ θεὸς τὸ στερέωμα· καὶ διεχώρισεν ὁ θεὸς ἀνὰ μέσον τοῦ ὕδατος ὁ ἦν ὑποκάτω τοῦ στερεώματος, καὶ ἀνὰ μέσον τοῦ ὕδατος τοῦ ἐπάνω τοῦ στερεώματος. καὶ ἐκάλεσεν ὁ θεὸς τὸ στερέωμα οὐρανόν· καὶ ἴδεν ὁ θεὸς ὅτι καλόν. καὶ ἐγένετο ἑσπέρα καὶ ἐγένετο πρωϊ, ἡμέρα δευτέρα. (LXX)

And God said, Let there be a **firmament** in the midst of the water, and let it be a division between water and water, and it was so. And God made the **firmament**, and God divided between the water which was under the **firmament** and the water which was above the **firmament**. And God called the **firmament** Heaven, and God saw that it was good, and there was evening and there was morning, the second day. (Brenton's LXX English Translation)

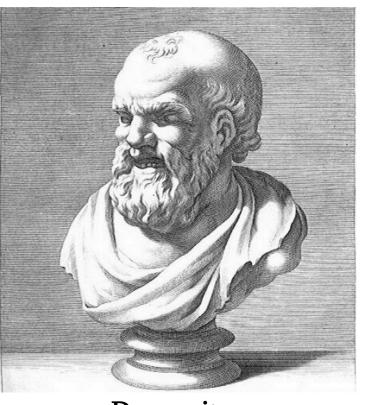
LSJ Greek-English Lexicon

στερέ-ωμα, ατος, τό, **A.** solid body, Hp. <u>Flat.</u>8, Anaxag. ap. <u>Placit.</u>2.25.9. **b.** ἄϋλα ς. immaterial solids, Dam. <u>Pr.</u>425, cf. 205.

- **2.** foundation or framework, e.g. the skeleton, on which the body is, as it were, built, Arist. PA655a22; στερεώματος ἕνεκα τοῦ περιτρήτου to strengthe n it, Hero Bel. 95.8: metaph., solid part, strength of an army, LXX 1 Ma.9.14; also, ratification, ἐπιστολῆς ib. Es. 9.29; steadfastness, "τῆς πίστεως" Ep.Col. 2.5.
- **3.** = στεῖρα (of a ship), *Thphr. <u>HP</u>5.7.3*.
- **4.** *firmament*, i.e. the sky, the heaven above, LXX <u>Ge.</u> 1.6, <u>Ez.</u>1.22, al.; "τὸν τῶν οὐρανίων ς. δεσπότην" <u>Tab.Defix.Aud.</u>242.8 (Carthage, iii A.D.).



Anaxagoras c. 500 BC-c. 428 BC



Democritus c.460 BC-c.370 BC

Άναξαγόρας Δημόκριτος στερέωμα διάπυρον, ἔχον ἐν ἑαυτῷ πεδία καὶ ὄρη καὶ φάραγγας.

Anaxagoras and Democritus, [affirm that the moon] is **a solid**, **condensed**, and fiery **body**, in which there are champaign countries, mountains, and valleys.

Colossians 2:5 The only NT occurrence of στερέωμα

εἰ γὰρ καὶ τῆ σαρκὶ ἄπειμι, ἀλλὰ τῷ πνεύματι σὺν ὑμῖν εἰμι, χαίρων καὶ βλέπων ὑμῶν τὴν τάξιν καὶ τὸ στερέωμα τῆς εἰς Χριστὸν πίστεως ὑμῶν.

For though I am absent in body, yet I am with you in spirit, rejoicing to see your good order and the **firmness** of your faith in Christ. (ESV)

Thayer's Greek Definitions

G4732

στερεόω stereoō

Thayer Definition:

1) to make solid, make firm, strengthen, make strong 1a) of the body of anyone

G4731

στερεός

stereos

Thayer Definition:

- 1) strong, firm, immovable, solid, hard, rigid
 1a) in a bad sense, cruel, stiff, stubborn,
 hard
- 1b) in a good sense, firm, steadfast

Στερεόω in NT

Act 3:7 And he took him by the right hand and raised him up, and immediately his feet and ankles were made strong. (ESV)

Act 3:16 And his name—by faith in his name—has made this man strong whom you see and know, and the faith that is through Jesus has given the man this perfect health in the presence of you all. (ESV)

Act 16:5 So the churches **were strengthened** in the faith, and they increased in numbers daily. (ESV)

Στερεός in NT

2 Tim. 2:19 But God's **firm** foundation stands, bearing this seal: "The Lord knows those who are his," and, "Let everyone who names the name of the Lord depart from iniquity."

Heb. 5:12, 14 For though by this time you ought to be teachers, you need someone to teach you again the basic principles of the oracles of God. You need milk, not **solid** food... But **solid** food is for the mature, for those who have their powers of discernment trained by constant practice to distinguish good from evil.

1 Pet. 5:9 Resist him, firm in your faith, knowing that the same kinds of suffering are being experienced by your brotherhood throughout the world.

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στερεόω
stereoō, v., make firm or solid; establish. 34× +NT
Hebrew Alignment
רקע—to spread out; to trample, stamp out; to beat out (4): Job 37:18; Ps 135:6; Isa 42:5; 44:24
דוק—to be, grow or make strong; to prevail, have or show courage; to seize, grasp, keep hold of (3): Jer 5:3; 10:4; 52:6
עלץ—to rejoice, exult (1): 1 Kgdms 2:1
1 מְבַצֵּר —secure position; fortified (1): 1 Kgdms 6:18
אמץ—to be strong; to strengthen, let grow strong, make firm; to prove to be strong (1): Ps 17:18
עשה 1 שה to make, manufacture; to do (1): Ps 32:6
תכן—to examine, check; to make correct; to measure up, assess, calculate the size (1): Ps 74:4
to prepare, make ready; to erect, set up; to determine, fix, appoint; to make firm; to feel inclined, be intent on, be firmly resolved
(1): Ps 92:1
נטה—to stretch, spread, lengthen; to bend down; to turn aside; to entice, deceive (1): Is 45:12
1 טפח to spread out (1): Is 48:13
1 מלח to be torn to pieces, scatter (1): Isa 51:6
1 בצב to place oneself; to be positioned, stand; to remain standing; to oppose (1): Lam 2:4
1 חשף to strip off, to bare; to skim off (1): Ezek 4:7
עצם 1 to be powerful; to be countless; to make more powerful (1): Dan 8:24
יצר to form, fashion; to create; to be formed (1): Am 4:13
English Gloss
establish (6): Sir 3:2; 34:11; 39:28; 42:17, 25; Hos 13:4
made firm (2): 1 Mac 9:62; Odes 3:1
firm (2): Sir 26:10; 42:11
strengthen (2): Sir 45:8; 50:1
                                                                                                                                *
keep (1): Sir 29:3
press (1): 1 Mac 10:50
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רָקיע means *expanse*!!!



Like this!



Not like this!

Overview

- Why it matters
- רָקִיעַ defined
- Στερέωμα in LXX
- The Aftermath
 - In Early Judaism
 - In Translation (English, Slavic, German)

The Rabbis on Creation... (from Bereishit Rabbah 4.2, my trans.)

אָמַר רַבִּי חֲנִינָא יָצְאָה הָאֵשׁ מִלְּמַעְלָה וְלֹחֲכָה אֶת פְּגֵי הָרָקִיעַ.

Rabbi Chanina said, "the fire went forth from above and scorched the face of the râqîya'."

. אָמַר רַבִּי יוּדָן בְּרַבִּי שִׁמְעוֹן יָצָאת הָאֵשׁ מִלְּמַעְלָה וְלִהְטָה פְּנֵי רָקִיעַ.

Rabbi Yudan said, "the fire went forth from above and the face of the râqîya' glowed."

The Sages on Night... (from Pesachim 94b.5, William Davidson Talmud.)

חכמי ישראל אומרים ביום חמה מהלכת למטה מן הרקיע ובלילה למעלה מן הרקיע וחכמי אומות העולם אומרים ביום חמה מהלכת למטה מן הרקיע ובלילה למטה מן הקרקע אמר רבי ונראין דבריהן מדברינו שביום מעינות צוננין ובלילה רותחין The Gemara presents a similar dispute: The Jewish Sages say that during the day the sun travels beneath the firmament and is therefore visible, and at night it travels above the firmament. And the sages of the nations of the world say that during the day the sun travels beneath the firmament, and at night it travels beneath the earth and around to the other side of the world. Rabbi Yehuda HaNasi said: And the statement of the sages of the nations of the world appears to be more accurate than our statement. A proof to this is that during the day, springs that originate deep in the ground are cold, and during the night they are hot compared to the air temperature, which supports the theory that these springs are warmed by the sun as it travels beneath the earth.



Josephus 37-c. 100 AD

τίς γὰρ οὐκ οἶδε τῶν ἀγαθῶν ἀνδρῶν ὅτι τὰς μὲν ἐν παρατάξει ψυχὰς σιδήρω τῶν σαρκῶν ἀπολυθείσας τὸ καθαρώτατον στοιχεῖον αἰθὴρ ξενοδοχῶν ἄστροις ἐγκαθιδρύει, δαίμονες δ' ἀγαθοὶ καὶ ἥρωες εὐμενεῖς ἰδίοις ἐγγόνοις ἐμφανίζονται, τὰς δὲ ἐν νοσοῦσι τοῖς σώμασι συντακείσας,

For what man of virtue is there who does not know, that those souls which are severed from their fleshly bodies in battles by the sword are received by the ether, that purest of elements, and joined to that company which are placed among the stars; that they become good demons, and propitious heroes, and show themselves as such to their posterity afterwards?

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Latin Vulgate (405 AD)

⁶ Dixit quoque Deus: Fiat **firmamentum** in medio aquarum: et dividat aquas ab aquis.

⁷ Et fecit Deus **firmamentum**, divisitque aquas, quae erant sub **firmamento**, ab his, quae erant super **firmamentum**. Et factum est ita.

⁸ Vocavitque Deus **firmamentum**, Caelum: et factum est vespere et mane, dies secundus.



King James Version (1611 AD)

⁶ And God said, Let there be a **firmament** in the midst of the waters, and let it divide the waters from the waters. ⁷ And God made the **firmament**, and divided the waters which *were* under the **firmament** from the waters which *were* above the **firmament**: and it was so. ⁸ And God called the **firmament** Heaven. And the evening and the morning were the second day.

Great Bible 1539 (1540 print)

Genesis 1:6-8

And God lapde: let there be a firmamét betwene the waters: and let it make a division betwene waters and waters. And God made the firmament, and let a division betwene the waters which were under the firmament and the waters that were about the firmament. And it was so. And God called the firmament, Heaven. The evenyinge also and the morning was made the second daye.

⁶ And God sayde: let there be a **firmament** betwene the waters: and let it make a diuision betwene waters and waters. ⁷ And God made the **firmament**, and set a diuision betwene the waters which were vnder the **firmament** and the waters that were aboue the **firmament**. And it was so. ⁸ And God called the **firmament**, Heauen. The euenynge also and the mornyng was made the second daye.

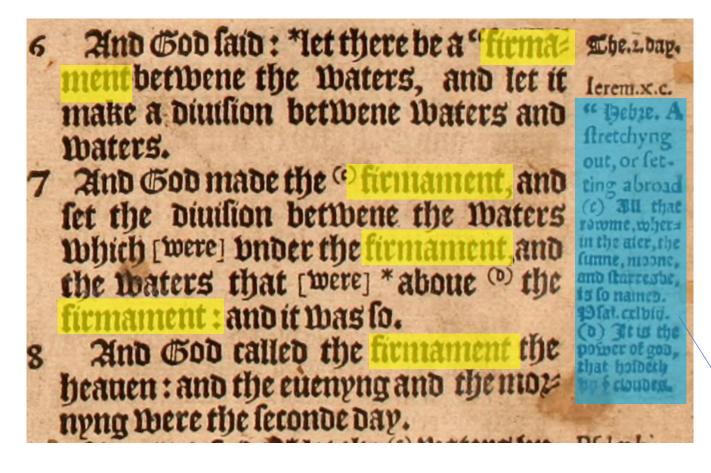
Geneva Bible 1560 (1594 print)

8 And God called the firmament, sweaheape by his fecret power. \$ &b. face of the waters. Heb. 13.3. e The light was made before either Sunne or Moone was created: therfore we must not attribute that to the creatures that are Gods instruments, which only apperteneth to God. + Eb.betwene the light, and betwene the darknes. + The first day. \$Ebr. so was the evening, so was the morning. Pfal. 33.6. 6 136.5. iere. 10.12.6 51.15. | Or, spreading ouer, & ayre. f As the sea and sizers, from those waters y are in the cloudes, which are voholden by Gods power, lest they should ouerwhelme the world. Pfal. 148.4. 2 That is, the region of the aire, and all that is about vs.

That is, the region of the air and all that is above us.

Bishop's Bible 1568

Genesis 1:6-8



⁶ And God said: let there be a **firmament** betwene the waters, and let it make a diuision betwene waters and waters ⁷ And God made the **firmament**, and set the diuision betwene the waters which [were] vnder the **firmament**, and the waters that [were] aboue the **firmament**: and it was so ⁸ And God called the **firmament** the heauen: and the euenyng and the mornyng were the seconde day

Hebrew: A stretching out, or setting abroad

- (c) All that roams, wherin the air, the sunne, moon, and stars be, is so named. Psalm cxlviii.
- (d) It is the power of God that holdeth up the clouds.

Thecreation

Chap.i.

of the world.



THE MOSES.

called GENESIS.

CHAP. I.

The creation of Heauen and Earth, 3 of the light, 6 of the firmament, 9 of the earth feparated from the waters, II and made fruitfull, 14 of the Sunne, Moone, and Starres, 20 of fish and fowle, 24 of beafts and cattell, 26 of Man in the Image of God. 29 Alfo the appointment of food.

acts.14.15. and 17.24. hebr, 11.3.

N*the beginning God created the Deauen, and the Earth.

earth was with out forme, and boyd, and darke

neffe was byon the face of the deepe : and the Spirit of God moduco byon the face of the

3 And Godlaid, * Letthere be light: and there was light.
4 And God law the light, that it was

good: and God divided the light from the darkenesse.

5 And God called the light, Day, and the darknelle he called Night: † and the evening and the morning were the

oc. And God faid, ***Het there be a firmament in the most of the waters:

sier. 10.12 and let it diade the waters from the

7 And God made the firmament; and divided the waters, which were but der the firmament, from the waters, which were about the firmament; and it

8 And God called the *firmament, 'ler. 51.15. Deauen: and the eneming and the moz-

ning were the second day.

9 (And Godsad, *Let the waters 'Pal.33.7.
bmder the heaven be gathered together and 136.3. buto one place, and let the dry land appeare: and it was so.

10 And God called the drie land. Earth, and the gathering together of the waters called hee, Seas: and God

law that it was good.
II And Godfaid, Let the Earth bring foorth graffe, the herbe yeelding feed, Hebsende and the four tree, verloing fruit after his kinde, whose seen is in it selfe, byon the earth; and it was so.

12 And the earth brought footh graffe, and herbe yeelding feed after his kinde, and the tree yeelding fruit, whose feed was in it felfe, after his kinde : and God faw that it was good.

werethe third day.

14 C And God faid, Let therebee Deu.4.19 Philippes in the firmament of the heaven, Philippes in the firmament of the heaven, to divide the day from the night: and the them be for figures and for featons, and for dayes and vertes.

15 And let them be for lights in the firmament of the heaven, to give light

16 And God maderwo greatlights: the greater light to rule the day, and Helr for the leffer light to rule the night; he made the rule of the day, ore, the starres also.

17 And God let them in the firma ment of the heaven, to give light bpon the earth:

13 And the evening and the morning

bpon the earth: and it was fo.

18 And to * rule over the day, and "lengt 35

King James Bible 1611

Genesis 1:6-8

was, and the morning was 5 icr.10.12 and 51.15.

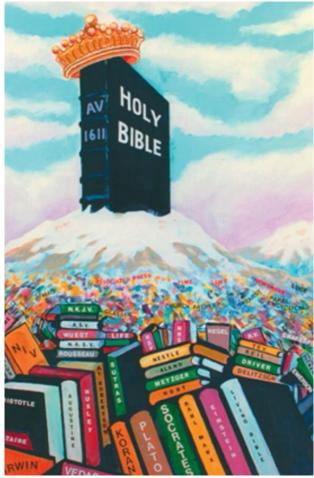
firmament in the mudit of the waters: and let it divide the waters from the

And God made the fi when the motore minch were h

Hebr. Expansion

...I have some strong doubts now about the Heliocentric system. ...I am not yet fully settled in my mind about all of this; but, as I said before, "I smell a rat" somewhere, and there is one place it will never be found: in a King James Bible.





Peter Ruckman

Ruthenian Bible (Библия Франциска Скорины) 1519

Church Slavonic – Based on LXX Uses твердь (*tverd*), "firmness"



Ps. 148 Prov. 8 Ps. 103 (104) ИКО ДОБРО · ИРАЗЛУЧИ БОГЪ МЕЖИ СВЕТОМ ИМЕЖИ ТМОЮ инарече светъ день итму нофъ . Н высть вечер в йой Heere ROLP TYRATEL LESS BESTP тро день единъ • посреди водъ ида разделить воды шводъ исотвори вогъ твердь иразделилъ воды еже беша подъ тве штехь еже быт надъ твердию ибыть тако • Ниаре EOLP LEET HERO 1 HEPICLP GEARL HOLD TEHP GLOSPIH .

Ostrog Bible (1581)

Bulgarian Synodal: И рече Бог: да има твърд посред водата...

Bulgarian Revised: И Бог каза: Да бъде свод сред водите...

Russian Synodal: И сказал Бог: да будет твердь посреди воды...

New Russian Translation: И сказал Бог: «Да будет свод между водами...

New Serbian Translation: Затим рече Бог: "Нека се простре свод посред вода...

Turkoniak UKR: I сказав Бог: Нехай буде небозвід посеред води...

Kulish UKR: I рече Бог: Нехай проміж водами постане твердь...

Ohienko UKR: I сказав Бог: Нехай станеться твердь...

Filaret URK: I сказав Бог: нехай буде твердь посеред води...

Macedonian S. 06: Потоа Бог рече: "Нека има **свод** среде водата...

Macedonian Gavril's Bible: Потоа рече Бог: »Нека има **свод** среде водата...

Modern Croatian: Tada je Bog rekao: »Neka bude svod, da razdvaja vode...

Croatian Bible 1831: I reče Bog: "Neka bude svod posred voda...

Syomukha Belorussian: I сказаў Бог: хай будзе цьвердзь пасярод вады...

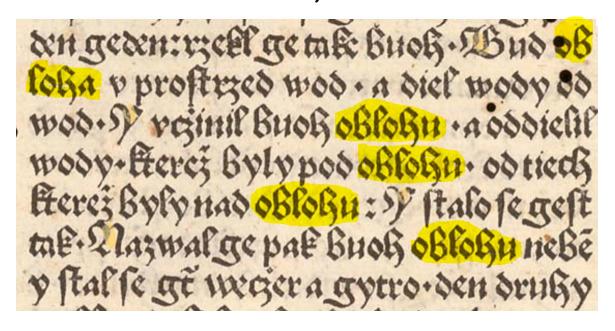
Bosnian Bible: I reče Bog: "Neka sred voda svod bude...

Slavic Translations using:

твердь (*tverd*), "firmness" свод (*svod*), "architectural vault"

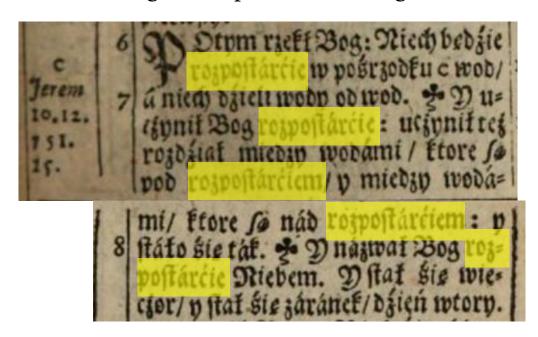
Prague Bible 1488

From Latin, but adjusts *firmamentum*! *Obloha* = "sky"



Polish Gdańsk Bible 1660

Rozpostarcie = Modern "rozszerzenie, rozciągnięcie" English "expanse, stretching"



1940 Bulgarian Bible: И Бог каза: Да бъде простор [expanse] посред водите...

2009 Czech Bible: Bůh řekl: "Ať je uprostřed vod obloha [sky]...

Serbian SEBDT: Boh povedal: "Nech je obloha [sky] uprostred vôd...

Slovenian CHR: In reče Bog: Bodi raztežje [stretching] med vodami...

Romanian RMNN: Dumnezeu a zis: "Să fie o întindere [stretching] între ape...

Anglo-Saxon Hexateuch (~1225–1250)



Cotton MS Claudius B IV

Anglo-Saxon "*fæstnys*" Modern English = "fastness" "firmness"

- 6. God cwæð ða ef (t) 3: Gewurðe nu fæstnys tomiddes ðam wæterum i totwæme ða wæteru fram ðam wæterum.
- 7. 7 God geworhte da fæstnysse, 7 totwæmde da wæteru, da wæren under dære fæstnysse, fram dam de wæren bufan dære fæstnysse: hit wæs da swa gedon.
- 8. 7 God het da fæstnysse heofonan, 7 wæs da geworden æfen mergen oder dæg. [Picture.]

1922 Reprint by Oxford University Press S. J. Crawford, ed.



Wenceslas Bible 1390s

Early German translation from Latin Uses "firmament"

First one is "*veitenunge*" which means "expansion" Modern "Ausdehnung"



Mentelin Bible 1466

"Vestenkeit" = "Firmness" Modern "Festigkeit"

morgen ein tag. Vno got der sprach. Vestenkeit wew gemacht in mitz der wasser: und teilt die was ser vo den wassern. Vno got macht die vestenkeit und teilte die wasser die do waren under der vestenkeit und teilte die wasser die do waren under der vestenkeit von den die do waren ob der vestenkeit. und es ward getan also Vno got der rief die vestenkeit de himel: und es ward gemacht abent und der morge der ander tage. Wann gott der sprach. Die wasser

Eck-Bible 1537

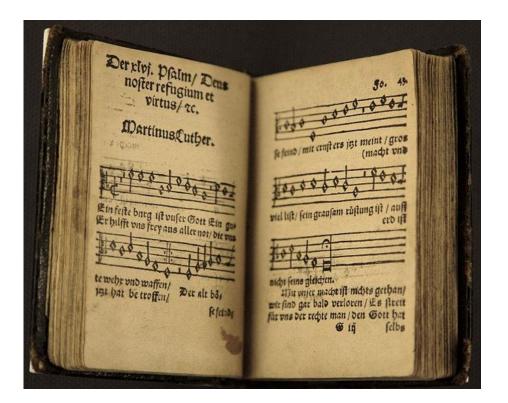
"Firmament"



Luther Bible (1522)

"Feste" = "fastness" ~ "firmness"

Ond Gott sprach/Lewerde eine feste zwisschen den wassern/vnd die sey ein vnterscheid zwisschen den wassern/Da macht Gott die Feste/vnd scheidet das wasser hunden/von dem wasser droben an der Festen/Ond es geschach also/Ond Gott nennet die Festen/Dimel/Da ward aus abend vnd morgen der ander tag.



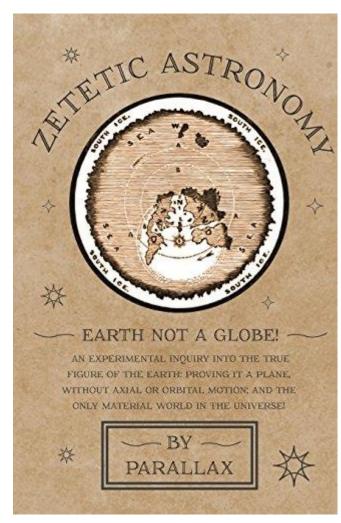
"Ein feste Burg ist unser Gott" (c. 1529)

THE CRITERION OF INCREDIBILITY.

The clearest criterion of legend is that it frequently reports things which are quite incredible. This poetry has another sort of probability from that which obtains in prosaic life, and ancient Israel considered many things to be possible which to us seem impossible. Thus many things are reported in Genesis which go directly against our better knowledge: we know that there are too many species of animals for all to have been assembled in any ark; that Ararat is not the highest mountain on earth; that the "firmament of heaven," of which Genesis i. 6 ff. speaks, is not a reality, but an optical illusion...



Herman Gunkel 1862–1932



Samuel Rowbotham "Parallax" 1816–1884

- Universal Zetetic Society established shortly after Rowbotham's death
- Renamed to Flat Earth Society in 1971
- Became popular through social media c. 2010s

*

רָקיע means *expanse*!!!



Like this!



Not like this!

Overview

- Why it matters
- רָקִיעַ defined
- Στερέωμα in LXX
- The Aftermath

Questions?