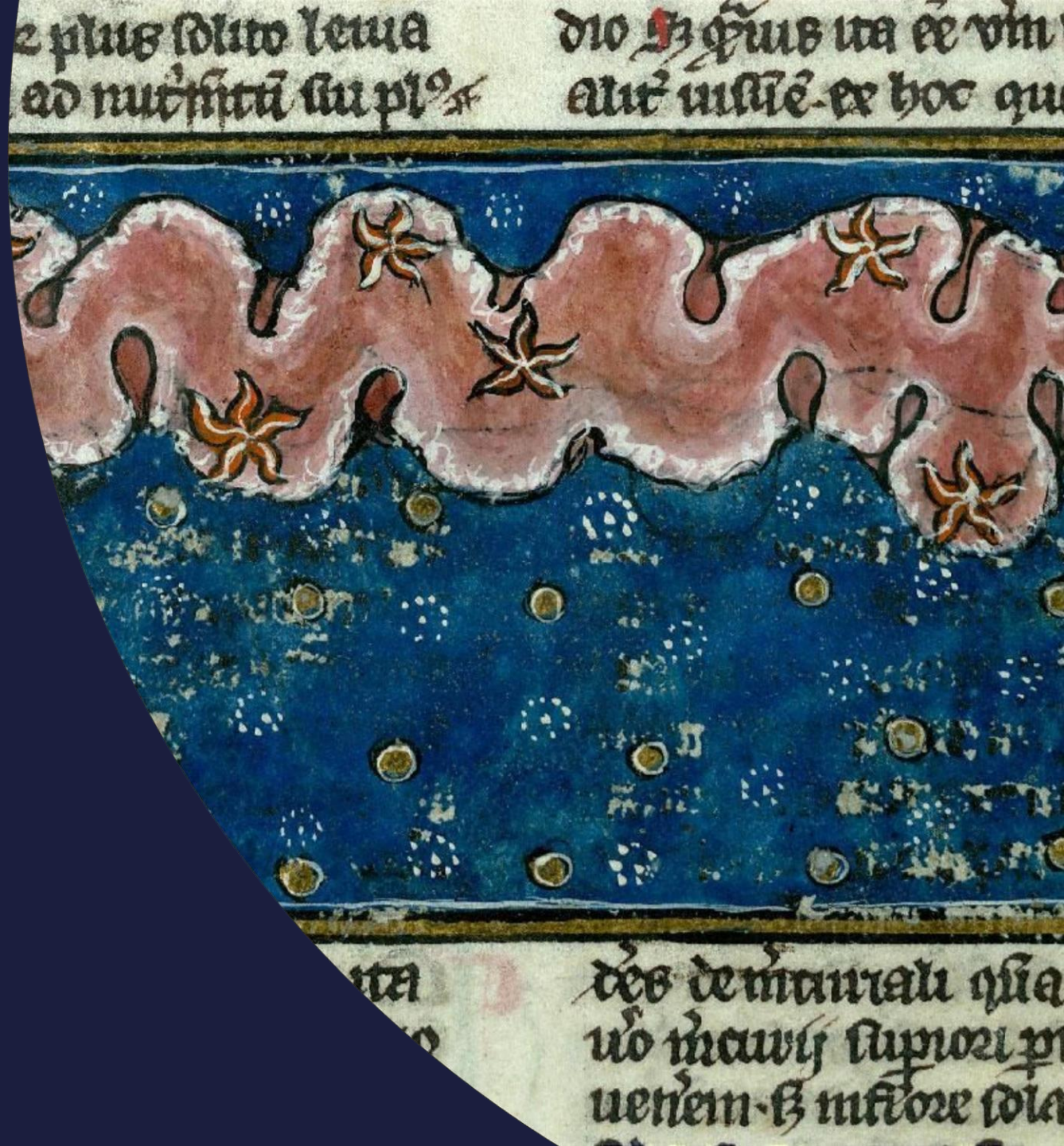
Dark Skies and Light Pollution: An Art-Historical Approach

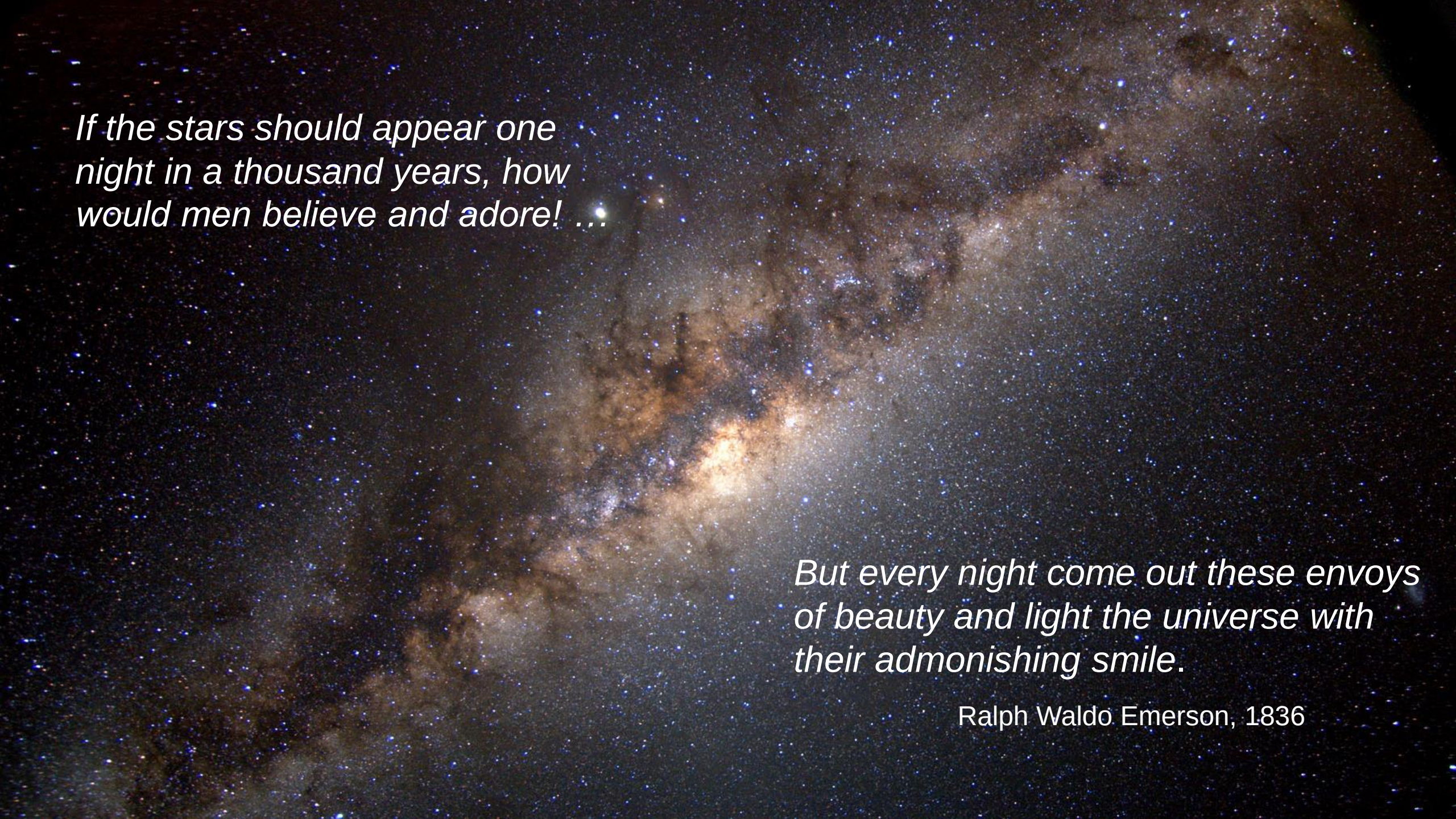
Dr Valerie Shrimplin

vshrimplin@gmail.com

www.valerieshrimplin.com

www.INSAP.org




If the stars should appear one night in a thousand years, how would men believe and adore! …
But every night come out these envoys of beauty and light the universe with their admonishing smile.
Ralph Waldo Emerson, 1836

Visual images of the sky/‘heavens’ - as essential backstory to the *protection* of the Dark Sky

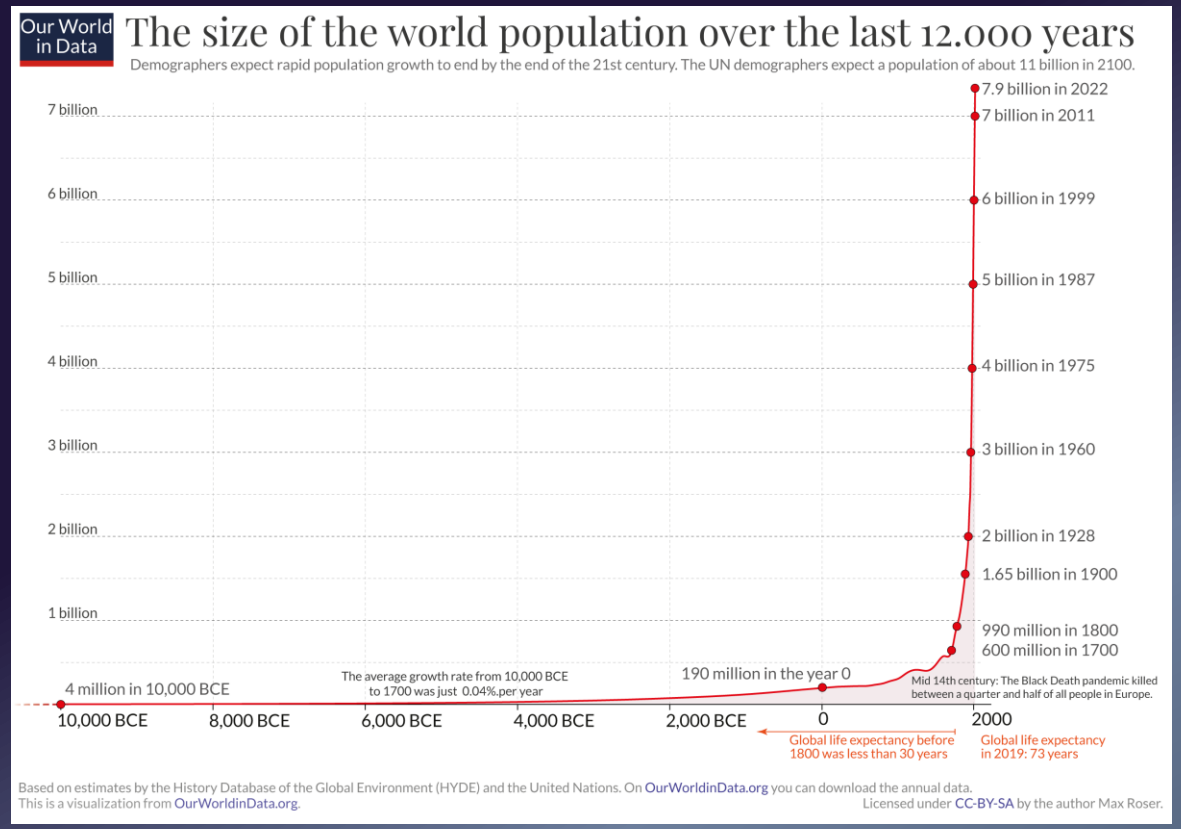
- Contemplation of stars, planets and ‘the heavens’ as familiar inspiration of religions, philosophies, myths and legends
- Ancient Greeks, medieval Europe, industrial age and our own times (Milky Way as ‘case study’)
- Grasping the complexities of the universe leading to scientific theories
- Yet - science is removing astronomical phenomena from common sight

Focus on our Galaxy – the ‘Milky Way’

‘The Milky Way is no longer visible to one third of humanity - including 60 percent of Europeans and 80 percent of Americans’

During a 1994 blackout, L.A. residents called 911 emergency number when they saw the Milky Way for the first time

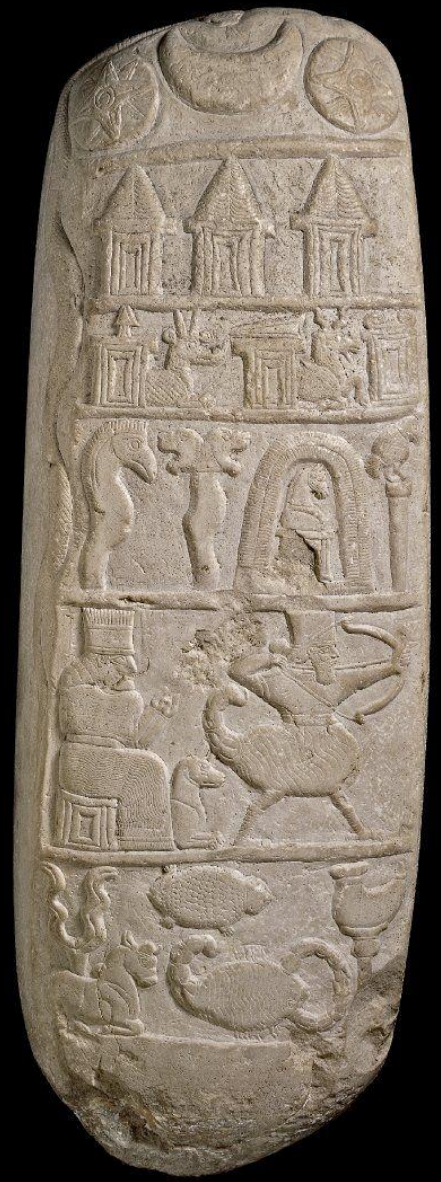
World population and light pollution



Monaco - less than one square mile, pop 37,500

Familiarity with night sky: Babylonia, Egypt

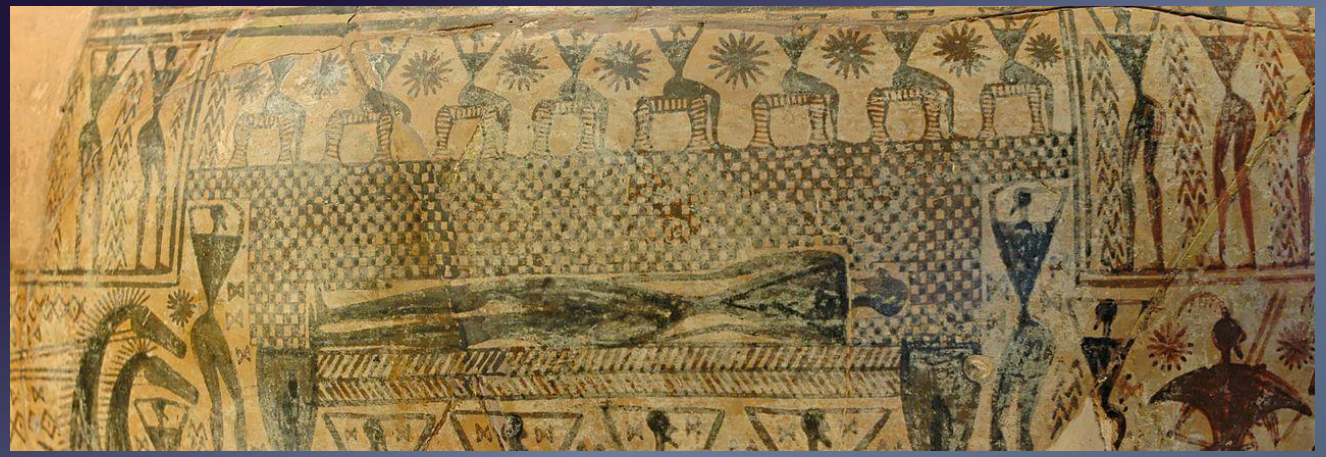
Sky goddess Nut (as ‘Milky Way’)



Boundary stone
Babylonian c 1125-1104 BC

Greece ....

None of the accounts concerning the Universe would ever have been given if men had not seen the stars or the sun or the heaven.
… the vision of day and night, months and years has created the art of number … the notion of Time … and means of research into the nature of the Universe. Plato, *Timaeus, 47 A-B*



Detail of Vase, late Geometric, c. 750 BC

Asteria - Goddess of falling stars and night
5th century BC

... and Rome

Ancient settlements, Greece, Rome: rush lights, torches, oil lamps

Population Education - https://vimeo.com/130468614

'… that circle that shines forth among the stars which the Greeks call the Milky Way' (Cicero)

Hadrian Silver Denarius (Pleiades) 115-28, BNK,R.404 (BM)

Early medieval

Norse

Body-parts of the slaughtered Ymir '…thrown into the sky to make the sun and moon and stars and planets'

Poetic Edda, 13th century (from earlier tradition)

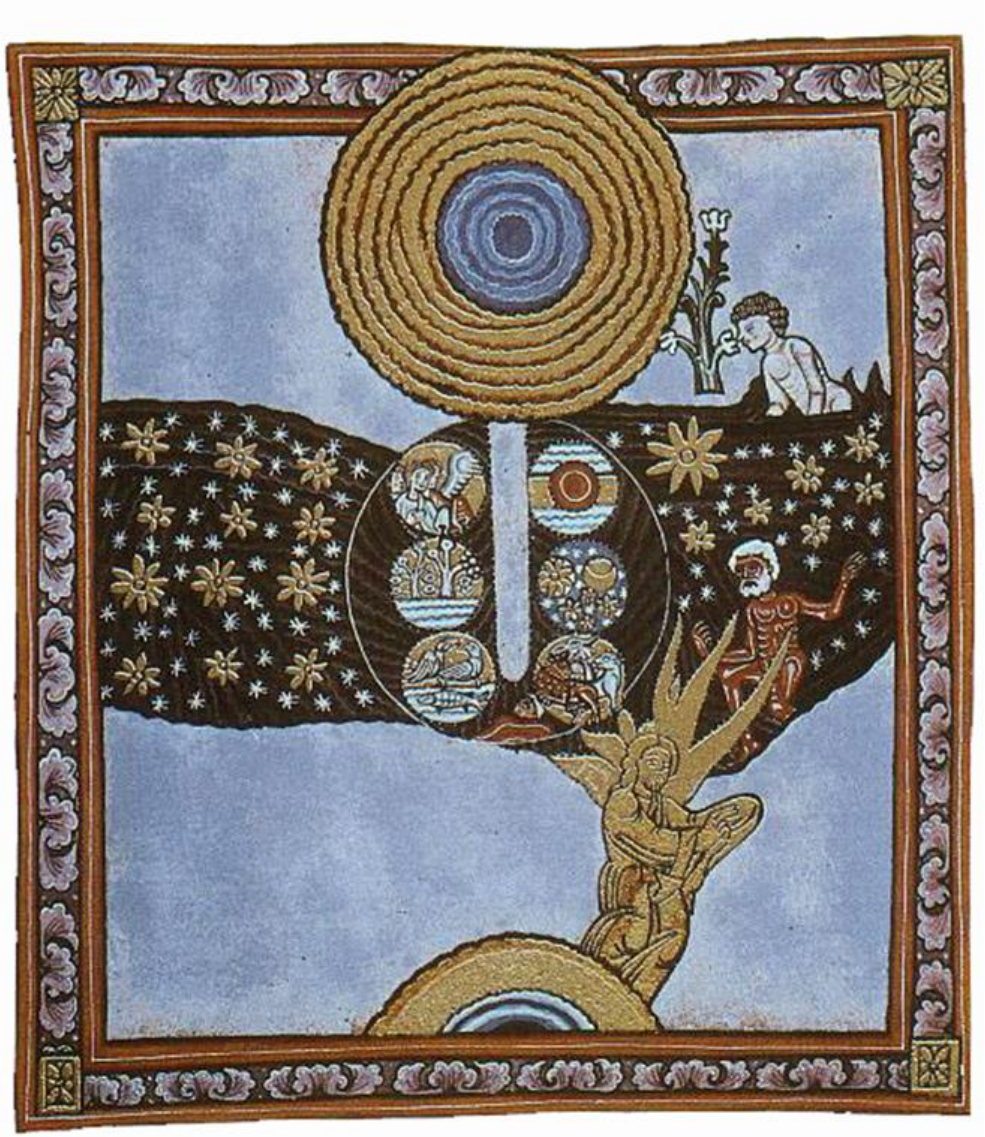
Judaeo-Christian - *And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also* (Genesis I:16)

The Mausoleum of Galla Placidia, Ravenna - 425

S Apollinare in Classe Ravenna, 7th century

Judaeo-Christian art and architecture (from 12th century)

Monreale, Sicily *God Creating the Universe,* 1180s



Hildegarde of Bingen, *Six days of Creation Scivias* 12th century

Population Education - https://vimeo.com/130468614

St Mark's Venice
Ascension Dome

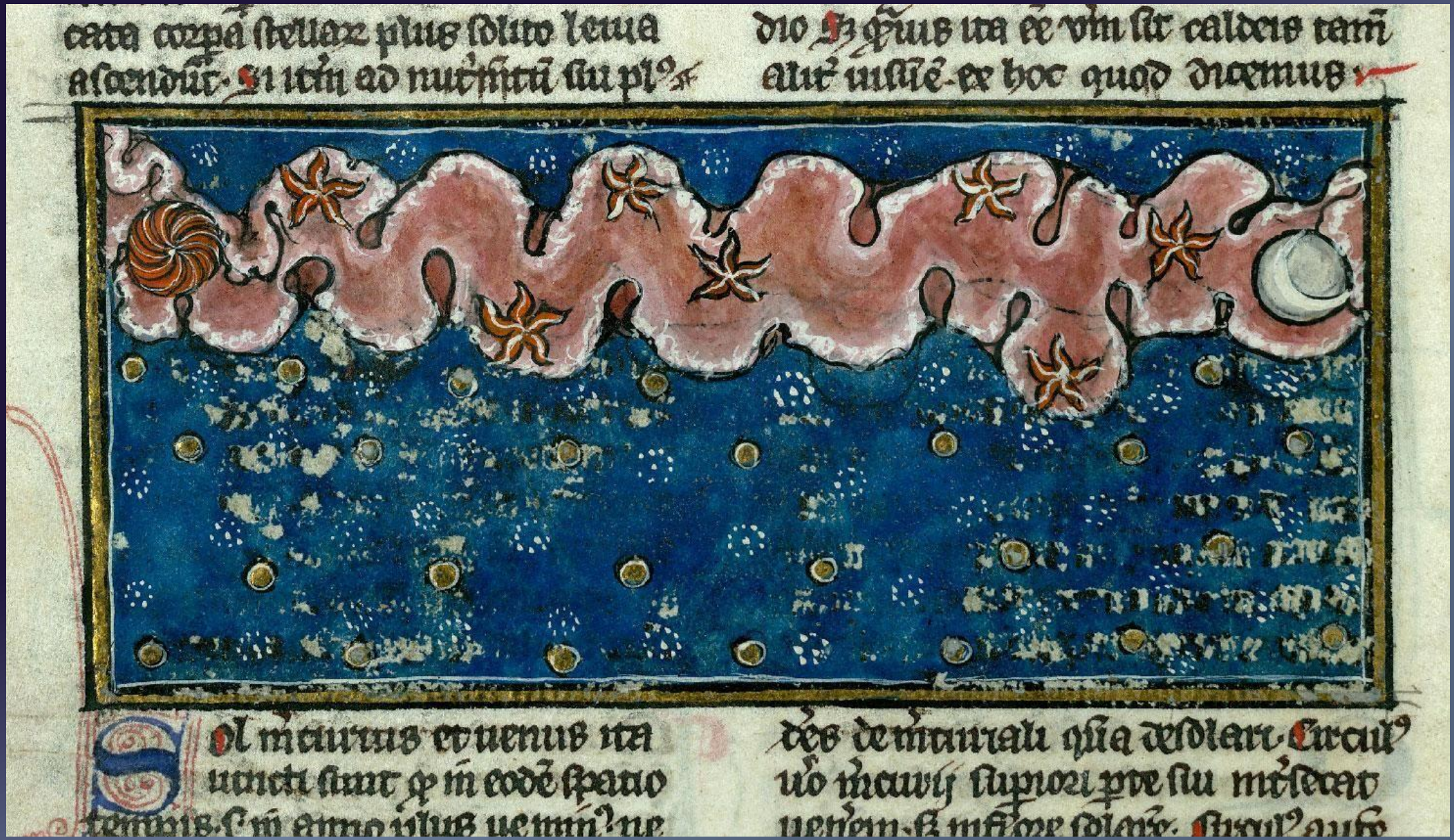
12th century

'Arc en ciel' – or Milky Way?

Via Lactea, Cod. Pal. germ. 832 (1491) Heidelberg

Milky Way as Circle of Stars (12th century) Biblioteca Nacional de Espana, Madrid (A 16, fol 68v)

Thomas Cantipratensis, *De Rerum Natura* (c 1290) Valenciennes, Bibl. mun., ms. 0320, f. 194v



Matfré Ermengau of Béziers,
Breviari d'Amour
Spain (Catalonia)
last quarter of 14th century
(British Library)

Macrobius, Commentary on Cicero's *Dream of Scipio* (meeting his ancestors in the 'Milky Circle')

Bologna c.1383
Lat. 256, fol. Iv, Oxford, Bodleian Library

Giotto, Arena Chapel, Padua, 1305

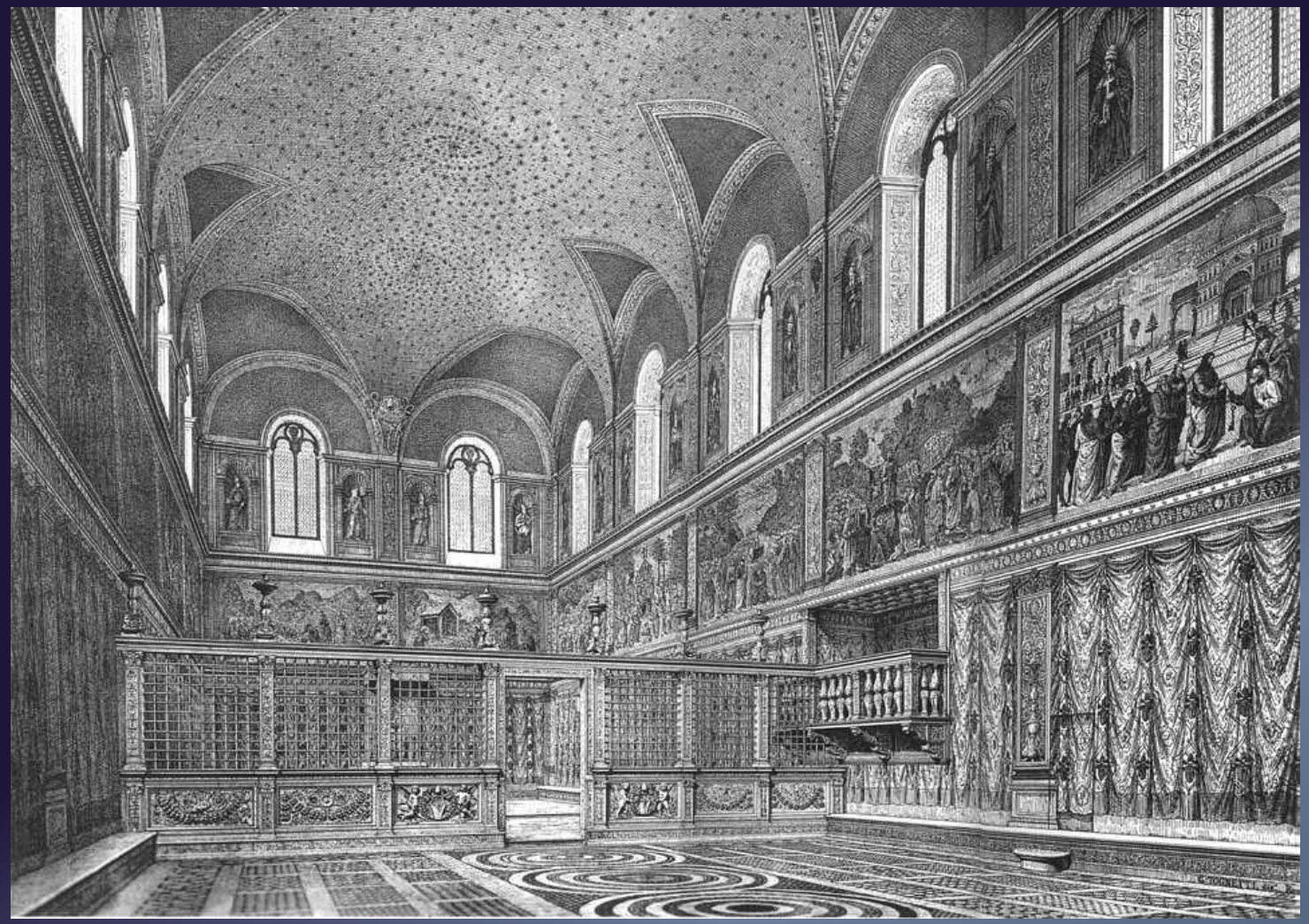
Chaucer (c1340-1400)

The Milky Way
‘Lo,’ quoth he, ‘cast up thine eye
See yonder, lo! the galaxie
The which men clepe the Milky Way
For it is white …’

Padua 14th century

Geneva, 1589

Sistine Chapel Ceiling with starry sky, c 1479-80 (‘pre-Michelangelo’)

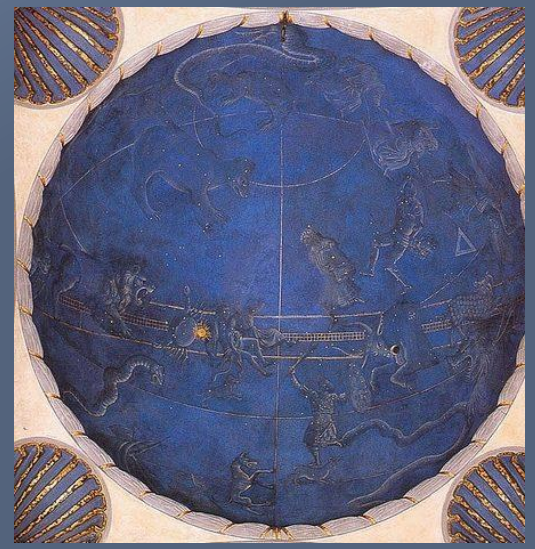


Originally painted brilliant blue with gold stars

Dante, *Divine Comedy Paradiso*: I saw the lovely things the heavens hold and we came out to see once more the stars

Shakespeare, *Romeo and Juliet:* Take him and cut him out in little stars/And he will make the face of heaven so fine/That all the world will be in love with night

Shakespeare, *Julius Caesar:*
The fault, dear Brutus,
is not in our stars,
but in ourselves …

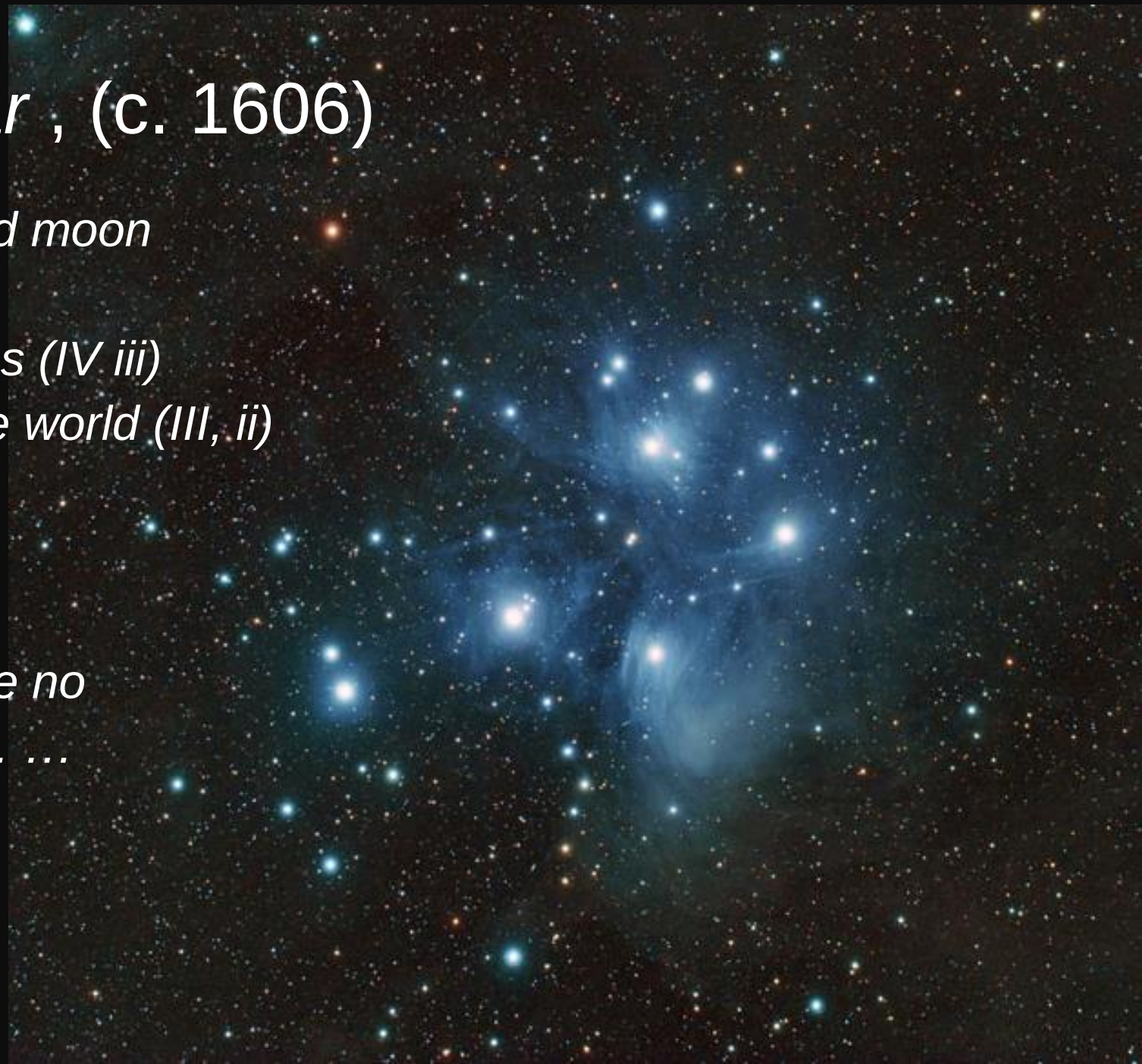


Old Sacristy San Lorenzo

Shakespeare, *King Lear* , (c. 1606)

- *These late eclipses in the sun and moon portend no good … (I, ii)*
- *It is the stars above that govern us (IV iii)*
- *Smite flat the thick rotundity o' the world (III, ii)*

A Riddle:
The reason why the seven stars are no more than seven is a pretty reason. …
Because they are not eight? …
Yes, indeed. (I,v)



Tintoretto, *Birth of the Milky Way* 1575-80 (NG)

Peter Paul Rubens, *the Birth of the Milky Way* c 1637 Prado

Population growth and lighting

1417 - London first organised lighting of streets (Mayoral decree)

1802 - more efficient coal-fueled lighting (William Murdoch)

1807 - London’s first gaslit road

1816 - Baltimore gaslit streetlights

1820 - Paris (1st electric lights, 1878)

1879 - Thomas Edison, incandescent lamps, led to light bulbs for street lighting

Wordsworth (1770-1850), *I Wandered Lonely as a Cloud…[Daffodils] continuous as the stars that shine/And twinkle on the milky way* … (1804, Lake District)

Byron (1788-1824), *She walks in beauty, like the night, Of cloudless climes and starry skies* (London, June 1814)

Van Gogh, *Starry Night Over the Rhône,* 1888
Arles

Van Gogh, *Starry Night* 1889,
Saint-Rémy-de-Provence

Edward Hughes
(1851-1917)

Night with her Train of Stars
1912

2 BILLION
1949 C.E.
WORLD WARS
04:36

5 BILLION
1992 C.E.
GREEN REVOLUTION

Norah Napaljarri Nelson, *Milky Way Dreaming*
c 2004 (Legends of the Warlpiri)

Norah Napaljarri Nelson, *Milky Way Dreaming*
c 2004 (Legends of the Warlpiri)

7 BILLION
2019 C.E.
INFORMATION AGE

7 BILLION
2019 C.E.
INFORMATION AGE

A FRIENDLY
Fishing
VILLAGE
WE ARE ALL
IN THIS TOGETHER
PLEASE UNDERSTAND
PLEASE THINK EQUAL

Thank you!
Any questions?