

Introduction to Goethean Enquiry: A Different Way of Seeing for Contemporary Times Summary Sheet

“The model we choose to understand something determines what we find....Our first leap determines where we land”

(McGilchrist, 2012, p.97)

Limitations of contemporary approaches to knowledge

Arising out of Enlightenment thinking, Western science progressed for centuries on the understanding that it is only possible to gather reliable knowledge about the world through rational thought and objective methodologies. Known as the empirical method, this way of doing science and gathering knowledge about the world has transformed all parts of our daily lives, yet it has also been recognised as contributing to numerous problems generated by our increasingly unsustainable lifestyles - from climate change and ecological degradation, to crises in education and the breakdown of community (McGilchrist, 2012).

Goethe and Goethean enquiry

In contrast to the empirical method, the 18th century German poet and scientist, Johann Wolfgang Von Goethe (1749-1832) offers us a more *relational* approach to phenomena; using subjective and objective ways of knowing. Although primarily known as a literary figure, Goethe developed a philosophy of science based on research he carried out into morphology, anatomy and optics. Goethe’s morphological method was a combination of careful empirical observation and deep intuition into what guides the pattern of changes over time in an organism as it interacts with its environment.

Goethe practiced his scientific research by firstly looking actively at what he was studying in order to see it clearly and deeply (exact sensorial perception), free from the blinkers of established theories, classifications and mental models of the reductionist worldview. Then he deepened his understanding by reliving his sensory experience over and over in his imagination (exact sensorial imagination) seeking to comprehend its unity without analytical or abstract thought; endeavouring to understand the whole through the parts.

Goethe believed a sufficient explanation of a phenomenon must address it in terms of its organic wholeness and development, and to do that, the scientist needs to describe the progressive modification of a single part. This is because its modification over time relates to the *whole* of which it is paradoxically the *part*; continuously developing the original form. Considering a leaf as an example, Goethe traced its metamorphosis from a seed into the stem, then leaves, flowers, and finally its stamen, or pistil. This continuous development was described by Goethe as ‘intensification’ of the original form. In his 1790 essay,

'The Metamorphosis of Plants', Goethe represented the intensification of a plant as the result of the interaction between the nutritive forces of the plant and the organic form of the primal leaf.

Goethe sought an *encounter* with phenomena, and in so doing, he was able to connect with the *oppositional tension that exists between* the creative force and compensatory limitations within which all living things exist. Goethe described this as 'polarity' or Polarität – i.e., polarity exists *between* a freely creative impulse and an objectively structuring law allowing a gentle moderation of creativity while at the same time allowing for innovation of formal rules. This idea of polarity also supported Goethe's work into colour, which he saw as the interplay between light and darkness out of which the phenomenon of colour arises. Goethe's work, therefore, brings us closely into relationship with the idea of polarised tension between part and whole, light and dark, which drives each phenomenon to self-formation through intensification.

As Goethe demonstrated, to open up a pathway of *living knowledge* we need to use *all* of our available faculties of knowing; not just our intellect, but also imagination, feelings, intuition. We can learn to 'see' connections in the wider context by bringing observations and accounts of form, behaviour, movement and structure to life within our imaginations.

Goethe's Method

You will need to select a plant (in the home, garden or out in nature). The aim of the exercise is to see your chosen plant *as it actually presents itself to you – in living relationship with the environment*. Try to approach your plant with openness, curiosity and interest. Pay close attention to thoughts and feelings.

1. Exact sensorial perception (25 minutes/35 minutes)

- Entering into a relationship with your chosen plant, commit to studying it as clearly and deeply as possible
- Clear your mind of any established theories, classifications and pre-formed mental models
- Listen and observe without preconceived ideas, labels or judgements. Ask your plant to show itself to you

2. Exact sensorial imagination (25 minutes/15 minutes)

- Deepen your understanding by actively remembering/reliving the experience through your imagination
- Inwardly recreate what you originally observed, heard and felt
- Make notes, drawings – anything that will help you remember your experience

Perception – Henri Bortoft (philosopher of science)

Our mental models have a major impact on *how* we see. For example, a famous shift in perception occurred when Galileo 'discovered' that a cannon ball travels as a parabolic arc. Suddenly people started to see the parabolic arc, however previous to Galileo's discovery, people believed, and saw, that the trajectory of a cannon ball went in a straight line then fell vertically (Bortoft, 2010, p. 143). The cannon ball had always travelled as a parabolic arc, but a simple shift of perception was required in order to see it. Another shift in

perception occurred when Copernicus discovered that the earth moves around the sun. The discovery was not based on new observations and evidence, simply a new way of seeing observations and data that had long been familiar. The discoveries of Galileo and Copernicus are what Bortoft terms a new '*organising idea*' which set what is already known into a new pattern of relationships, thereby changing its meaning.¹

Copernicus believed that the problem of planetary motion could not be solved by any further work within the accepted system of ideas because it was that system of ideas itself which needed to be changed. There is no way that such a change can be brought about by further observations... and so what Copernicus did was to turn to a different historical tradition for the new organising idea. The new theory emerged from a school of thought, not from new facts. (Bortoft, 2010, p. 153).

In other words, the fact that the earth moves around the sun was there to see the whole time, but Copernicus was required to '*bring it into being*', into a new organising idea.

How we know, influences what we see, and consequently dictates how we engage with what we see

Important considerations

- Given numerous global challenges (including ecological degradation, climate change, war, disease, societal/economic/educational breakdown), does Goethean enquiry offer any value?
- If so, how and why?

Suggested reading

- Bortoft, H. (2010). *The Wholeness of Nature: Goethe's Way of Science*. Edinburgh: Floris Books.
- Bortoft, H. (2012). *Taking Appearance Seriously: The Dynamic Way of Seeing in Goethe and European Thought*. Edinburgh: Floris Books.
- Holdrege, C. (2005). Doing Goethean Science. *Janus Head*, 8(1), 27–52.
- Holdrege, C. (2013) *Thinking Like a Plant: A Living Science for Life*. Great Barrington: Lindisfarne Books.

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www.heartsenseresearch.co.uk

www.mythcosmologysacred.com

¹ An organising idea pulls information together so that the mind can make sense of it.