

GERALD MANLEY HOPKINS'S *ECOSOPHICAL* LAMENT

ANTONELLA RIEM
UNIVERSITÀ DI UDINE

Abstract – This essay focuses on Gerald Manley Hopkins's poetical lament in response to the ecosystem being attacked and devastated by the Victorian industrial revolution. The exploitation of natural resources resulting in the destruction of our environment emanates from a 'dominator' idea of economy as unlimited growth. My approach to Hopkins's poetry, in line with the Partnership Studies Group research work, is tied to Eisler's biocultural partnership-dominator model, Panikkar's ideas on ecosophy, Capra's contemporary systemic science, also in his interaction with Mancuso's investigations on plant biology. This methodological background is meant to go beyond traditional binary oppositions and focus more on interdisciplinary partnership perspectives, in their different representations of the natural world and life, including all so-called sentient and non-sentient beings. Hopkins was well aware of the importance of literature and art to address contemporary issues in order to inspire, educate and transform and did so through his poetry.

Keywords: Hopkins; ecosophy; partnership studies; systemic science.

1. *Hopkins's Environmental Concerns*

This essay focuses on Gerald Manley Hopkins's poetical lament in response to the ecosystem being attacked and devastated by the Victorian industrial revolution. The exploitation of natural resources resulting in the destruction of our environment emanates from a 'dominator' idea of economy as unlimited growth. My approach to Hopkins's poetry, in line with the Partnership Studies Group research work,¹ is tied to Eisler's biocultural partnership-dominator model, Panikkar's ideas on ecosophy² (Phan & Ro 2018), Capra's contemporary systemic science Fritjof Capra (1975; 1996), also in his interaction with Stefano Mancuso's investigations on plant biology (Capra & Mancuso 2019), or, as he and his colleagues provocatively define it, "neurobiology".³ This methodological background is meant to go beyond traditional binary oppositions and focus more on interdisciplinary partnership perspectives, in their different representations of the natural world and life, including all so-called sentient and non-sentient beings.

Hopkins was well aware of the importance of literature and art in addressing contemporary issues in order to inspire, educate and transform. His interest in the emergent ecological concerns, often led him to write in his poetry and notebooks about the environmental degradation of his beloved countryside and of the cities (Bump 1990, p. 86). He was very much involved in the scientific inquiries of his time, and published articles on scientific themes in *Nature*, the journal of science *par excellence*, then and now. His involvement in scientific themes and his publications in *Nature* are evidence of

¹ http://all.uniud.it/?page_id=195 and <http://www.antonellariem.it/partnership-studies-group-2/>.

² <http://www.raimon-panikkar.org/english/gloss-ecosofi.html>; <https://www.avvenire.it/agora/pagine/ecosofia-teilhard-a-panikkar>.

³ See: Mancuso's *International Laboratory of Plant Neurobiology*: <http://www.linu.org/>.

how literature, philosophy and art were, and still are considered very relevant for any 'scientific' discussion, due to their range of interests, their capacity to 'create' worlds through words, deepening the interdisciplinary scope of research. Across the ages, literature and the arts have been a fundamental tool in interpreting reality in its manifold forms and expressions, often poetically and imaginatively evidencing what now the most recent scientific discoveries confirm: we are an interconnected, "inter-in-dependent" living network or *cosmos*.

Panikkar, like Hopkins, has a religious vision of unity, and focuses on a harmonious relationship with the world, based on a relational (another word for *partnership*) ontology of "inter-in-dependence" (Panikkar 2010, p. 60), also expressed in his *cosmotheandric* (cosmos, divine, human) idea of reality which descends from the Buddhist concept of *Pratītyasamutpāda*, dependent co-origination (Phan & Ro 2018). For Hopkins too, a being (creature, natural element) still maintains its own *thisness* and at the same time cannot be seen as separate but should be felt and read as interconnected to the whole, in a partnership relationship.

After publishing his first bestselling book *The Tao of Physics*, Fritjof Capra realised that whether dealing with the environment, our fellow human beings, animals, plants, stones, elements, or with our economic and social organisations, "we are always dealing with living systems" (Zutshi & Capra 2018). Thus he moved from physics, which can only provide "knowledge about the material structures" (Zutshi & Capra 2018) of reality, to the life sciences, in a "conceptual framework that integrates four dimensions of life: the biological, the cognitive, the social and the ecological dimension" (Zutshi & Capra 2018). This *turning point* is a basic change of focus, leading us towards a systemic, biocultural, partnership, organicist, and comprehensive vision that takes our research beyond the confines of rigid dogmatic and doctrinal specialisations. In tune with Raimon Panikkar's spiritual *ecosophy*, this vision is well represented in Romantic poetry, especially in Coleridge's Organicist theory and in Hopkins's religious, philosophical and poetical perception of life as a spiritual network (Day 2004, pp. 181-194), and not a machine:

A certain habitual ecological attitude must be overcome in order to go much deeper, seeking a new equilibrium between matter and spirit (Ecosofía. *Para una espiritualidad de la tierra*, Madrid 1994).

Beyond a simple ecology, ecosophy is a wisdom-spirituality of the earth. 'The new equilibrium' is not so much between man and the earth, as between matter and spirit, between spatio-temporality and consciousness. Ecosophy is neither a mere 'science of the earth' (ecology) nor even 'wisdom about the earth', but rather a 'wisdom of the earth herself' that is made manifest to man when he knows how to listen to her with love.⁴

Panikkar's neologism *ecosophy* is meant to pinpoint the relational quality of things; he puts together *Eco*, from the Greek *oikos*, house, to speak of our eco/earth/house and *Sophia*/wisdom and to set the question of ecology (*eco/logos*) in a wider spiritual context, including our human responsibility and the necessity of our ethical engagement to 'care' for all life, because of a deeper understanding of the divine being present in nature (Phan & Ro 2018).

Hopkins's approach to the environment is akin to Panikkar's; it is tinged with Jesuit theology and often focuses on the qualities in nature that manifest our biocultural

⁴ See: <http://www.raimon-panikkar.org/english/gloss-ecosofi.html> and <https://www.avvenire.it/agora/pagine/ecosofia-teilhard-a-panikkar>.

human capacities for love, care, creativity, and awareness – the partnership model. At the same time, very stringently, Hopkins detects the insensitivity, aggressive brutality and violence of what Eisler calls the dominator model (Eisler 1987; 1995; Eisler & Fry 2019). Nature is always at the core of Hopkins's meditations, as the outward temple where God manifests Himself - and often more importantly - in the most ancient world species, the 'vegetal'. He addresses a powerful appeal to us humans, to look and listen with focus and care, for this can lead us to a spiritual understanding and realisation.

In his religious world-view perceiving the presence of God in all creation, Hopkins would agree with the quantum physics idea that we cannot "decompose" the world into independently existing elementary units. Since his adoration for God found expression in his love and appreciation for His creation, Hopkins's too anticipates our contemporary concerns about our climate and ecosystem, underlining the stony indifference of humans' versus nature/divine creation. This is a key theme underlying many of Hopkins's poems, such as, for example, "Binsey Poplars" and "God's Grandeur", where what matters most of all to the poet are the "interconnections between things" (Capra 1996, p. 30), or, to use his own words, the "instress" that is created between the different "inscapes", or "within scapes", of things.⁵ The relationship of Hopkins's poetry with contemporary science was quite clear to Jerome Bump already in 1975, in his essay on Hopkins, the humanities and the environment:

The Emergence of ecology, Gestalt psychology and the theories of relativity and indeterminacy in modern physics and quantum theory has revealed that the primary cause of the accelerated destruction of our natural environment is our habitual confusion of certain models with reality. In our love affair with technology we forget that multi-dimensional reality cannot always be translated into a linear symbol system, much less simplistic dualism (Bump 1974, p. 227).

According to Panikkar, the dualistic perspective stemming from the Cartesian dominator dichotomy of body and mind divides reality in isolated compartments and categories and also entails the painful separation between nature, God and humanity. As a consequence, this creates fragmentation and isolation and has been in recent times a powerful instrument in order to negate the essential relational and partnership quality of life (Phan & Ro 2018). In some of their studies on the profound multi-dimensional interrelatedness of all living forms, including plants, also Fritjof Capra and Stefano Mancuso describe this necessary integrated relational, systemic or holistic approach, stemming also from their research on Leonardo da Vinci's organicist conception of existence:

The similitudes and symmetries [Leonardo] noted suggested him the existence of profound relationships between living forms and the environment, and therefore the idea of an integration within the whole biosphere. Leonardo's organicist conception of life remained as a subterranean current of biology throughout the centuries, surfacing only at times. Nowadays, though, from our modern perspective of the complexity and the living systems theories, we can state that Leonardo's intuition was absolutely correct: the coexistence of stability and mutation which is realised in the form of the spiral, and especially in the spiral vortex, is in truth a fundamental feature of all living systems (Capra & Mancuso 2019, p. 13, my translation; See also: Capra 1996).

⁵ "Hopkins is beginning to make regular use of the words 'inscape' and 'instress': 'instress' appears first in the *Journal* on 27 June 1868 (p. 168); 'inscaped' on 7 July (p. 170); and 'inscape' on 16 July (p. 175)". (House & Storey 1959, p. XXIV).

Analogous symmetries and relationships can be found in Coleridge's idea of Organicism and the Oneness of all life (Riem 2005, Cheyne 2017),⁶ and in Hopkins's focus on the inscape of things, the inner essence that according to him revealed God's presence in the created world.

2. My Aspens Dear All Felled

Even if Hopkins writes in the Victorian Age, he is not far from Romantic philosophical and poetical notions, especially in his closeness to the natural world, in his lyricism and focus on the inner Self, in his intimate relationship with God. Hopkins wrote "Binsey Poplars" in March 1879, after returning to Oxford for a temporary curacy at a local parish. To his dismay, he found that all his "aspens dear" had been "felled", and their wood had been used for the railways, the big industry of the time, which Hopkins thought as a devastating force against nature. The poem is a dirge in memory of the lovely trees of the title, which once shaded his favourite riverside walk near the small hamlet of Godstow, a few miles north of Binsey, during his undergraduate days at Oxford, around 1865 (White 1995, p. 303). These poplars constituted a significant part of the river scene where he was fond of walking, contemplating, meditating and jotting down intuitions and reflections in his notebook. The poem outlines the plaintiff outburst of his poignant emotions against what he describes as a terrible act of ecological vandalism against the magnificence and generous healing presence of natural elements, as live expressions of God's creation.

Hopkins believes that each natural phenomenon embodies unique characteristics, composing what he defines as "inscape", which manifest the clear imprint of God's presence in all His creation (Cash 2009, pp. 87-96; pp. 94-96). After he became acquainted with Duns Scotus's philosophy (c. 1270-1308), he found more solid theoretical foundations for his intuition, because, according to Scotus, every physical element specifically manifests its *thisness*, or *haeccitas*, its God-given inherent and specific properties that render it unique and different from anything else in the world. Thus, destroying an element in God's creation impoverishes our capacity to see and perceive beauty, and is an insult against God's loving presence, the "unity in variety" and "pervasiveness of that relationship throughout our environment" (Bump 1974, p. 231). In his journal, he describes what happens when human destruction befalls on nature and the "great pang" of pain he feels for the felling of an ash-tree growing nearby:

April 8 1873: The ashtree growing in the corner of the garden was felled. It was lopped first: I heard the sound and looking out and seeing it maimed there came at that moment a great pang and I wished to die and not to see the inscapes of the world destroyed any more (House & Storey 1959, p. 230).

Hopkins was keenly aware that a different "organicist" and holistic approach to the beauty and poetry of our world was required, a spirituality belonging to us all: humans, plants, animals, stones, elemental forces – to life. Analogously to contemporary systemic science (Capra 1975), Hopkins felt the need for an ontology (and maybe a theology) that could acknowledge once again Mother Earth as a conscious and spiritual being. In this he anticipated the chemist James Lovelock, who, in the 1970s, first articulated his *Gaia* Hypothesis (Lovelock, [Atmospheric Environment](#) 1972, pp. 579-580), naming it after the

⁶ See also: Riem, *The Unstruck Sound of Oneness*. forthcoming.

Greek Earth Goddess. His theory has subsequently developed in collaboration with the microbiologist Lynn Margulis (Lovelock & Margulis 1974, pp. 2-10), and later refined with ideas coming from different areas of study such as Earth-life system science and systems ecology (Wilkinson 2006; Beerling 2007; Cockell 2008; Tyrrell 2013). All these contemporary investigations demonstrate that our patriarchal dominator approach to the Earth has failed and we urgently have to change direction, as the “Fridays for Future Movement”,⁷ among the many, has recently strongly purported. We need to change what some feminist critics call the patriarchal dominator politics of death, which has prevailed at least over the last four thousand years. This is manifest in political and religious systems that impose and maintain power through a dominance-submission social structure and a strategy based on fear of violence and death:

We are at the point where we must evolve or die. In a chilling book published in 1972, called *The 20th Century Book of the Dead*, Gill Elliot compiled statistics of all the ways we know how to die. In the twentieth century alone, according to Elliot, there have been 110 million manmade deaths, including 62 million by various forms of privation (death camps, slave labor, forced marches, imprisonment), 46 million from guns and bombs, and 2 million from chemicals (Sjöö & Mor 1991, p. 421; note 7, p. 475).

Hopkins's poem “Binsey Poplars” imaginatively and rhythmically gives voice to these deaths, perpetrated against nature which profoundly affect and destabilise him, violating his human feelings and passionate sensitivity towards nature. Devastations and deaths committed in compliance to the aberrant dominator idea of economic ‘progress’, which pollutes water, air and food with toxic chemicals. The idea of evolution itself has been misinterpreted as an inexorable linear unfolding carrying on the ‘survival of the fittest’, while, more recent scholarship focuses on:

the importance of motivations such as caring, curiosity, and creativity, rather than reducing us to puppets of selfish genes. [...] Adrienne Zihlman, Nancy Tanner, and Sally Linton Slocum propose that the first social bonds were actually between mothers and infants and that they were based on sharing and caring, providing the foundation for social bonds later in life. [...]. Biologist Humberto Maturana also argues that the origins of language are rooted in loving behaviors and introduces the phrase “the biology of love.” Similarly, MacLean proposes that language arose in the loving relationship between mother and child (Eisler & Fry 2019, p. 59; notes 80, 81, pp. 69-70).

In the intense awareness of the “inter-in-dependence” (Panikkar 2010, p. 60) of life, Hopkins expresses his pathos for the lack of care and respect for God's creation at the hands of the tree-fellers and those who see the earth not as children-to-mother, but as a mere source of gain to be exploited without consideration for the consequences this provokes. Because “country is so tender” (l. 12), “To touch, her being so slender” (l. 13) necessarily define what brings havoc, because even “When we, even where we mean / To mend her we end her” (ll. 16-17).

In the opening lines (ll.1-3) of the poem, Hopkins beautifully shows the dance of life, foliage and reflections of the trees along the river, still so vivid in his memory, clearly and lyrically bringing them back to the present, to his readers' inner eye and heart. This is a quantum physics phenomenon demonstrating that biology is not only a time-process, for the poet outleaps time showing that things past and present can be eternally synchronically

⁷ <https://fridaysforfuture.org/>.

present for us in the poetic word. It is a magic time-and-space travelling, a capacity to move not only linearly but also in spiralling forms, like our DNA:

We must *remember* the chemical connections between our cells and the stars, between the beginning and now. We must remember and reactivate the primal consciousness of oneness between all living things. We must return to that time, in our genetic memory, in our dreams, when we were one species born to live together on earth, as her magic children. These are things human beings *have known* for most of our time on earth. For at least 500,000 years of human time we have known them; for about 5 billion years of earth time we have known them; for a good 13 billion years of galactic time we have known them – and, no doubt, longer than that. Set against this long galactic, terrestrial, and human time of *knowing* our oneness, the past four thousand years of patriarchy's institutional and doctrinal *denial* of our oneness, once we see it for what it was, will appear a mere aberration. *Just a brief forgetting* (Sjöö & Mor 1991, p. 424).

If we cannot *re-member* our awareness of being *One*, if we are unable to recompose the dispersed members of our cosmic existence, then we deny and destroy, losing sight of Beauty and Truth. In the poem this happens in the abrupt and violent actions of men who chop down the trees for their own utilitarian and base motives:

My aspens dear, whose airy cages quelled,
 Quelled or quenched in leaves the leaping sun,
 All felled, felled, are all felled;
 Of a fresh and following folded rank
 Not spared, not one
 (ll. 1-5, Papetti 1992, p. 206).

Hopkins captures the play of light of the branches upon “the leaping sun”, a beauty dear to his heart and memory that has been ruined by human hands. His almost physical pain for this loss is rhythmically expressed in the obsessive repetition of the verb “felled”, in the past tense, an inexorable and unhealable action. The verse gives voice to the poet's painful bewilderment that someone could be so stupidly blind and spiritually indifferent to God's grandeur as incarnated in the aspens.

The *Populus tremulus* grows rapidly and does not live more than one hundred years; it needs much light and prospers quickly; in fact, together with the birch, it is the first tree to colonise uncultivated fields and to prepare the space for a new forest (Taraglio 1997, pp. 354-356). Traditionally it is seen as a powerful vertical channel allowing humans to reach other dimensions of knowledge, bringing the very same poetic *inspiration* that Hopkins himself felt in their reassuring presence. It is related to the wind that makes its leaves incessantly move, breathe, tremble and dance in honour of Mercury, the Gods' messenger, reverberating new meanings and insights to better lead our lives (Hageneder 1998, trad it. 2001, pp. 299-308). Ancient legends explain the continuous dance of its foliage as a response to the secrets murmured by the *Sidhe*, or the *Aos Sí*, the people of the mounds, fairy creatures who govern life-death-rebirth processes. The poplar is thus close to the otherworld, bringing us in contact with death as a passage and transformation. Its trembling leaves have therapeutic properties and were used to abate fevers. Still today bees often produce propolis, a natural antibiotic, elaborating a substance exuding from poplars' gems (Taraglio 1997, pp. 354-356). Thus, the destruction of the tree cuts away these sacred interrelated ties and segregates humans only within the horizontal dimension, leaving them blind and inert.

The verse “O if we but knew what we do” (l. 9) emphasises the connection between plant and human life referring to Christ on the Cross, in the echo of Luke's

“Forgive them Father for they know not what they do” (Luke 23, v 24). The poet also pinpoints the vulnerability of nature as a feminine force in the lines: “since country is so tender / To touch, her being so slender” (ll. 12-13).

If we think of the tremendous fights engaged by the Church against Celtic lore and its sacred forests in Germany, Gallia and also Great Britain (Brosse 1989, trad. it. pp. 156-168), it is interesting to note that while Hopkins's indictments against industrialisation are very resolute, he does not seem to be aware that the first systematic destruction of ancient sacred forests, dedicated to Goddess cults and Druid lore, were carried on by the clergy (Berresford 1992, 1994; McSkimming 1992; Graves 1999; Cattabiani 1996, pp. 188-191). The deforestation and exploitation of trees and forests from monastic orders was certainly due to economic motives, but also meant to eradicate ‘pagan’ nature cults.

In the following lines (ll. 14-15) the poet makes a devastating comparison between the felled aspens and the shameless pricking and blinding of an eye: an easy action to make but impossible to unmake. It is a shocking and excruciating image meant to make us shudder in horror, which thoroughly communicates Hopkins's dire physical and spiritual pain over the felled poplars; for, once the trees disappear from sight, the consequences are as appalling as the loss of our organ of vision. What may appear as a sadistic and dreadful comparison between a human eye being pricked and a tree being felled has in reality the function of startling us into compassionate attention. Hopkins's potent image is meant to evoke the blindness of those who ordered and those who acted out the cutting. It is a slap in the face, reminding us of our fragility as humans, so easy to be wounded and destroyed in our own turn. The poet admonishes humanity to open our eyes and *see*, for we are unable to “mend” what we “end” (l. 17) due to our unquenchable greed and desire to exploit.

As Bump underlines, in “Binsey Poplars” there is poetic evidence of how our human craving to dominate reality for our own exclusive benefit and the binary scientific justifications for this attitude are a clear sign that we have lost sight of the complexities, intricacies and the beauty of life that are still clear for the child, the poet and the shaman:

Interdisciplinary thinkers in a variety of fields are re-evaluating the child's vision of unity with nature, the tribal men's sense of the unbroken solidarity of life and his ability to identify with other creatures, the personal sense of historical continuity and the necessity for conservation fostered by the Chinese family system, the Greek medical concept of the harmony of the body, and the possibility of a biological basis for intuition (Bump 1974, p. 228).

The “unbroken solidarity” and “unity with nature” are close to Panikkar's idea of the interconnectedness of things, to Eisler's biocultural partnership-dominator paradigm and to Capra's systemic science, because for Hopkins, all creatures “whether human or non-human” are “relational beings” (Day 2004, p. 182). So each thing has its own originality and individuality (its inscape) and at the same time there is a sense of unity and continuity:

[Hopkins] expends the greatest part of his energies on the second proposition, considering two points that are germane to the study of Hopkins's ecology: the relation of self and other, and the relation of the particular to the universal. In considering these relations, Hopkins sets out first principles and foundations not only for a theology but for an ecology too (Day 2004, p. 182).

Ecology is revealed in the nostalgic and melodious closing lines of the poem, which have a melancholy, warbling and plangent tone which evokes and prolongs the anguish oppressing his heart:

The sweet especial scene,
 Rural scene, a rural scene,
 Sweet especial rural scene.
 (ll. 22-24, Papetti 1992, p. 206).

At the end, Hopkins gives voice to a sort of elegiac reconciliation between humanity and nature inside himself. Even if each tree's uniqueness seems forever lost in the material world, it still exists in the poet's recollection and creates reverberations in our own inner vision and memory. We know that shortly after the poem was published in 1918:

the trees in Binsey were replanted in 1918, and when they were cut down again in 2004, Hopkins's poem was part of the successful campaign to have them replanted. [...] 'The poem has a very particular local meaning but speaks to a much broader audience in its plaintive evocation of spiritual desolation through the destruction of nature'.⁸

So, it is clear that because "language controls so much of our response to the world around us, literature is particularly important" (Bump 1974, p. 229) as an active means to vigorously participate and contribute to a positive change in our approach to the environment.

3. The Earth-Mother Gaia

According to Stefano Mancuso (2018; 2019), plants embody a more resilient life-model than that of the animal world, of which we are part. They are at the same time solidly strong and flexible, they have a "modular" diffused organisation and constitution, and show cooperative and partnership relationships, with a distributed architecture and no dominator central hierarchy. This enables them to resist to most catastrophes without losing their basic functional activity and life force; they can easily adapt to climatic changes and even to the enormous impacting transformations we have forced on Mother Earth's ecosystem (Mancuso 2017, pp. 7 ff.). As Mancuso asserts, plants are interconnected among themselves and with the rest of the environment, they have a 'social life', they interact, especially through their root and foliage systems, send chemical signals to other plants and animals, and are fundamentally relational. As he says, to cut trees has always been "a very bad idea", stressing the fact that "history is full of the disasters caused by the indiscriminate cutting of trees and the destruction of our planet's primary resources" (Mancuso 2017, p. 113, translation mine).

As a result of this partnership ecosophical perspective, I have read Hopkins's "Binsey Poplars", connecting mythology, biology, systemic science, ecosophy and the biocultural partnership-dominator lens. This methodological viewpoint demonstrates the importance, especially nowadays, of approaching literature and life according to an interdisciplinary partnership-standpoint as literature is always so powerfully evocative, engaging and motivating. In "Binsey Poplars", Hopkins speaks against the destruction brought about by the industrial revolution and directly talks to the XXI century, expressing our very same environmental concerns and his ecosophical lament. He incites us to listen and *see* again, to feel the stars reverberating their light in the graceful breath of trees and

⁸ See: <https://www.theguardian.com/books/2013/may/02/bodleian-gerard-manley-hopkins-manuscript> and <https://interestingliterature.com/2016/12/a-short-analysis-of-hopkinss-binsey-poplars/>.

nature. His poetry indicates the path humanity should follow in order to protect our Earth-Mother, Gaia, which is dear, sweet, special and tender, and we are Her beloved children.

Bionote: She is Full Professor of English Literature and Language, Director of the Department of Languages and Literatures, DILL, President of the Italian Conference of Foreign Languages, founder of the Partnership Studies Group; editor in chief of the series *ALL* Forum University Press, of the online A ranked journal on world literatures *Le Simplegadi*. She was Deputy Vice-Chancellor and Pro-Vice Chancellor International of the University of Udine, Dean of the Faculty of Foreign Languages and Literatures, President of the Italian Deans of the Faculties of Foreign Languages and Literatures. She has more than one hundred international publications and nine monographic volumes on the Literatures in English. She is currently studying ecological representations in literature. Website: <http://www.antonellariem.it/>

Author's address: antonella.riem@uniud.it

References

- Beerling D. 2007, *The Emerald Planet: How Plants Changed Earth's History*, Oxford University Press, Oxford.
- Berresford E. P. 1992, *Dictionary of Celtic Mythology*, Constable & Company, London.
- Berresford E. P. 1992, *A Dictionary of Irish Mythology*, Oxford University Press, Oxford.
- Berresford E. P. 1994, *The Druids*, Constable & Company, London.
- Brosse J. 1989, *Mythologie des arbres*, Plon, Paris; trad. it. di Zannino G. A., 1994, *Mitologia degli alberi*, B.U.R., Milano.
- Capra F. 1975, *The Tao of Physics*, Shambhala Publications, Berkeley.
- Capra F. 1996, *The Web of Life*, HarperCollins, London.
- Capra F. and Mancuso S. 2019, *Discorso sulle erbe. Dalla botanica di Leonardo alle reti vegetali*, Aboca, Sansepolcro.
- Cattabiani A. 1996, *Florario. Miti, leggende e simboli di fiori e piante*, Mondadori, Milano.
- Cheyne P. (ed.), 2017, *Coleridge and Contemplation*, Oxford University Press, Oxford.
- Cockell, Charles. 2008, *An Introduction to the Earth-Life System*. Cambridge University Press, Cambridge.
- Day Brian J. 2004, Hopkins' Spiritual Ecology in "Binsey Poplars", in "Victorian Poetry" 42 [2] (Summer), pp. 181-194.
- Eisler, Riane. 1987, *The Chalice and the Blade: Our History, Our Future*, Harper and Row, San Francisco.
- Eisler, Riane. 1995, *Sacred Pleasure, Sex, Myth, and the Politics of the Body: New Paths to Power and Love*, Harper and Row, San Francisco.
- Eisler, Riane and Douglas P. Fry. 2019, *Nurturing Our Humanity. How Domination and Partnership Shape our Brains, Lives, and Futures*, Oxford University Press, Oxford.
- FRIDAYS FOR FUTURE <https://fridaysforfuture.org/> (19.4.2020).
- Graves, Robert. 1999, *White Goddess: A Historical Grammar of Poetic Myth*, Faber & Faber, London.
- Hageneder, Fred. 1998, *Geist der Bäume*, Neue Erde, Verlag; trad. it. Leonetti A. e Tecchio D. 2001, *Lo Spirito degli Alberi*, Crisalide, Spigno Saturnia (LT).
- Hopkins, Gerald Manley. 1992, *Dalle foglie della Sibilla. Poesie e prose 1863-1888*, Viola Papetti (a cura di), Rizzoli, Milano.
- Lovelock, James Ephraim. 1972, Gaia as seen through the atmosphere, "Atmospheric Environment", 6 [8], pp. 579-580.
- Lovelock, James Ephraim and Lynn Margulis. 1974, Atmospheric homeostasis by and for the biosphere: the Gaia hypothesis, "Tellus", Series A. Stockholm: International Meteorological Institute 26 [1-2], pp. 2-10.
- Mancuso S. International Laboratory of Plant Neurobiology. <http://www.linv.org/> (1.05.2020).
- Mancuso S. 2017, *Plant revolution*, Giunti, Firenze.
- Mancuso S. 2017, *Botanica. Viaggio nell'universo vegetale*, Aboca, Sansepolcro.
- Mancuso S. 2018, *L'incredibile viaggio delle piante*, Laterza, Bari.
- Mancuso S. 2019, *La nazione delle piante*, Laterza, Bari.
- McSkimming H. 1992, *The Trees of the Celtic Alphabet*, Clan Dalriada Publications, Brodrick - Isle of Arran.
- Phan Peter C. and Young-chan Ro. (eds.), 2018, *Raimon Panikkar: A Companion to his Life and Thought*, James & Clarke, Cambridge.
- Panikkar R. 2010, *The Rhythm of Being: The Gifford Lectures*, Orbis Books, Maryknoll, NY.
- Panikkar R., <http://www.raimon-panikkar.org/english/gloss-ecosofi.html> (14.3.2020).
- Panikkar R., <https://www.avvenire.it/agora/pagine/ecosofia-teilharde-panikkar> (22.3.2020).
- Partnership Studies Group, Udine University, http://all.uniud.it/?page_id=195, <http://www.antonellariem.it/partnership-studies-group-2/> (1.03.2020).
- Riem A. 2005, *The One Life. Coleridge and Hinduism*, Rawat, Jaipur.
- Riem A. Forthcoming, *The Unstruck Sound of Oneness. Coleridge and The Indic Renaissance*, Cambridge Scholars Publishing, Newcastle upon Tyne.
- Sjöö M. and Mor B. 1991, *The Great Cosmic Mother. Rediscovering the Religion of the Earth*, HarperCollins, San Francisco.
- Taraglio R. 1997, *Il vischio e la quercia. Spiritualità celtica nell'Europa druidica*, Edizioni Età dell'Acquario, Grignasco (NO).
- Tyrrell T. 2013, *On Gaia: A Critical Investigation of the Relationship between Life and Earth*, Princeton University Press, Princeton.
- Wilkinson D. M. 2006, *Fundamental Processes in Ecology: An Earth Systems Approach*, Oxford University

Press, Oxford.

Zutshi V. and Capra F. 2018, "Belonging to the Universe: Fritjof Capra in Conversation" in *Fair Observer* (Apr 15), <https://www.fairobsERVER.com/culture/fritjof-capra-new-physics-science-ecology-spirituality-conversation-news-65192/> (5.05.2020).