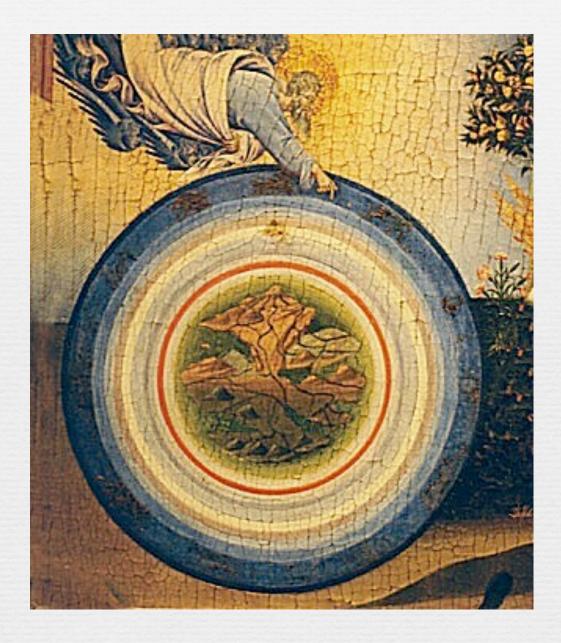
The Cosmos as Cathedral

Worldviews and the Language of Faith

Holy Trinity Adult Forum February 4, 2007



The Medieval Model



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- --IMPORTANCE
- --Medieval model governed thought for over 1,000 years; late Antiquity to the end of the 17th century
- --Profound influence on language & forms of Christian faith
- --Undone in part by advances in the Renaissance
- --1572 was a watershed year

Models, old and new

The answers we get depend on the questions we ask . . .

but

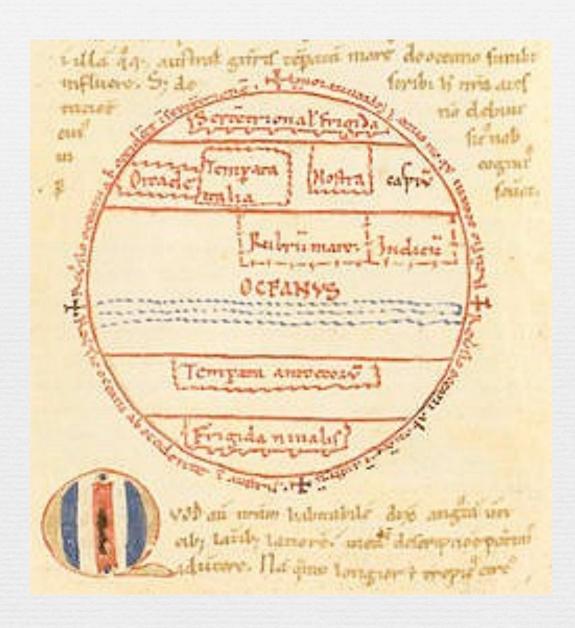
... the questions we ask depend on the universe we envision.





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Myth 1: the Earth is flat



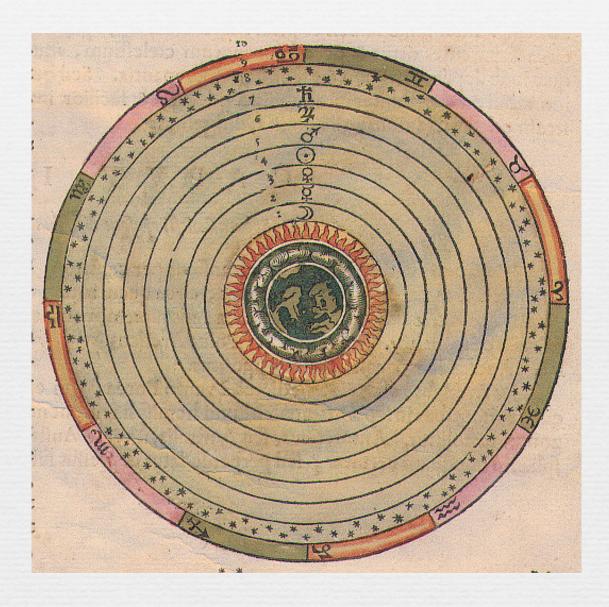
- --12th century illustration from Macrobius's Commentary on the Dream of Scipio by Cicero
- --temperate regions in both hemispheres, but inaccessible because of heat and ocean
- --In Inventing the Flat Earth: Columbus and Modern Historians, Jeffrey Russell (professor of history at University of California, Santa Barbara) claims that the Flat Earth theory is a fable used to impugn pre-modern civilization, especially that of the Middle Ages in Europe. Today essentially all professional medievalists agree with Russell that the "medieval flat Earth" is a nineteenth-century fabrication, and that the few verifiable "flat Earthers" were the exception.
- --www.answers.com/topic/flat-earth

Myth 1: the Earth is flat



- --c. 1400: Dante & Vergil escape Lucifer by climbing UP his leg
- --gravity is reversed
- --Lewis: first 'science fiction effect' in literature
- --Dante's Inferno, 14th century (British Library, add. ms. 19587, f.58a).
- --medievalwriting.50megs.com/.../dante/flimage.htm

Myth 2: the Earth is the center



⁻⁻spherical earth lies in the middle

⁻⁻above is a ring of fire

⁻⁻concentric circles like Russian dolls

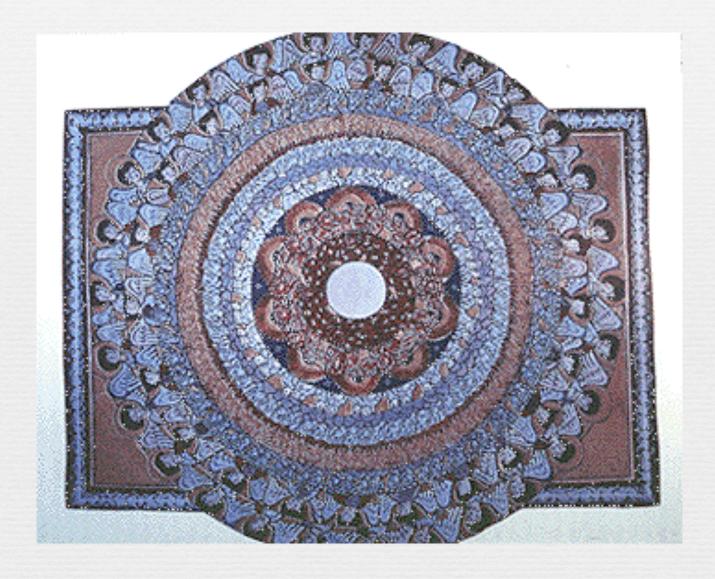
⁻⁻www.astro.umontreal.ca/~paulchar/sp/images/

'Everything not forbidden is compulsory'



- --Centaurus A (thought to contain a black hole)
- --composite optical, X-ray and radio image from Hubble & others
- --predicted by theory before any observational evidence
- --answer to G is (a) particle physics and (b) T.H. White
- --chandra.harvard.edu/photo/2002/0157/

Plenitude and the Triad: angels



⁻⁻pseudo-Dionysius' 9 orders of angels

^{-- &#}x27;Seraphs, Cherubims & Thrones/...Dominions, Princedoms, Powers,/Virtues, Archangels, Angels' choirs'

⁻⁻N is The Hymnal, 1982, #618 (John A.L. Riley)

⁻⁻HILDEGARDE VON BINGEN. Nine Ranks of Angels

⁻⁻www.dartmouth.edu/.../unit10/unit10.html

Origins of the Medieval Model



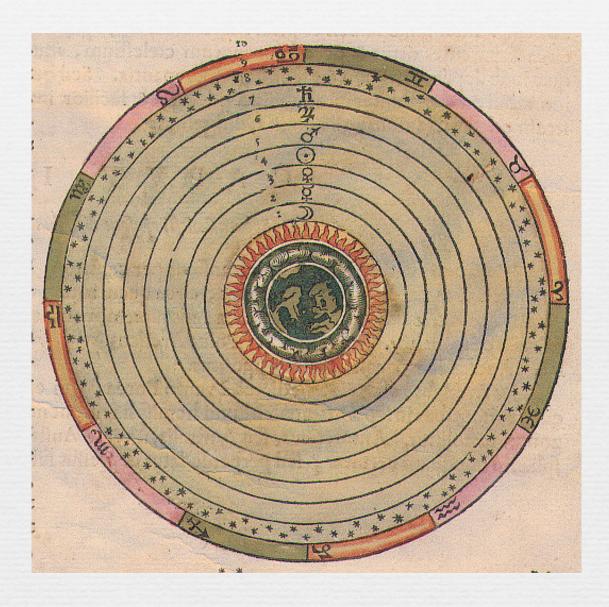
- --SOURCES: BOOKS, BOOKS, BOOKS!
- -- Greek philosophers in Latin: some Plato (not the ones we know); Aristotle & his circle (not till 12th cent. did others become widespread, due to Arabic translations); Stoic philosophers (contemptus mundi)
- --Late Latin Neo-Platonists and others: Macrobius' commentary on Cicero, Pseudo-Dionysius, Boethius (esp. Consolation of Philosophy)
- --Book of Kells, c. 800 A.D., Trinity College, Dublin
- --www.ub.ntnu.no/.../til opplysning/to nr9.html

Why things move



- --Gary Larson cartoon
- --Medieval 'kindly enclynyng' for our 'kindly stede' (Chaucer, House of Fame)
- --Newtonian 'laws'
- --Relativistic 'world lines'
- --Quantum mechanical 'probabilities'
- --what are the emotional consequences: strivings and desires; municipal traffic courts; drifting; chance?

The heavens



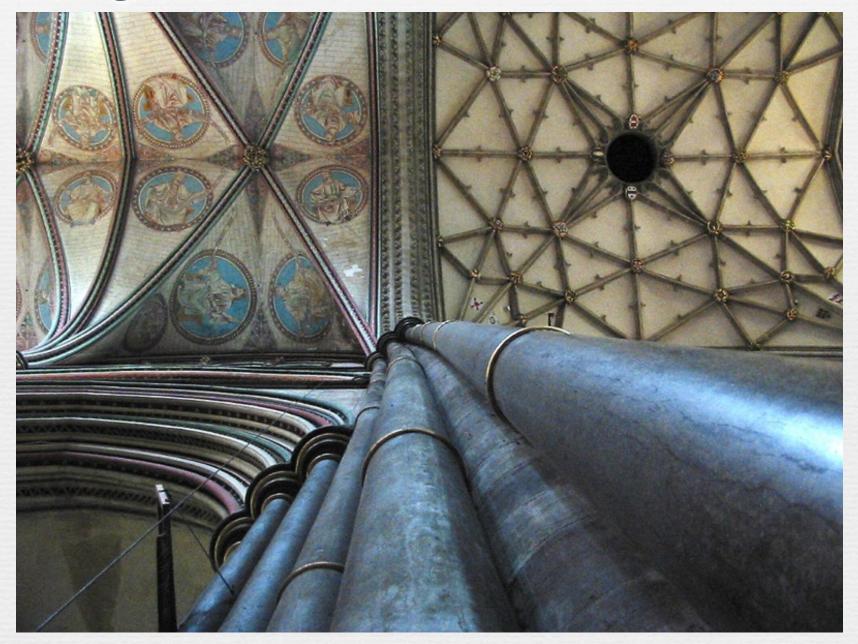
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^{-- &#}x27;seven stars' above: Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn

⁻⁻fixed stars (the Empyrean)

⁻⁻www.astro.umontreal.ca/~paulchar/sp/images/

The height of the cosmos



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- --Salisbury Cathedral, 2002
- --pressure of the 14th c. spire bows structure out; William Golding's 'The Spire'
- --sense of verticality
- --inadequacy of pictures to convey the vertigo
- --difference between looking 'out' and looking 'up' at the heavens
- --note curve

'Nature' and 'Sky'



- --Dante & Beatrice leave the Earth for the Moon
- --Aristotle 'physis' vs. 'ouranos'
- --birth, growth, decay, death vs. eternal unchanging realm
- --no change or imperfection in the heavens
- --D sublunary is John Donne
- --Giovannio DI PAOLO (c. 1445): Dante leaving the Earth
- --www.dartmouth.edu/.../unit10/unit10.html

Approaching God: the Primum Mobile



- --Dante & Beatrice approach the Prime Mover
- --Aristotleian idea: unmoved mover, first cause
- --F Eternal Ruler is Hymnal #617 (John Chadwick)
- --Giovannio DI PAOLO (c. 1445): Primum Mobile
- --www.dartmouth.edu/.../unit10/unit10.html

Approaching God: the Empyrean



- --Dante & Beatrice view the Celestial Rose
- --Giovannio DI PAOLO (c. 1445): Cosmic Rose
- --reversal of order of sensation: God in center, not circuference; we are outside
- --'shown by di Paolo as an actual rose, with nine angels and the Trinity"
- --Lewis: 'revelry of insatiable love'
- --www.dartmouth.edu/.../unit10/unit10.html

A finite and bounded cosmos

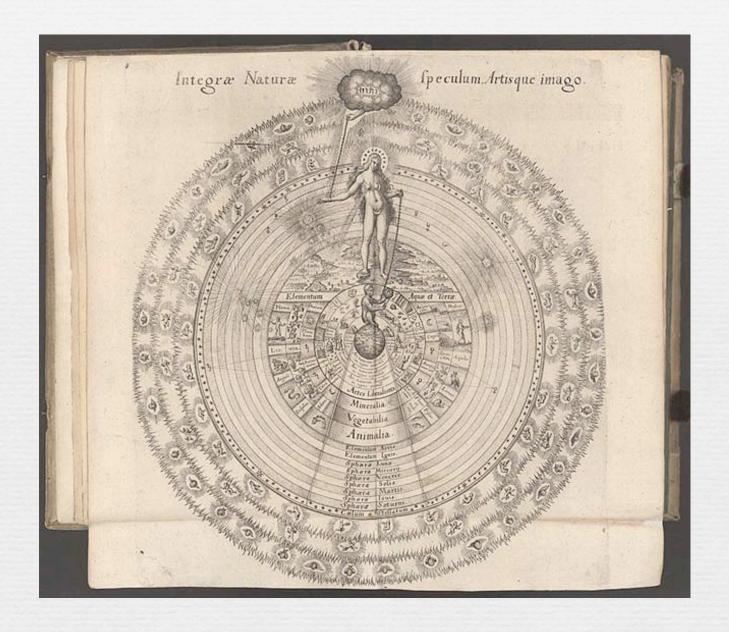


⁻⁻another view of the medieval system

⁻⁻modern cosmologies may be finite or infinite; almost all are unbounded

⁻⁻www.brogilbert.org/.../dante_canto27.HTM

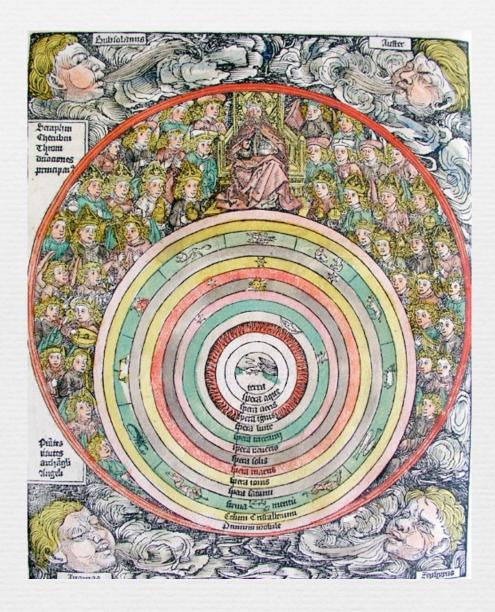
A hierarchical cosmos



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- --the 'Great Chain of Being'
- --Robert Fludd. Urtriusque cosmi maioris scilicet et minoris metaphysica, physica atque technica historia, in duo volumnia secundum cosmi differntiam diuisa. Vol. 1 Enlarged version. Frankfurt: J. T. Bry, 1624
- --Ulysses' speech on order
- --etymologies of Lord & Lady
- --www.loc.gov/exhibits/world/earth.html

A top-down cosmos

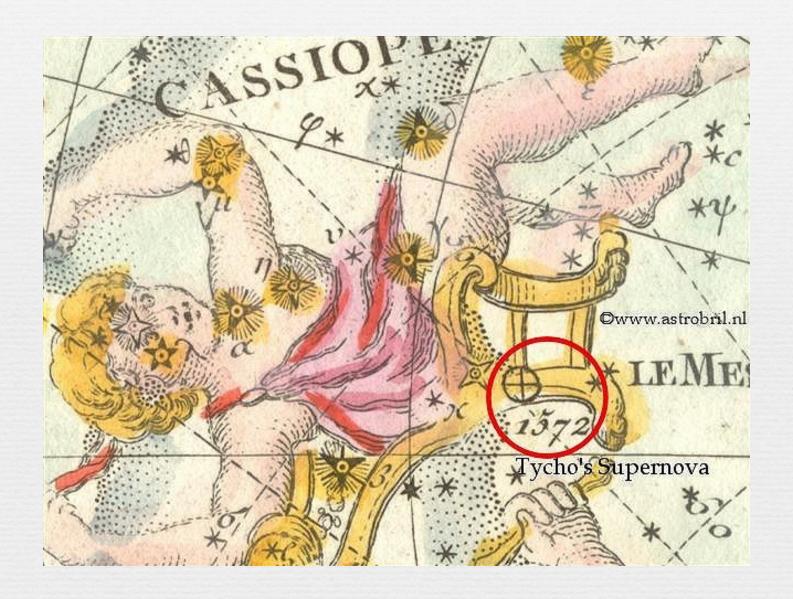


⁻⁻Nuremberg Chronicle, 1493

⁻⁻Lewis: 'ladder'

⁻⁻www.columbia.edu/.../nuremchron1493.html

Tycho's nova of 1572



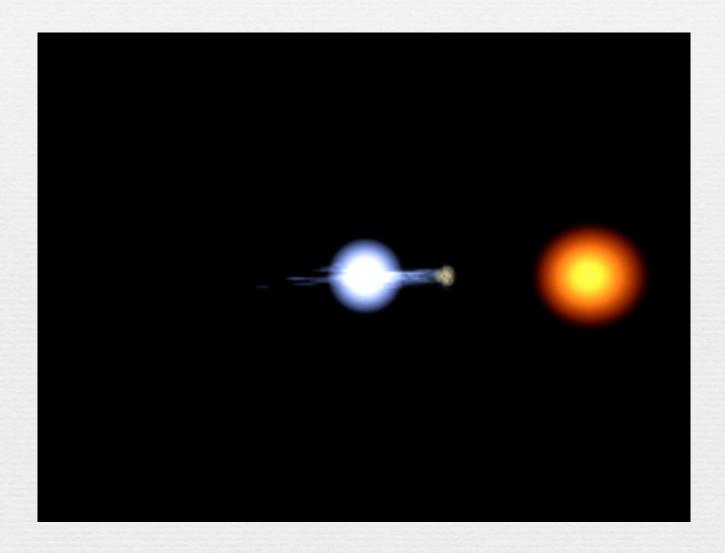
⁻⁻Atlas of Fortin, 1795

⁻⁻Momentous event

⁻⁻C 'Philosophy' is Donne; K 'silence' is Pascal

⁻⁻www.astrobril.nl/FortinOther.html

Goodricke and Algol



- --John Goodricke, 1764-1786: deaf-mute astronomer who unravelled secret of Algol ('the Ghoul' in Arabic)
- --E 'Entities' is Occam
- -- J 'hypothesis' is Laplace; B 'disheveled' is Yeats
- --B 'disheveled' is Yeats
- --www.surveyor.in-berlin.de/.../Doppler-e.html

Models

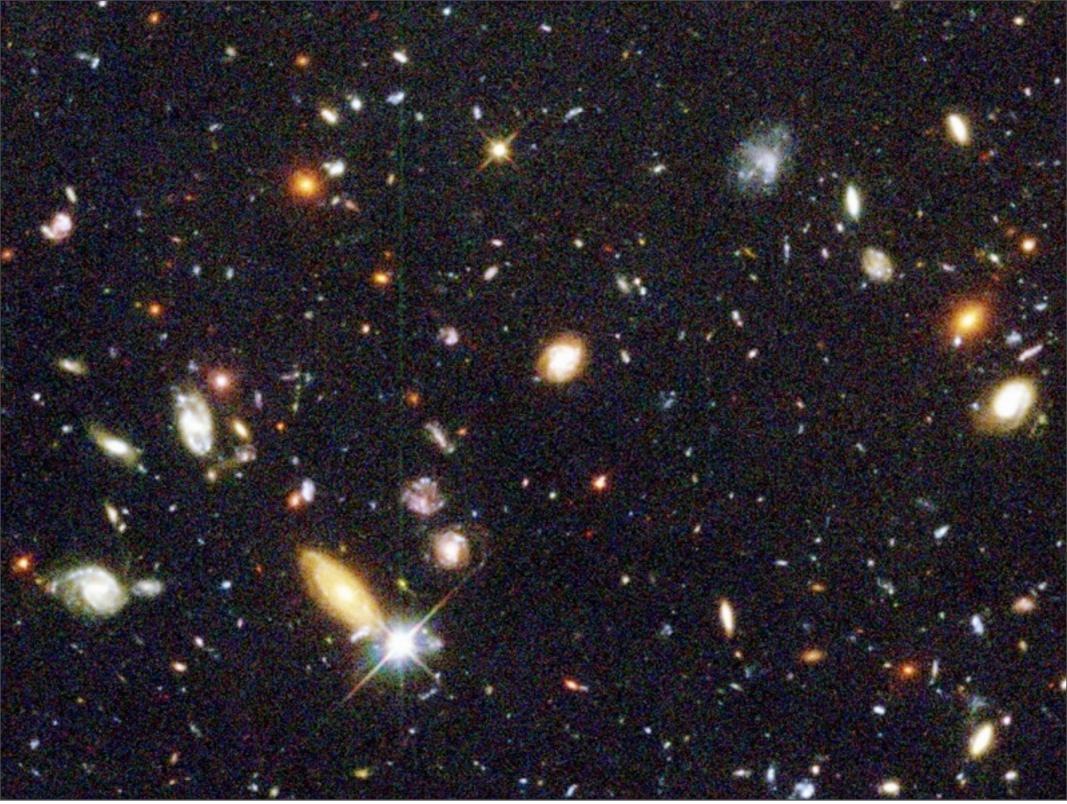
God as the Architect of the Universe . . .





...or the Universe as our Architect?

- --H 'dice' is Einstein
- --M 'queerer' is Haldane (following Sir Arthur Eddington)
- --God as the Architect of the Universe. French, mid-13th C. From the Bible moralisée, Codex Vindobonensis 2554, in the Österreichische Nationalbibliothek, Vienna.
- --www.lhup.edu/~dsimanek/philosop/design.htm
- --Hubble Deep Field image
- --http://www.firstpr.com.au/astrophysics/hubble-deep-field/Hubble-Deep-Field-1024-wide.bmp



--Hubble Deep Field image

⁻⁻http://www.firstpr.com.au/astrophysics/hubble-deep-field/Hubble-Deep-Field-1024-wide.bmp