



Original research article

The Globe Sustained: Shakespeare's allegory for sustainable development

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ABSTRACT

Sustainability theory shows that the sustainability problem is a value orientation problem. In a recent study, Klaas van Egmond identified an underlying pattern of a crossed circle, representing affirmative and adversative value orientations, whose disintegration engenders unsustainable tendencies. This article explicates how Shakespeare's allegories invite to quests for 'values worthy of pursuit', grounded upon a similar immanent cyclical pattern of value orientations, moving from and to the centre of Shakespeare's works. Holding up the allegorical mirror to contemporary sustainability challenges, Shakespeare's works anticipate sustainability narratives for society at large and its individual actors. The results of this research are highly relevant in the contemporary debates on the 'erosion' of European values, as it demonstrates how to identify sustained European value patterns and how to build on these patterns in relation with contemporary questions of sustainability. © 2017 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Sustainability theory has shown that the sustainability problem is a value orientation problem (Nussbaum & Sen, 1993, repr. 2009; World Commission on Environment and Development, 1987).¹ Thus axiological questions have been a major concern of scholars in the field of futures studies, bringing ethics to the forefront of the political and academic sustainability debates in the past decades. This has led to a form of futures inquiry that uses an integral approach, implying a need for recognition of a 'plurality of ways of knowing' and subsequent value orientations (Voros, 2008).² Ziauddin Sardar (2010) notes:

The discourse of futures studies is (. . .) not just multi- and trans-disciplinary, it is unashamedly un-disciplinary: that is, it consciously rejects the status and state of a discipline while being a fully fledged systematic mode of critical inquiry.³

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¹ Cf. Martha Nussbaum and Amartya Sen (eds.), *Quality of Life* (Oxford: Clarendon Press, 1993, repr. 2009); World Commission on Environment and Development, chaired by Gro Harlem Brundtland, *Our Common Future* (Oxford/New York: Oxford University Press, 1987).

² Joseph Voros, 'Integral Futures: An approach to futures inquiry' in *Futures* 40 (2), 197, <http://dx.doi.org/10.1016/j.futures.2007.11.010>.

³ Ziauddin Sardar, 'The Namesake: Futures; futures studies; futurology; futuristic; foresight – What's in a name?' in *Futures* 42 (2010), 183, <http://dx.doi.org/10.1016/j.futures.2009.11.001>.



Fig. 1. Survey results: value orientations and their classification in eight categories (Van Egmond & De Vries, 2011, p. 856).

In line with this, Klaas van Egmond and Bert de Vries (2011) argue for an 'integral worldview', to be found in an analysis of the mutual relation between single underlying values, the ranking of these values and the implication of this choice for moral character.⁴

Van Egmond's theory identifies an underlying value pattern in the shape of a crossed circle, representing affirmative and adversative value orientations, whose (centrifugal) disintegration engenders unsustainable tendencies – pleading for a (centripetal) integration of value orientations. However, building on Kant's observation that 'without a teleological framework the whole project of morality becomes unintelligible', MacIntyre (1981/2007/2011, p. 11) has pointed out that there is no 'rational' solution to the problem of virtue versus vice, and in this respect he considers the Enlightenment to be a failure (technology without a moral concept led to an ecological crisis).⁵ MacIntyre argues for a revival of the Aristotelian tradition with the central concept of man as having an essential nature, purpose and function. As Aristotle (2011, p. 61) argued in his *Nicomachean Ethics*, a unity of virtues is to be sought in a complex diversity of values (virtue being the intermediate between two vices):

Virtue, then, is a state of character concerned with choice, lying in a mean, i.e. mean relative to us, this being determined by a rational principle, and by that principle by which the man of practical wisdom would determine it. Now it is a mean between two vices, that which depends on excess and that which depends on defect; and, again it is a mean because the vices respectively fall short of or exceed what is right in both passions and actions, while virtue both finds and chooses that which is intermediate.⁶

This (dynamic) mean is to enable people to realize their specific human aim (*telos*).⁷ Van Egmond's theory underpins MacIntyre's argument and attunes to the Integral Futures approach, which also recognizes this complexity:

Thus, to take an integral perspective, one needs to be able to move out of specific, particularising paradigmatic assumptions and paradigm-based perspectives into what we might call a 'meta-paradigmatic meta-perspective'—a perspective which recognises and values the contributions of all paradigm-based perspectives but which is nonetheless free of and outside of their particularising hold.⁸

(Voros, 2008, p. 198)

⁴ Klaas van Egmond & Bert de Vries, 'Sustainability: The search for the integral worldview', in *Futures* 43:8 (2011), 853–867; doi:10.1016/j.futures.2011.05.027.

⁵ Alasdair MacIntyre, *After Virtue, A Study in Moral Theory* (London/New York: Bloomsbury, 1981, third edition 2007, impression 2011), 66.

⁶ Aristotle, *Nicomachean Ethics*, William David Ross (trans. & ed.) (Charleston: CreateSpace, 2011), 61 and 65.

⁷ Aristotle, *Nicomachean Ethics*, William David Ross (trans. & ed.) (Charleston: CreateSpace, 2011), 17.

⁸ Voros, *op. cit.* in *Futures* 40 (2), 198, <http://dx.doi.org/10.1016/j.futures.2007.11.010>.

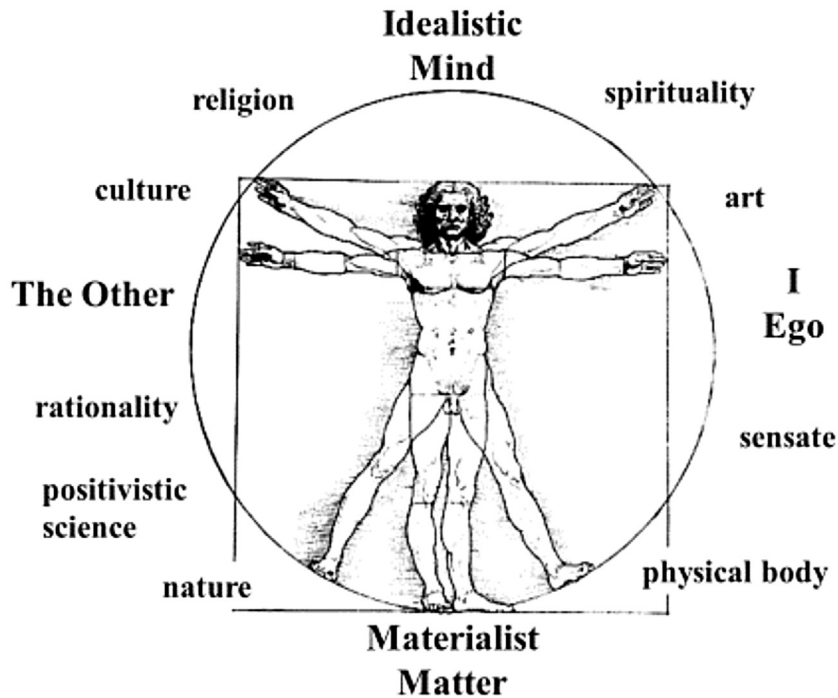


Fig. 2. Human value orientations (Van Egmond & De Vries, 2011, 858).

This article explains how the underlying allegorical structure of Shakespeare's works corresponds to Van Egmond's theoretical sustainability model and how the (dynamic) value orientations of the northern European Renaissance that ground Shakespeare's works are relevant to the 'reflexive process of questioning, creation and questioning' anticipatory of more sustainable (inclusive) futures (Inayatullah, 2006, p. 656).⁹

2. Sustainability theory

2.1. Sustainability model

To classify different value orientations, Van Egmond collected data from social surveys, historical and philosophical works. In this 'integral worldview', Van Egmond first combined the value orientations deduced from the population surveys with philosophical insights of the past millennia (Fig. 1¹⁰).

Positioned in the figure, individual people ascribe more value to certain parts (quadrants) of the integral worldview than other parts; such parts (quadrants) can be considered as (individual) worldviews (Fig. 2¹¹):

Then Van Egmond analyzed the relationship between these worldviews and outlines of (macro) history. He found that specific value patterns (quadrants of the integral worldview) dominated certain periods, denoting a quadrant or 'worldview' as the 'Zeitgeist'. So, the time factor was added: history turns counterclockwise through the integral worldview, one worldview dominating the 'Zeitgeist' for several hundred years. Then the worldview degenerates into its own caricature, and other values start to dominate, often as a response to the values of the previous worldview (Fig. 3¹²).

The development of a worldview into its own caricature is a trigger for 'unsustainable development', Van Egmond discovered. That is because complementary value orientations, which are opposed in the model, evoke tensions that lead to a disproportionate one-sided focus, resulting in a perversion of the value orientation. Once value orientations break through the periphery of the circle into the outside, they lose contact with the coherence of the value circle (and herewith with 'human dignity' which is defined by the value pattern within the circle).

⁹ Sohail Inayatullah, 'Anticipatory action learning: Theory and practice' in *Futures* 38 (2006), 656, <http://dx.doi.org/10.1016/j.futures.2005.10.003>.

¹⁰ Van Egmond & De Vries in *Futures* (2011), *op. cit.*, 856, doi:10.1016/j.futures.2011.05.027; based on the WIN-model™ of TNS-NIPO (Aalbers 2006).

¹¹ Van Egmond & De Vries in *Futures* (2011), *op. cit.*, 856, doi:10.1016/j.futures.2011.05.027; based on the WIN-model™ of TNS-NIPO (Aalbers 2006), 858.

¹² Van Egmond & De Vries in *Futures* (2011), *op. cit.*, 856, doi:10.1016/j.futures.2011.05.027; based on the WIN-model™ of TNS-NIPO (Aalbers 2006), 861.

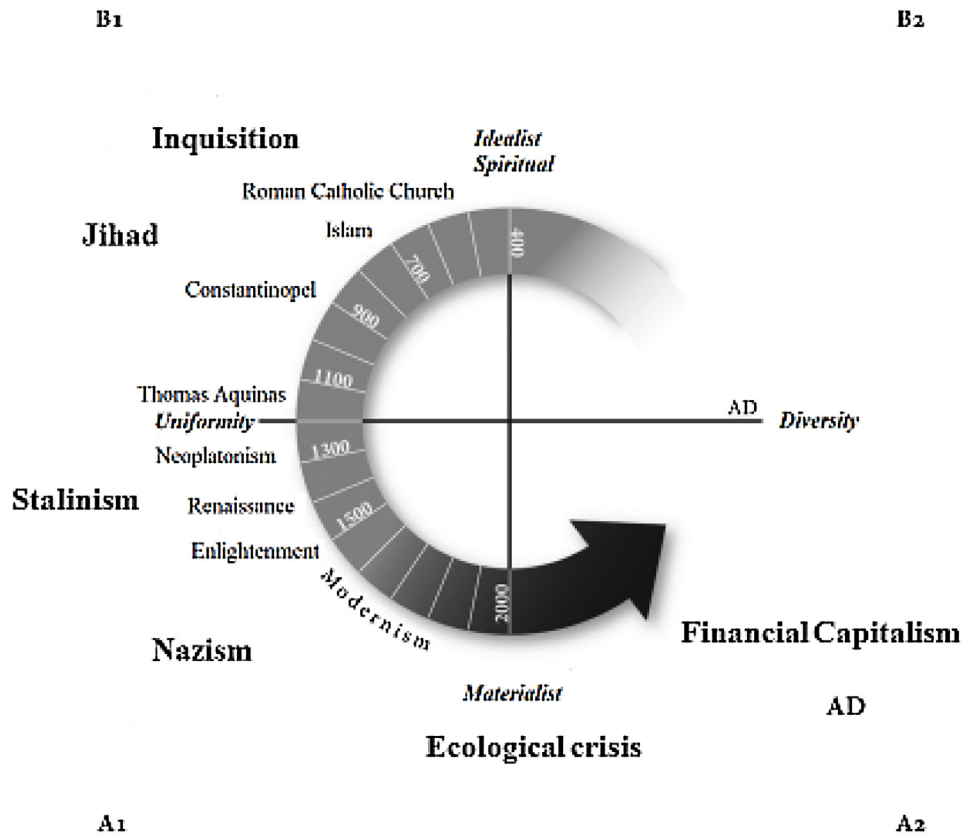


Fig. 3. Overshoot and collapse of worldviews (Van Egmond & De Vries, 2011, 861).

2.2. The challenge

If 'unsustainable development' is represented by outward arrows – similar to 'centrifugal forces' – then sustainable development is the (centripetal) movement toward the centre of the circle: the place where social value orientations and worldviews touch or even overlap. Yet the desired balance complies with the dynamics associated with value orientations, making it a complex task – resemblant to the complications in 'Integral Futures'. How to achieve this (paradoxical) dynamic equilibrium and make what is of value *inclusive*?¹³ (Floyd, Burns, & Ramos, 2008, p. 77) To structure debates circling around this question, it is useful to see how the works of William Shakespeare engender 'practical self-reflexive inquiry' as a catalyst for an integral approach (Voros, 2008, p. 198).¹⁴

3. Da Vinci's 'Vitruvian Man' as a model for understanding reality

For if a man be placed flat on his back,
with his hands and feet extended,
and a pair of compasses centered at his navel,
the fingers and toes of his two hands and feet will touch
the circumference of a circle described therefrom.
And just as the human body yields a circular outline,
so too a square figure may be found from it.¹⁵

¹³ 'I perceive the challenge to be in articulating an Embodied Foresight, inclusive of integral theories, but allowing them to inform (not over-code) local challenges and circumstances, and be transformed by locality and the needs at hand.' Josh Floyd, Alex Burns and Jose Ramos, 'A Challenging Conversation on Integral Futures: Embodied Foresight & Trialogues' in Journal of Futures Studies 13 (2, 2008), 77.

¹⁴ 'A truly integral approach to knowledge inquiry would seek to include not only all levels of human experience, but would also consider all levels of existence itself, in all of the forms it has been conceived of in the entire history of the human knowledge quest, be it material, mental or, indeed, spiritual.' Joseph Voros, *op. cit.* in Futures 40, 198, <http://dx.doi.org/10.1016/j.futures.2007.11.010>.

¹⁵ Marcus Vitruvius, *De Architectura*, Morris Hicky Morgan (trans.) (Cambridge: Harvard University Press, 1914), Book III, Chapter 1, retrieved 2016-0311 on <http://www.gutenberg.org/files/20239/20239-h/29239-h.htm>.

(Vitruvius/Morgan, 1914, III-1)

Around 1490, Leonardo da Vinci made a drawing of the human proportions: the 'Vitruvian Man'. The title refers to the Roman architect Vitruvius, who used these proportions fifteen hundred years earlier, in *De architectura libri decem* as a 'canon of proportions' for the construction of temples. From the centre of this figure, both a circle and a square can be drawn. As a model for understanding reality, the figure inspired philosophers, scientists and other thinkers during centuries. One of them was Carl Gustav Jung, a Swiss psychiatrist and founder of the school of analytical psychology. On the basis of this drawing he explored the relationship between the tangible human existence and the unconscious (Jung, 2011, 9:1, p. 377).¹⁶

Human anatomy, according to Jung, depicts a mental structure in the domain of the 'unconscious', where basic patterns of human behaviour are embedded. In this structure, the circle symbolizes the spiritual aspects, the square the material domain. Within this 'portrayal of man', Jung sees two centres. The ego as an entity at the centre of consciousness; the Self as the unconscious prefiguration of the ego, which includes both the conscious, the unconscious and the ego. Studying the alchemistic concept of *coincidentia oppositorum* (or *coniunctio*), Jung (2011, 14:1–2) analyses the components of the conjunction (i.e. physical and spiritual union), their underlying dualistic structure and the process towards the union of opposites.¹⁷ Van Egmond's value circle echoes Jung's interpretation: Van Egmond also suggests to find shared values in the middle of the circle, inviting sustainable balance.

4. Allegory and the search for values

4.1. William Shakespeare and his time¹⁸

Until the late Middle Ages, just before Shakespeare's time, geocentrism was the predominant cosmological system. The earth was the centre of the universe, and all celestial bodies – the sun, moon, stars and planets – were carried around the earth on spheres or circles. The Heavens stretched out above the earth, Hell was beneath. In this world, everything was linked together. The sublunary, earthly world was made up of the four elements earth, water, air and fire. The interaction between these complementary elements on earth caused movement, but this was only temporary in duration. In contrast, the movements in the super-lunar world (ether) were cyclical, unchanging, and everlasting. Every moving thing, both physical and spiritual, found its balance inside the big circle, which ever remained the same (Rivers, 1994, pp. 68–88; Tillyard, 1959).¹⁹

4.1.1. Worldview questioned

The reinterpretation of ancient sources in the European Renaissance led to scientific discoveries that changed the medieval world. Not long after the Polish mathematician and astronomer Nicolaus Copernicus proved that not the earth, but the sun is the centre of our solar system, his German colleague Johannes Kepler added that the planets do not move in circles around the sun, but make elliptical orbits: the sun is only one of two focal points (Hon & Zik, 2009, pp. 307–8).²⁰ Both findings were inconvenient for the Catholic Church. Arrogating biblical passages, the Church had led people to believe that God had created the earth as a solid, immovable rock, around which all celestial bodies made perfect circles. Due to the recent scientific discoveries, now two scenarios were possible: either the Bible was not right, or the clerical interpretation of the Bible was wrong. Both scenarios portended little good for the powerful position of the Church.

The sixteenth century brought many other discoveries and innovations, like the barometer and the telescope, which undermined the medieval worldview. Life was not a 'Perfect Circle' with the earth as its unshakable centre, and man in the upper position of the old world order, as a link between heaven and earth: between God and the animals (Nicolson, 1965).²¹ Order – if any – had to be redefined.

Thinkers like Leonardo da Vinci and Francesco Petrarca revived an old philosophical concept, probing man as the measure of all things, and questioning the hierarchical model of the Church. Human experience of reality grounded this new, early modern worldview (Cf. Zarka, 2011, pp. 111–20).²² Reviving Aristotelian aesthetics, it was not only permissible but desirable to pursue happiness in the present and not to wait for a paradise in the hereafter: Man was endowed with reason and free

¹⁶ C.G. Jung, *Die Archetypen und das kollektive Unterbewußte*, in *Gesammelte Werke* 9/1 (Ostfildern: Patmos Verlag, 1995, repr. 2011), 377.

¹⁷ C.G. Jung, *Mysterium Coniunctionis*, in *Gesammelte Werke*, 14/1&2 (Ostfildern: Patmos Verlag, 1995, repr. 2011). The 'conjunction of opposites' is an old philosophical concept, which goes back to the ancient Greeks (Heraclitus) and Hermeticism (Hermes Trismegistos), later applied by the alchemists and Rosicrucians.

¹⁸ William Shakespeare wrote his plays between 1590 and 1613.

¹⁹ Cf. Isabel Rivers, *Classical and Christian Ideas in English Renaissance Poetry: A Students' Guide* (2nd edn, London: Routledge, 1994, first published Allen & Unwin, 1979), 68–88; Eustace M.W. Tillyard, *The Elizabethan World Picture* (New York: Vintage Books, 1959).

²⁰ Giora Hon, Yaakov Zik, 'Kepler's Optical Part of Astronomy (1604): Introducing the Ecliptic Instrument' in *Perspectives on Science*, 17:3 (2009), 307–8, doi:10.1162/posc.2009.17.3.307.

²¹ Marjorie Hope Nicolson, *The Breaking of the Circle, Studies in the Effect of the 'New Science' on Seventeenth-Century Poetry* (New York & London: Columbia University Press, 1960, revised edition 1965).

²² Recently, scholars added to the traditional views of anthropocentric humanism the concept of a 'heteronomous humanism', cf. Yves Charles Zarka, 'Levinas: Humanism and Heteronomy', in the *British Journal for the History of Philosophy*, 19:1 (2011), 111–120, DOI: 10.1080/09608788.2011.533014.

will. Scientists, philosophers and artists pored over these new insights which ‘call all in doubt’, as one of them literally wrote (Donne/Patrides, 1991, p. 335, l. 205).²³ So did William Shakespeare.

4.1.2. *King and theatre*

Shakespeare's audiences varied from London citizens in the Globe to the English aristocracy and the Royal Family in Whitehall Palace or outside London. After the death of Queen Elizabeth in 1603, her successor King James I became patron of Shakespeare's theatre company, which from then on was called The King's Men. Despite this Royal recognition, Shakespeare did not shun critical allusions to Royal authority and politics. His plays denounced topical issues regarding economic and social welfare, the situation of disadvantaged groups, public health, agriculture, science, mining – all this in light of the changing worldviews in Europe.

4.2. *Allegory*

For criticism on State, Church or King, playwrights could expect a heavy penalty. Playwright Ben Jonson and some actors ended up in jail in 1597, after their staging of a satirical piece. Criticism was possible only when cloaked in smart terms. A tried instrument was allegory: a form of imagery in which the metaphor is sustained throughout the piece. Allegory often presents abstract concepts, such as Nature, Death, Love and Virtue as living persons. Thus, allegory invites the reader or viewer to search and find meanings, which can be applied to reality. These meanings are not purely critical or amusing commentary, as in satire. Satire makes fun of stupid behaviour or hateful ideas in an entertaining way, whereas allegory is directed towards the discovery of value (Clifford, 1974, p. 49).²⁴

4.2.1. *Allegorical patterns*

Such an allegorical quest for values is not random. Another characteristic of allegory is that it is built on patterns, which are continuously repeated between the start and finish of the quest (Clifford, 1974).²⁵ Those patterns are recognizable because they are life-like. They tell about the difficulties the characters have to overcome on their path; about the qualities and virtues that are important to them; about how the characters relate to each other and their challenges; about the values on which they base their choices; about the consequences of their choices and behaviour. Thus, the reader or viewer gains an insight into what does and does not work.

The allegorical patterns may instigate the reader or spectator to relate to current personal and social challenges. This increases an understanding of human relationships and social developments. Such understanding can help to find ‘sustainable values’: principles that a person or group of people find valuable and important to pursue, because they contribute to a balanced relationship between the individual, society and the environment. This is one reason why allegory, myth and metaphor are relevant to futures studies, as Anthony Judge (1993, pp. 275-6) observes:

Metaphors are used to get a conceptual handle on complexity' (. . .) A metaphor thus provides a framework of credible associations that increases the probability that relationships in other domains will be conceived according to the pattern, rather than another.²⁶

4.2.2. *Allegory is no moral compass*

A third characteristic of allegory is that there is something ‘unlimited’ in it, as Northrop Frye remarked (1957, p. 88).²⁷ There is no question of one indisputable outcome. Although facts speak for themselves – the number of deaths in *Hamlet* is nine –, the question if Hamlet's choices were correct or not, if ‘to be or not to be’ really is a question, or if Hamlet's successor Fortinbras heralds a better future, is debatable. Shakespeare provides his audience with practical handles to think about motives, reasons, actions of and consequences for the characters and their sphere of influence. The stage dialogue is a representation of Hamlet's reality, without judgement of a writer who puts up that reality.

4.3. *Shakespeare's allegorical pattern: O*

Sketches of the allegorical pattern in Shakespeare's plays correspond to the circular value model of Van Egmond. That is not surprising, given the dominance of the orderly, cyclical worldview until shortly before Shakespeare's time, and the Aristotelian influence on early modern politics (Armitage, Condren, & Fitzmaurice, 2009, p. 3).²⁸ If characters are placed in different quadrants of the value circle, they articulate tensions between different values and worldviews. An example of this

²³ John Donne, *The First Anniversarie. An Anatomy of the World, Wherein, By the Occasion of the Untimely Death of Mistress Elizabeth Drury, the frailtie and the decay of this whole World is represented.* In *The Complete English Poems of John Donne*, C.A. Patrides (ed.) (London: Everyman's Library, 1991), 335, 205.

²⁴ ‘In the first case effort is directed towards the rejection of what is valueless, in the second toward the discovery of value.’ Gay Clifford, *The Transformations of Allegory*, (London/Boston: Routledge & Kegan Paul, 1974), 49.

²⁵ ‘In the first case effort is directed towards the rejection of what is valueless, in the second toward the discovery of value.’ Gay Clifford, *The Transformations of Allegory*, (London/Boston: Routledge & Kegan Paul, 1974), 14.

²⁶ Anthony J.N. Judge, ‘Metaphor and the Language of Futures’, in *Futures* 25 (3), 275-6, [http://dx.doi.org/10.1016/0016-3287\(93\)90137-1](http://dx.doi.org/10.1016/0016-3287(93)90137-1).

²⁷ Northrop Frye, *Anatomy of Criticism, Four Essays*, (Princeton and Oxford: Princeton University Press, 1957), 88.

²⁸ Cf. *Shakespeare and Early Modern Political Thought*, David Armitage, Conal Condren, Andrew Fitzmaurice (eds.) (Cambridge: University Press, 2009), 3.

can be found in *The Tempest*. Here, the 'earthly' character Caliban is opposed to the 'spiritual' Ariel, as Antonio's egoistic materialism to Gonzalo's altruistic stewardship. The play ends with Prospero's acknowledgement of these tensions, drawing a circle on the stage, inviting the reader: only by embracing the complete value circle, the 'O' may finally come to 'Prosper'. Scholars have noted the connection with the alchemistic concept of 'coniunctio oppositorum', as later also applied by C.G. Jung in his psychoanalytical work (Cobb, 1984; Jung, 2011a, 2011b; Rogers, 1992).²⁹

Like Van Egmond's circular value model, Shakespeare's allegorical pattern has a dynamic nature. This also has to do with the *Zeitgeist*. In the early modern period, the order of the cosmos changed in the chaos of the universe. Reason and free will enabled man to bring order to chaos. Order is brought about by choices for values, which promote order. Such choices are based on human judgement, which implies difference, conflict and temporality. Therefore, Shakespeare's works are not based on a static value circle, but on a dynamic and allegorical O, in which Shakespeare plays with judgements, oppositions and conjunctions that acquire significance in dynamic reality. This dynamic allegorical O thus contrasts with 'future as where-metaphors' that 'condition people to think in terms of time as a linear arrow' (Judge, 1993, p. 279).³⁰

The significance of Shakespeare's allegorical O and how it relates to the cyclical medieval value system can be understood from the principles of the ancient art of memory, which took on a new dimension in Shakespeare's time.

5. Memory art

5.1. Memory art and association

The art of memory is a way to organize complex structures or data, because planning is essential for good memory (OED, 2016).³¹ An ancient Roman orator could memorize long speeches by associating his words with *imagines* or images, and linking those images to a series of *loci*, or locations. This allowed the orator to walk through an imaginary building via a fixed route during his speech. In each room, he found *memory images* to which he had attached parts of his speech. By means of association he could ladle the text from his memory (Yates, 1966/2001, p. 18; Carruthers, 1990/2008, p. 25).³²

5.1.1. Memory art as scientia

Building on the principles of scholastic animist philosophy, Giordano Bruno further developed memory art in the late fifteenth century (Schmitt, Skinner, & Kessler, 1998–2003, pp. 236–63).³³ Bruno used perfect geometric figures in his design (Wildgen, 2007, p. 22).³⁴ Individual letters were memorized by way of associative images, such as the O by a sphere, or the A by a ladder or a pair of compasses, and combinations formed new words or sentences (Gatti, 2002, p. 198).³⁵ Thus Bruno's memory art functioned as a practical tool for foreign language acquisition.

Bruno argued that the *adiecta* (literally 'participles': the symbolic contents of a memory cell, called *imagines agentes* by Cicero) express a dynamic which is characteristic of the soul, and manifests itself in the process of reasoning (Farinella & Preston, 2002, pp. 599–609).³⁶ Bruno reasoned that this internal movement principle was not only to be found in the tiniest elementary particles, but also in the memory images: if there is a principle of movement that determines the outer world, it should also be traceable within: through our imagination. Thus, imagination spurred on the development of science, which, after heliocentrism, now proposed theories about the infinity of the universe (Gatti, 2002, p. 202).³⁷ Now memory art was more than a practical way to store and reproduce information: it had become a meditative discipline focused on spiritual and scientific deepening, on the basis of willpower and imagination (Yates, 1966/2001, pp. 226–7).³⁸

5.2. Memory art and Shakespeare

Memory art had a great potential. Backwards, it grounded memory, facilitating the memorization of words, texts, events, people and objects in various combinations. Forwards, it trained the mind, as a technique for developing and testing

²⁹ For Jungian readings of Shakespeare, cf. Barbara Rogers, *Jung and Shakespeare, Hamlet, Othello and The Tempest* (Wilmette: Chiron Publications, 1992) or Noel Cobb, *Prospero's Island, The Secret Alchemy at the Heart of The Tempest* (London: Coventure, 1984). For Jung's explanation of *coniunctio oppositorum*, see Jung (1995), *op. cit.*

³⁰ Judge, in *Futures* 25 (3), 279, [http://dx.doi.org/10.1016/0016-3287\(93\)90137-I](http://dx.doi.org/10.1016/0016-3287(93)90137-I).

³¹ OED, mnemonics, n.

³² Frances Yates, *The Art of Memory* (London: Pimlico, 1966, repr. 2001), 18; Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: University Press, 1990, second edition 2008), 25.

³³ *The Cambridge History of Renaissance Philosophy*, Charles B. Schmitt, Quentin Skinner, Eckhart Kessler (eds.) (Cambridge: University Press, 1988–2003), 236–63.

³⁴ Wolfgang Wildgen, 'Color, Smell and Memory', in *Speaking of Colors and Odours*, Martina Plümacher and Peter Holz (eds.) (Amsterdam-Philadelphia: John Benjamins Publishing, 2007), 22.

³⁵ Hilary Gatti, *Giordano Bruno and Renaissance Science: Broken Lives and Organizational Power* (Ithaca: Cornell University Press, 1999; repr. 2002), 198.

³⁶ Alessandro Farinella and Carole Preston, 'Giordano Bruno: Neoplatonism and the Wheel of Memory in the *De Umbris Idearum*', in *Renaissance Quarterly* 55-2 (2002), 599–609, DOI: [10.2307/1262319](https://doi.org/10.2307/1262319).

³⁷ Gatti, *op. cit.*, 202.

³⁸ Yates, *op. cit.*, 226–7. Yates argues that the major emphasis on imagination is characteristic of the Renaissance, and that the memory systems exhibit 'a profound conviction, that man, the image of the greater world, can grasp, hold, and understand the greater world through the power of his imagination.'

scenarios. In both ways, memory images work by way of association. Once the mental powers in the memory wheel (the ‘O’ of Shakespeare’s plays) are put to work, association creates new perspectives, emerging from memorized realities that enhance social learning. This key idea was represented by the flag above the entrance of Shakespeare’s old Globe, depicting a memory image of Hercules with the globe on his shoulders (Casteren van Cattenburch, 2015).³⁹ Shakespeare literally and figuratively played with it: in, on and through the (letter) O.

6. Shakespeare’s O for sustainable futures

As the letter ‘O’ in memory art is memorized by the image of a sphere, so Shakespeare used the letter O as a word with many meanings. These meanings have one feature in common: they allude to a regenerative capacity. That reference can be either positive or negative, or both. If positive, the O can produce a new and animate perspective, hence ‘sustainable’ in the long term. If the allusion is negative, the O awakens to values (choices) that are not ‘sustainable’ in the long term.⁴⁰ The movement of Shakespearean characters between these alternate values echoes in works of other seventeenth-century authors like Ben Jonson or John Lyly, and corresponds to the indications of centripetal and centrifugal orientations in Van Egmond’s sustainability theory. In a study on Ben Jonson, Thomas Greene (1970, p. 326) literally refers to centripetal and centrifugal forces:

Most of the works in Jonson’s large canon – including the tragedies and comedies, verse and prose – can be categorized broadly in their relation to an implicit or explicit centre. That is to say, one can describe an image or character or situation as durable, as centre-oriented and centripetal (I shall use these terms as more or less synonymous) or one can describe them as moving free, as disoriented and centrifugal, in quest of transformation. To sketch these categories is to seem to suggest absolute poles, ethically positive and negative.⁴¹

This quotation resonates with the dynamics in societal value orientations described above, as deduced from recent social surveys. There is a direct association between ‘durable’ (sustainable) and the orientation on the centre, with a positive ethical annotation. Greene (1970, p. 326) associates the positive with (the assertion of order in) the ‘masques’ and comedies and the negative with (crudity and disorder in) the ‘anti-masques’ and tragedies:

The great storehouse of Jonson’s centripetal images is the series of masques which assert, almost by definition, the existence of an order. The succession of anti-masque to masque, of crudity and disorder to beauty and order, demonstrates over and over the basic harmony of the cosmos and the realm.⁴²

This corroborates the idea of a circular value pattern, with an outspoken ethical notion; positive in case of centripetal forces (comedies) and negative in case of centrifugal forces (tragedies).

6.1. O’s senses

The circle metaphor is also used in the plays, in many ways. A few examples will be given:

O, crown; O, zero

In the tragedy *King Lear*, the Fool says to Lear: ‘Thou art an O without a figure’: a zero without a cipher preceding it, which means zero, nothing (Shakespeare/Hinman, 1968/1996, p. 796).⁴³ The O alludes to the precious crown on the King’s head, which really is not worth anything, because Lear has not been able to pass on his kingdom to the next generation in a ‘sustainable’ way: succession in *King Lear* ends in a bloodbath. With his ‘O without a figure’, the Fool suggests that Lear’s crown is hollow, an empty ring. This allusion (or memory image) may alert to the thought that sustainable values are to be found elsewhere.

O, vagina

The comedy *Much Ado About Nothing* is peppered with disputation, intrigue, imputation and conspiracy for the sake of ‘love’. The play ends with the promise that two couples marry and the schemer is punished, leaving the audience to conclude that there was no reason for such a fuss. The accusation, that the fiancée of one of the main characters had been unfaithful and lost her virginity, turned out to be groundless, as also the ostensible hostility between the second pair of lovers, who really just seemed to love each other. There was ‘much ado about nothing’: nothing, zero, 0. And all this ‘much ado’ was about ‘n O-thing’, a vulgar word for vagina, which definitely needs ‘No-thing’ (noting, notion) for the consummation of marriage (Partridge, 1947/2001, p. 200).⁴⁴

³⁹ Hercules replaces Atlas in his eleventh ‘impossible labour’ which is to fetch the three golden apples from a tree guarded by a hundred-headed dragon and the Hesperides. Since Atlas is the father of the Hesperides, he can steal the apples without creating suspicion. While Hercules takes over Atlas’s load (i.e. the celestial vault, represented by the globe), he receives help from the goddess Pallas Athena. This event alludes to the rare moment when ‘Heaven and Earth’ are reconnected (and humans can peep behind the heavenly scenes, i.e. they can broaden their perspectives for mutual respect and understanding). Further contextualization in author’s dissertation (2015).

⁴⁰ The ideas framed here have been substantiated in the author’s dissertation (Utrecht University, 2015: oai:dSPACE.library.uu.nl:1874/313689).

⁴¹ Thomas M. Greene, ‘Ben Jonson and the Centered Self’ in *Studies in English Literature, 1500–1900*, 10:2 (1970), 326, DOI: [10.2307/449921](https://doi.org/10.2307/449921).

⁴² Thomas M. Greene, ‘Ben Jonson and the Centered Self’ in *Studies in English Literature, 1500–1900*, 10:2 (1970), 326, DOI: [10.2307/449921](https://doi.org/10.2307/449921).

⁴³ *The Tragedie of King Lear*, in *The Norton Facsimile, The First Folio of Shakespeare, Based on Folios in the Folger Shakespeare Library Collection*, Charles Hinman (ed.) (New York-London: W.W. Norton & Company, 1968, second edition 1996), 1.4.705–8, p. 796. Cf. *King Lear*, R.A. Foakes (ed.), *The Arden Shakespeare* (London: Methuen, 1997), 202, 1.4.83–4: Foakes explains the ‘O without a figure’ as ‘cipher, or zero, with no number before it to give it value’.

⁴⁴ Eric Partridge, *Shakespeare’s Bawdy* (London and New York: Routledge, 1947; 2001), 200 (‘O’ for ‘circle’), 99 (‘circle’ for ‘pudend’).

O, death; O, eternity

In *The Tempest*, O is used to indicate different meanings. The first emanates from Sebastian and Antonio, two thugs who are keen on seizing power and willing to commit a double murder for it. When they raise their swords above the sleeping king Alonso and his counsellor Gonzalo, Sebastian says, 'O, but one word', which means: 'For the boundary between life and death, only one word is needed: 'O'. To the nonbeliever, O is the point at which life merges into nothingness (the empty O, nothing). To the believer, O is the moment when man's corruptible body is separated from the immortal part, namely the soul (O as the perpetually rotating wheel of life).

O, the soul

In the fifth act of *The Tempest*, Prospero the 'magician' draws a magic circle on the floor around all characters (Shakespeare/Hinman, 1968/1996, p. 34).⁴⁵ They all stand rooted to the spot, as Prospero makes his critical one-way address. This O alludes to Prospero's moment of insight, as he finally realizes he has kept himself out of the circle of his own projections, whereas he had (has) a score to settle with himself. He must step into his own O for spiritual growth: he has to 'prosper O'. The O here alludes to the incentive of movement and life, which memory artists in Shakespeare's time would have called the 'soul' (Auden/Kirsch, 2003, p. 6).⁴⁶

6.2. Crossing Shakespeare's O

Shakespeare's O functions as a topographic map, emerging from the play's structure. The 'story', told from the prologue to the first act until the epilogue after the fifth, is like a sphere that has no beginning and no end. All characters and their fortunes are in this sphere. Identifying with the characters, the reader rolls on with the time span of the play to experience the forces manifested within: rivalry, alliance, revenge, resentment, respect, acceptance, desire, despair, understanding.

This interplay of forces takes place between the characters, and is constantly changing. The sphere includes the pattern under these forces. This pattern underlies the structure of the play, the characteristics of its characters, themes, storyline, attributes and other memory images. Whereas forces differ from play to play, the underlying pattern hardly changes. Alongside the characters, the reader hikes through an allegorical landscape, wherein memory images serve as markers on the route. O is the topographic map, which the reader uses to find his way in the allegory, discover new paths and learn which routes are sustainable and which are not.

6.3. Shakespeare's O for sustainable futures

Richard Slaughter (1998, p. 997) refers to Herman Hesse's *Siddharta* as a dramatisation of 'the potentially powerful influence of the presently-eclipsed 'perennial tradition', or collective spiritual wisdom of humankind,' and the obscuration or loss of this 'knowledge of a prior, inner world to most people'.⁴⁷ In a critical futures approach, *Siddharta* can function as an instrument to re-admit 'the interior dimensions of individual and collective life into the picture as well as re-assessing the kinds of values and deep cultural commitments we wish to take on into the future' (Slaughter, 1998).⁴⁸

In a similar vein can Shakespeare's O 'hold a mirror up to nature' (Shakespeare/Hinman, 1968/2001, p. 774) in order to bring 'obscured assumptions to full awareness, where they can be examined and, if necessary, discarded' (Slaughter, 1998, p. 999).⁴⁹ This, in Hamlet's words, is exactly the 'purpose of playing':

HAMLET for anything so overdone is from the purpose of playing,
whose end, both at the first and now, was and is, to hold, as
'twere, the mirror up to nature; to show Virtue her own feature,
scorn her own image, and the very age and body of the time his
form and pressure.

Allegorically, Hamlet's 'playing' stands for 'living consciously'. If the allegorical mirror is applied properly, it raises consciousness of virtues, vices and their dynamic balance, and it does so in the 'very age and body of the time'. Shakespeare's words cannot be reduced to a singular meaning or ideology, but they engender meaning within new contexts. As in *Siddharta*,

⁴⁵ 'Heere enters Ariel before: Then Alonso with a franticke gesture, attended by Gonzalo, Sebastian and Anthonio in like manner attended by Adrian and Francisco: They all enter the circle which Prospero had made, and there stand charm'd: which Prospero obseruing, speakes:;', which is the stagedirection in William Shakespeare, *The Tempest*, in *The Norton Facsimile, The First Folio of Shakespeare, Based on Folios in the Folger Shakespeare Library Collection*, Charles Hinman (ed.) (New York-London: W.W. Norton & Company, 1968, second edition 1996), 5.1.2034-7, 34.

⁴⁶ Cf. W.H. Auden, *The Sea and the Mirror, A Commentary on Shakespeare's The Tempest*, Arthur Kirsch (ed.) (Princeton and Oxford: Princeton University Press, 2003), 6. Arthur Kirsch writes in his introduction to Auden's poem: 'At the same time, though Auden yearned to transcend dualism – he said that 'All the striving of life is a striving to transcend duality' – he remained acutely conscious of its contrapuntal manifestations in human existence. He said that in this world 'all experience is dualistic,' and insisted that 'Man is neither pure spirit nor pure nature – if he were purely either he would have no history – but exists in and as a tension between their opposing polarities.' He thus praised what he called 'binocular vision,' and said that the 'one infallible symptom of greatness is the capacity for double focus.'" (xix–xx)

⁴⁷ Richard Slaughter, 'Futures beyond dystopia' in *Futures* 30:10, 997, [http://dx.doi.org/10.1016/S0016-3287\(98\)00101-3](http://dx.doi.org/10.1016/S0016-3287(98)00101-3).

⁴⁸ Richard Slaughter, 'Futures beyond dystopia' in *Futures* 30:10, 997, [http://dx.doi.org/10.1016/S0016-3287\(98\), 999](http://dx.doi.org/10.1016/S0016-3287(98), 999).

⁴⁹ *The Tragedie of Hamlet, Prince of Denmarke*, Shakespeare, *Hamlet*, in *The Norton Facsimile, The First Folio of Shakespeare, Based on Folios in the Folger Shakespeare Library Collection*, Charles Hinman (ed.) (New York-London: W.W. Norton & Company, 1968, second edition 1996), 3.2.1867-72, 774. Second quotation: Slaughter, in *Futures* 30:10, 999, [http://dx.doi.org/10.1016/S0016-3287\(98\)00101-3](http://dx.doi.org/10.1016/S0016-3287(98)00101-3).

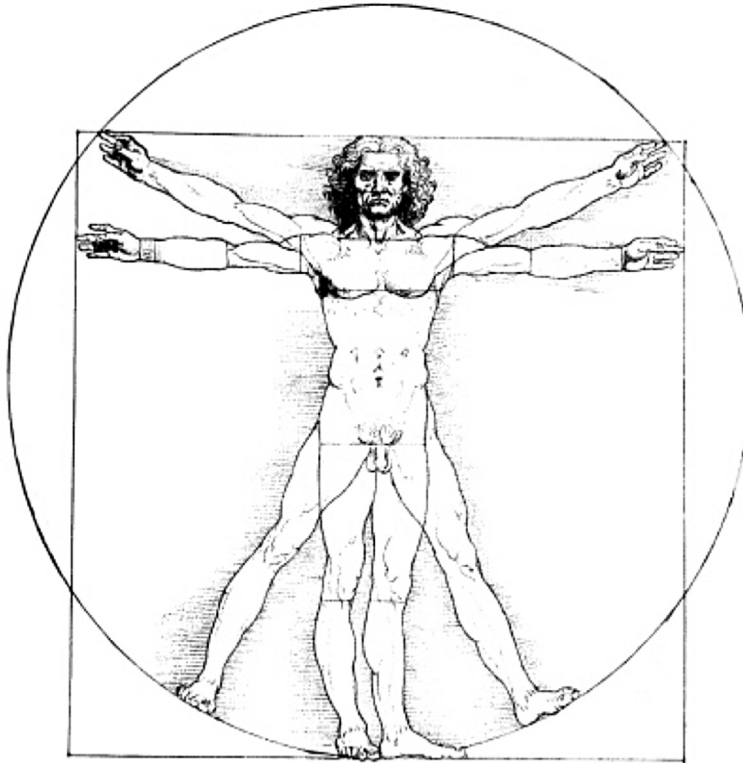


Fig. 4. Reproduction of Leonardo da Vinci's *Vitruvian Man* (van Egmond & de Vries, 2011; van Egmond, 2014).

every action and event can lead to understanding (consciousness), while the allegorical O keeps questioning the 'Future' as an energetic fellow actor playing a vital role in 'Present's' play.

6.3.1. Plurality

The application of Shakespeare's allegorical O to contemporary sustainability debates matches the method of causal layered analysis (CLA) in the poststructuralist futures approach of Sohail Inayatullah (1998, p. 815) in the sense that Shakespeare's works serve 'to open up the present and past to create alternative futures' – (pluralistically) following from their cyclical value pattern.⁵⁰ Shakespeare's allegorical O focuses on multiple interpretations rather than *a* meaning: it invites the reader to find out new meaning (of an issue at hand) by questioning the allegorical path while questioning the future (of the issue at hand). Because allegory 'attempts to offer means by which we can interpret our relationship to the past, to the forces operating in the psyche, and to the facts and processes of the world around us' (Clifford, 1974, p. 54), the structure of Shakespeare's allegorical pattern exposes a deeper coherence⁵¹:

1. With particular experience (in allegory: the conflict/inciting event; in CLA: the 'litany' of the issue at hand);
2. With the shared story (at plot level: action 1 causes action 2, leading to climax and dénouement; in CLA, understanding of the working of the system behind the issue at hand);
3. Continuity between particular experience and different philosophic insights, related to individuals and groups, division of roles and structure, leading to climax and peripeteia in allegory; in CLA, cultural carriers, different ways of knowing and worldview(s) under the system and issue at hand;
4. Continuity between past, present and future: questioning the dénouement and peripeteia in Shakespeare's allegorical O is questioning the future. Moving up and down the layers of analysis is a way to transform the metaphor, in order to transform the world, while allegory keeps watching over the continuity of the transformation process (we are learners).

Shakespeare's allegorical value pattern thus adds to the post-structural futures toolbox, as an instrument to anticipate futures that move beyond 'rational/design efforts' and become manifest through an understanding of collective archetypes under changing worldviews.

⁵⁰ Sohail Inayatullah, 'Causal Layered Analysis', in *Futures* 30:8, 815, [http://dx.doi.org/10.1016/S0016-3287\(98\)00086-X](http://dx.doi.org/10.1016/S0016-3287(98)00086-X).

⁵¹ Clifford (1974), *op. cit.*, 54.

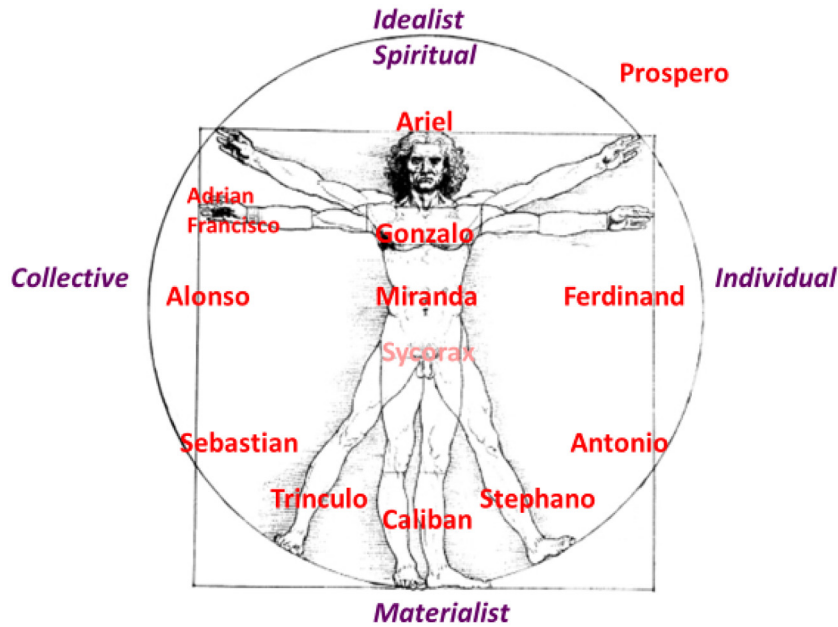


Fig. 5. Inscribing characters of Shakespeare's *The Tempest* in the value pattern: Shakespeare's allegorical O (van Egmond & de Vries, 2011; van Egmond, 2014).

6.3.2. Teleology

The structure of Shakespeare's value quest resonates in Da Vinci's *Vitruvian Man*, as it symbolizes the dynamics of Renaissance humanism, addressing the human challenge to move along with the cyclical movement of Time, and to find renewed balance in the process of the seasons. Shakespeare may have been familiar with Da Vinci's drawing, as one of his contemporaries and friend, Ben Jonson, had an annotated version of Vitruvius's *De Architectura Libri Decem* in his library collection, and Jonson is known for his association with architecture and its influence on his literary works (Johnson, 1995).⁵² In an Aristotelian vein, the four quadrants or seasons symbolize the qualities of life: 'you and me', 'spirit and matter', 'dark and light', 'water and fire'. Traversing the allegorical O is then a metaphor for the human challenge (Fig. 4⁵³):

- To understand these life qualities (in the physical world – the square);
- To understand the interdependence of these experiences (in the mental world – the circle);
- To keep searching for the values that define solidarity and cohesion, and to apply them (in an interplay between circle and square).

In Da Vinci's drawings, the value spectrum circles around two focal points: the navel in the *homo ad circumum* (as the spiritual/mental centre) and the genitals in the *homo ad quadratum* (as the physical/sexual centre). The navel and genitals are biological conditions for new life, as they facilitate the propagation of the species. They also symbolize the foundation of spiritual regeneration as two focal points in the ever-relevant quest for values worthy of pursuit.

Again, in an Aristotelian vein, Shakespeare's allegorical O grounds this quest in the presupposition that allegory is a 'teleological process: one begins with a goal and shows how a given set of steps leads to that goal' (Richter, 2001, p. 204).⁵⁴ As this structured process is both 'unending' and 'unlimited', allegory can serve to understand society's reflexive relationships with their futures. Then Shakespeare's allegorical O can be applied to pose questions like: How does an issue relate to relevant issues in the value circle? Which conditions are attached to these relationships, and why? How do perceptions of reality affect the issue? How can the issue be placed in (a) coherent pattern(s)?

Such questions can be posed on the basis of an associative grouping of Shakespearean characters in the allegorical O (Fig. 5⁵⁵):

⁵² A.W. Johnson, *Ben Jonson, Poetry and Architecture* (Oxford: Clarendon Press, 1995).

⁵³ Reproduction of Leonardo da Vinci's *Vitruvian Man*, used by Klaas van Egmond in works cited (2010, 2011, 2014).

⁵⁴ Richter, Daniel S., 'Plutarch on Isis and Osiris: Text, Cult, and Cultural Appropriation', in *Transactions of the American Philological Association*, Volume 131 (Baltimore: Johns Hopkins University Press, 2001), 204, <http://www.jstor.org/stable/20140969>.

⁵⁵ Reproduction of Leonardo da Vinci's *Vitruvian Man* derived from Klaas van Egmond in works cited (2010, 2011, 2014).

Association of the plot development in the allegorical O with a current sustainability issue then becomes a learning process, during which the student becomes aware of values articulated in the allegory, which may be applicable to considerations regarding the current issue, in anticipation of any subsequent debate or plan of action.

6.3.3. Aristotelian

According to Van Egmond, MacIntyre and others, the complex twenty-first century sustainability challenges need new devices for thinking: instruments to quest for values worthy of pursuit, in order to anticipate more integral futures. Such quests involve the articulation of a human telos, a notion that was abandoned by the Enlightenment philosophers, who instead attempted to provide epistemic grounds for moral judgement (MacIntyre, 1981/2007/2011, p. 55).⁵⁶ Shakespeare's O is a product of the northern European Renaissance and is founded on an Aristotelian view of ethics, which demands at least some account of the human telos. It also represents the dynamics of the (rapidly changing) early modern value pattern, which makes it even more appropriate to the twenty-first century quest for more integral futures.

7. Conclusion

The circle metaphor in the works of William Shakespeare (O) alludes to a cyclical allegorical value pattern, which serves to guide quests for values worthy of pursuit, and to facilitate social learning.

Shakespeare invites to cross this allegorical O and learn about personal and generic values. 'Learning' here is synonymous with 'consciousness-raising', brought about by a growing (mutual) understanding of and respect for different perspectives. This idea is the nucleus of Shakespeare's works, and the key to the working of his allegorical pattern. It corresponds to Van Egmond's plea for a stimulus of the centripetal movement towards a 'conjunction of opposites' around the centre of the circular value orientation model, constructing an integral worldview for the sake of (more) sustainable decisions. Resounding an Aristotelian view of ethics, Shakespeare's dynamic allegorical O helps to examine virtues at individual and societal level. Then the application of Shakespeare's allegorical O may instigate a 'cyclic understanding (that) may prove to be more consistent with economic and social cycles, as well as with the cycles in an individual's lifespan' (Judge, 1993, p. 280).⁵⁷

Two contemporary case studies, which will be worked out in a subsequent paper, have shown that Shakespeare's allegorical pattern provides practicable handles to make key business concerns a subject of discussion and work towards (sustainable) solutions with stakeholders. Thus, Shakespeare's allegorical O enhances the meaning and applicability of Van Egmond's new ethical framework in contemporary sustainability debates. Such endeavour is highly needed, as Richard Slaughter emphasizes that 'humanity is neither responding nor adapting to new conditions and is therefore currently at greater risk than is commonly understood (Slaughter, 2009, p. 6).'⁵⁸

If, as Shakespeare would have agreed with Slaughter, humans are 'a species capable of endless self-transformation, vertical (qualitative) growth and development' (Slaughter, 1998, p. 1000), then it is worthwhile to traverse Shakespeare's allegorical O, and circle its dynamic centre.⁵⁹ As Van Egmond's sustainability research has shown, such quests uncover new ways to 'Sustainable Civilization'. Then Shakespeare's futures may not only deepen social and political debates, but also add to educational curricula and strategic thinking.

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⁵⁶ MacIntyre, *op. cit.*, 55.

⁵⁷ Judge, *op. cit.*, in *Futures* 25:3, 280, [http://dx.doi.org/10.1016/0016-3287\(93\)90137-1](http://dx.doi.org/10.1016/0016-3287(93)90137-1).

⁵⁸ Richard Slaughter, 'The state of play in the futures field: a metascanning overview' in *Foresight* 11 (5, 2009), 6, <http://dx.doi.org/10.1108/14636680910994932>.

⁵⁹ Slaughter, *op. cit.*, in *Futures* 30:10, 1000, [http://dx.doi.org/10.1016/S0016-3287\(98\)00101-3](http://dx.doi.org/10.1016/S0016-3287(98)00101-3).

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