



Sumpatheia and Chaosmos

*MACAA
Foundations Module*

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The aim of this lecture

- To introduce the classical notions of sympathy
- To consider the notion of cosmology verse chaosmos – a term created by James Joyce
- To explore the notion of fractals as a two dimensional expression of sympathy/chaos.
- To consider organic life as an expression of chaosmos via ritual, habits and repetition.

Sumpatheia

Classical cosmology contained the notion of *sumpatheia*, a sympathetic cosmos. This is defined by **Sophie Botros** when discussing Stoic cosmology as one where nature, life, God/gods or divine, and the organic and inorganic world all combined in one sympathetic connected relationship.

Susanne Bobzien defines this concept as the idea that ‘in some sense everything in the universe emits some physical influence on everything else.’¹

Sophie Botros, in B. Inwood, *Oxford Studies in Ancient Philosophy* (Oxford: Oxford University Press, USA, 2008), p.277.

1. Susanne Bobzien, *Determinism and Freedom in Stoic Philosophy* (Oxford: Clarendon Press, [1998] 2005), p.169.

Harmonia

Pythagoras of Samos (c. 570-495 BCE)

- Is acknowledged to be an early source of the notion of a sympathetic universe. [The teachings of Pythagoras and those of Orpheus have a great deal of overlap.]

Harmonia – different uses

- Homer, (recorded in the 8th century BCE) used the term *harmonia* to talk of any form of joining or fitting together.
- Heraclitus (535-475 BCE) used to talk of the similarity but difference between a lyre and a bow.²
- Pythagoras used the term to define a unity within the cosmos – very similar to the Middle Kingdom Egyptian notions of *Ma'at*.



2.Snyder, Jane McIntosh. "The Harmonia of Bow and Lyre in Heraclitus Fr. 51 (Dk)." *Phronesis* 29, no. 1 (1984): 91-95. p.91

Pythagorean Harmonia

- Pythagoras considered that number expressed as units, shapes and sound was the unifying feature of the universe.
- The ratios of musical harmony were expressions of (*archai*) the primordial organising principle of the universe.³
- This organising principle expressed in number was in all things and thus one could **generalise from the individual instances to the galactic.**

This concept of a universe bound by number is a principle of mathematics and in the 20th century Pythagoras' version of *harmonia* has emerged in the field of fractals, which shows that the shapes in nature are bound by number and can be formed across all scales.⁴



Pythagoras statue, Samos

3. Morrison, J. S. "Pythagoras of Samos." *The Classical Quarterly* 6, no. 3/4 (1956): 135-156. p.153.

4. See Mandelbrot, Benoit. *The Fractal Geometry of Nature*. San Francisco: W. H. Freeman, 1982.

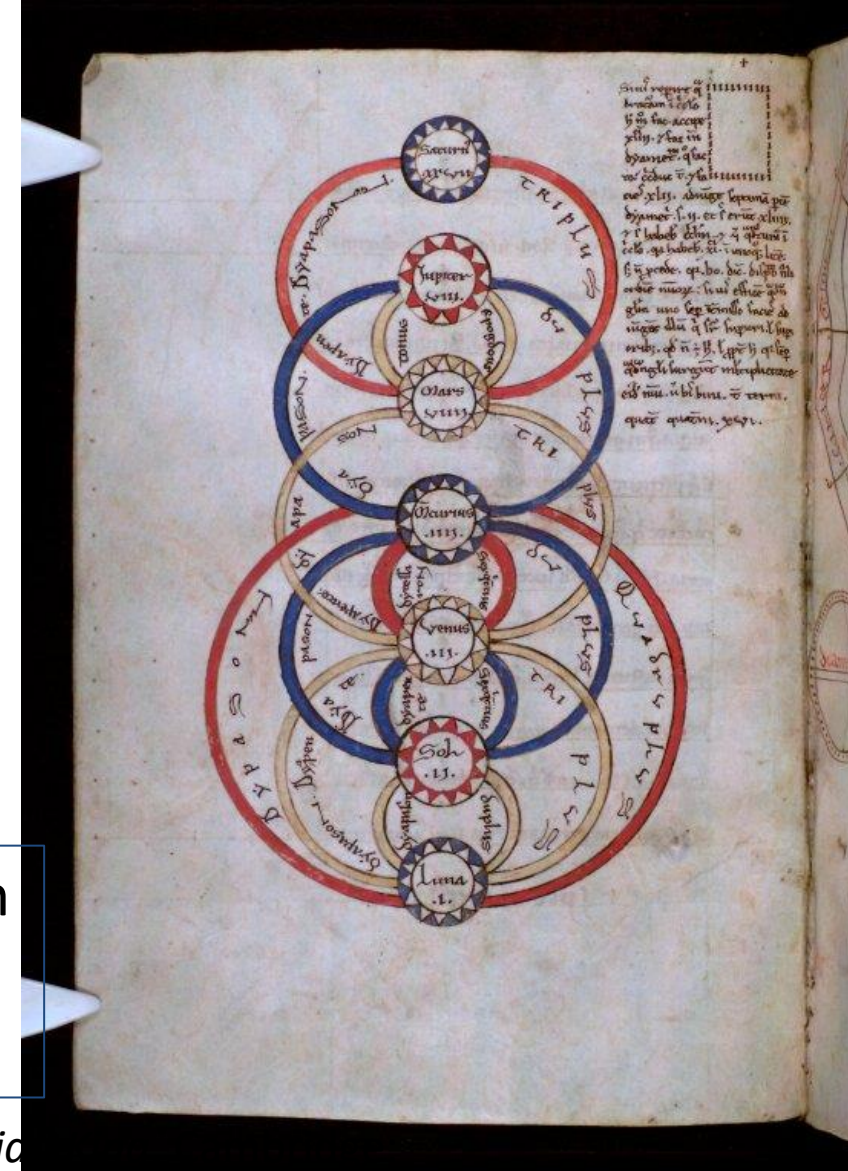
Archytas' *Harmonia* and Plato

Dante's library - Timaeus

- Plato probably learned of the Pythagorean *harmonia* from Archytas, the philosopher king of Tarentum who was Plato's friend and tutor.⁵
- Plato placed the Pythagorean harmonia of number into his creation myth, the *Timaeus* but differed from the Pythagoreans, by considering that the organising principle of the universe was **driven by an architect god**. **Plato personified the principle, rather than allowing it to be a feature of nature.**

Thus Plato saw a single causal (divine) agent as the source from which all creation flowed – this model is now defined as a **linear dynamic cosmology**.

5. Huffman, Carl. *Archytas of Tarentum, Pythagorean, Philosopher and Mathematician*. Cambridge University Press, 2005.p.32



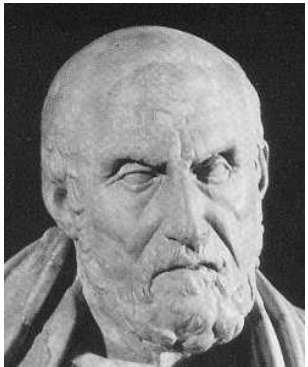
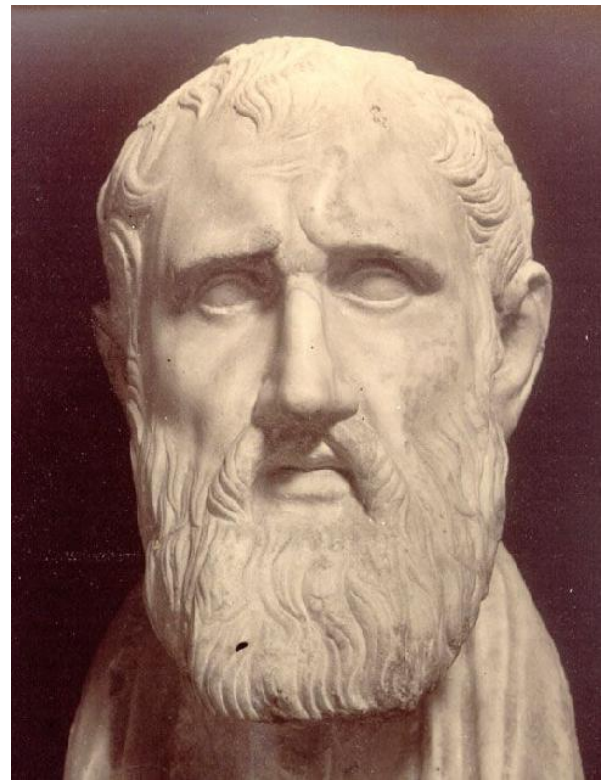
Stoics turn *harmonia* into *sumpatheia*

Zeno of Citium (d. 263 B.C.E.) the founder of the Stoa:

‘The substance of god is the whole world and the heaven.’⁸

Chrysippus (279 – 206 B.C.E.) the third head of the Stoa wrote:

‘for our individual natures are part of the nature of the whole universe.’⁹



8. Diogenes Laertius, *Lives of Eminent Philosophers*, trans. R.D. Hicks, vol. II, Loeb Classical Library (Cambridge, MA Harvard University Press, [1925] 2005), 7.148.

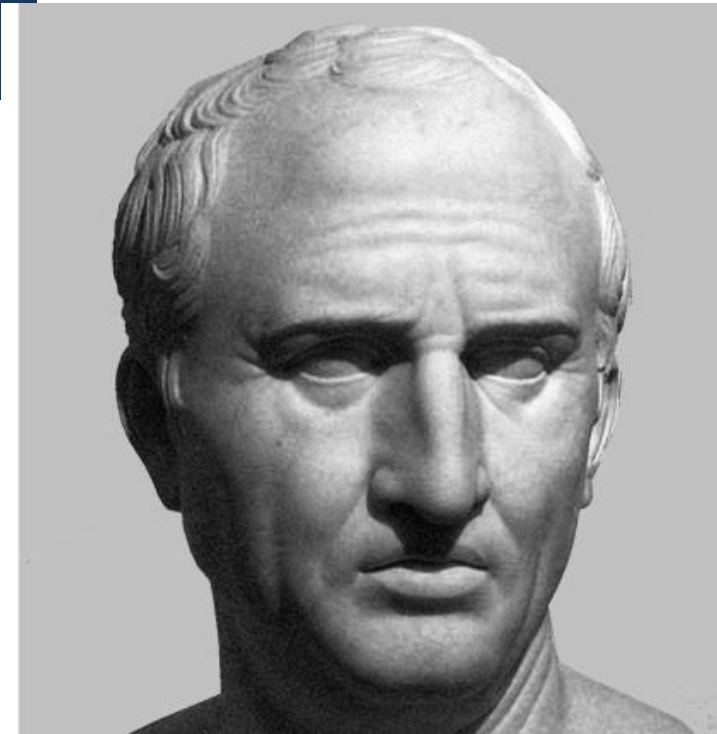
9. Diogenes Laertius, *Lives of Eminent Philosophers*, II: 7.88.

Stoic Sympathy



Image from the movie Avatar

Cicero (106-43 BCE) voicing Stoic thought, commented on this unity of the whole cosmos when he wrote:



‘Who is not compelled to accept what I say by (consideration of) the tremendous sympathy, agreement, and interconnected relationships of the cosmos... These things, and the mutual harmony of the parts of the cosmos, certainly could not happen as they do unless they were bound together by one divine and continuously connected *pneuma*.’¹⁰

10. Quoted from: Inwood and Gerson, *The Stoics Reader*: p.62.Cicero text 2.19.

Stoic Sympathy

The *pneuma* – the breath of life



Woodspirit by Tom Paddle

For the Stoics this is the active generative principle that flows through all things from rocks, trees, human life, and the cosmos. The human soul was a fragment of the divine *pneuma*. **The Stoics thus removed the personal element from *sumpatheia*.**

Plutarch (46-120 CE) comments on *pneuma*:

‘They [the Stoics] say that earth and water sustain neither themselves nor other things, but preserve their unity by participation in a breathy and fiery power.’ ¹¹

11. Plutarch, *On common conceptions* 1085c-d.

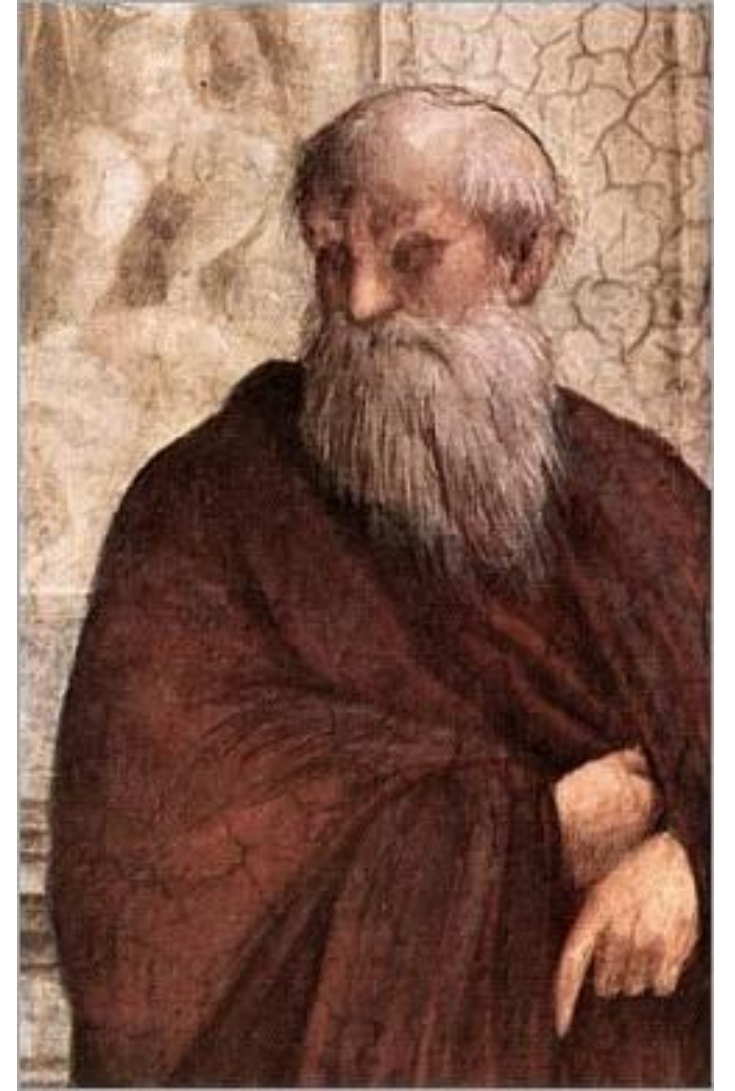
Plotinus and Sympathy

Plotinus (204/5–270 CE) talked not of causes or number but instead of how,

...all things must be enchained; and the sympathy and correspondence obtaining in any one closely knit organism must exist, first, and most intensely, in the All.¹³

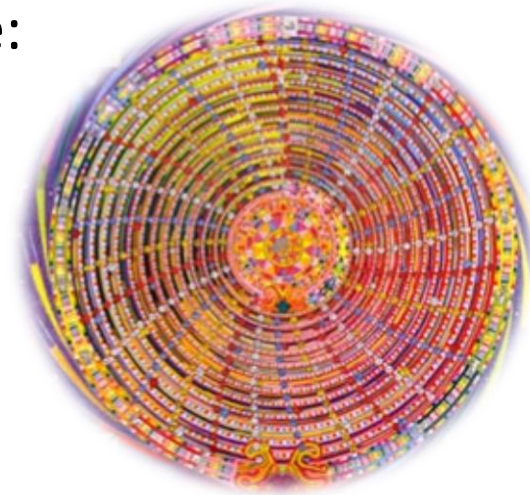
He then argued for a sympathetic cosmos not linked by Stoic or Aristotelian causes but by **symbols**.

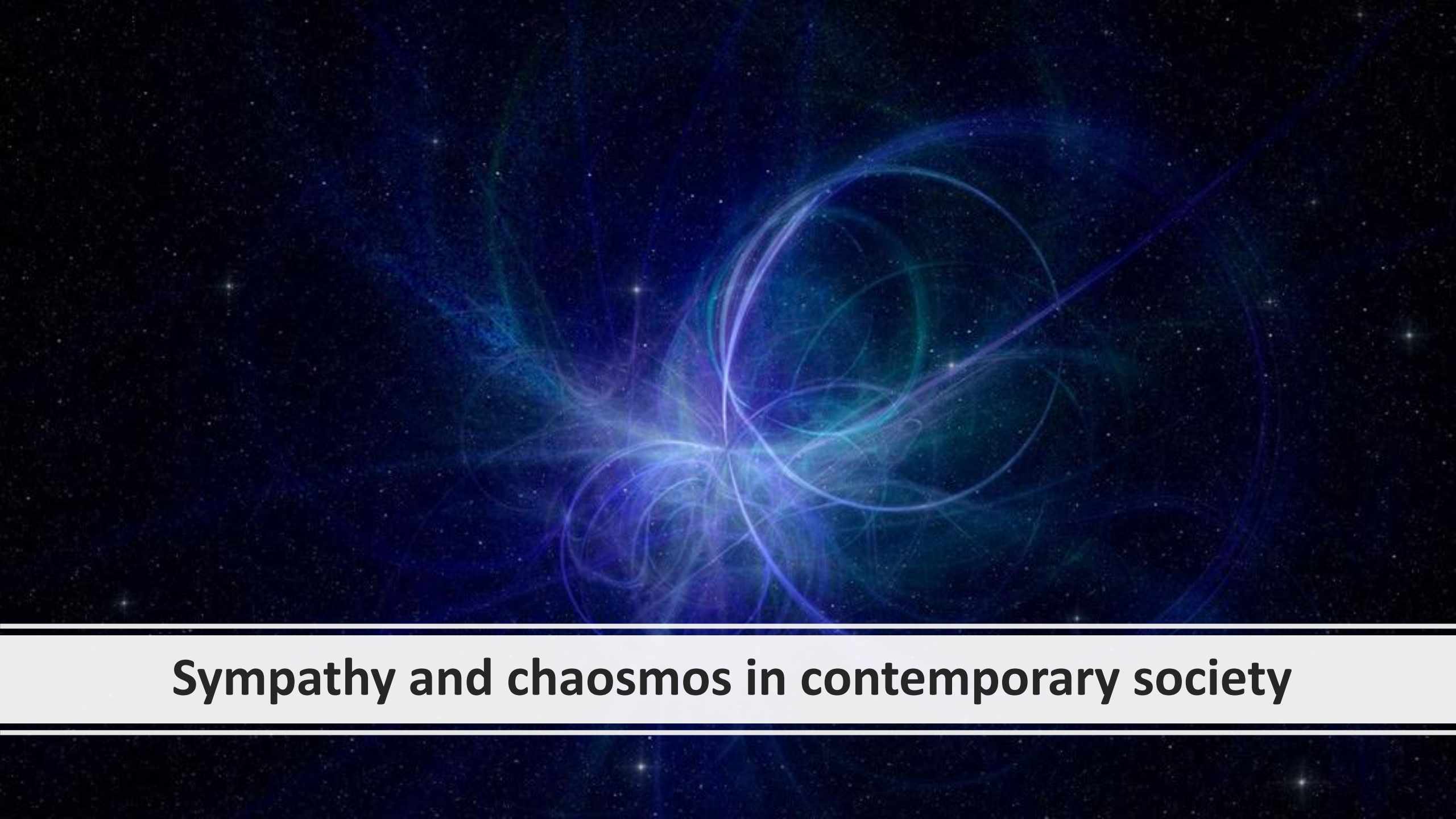
¹³. Plotinus, *The Enneads*: II.3.7.



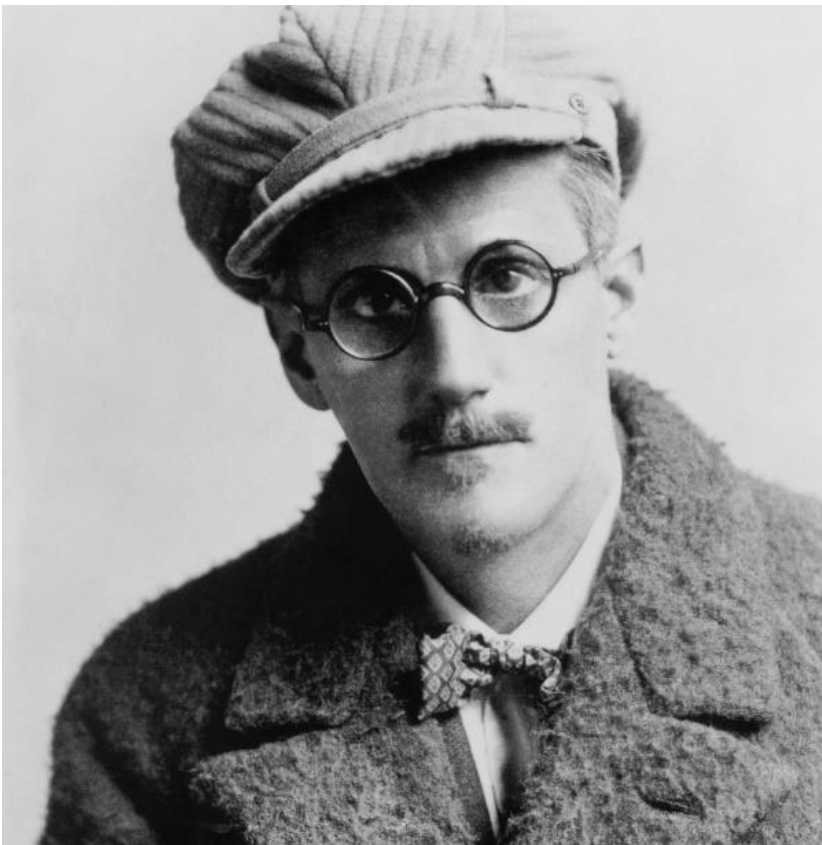
Summary of *Harmonia* and *Sympathy*

- It is the concept promoted as early as the Middle Kingdom in Egypt (c 2300 BCE) and was also developed by Pythagoras. It was later formulised into a 'physics' by the Stoics.
- Its central premise is that all things, animated and non-animated, are linked together in a mutual feedback relationship.
- There are different versions of harmonia or sympathy some of which are:
 - Pythagorean – number (mathematical)
 - Stoic – *pneuma* (biosphere)
 - Platonic – World Soul (spiritual)
 - Aristotelian – qualities (biosphere)
 - Plotinian – symbols (Jungian)
- The different version of sympathy can be associated with **different styles of cosmology and by extension to different styles of astrology.**





Sympathy and chaosmos in contemporary society



Cosmos and Chaosmos

James Joyce (1882-1941) in 1939 introduced the term Chaosmos in his novel *Finnegans Wake*. He used it to show the tension between chaos and order.

What is meant by chaosmos? Why is this term necessary?
How does it differ from Cosmos?

Living in Cosmos – according to William James

To live in a cosmos (a fundamentally ordered world; where stability is the built-in feature) means three things:

- there is a set of **rational laws** that structure the cosmos, and these laws also structure the human mind (one matches the other).
- Hence the **quest of the principle or starting point** 'place' of genesis of all phenomena is a meaningful endeavour. *What is the source of the order?*
- This quest has a **holistic transformative virtue**, as personal meaning can be gained, that is the meaning of one's life by understanding the point of origin. *Where have I come from? A question which is part of the meaning of life.*

Living in Chaosmos – according to William James

Jamesian chaosmos was how pragmatism understands the world. We can consider that chaosmos is a practical view of the world based on the internal experience or **phenomenological perspective** of life.

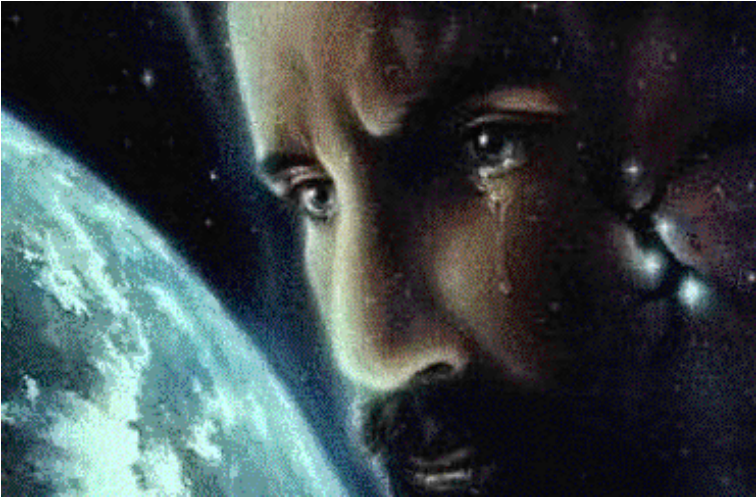
Chaosmos is a partially ordered world; where stability is earned over creative process, where stability never has the last word.

To live in a chaosmos means that:

- Natural laws are but **processual habits**, they cannot pretend to exhaust the phenomena, and their fitness with the human rationality is purely local, indeed pragmatic.
- Hence the quest for a **single principle to explain everything** is at best **useless** and at worst misleading.
- **Personal** rather than collective **consequences** are the issue – the **world is created uniquely at the personal level.**

The two theories concerning the creation of Order

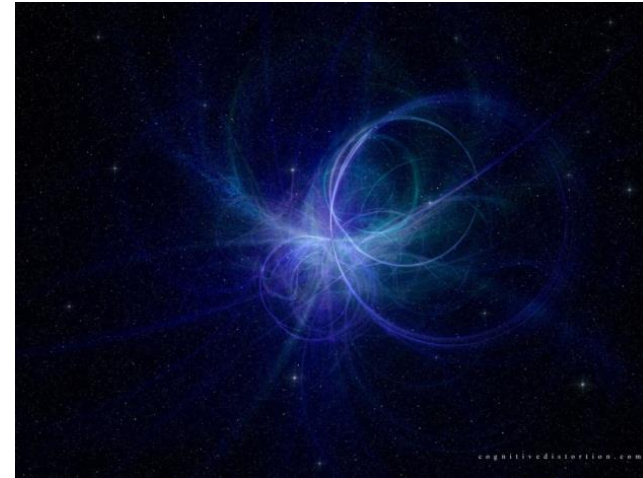
Ex nihilo nihil fit – nothing comes from nothing



The Cosmos theory which is the theory of **origin from order**.

Order creates more order. Thus an artisan god begins the creation of order.

Creatio ex nihilo – creation out of nothing



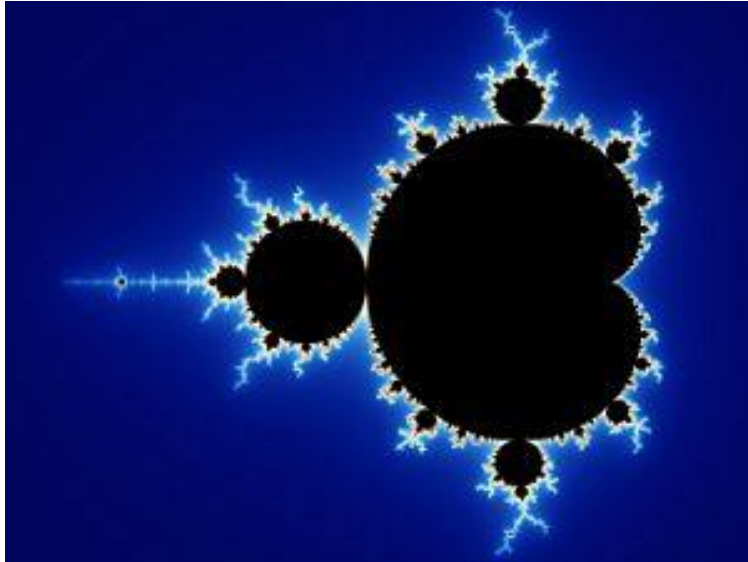
The Chaos theory which is the theory of **origin from chaos**.

Order spontaneously emerges from the void and then produces more order – more complexity.

Chaosmos and the lived life – a world made by number

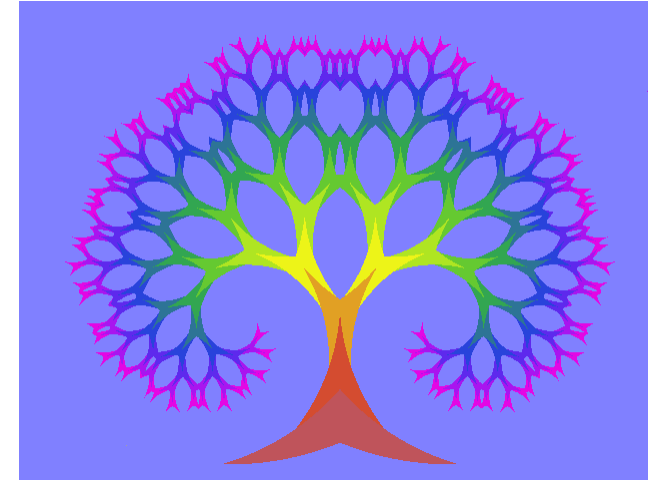
Repetition – feedback - at a two dimensional level reveals chaosmos

Benoit Mandelbrot (1924-2012) found that by looping an equation back on itself – feedback – that fractals (patterns with no end) were formed.



Benoit Mandelbrot showed that new order spontaneously emerged with such feedback.

Benoit Mandelbrot, *The Fractal Geometry of Nature* (San Francisco: W. H. Freeman, 1982).



A fractal is a graph formed when a particular type of equation is iterated – that is the results are fed back into the equation before it is run again.

Repetition!



A fractal landscape.
This image was not designed by an artist but instead is the result of an equation being iterated. Each time the equation is run, it plots a dot on the screen. After millions of iterations the image is formed.



A fractal landscape.

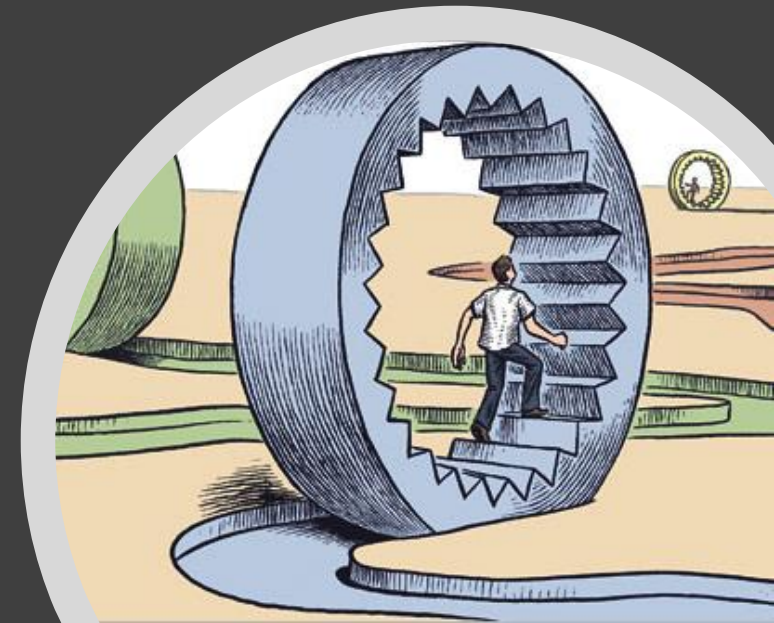
No artist made this image. This landscape has a slightly different equation to the one on the slide before.

Any shape, object or landscape can be created if you know the right equation.

**This is order
as emerging
patterns
created by
repetition.**

Life and Feedback

- All living systems are in **feedback** and move forward via repetition (pattern or ritual). *You live in repetition.*
- Feedback turns the rational linear behaviour, predictable, into the **emergent patterns** which are unpredictable. *Coincidences, synchronicities.*
- Systems in feedback **ignore scale**. *A tea leaf can reflect a journey.*



Chaosmos in the Contemporary world

Emerging from the New Age movement and based on the theme of sympathy an **environmentalism which is holistic** was developed.

Light Green, Dark Green and Deep Green attitudes to the environment.



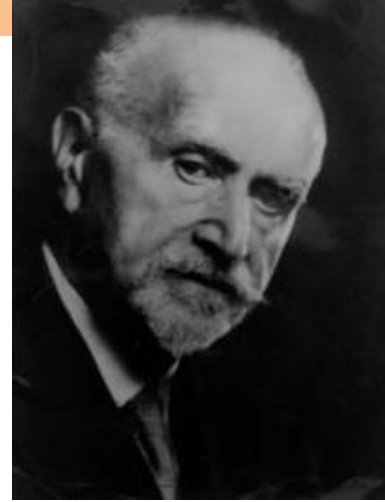
The philosophy of **Dark Green environmentalism** is where the human being is viewed as just one part of the life of a living planet, but holds no special rank within the bio system.

This is life as **participation** rather than **observation**.

This is the idea of Stoic sympathy in a modern form as well as it is the notion of participation as discussed by Lévy-Bruhl.

See the work of Thomas Berry on this theme and more recently Bron Taylor, *Introducing Religion and Dark Green Religion* (Oakland: University of California Press, 2010). See: Berry, Thomas, *The Great Work, Our Way into the Future* (New York: Three Rivers Press, 1999)

Lévy-Bruhl on Chaosmos



Similar ideas are found in the work of **Lucien Lévy-Bruhl** (1857-1939) who put forward the idea of the 'mystical mind'. The individual with a mystical mind lived in the world through **participation with living symbols**.

Lévy-Bruhl commented that with such a mind-set viewed the laws of nature as 'not denied, but in so far as they could constitute an obstacle, they are put aside, and there is seen to us the very framework of the ambient world, the characteristic fluidity of the mythical world which is unaware of it [the laws of nature].'

Many astrologers view themselves as part of a living cosmic system, though a system in which they were not privileged but were the same as all other living things. By adopting this position, **these astrologers seek or hope to partake in the co-creation of their own future.**

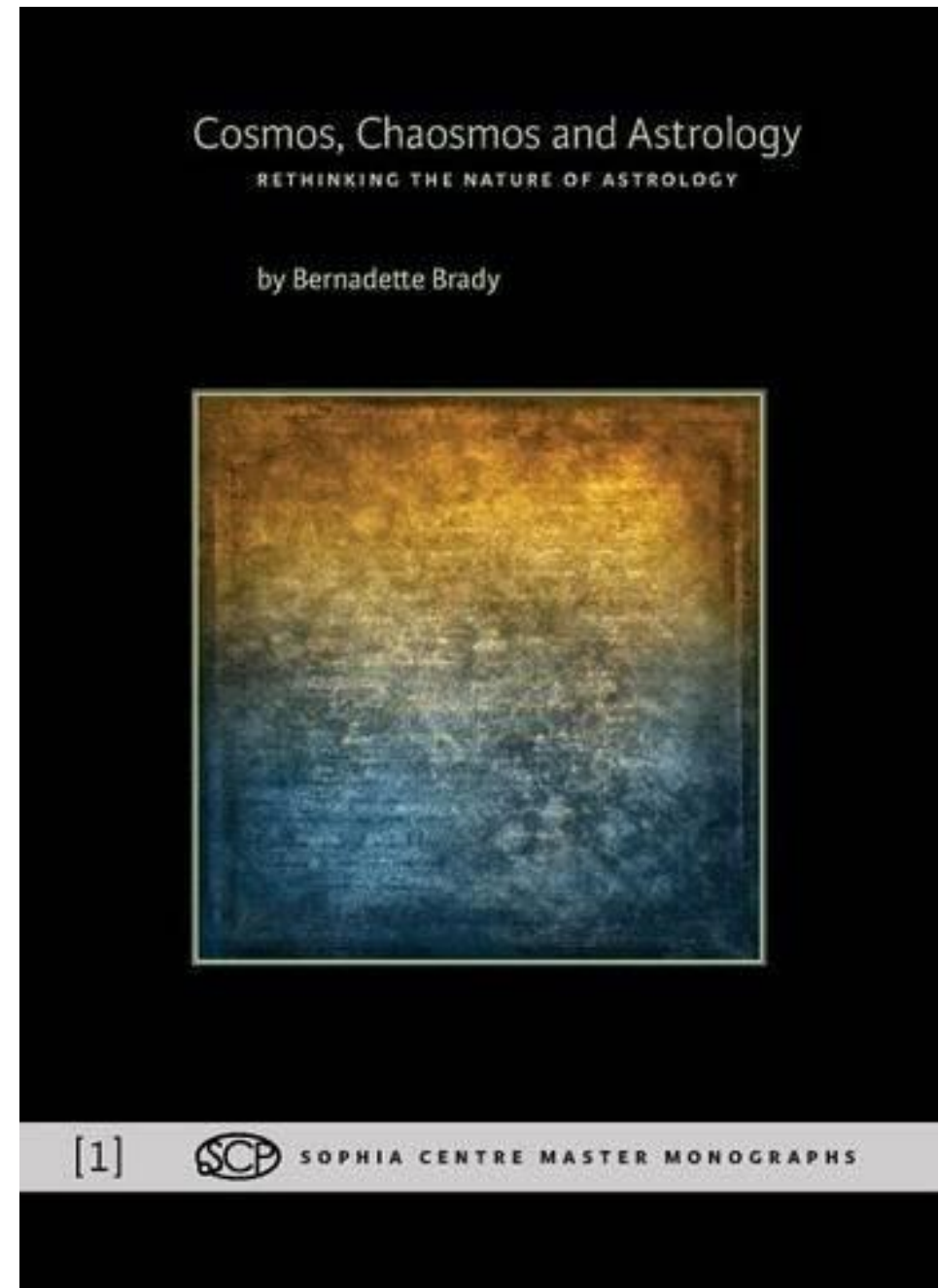
Linking Chaosmos to daily life and practice of astrology

If you wish to explore this further and the links between Chaosmos, cosmos and astrology then this monograph from the Sophia Press will be of use to your work.

Bernadette Brady, *Cosmos, Chaosmos and Astrology* (London: Sophia Centre Press, 2014).

Available from Sophia Press:

<http://www.sophiacentrepress.com/publications/CosmosChaosmosAndAstrology/CosmosChaosmosAndAstrology.html>



References Sympatheia

Bobzien, Susanne . *Determinism and Freedom in Stoic Philosophy* (Oxford: Clarendon Press, [1998] 2005)
Brady, Bernadette, *Cosmos, Chaosmos and Astrology* (London: Sophia Centre Press, 2014).

Diogenes Laertius, *Lives of Eminent Philosophers*, trans. R.D. Hicks, vol. II, Loeb Classical Library
(Cambridge, MA Harvard University Press, [1925] 2005)

Husserl, Edmund, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. and with an Introduction by David Carr, (Northwestern University Press, 1970).

Lehoux, Daryn , "Tomorrow's News Today: Astrology, Fate, and the Way Out," *Representations* (Summer 2006)

Lévy-Bruhl, Lucien *The notebooks on primitive mentality* trans. Peter Rivière (San Francisco: Harper & Row Publishers, 1975)

Inwood, B. *Oxford Studies in Ancient Philosophy* (Oxford: Oxford University Press, USA, 2008)

Snyder, Jane McIntosh. "The Harmonia of Bow and Lyre in Heraclitus Fr. 51 (Dk)." *Phronesis* 29, no. 1 (1984) (2014)

References Cosmology and Chaosmology

- Abrams**, Nancy Ellen, and Joel R Primack. 2001. Cosmology & 21st Century Culture In, <http://www.greenspirit.org.uk/resources/CosmologyandCulture.shtml>. (accessed 1 June 2009).
- Berry**, Thomas. "Creative Energy." In *Riverdale Papers*, n.d.
- Brody**, Hugh. (2001). *The Other Side of Eden*. London: Faber and Faber.
- Chapple**, Christopher Key (1998). "Thomas Berry, Buddhism, and the New Cosmology." *Buddhist-Christian Studies* Vol 18: pp 147-54.
- Colebrook**, Michael "Thomas Berry: Geologist ", 2001. <http://www.greenspirit.org.uk/resources/TBerry.shtml> (accessed 1 June 2009).
- Eliade, Mircea**. (1987) *The Sacred and the Profane, the Nature of Religion*. Translated by Willard R. Trask. London: Harcourt, Inc., [1957].
- Harre**, R (1962). "Philosophical Aspects of Cosmology." *The British Journal for the Philosophy of Science* Vol. 13, no. No. 50: pp. 104-19.
- Long**, A.A., and D.N. Sedley. (1987, 2007). *The Hellenistic Philosophers*. Vol. 1. Cambridge: Cambridge University Press.
- Lopez-Corredoira**, Martin. (2008) "Sociology of Modern Cosmology." Paper presented at the Cosmology across Cultures, Granada, Spain, 8 - 12 September, 2008.
- Munitz**, Milton K (1962). "The Logic of Cosmology." *The British Journal for the Philosophy of Science* Vol. 13, no. No. 49: pp 34-50.
- North**, John (2008). *Cosmos, an Illustrated History of Astronomy and Cosmology*. Chicago, London: The University of Chicago Press.
- Rhook**, Graeme, and Mark Zangari. (1994). "Should We Believe in the Big Bang? A Critique of the Integrity of Modern Cosmology." In *Proceedings of Biennial Meeting of the Philosophy of Science Association*, pp. 228-37: The University of Chicago Press.
- Riordan**, M, and D Schramm. (1991). *The Shadows of Creation: Dark Matter and the Structure of the Universe*. New York: Freeman.
- Robinson**, Gilbert Kelly (1936). "Ethics, Cosmology and Religious Faith." *The Journal of Religion* Vol. 16, no. No.1: pp. 47-56.

References Chaos and Complexity

- Benoit Mandelbrot, *The Fractal Geometry of Nature* (San Francisco: W. H. Freeman, 1982).
- Bütz, Michael, *Chaos and Complexity – Implications for Psychological Theory and Practice* (Washington, DC: Taylor and Francis, 1997)
- Casti, John L., *Complexification – Explaining a Paradoxical World through the Science of Surprise* (London: Abacus 1994)
- Cilliers, Paul, *Complexity and Postmodernism, Understanding Complex Systems* (London, New York: Routledge, 1998, 2005)
- Goodwin, Brian, *How the Leopard Changed Its Spots, the Evolution of Complexity* (London: Phoenix, 1994)
- Holland, John *Hidden Order: How Adaptation Builds Complexity* (Reading, Mass: Helix Books, 1995)
- Horgan, John, 'From Complexity to Perplexity, Can Science Achieve a Unified Theory of Complex Systems?', *Scientific American* 1995
- Jervis, Robert *System Effects: Complexity in Political and Social Life* (Princeton, USA: Princeton University Press, 1997)
- Kauffman, Stuart, *At Home in the Universe: The Search for the Laws of Self-Organization and Complexity* (New York: Oxford University Press, 1995)
- Prigogine, I, *From Being to Becoming: Time and Complexity in the Physical Sciences* (San Francisco: W. H. Freeman, 1980)
- Ramalingam, Ben and others, *Exploring the Science of Complexity: Ideas and Implications for Development and Humanitarian Efforts* (London: Overseas Development Institute 2008).