

“IN NATURE’S DRESS”

The Anthropocene, Talking Nature and the Poetry of Margaret Cavendish

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ABSTRACT • This paper examines a selection of poems on nature by Margaret Cavendish, an English poet and natural philosopher active in the mid-seventeenth century. Cavendish’s conception of nature was “organicist”, meaning that all creatures – humans, animals and plants alike – share similar abilities in terms of feeling and reasoning. In this essay, Cavendish’s organicism will be discussed as the philosophical framework of her collection *Poems, and Fancies* (1653), especially those poems in which beasts, plants or nature herself engage in dialogue with human beings about their relationship with the environment. It will be argued that Cavendish’s choice to give voice to nature works as a fictional strategy to help readers imagine an alternative idea of nature, one different to that of nature as resource that was becoming increasingly widespread with the advent of early modern science. In the final section, it will finally be suggested that reading Cavendish’s poetry through the lens of post-humanism can contribute to present-day discussions on the Anthropocene.

KEYWORDS • Anthropocene; English Literature; Poetry; Science; Seventeenth Century Literature.

1. The Anthropocene and the Seventeenth Century

Since its appearance in a short piece written by chemist Paul Crutzen and biologist Eugene Stoermer for *The Global Change News Letter* of 17 May 2000, the term “Anthropocene” has rapidly acquired currency within cross-disciplinary debates on how humans affect the environment (Zottola, de Majo 2022). As is now well known, the concept identifies a new geological epoch, one that brings to a close the holocene, the warm age of the past 11,700 years (Steffen, Grinevald, Crutzen, McNeill 2011, p. 843). While changes to the environment have always been part of the history of humankind, experts claim that with the Anthropocene it is the scale that has changed. Humankind has turned into a force “so large and active that it now rivals some of the great forces of Nature in its impact on the functioning of the Earth system” (*Ibid.*). Its impact includes having altered the carbon cycle, disrupted vital biogeochemical and water processes, and inaugurated a sixth mass extinction of animal and plant species.

The term Anthropocene has not been pacifically accepted by all expert communities (McNeill 2016, pp. 124-125) but, as Naomi Oreskes explains in her review of scientific consensus on climate change, “virtually all professional climate scientists” agree that global-scale anthropogenic change is real, and the debate is about “tempo and mode” (2007, p. 74). These two factors are crucial to identifying possible candidates for the beginning of the Anthropocene. In the field of geology, the criteria for formally acknowledging the beginning of a new geological epoch are particularly stringent. A Global Stratotype Section and Point (GSSP) must be unambiguously identified. GSSPs,

which in expert parlance are also known as “golden spikes”, are the stratigraphic markers of major planetary events. If a GSSP is accompanied by suitable auxiliary evidence, it may be taken as evidence of a new geological epoch (Lewis, Maslin 2015, pp. 171-173).

From a strictly geological standpoint, the question is less that of detecting the “first traces of our species” on the planet than to find markers of processes that, because of their scale and duration, may identify the beginning of the Anthropocene (Zalasiewicz et alii 2015, p. 201). This is why geologists tend to agree that, although the Industrial Revolution of the late eighteenth century was a turning moment due to the dramatic increase in the use of coal, it was only with the so-called “Great Acceleration” in the 1950s – a concurrent set of macroscopic socio-economic, biological and physical changes to our planet – that human change became truly global in its impact (*Ibid.*; see also McNeill, Engelke 2014).

The issue of dating has different ramifications depending on the discipline. As Simon L. Lewis and Mark A. Maslin have noted, the very fact that scientists debate the beginning of the Anthropocene by privileging numerical data gives them a role as “arbiters” of the relationship between humankind and the environment (2015, p. 171). Their focus on the Great Acceleration may result in a lack of interest on, and thus understanding of, previous periods of major human-induced global change. But this lack of interest has not occurred, and this is largely due to the fact that the Anthropocene has long strayed beyond strictly scientific discourses (Iovino 2018; Concilio 2023). Scholars in the social sciences and the humanities attach great value to older periods that either brought about large-scale anthropogenic change or established cultural practices conducive to the Anthropocene. Although preindustrial societies did not have “the numbers, social and economic organisation, or technologies needed to equal or dominate the great forces of Nature in magnitude or rate” (Steffen, Crutzen, McNeill 2007, p. 615), the fact that their activity resulted in dramatic changes to our relationship with nature is highly relevant from a cultural point of view.

This is why attention has been devoted to periods like the seventeenth century, where anthropogenic changes to the global environment became conspicuous. 1610 has been identified as a candidate Anthropocene GSSP by some geologists due to the stratigraphical evidence of pollen deposits of New World maize and corn in Europe marine and lake sediments. Such evidence points to the animal and plant life of planet Earth – what is technically known as its biota – being homogenised as a result of the so-called Columbian Exchange, a term first introduced by historian Alfred Crosby to designate “the process of biological diffusion triggered by Europe’s colonization of the Americas” (Earle 2012, p. 341). The relevance of the Columbian Exchange for both social scientists and humanists is clear when considering its historical context:

Although it represents a major event in world history, the collision of the Old and New Worlds has not been proposed previously, to our knowledge, as a possible GSSP. We suggest naming the dip in atmospheric CO₂ the “Orbis spike” and the suite of changes marking 1610 as the beginning of the Anthropocene the “Orbis hypothesis”, from the Latin for world, because post-1492 humans on the two hemispheres were connected, trade became global, and some prominent social scientists refer to this time as the beginning of the modern “world-system” (Lewis, Maslin 2015, p. 175).

Regardless of whether 1610 constitutes a suitable GSSP, the seventeenth century does represent a crucial juncture for our cultural understanding of the Anthropocene because the environmental changes resulting from the Columbian Exchange are closely tied to the rise of the modern world economy. The reference theorist is Immanuel Wallerstein, whose world-system theory argues that between the late sixteenth century and the early seventeenth century a European world economy emerged, one based upon a “capitalist mode of production” (Wallerstein 1974, p. 67). The key point is not the emergence of capitalism *per se* – which happened earlier – but its having be-

come truly global at that time, with the economic decisions of countries being "oriented primarily to the arena of the world economy" (*Ibid.*).

2. Early Science and the Poetry of Nature in Seventeenth-Century England

Seventeenth-century England makes for a particularly interesting time for our discussions of the Anthropocene, in that it provides a unique blend of "catastrophic historical transition, profound environmental transformation and global climate change" (Williams 2016, p. 87). Although generally regarded as an age of "general crisis" due to a mix of global economic recession and worldwide political upheaval, the seventeenth century was a time of growth in England. Along with the Low Countries, England went against the grain of the global economic downturn in that "the crisis had essentially liberating effects", especially in terms of significant growth for the economy (Wallerstein 2011, p. 20). Wallerstein even posits that, judging by its "constant economic activity" and prosperity of England, the Industrial Revolution had already started by the late seventeenth century (*Ibid.*, pp. 26-27).

Such a prosperity was largely due to changes in land management, with England at the forefront of a new conception of the environment as a resource to be exploited. The mid-seventeenth-century mark, with England's growth being such that the country was on course to become "one of world's masters" (Hobsbawm 1965, p. 51), saw the rise of what James W. Moore has famously called "Cheap Nature", that is, a shift "from land to labor productivity as the decisive metric of wealth" (Moore 2016, p. 98). This implied "an entirely novel approach to the relation between human activity and the web of life. For the first time, the forces of nature were deployed to advance the productivity of human work" (*Ibid.*).

One of the main causes of this shift was the rise of modern science, especially via technical developments geared towards the improvement of productivity. In particular, in the mid-seventeenth-century agronomy underwent substantial reforms – largely thanks to the activity of the early scientists that gathered around the Royal Society (1663). While stating that the Royal Society experimenters saw the planet "as an enemy to be subdued" (Mirzoeff 2014, p. 217) makes for an overblown claim, it is true that the Bacon-inspired project of the New Science advocated a new relationship between humankind and nature, one based on a profit-oriented use of natural resources. The question of trees and deforestation was particularly central to the Royal Society and its influential Georgical Committee. Founded in 1664, the Georgical Committee consisted of thirty-two members, among whom were important figures like John Aubrey, Robert Boyle, John Evelyn, Henry Oldenburg and Richard Waller. At first, the Committee sought to collect data via questionnaires distributed throughout England, Scotland, Wales and Ireland (Russell 1966, pp. 21-26). The questionnaires were meant as the basis for a collective history of agriculture (eventually not written), whose goal was to spread knowledge on "what is knowne and done already, both to enrich every place with the aides, that are found in any place, and withall to consider, what further improvements may be made in all the practise of Husbandry" (in Lennard 1932, p. 24).

This goal of disseminating improvement-oriented (and thus profit-oriented) approaches to land management was effective, and many of the results of the influential Georgical Committee were published in the *Philosophical Transactions*, the *de facto* official journal of the Royal Society (Russell 1966, pp. 21-22; Crawford 1998). Interestingly, but not so surprisingly given the fluid disciplinary boundaries at the time, this debate did not concern the more experimentally-minded fellows only. Interest for agricultural reform involved belletrists such as the poet Abraham Cowley and, most crucially, diarist John Evelyn (Low 1983, pp. 255-258). The very first publication bearing the imprimatur of the Royal Society was *Sylva, or a Discourse of Forest-Trees and the Prop-*

agation of Timber, published by Evelyn in 1664 but, in fact, something of a collective Royal Society endeavour (Hartley 2010, p. 230). *Sylva* was published as a response to an appeal by the English Navy, in which the Royal Society was asked to promote the planting of oaks to produce more timber and make up for the losses incurred during the Civil War and the Interregnum (*Ibid.*, p. 229). By advocating the preservation of royal forests and insisting that landowners plant trees as an economically advantageous enterprise, *Sylva* was part of a movement directed at maximizing the profitability of the English land to ensure future national richness, both domestically and internationally (Lowry 2003, p. 93).

This episode shows two things. First, members of the Royal Society clearly understood that the well-being of society after a time of war and crisis – indeed, the very possibility of conducting their intellectual pursuits – depended on properly exploiting the land and improving agricultural productivity (Fussell 1971, p. 76; Lowry 2003, p. 93). Secondly, the literary skills of Royal Society members were at the service of these proposed changes to the human-environment relationship, as exemplified by Evelyn’s regular tendency to quote from Virgil’s *Georgics* to make his arguments about the preservation of forests (Lynch 2001, p. 35). Evelyn’s “Virgilianism” was part of a broader engagement with classical sources by early scientists of the Royal Society. Poetical references to Virgil in *Sylva*, for instance, worked to link Evelyn’s own work to Bacon, who, in *The Advancement of Learning*, described his philosophical enterprise as a “Georgics of the Mind” (Goodman 2008, p. 9). On top of this, scholars have noted a connection between the Virgilian georgic mode and the trade histories endorsed by members of the Royal Society (O’Brian 2018, p. 323).

Thinking in terms of interconnections between literature and early science in seventeenth-century England opens up new vistas on a number of poets who wrote about the environment at that time. As Diane Kelsey McColley has shown in her fascinating study on poetry and ecology in the age of Milton and Marvell, this was a time when poets embraced “new knowledge of nature” while also recognizing “the costs of power over nature intemperately used” (Kelsey McColley 2007, p. 1). In particular, trees could be thought of in very different ways: as “providers of human sustenance, pleasure, and wisdom”; as “fellow creatures whose lives belong to themselves”; or as a hybrid of the two (*Ibid.*).

A poet like Andrew Marvell seems to stand as an example of the former tendency. As Victoria Bladen has insightfully shown, his country house poem *Upon Appleton House* (1651) – written for his patron Lord Fairfax as a commentary on the tumultuous post-revolutionary times in which they lived in – makes use of arboreal imagery to offer interpretations of such recent political developments. The beheading of Charles I in 1649, for instance, is rendered via the imagery of the oak (a traditional emblem of royalty), whose felling is seen as “part of the natural cycle of events” (Bladen 2022, pp. 165, 162). Marvell achieves this result by shifting the narrative focus of the poem on the humble woodpecker, who:

[...] tinkling with his Beak,
Does find the hollow Oak to speak,
That for his building he designs,
And through the tainted Side he mines.
Who could have thought the tallest Oak
Should fall by such a feeble Stroke! (Marvell 1772, p. 66)

In this way, nature is understood as a scenario onto which political events can be projected – which is to say, nature is relevant only insofar as it serves human history. A similar process occurs in *Bermudas*, a poem, also written in the 1650s, in which Marvell describes the arrival of Puritan pilgrims to the Summer Isles in the North Atlantic Ocean. In the poem, nature is cast as a gift from God to man: the pilgrims fleeing religious persecution in England sing to the winds their

praise to the divine hand, which "lands us on a grassy stage, / Safe from the storm's and prelates' rage. / He gave us this eternal spring / Which here enamels everything" (Marvell 1772, p. 79). For all its political and religious nuances, *Bermudas* still suggests that nature is little more than a garden of plenty exclusively created for the pleasure of humankind (Williams 2016, p. 90).

In these examples from Marvell, nature is conceived of as a passive entity, half resource and half symbolic backdrop against which the events of human history may be read. Quite different to this approach is that adopted by Aphra Behn and Margaret Cavendish, whose poetry also engaged with the issue of deforestation raised by Evelyn's *Sylva* (Williams 2016, p. 88). In *The Golden Age* (1677), the adaptation of Torquato Tasso's pastoral play *Aminta* (1573), Behn drew on the myth of the Golden Age – the mythological period prior to the seizing of power by the Olympian Gods. Behn imagined it "as an era of fecund plenty without effort, when war, work, property, shame and sexual constraints were unknown" (Todd 1996, p. 204). As it clearly appears from the first lines of the poem, Behn's nature does not necessarily require human presence. The golden age she evokes is that of natural places before their being inhabited by humankind:

BLEST age! when ev'ry purling stream
Ran undisturbed and clear,
When no scorned shepherds on your banks were seen,
Tortured by love, by jealousy, or fear; (Behn 1992, p. 30)

The poem goes on to describe how the arrival of man, especially with the creation of society and thus hierarchy, disrupted nature's pristine serenity. A subtle thread in *The Golden Age* is the subversion of societal constraints, especially those related to gender (Markley, Rothenberg 1993). It is in this very light that we can read the displacement of man from its role as narrator in "On a Juniper Tree, Cut Down to Make Busks". In this short poem, the juniper takes on the role of narrator, describing two young lovers, the shepherdess Cloris and the swain Philocles, as they make love under its shade (Wright 2021, p. 186). Notably, the juniper tree describes itself as a character with hybrid sexuality. Its self-depiction is that of a pinnacle of feminine beauty that gets exploited for its allures: "My Wealth, like bashful Virgins, I / Yielded with some Reluctancy; / For which my vallue should be more, / Not giving easily my store" (Behn 1992, p. 39, ll. 9-12). Yet, as Elizabeth Young has argued, the very first opening lines of the poem have the juniper tree also establish a "traditional masculine pastoral person" in control of the narrative (Young 1993, p. 526). The juniper-tree describes itself as it "Triumphant stood / The Pride and Glory of the Wood", and his "Aromatick Boughs and Fruit, / Did with all other Trees dispute. / Had right by Nature to excel, / In pleasing both the taste and smell" (Behn 1992, p. 39, ll. 1-6).

By emphasising the hybridity of its tree narrator, Behn draws an implicit analogy between nature and women in terms of the tension between being independent and being exploited. As the juniper tree welcomes the two young lovers under its branches, it actively participates to their act of lovemaking: "And every aiding Bough I bent / So low, as sometimes had the blisse / To rob the Shepherd of a kiss" (*Ibid.*, ll. 35-36). However, in the conclusion of the poem the tree narrator seems to be ultimately subordinate to human beings, as it appears from its grieving over its being separated from the two lovers:

My Grief must be as great and high,
When all abandon'd I shall be,
Doom'd to a silent Destinie.
No more the Charming strife to hear,
The Shepherds Vows, the Virgins fear:
No more a joyful looker on,
Whilst Loves soft Battel's lost and won. (Behn 1992, p. 39, ll. 88-93)

In this sense, “On a Juniper Tree” conflates two opposite claims about nature. On the one hand, the talking tree stands as a mirror of women self-empowerment (Wright 2021, p. 187). Once sexual intercourse is complete, Cloris frees herself from Philocles, who fails to appear in the final section of the poem when the juniper tree gains its freedom thanks to the shepherdess, who cuts part of it to make busks for her corsets, “Where I still guard the Sacred Store, / And of Loves Temple keep the Door” (*Ibid.*, ll. 107-108). On the other hand, the tree’s personification is subservient to Behn’s proto-feminist argument: its very identity as a non-human being is not directed at investigating alterity but serve Behn’s purpose to let her readers “observe human activity with detachment and irony”, eventually drawing them to challenge “the artful and contrived nature of identity itself” (Young 1993, p. 525). In symbolic terms, nature is still conceived of as a resource, one that can be harvested by the poet to make a point about society, with the juniper tree standing as one of the many “feigned identities” which Behn enacts to question the concept of selfhood (Ballaster 1992, p. 112).

A different case to Behn and Marvell is that of Margaret Cavendish, who in her writings expatiated on the concept of the non-human with a unique blend of natural philosophy and poetry. As we will see in the next two sections, in her poems Cavendish questioned human attempts to think of nature as a resource, casting a critique to human exceptionalism in the late seventeenth century.

3. The Organicism of Margaret Cavendish

Recent decades have witnessed a reassessment of Cavendish’s philosophical outlook as a valuable contribution to seventeenth-century thought, especially with regards to her original conception of the natural world (Duncan 2012). As Karen Detlefsen (2009, pp. 423-424) summarises, the four central tenets of Cavendish’s view of nature are materialism, plenism, non-mechanicism and motion being inherent to matter. These beliefs may be bracketed under the overarching concept of organicism, which, in Cavendish’s philosophical view, is the idea that everything in nature is matter, and all matter has similar properties of sentience, perception and, ultimately, agency.

A key text to appreciate these positions is the *Philosophical Letters* (1664), in which Cavendish tackles the ideas of the great philosophers of her time – among which Descartes, Thomas Hobbes and Henry More – via a series of fictional letters in response to queries from one “Madam”. Responding to one such query about nature, Cavendish presents her organicism by claiming that:

Nature is material, or corporeal, and so are all her Creatures, and whatsoever is not material is no part of Nature, neither doth it belong any ways to Nature: Wherefore, all that is called Immaterial, is a Natural Nothing, and an Immaterial Natural substance, in my opinion, is non-sense. (Cavendish 1664, pp. 320-321)

A key facet of Cavendish’s view of nature is that she understands matter as “intrinsically motive”, meaning that nature is self-moving in its entirety (Detlefsen 2009, p. 426). All particular manifestations of nature are just part of a single moving nature which constantly disintegrates and re-organizes itself. Therefore, not only is the belief in a separation between humankind and nature illusionary, but the inherent movement of matter also means that nature is sensitive and rational as a whole, as Cavendish explains in the preface to the *Philosophical Letters*:

These sensitive and rational parts of matter are the purest and subtilest parts of Nature, as the active parts, the knowing, understanding and prudent parts, the designing, architectonical and working parts, nay, the Life and Soul of Nature, and that there is not any Creature or part of nature without this Life

and Soul; and that not onely Animals, but also Vegetables, Minerals and Elements, and what more is in Nature, are endued with this Life and Soul, Sense and Reason. (Cavendish 1664, "A Preface to the Reader")

The extension of this position is what some critics have come to call Cavendish's "panpsychism", the belief that thinking occurs not just in humans but in all non-human entities too (Cunning 2022). To those who argue for the superiority of man, especially via the traditional religious *topos* of the Great Chain of Beings, Cavendish responds that that is a logical fallacy. "Man cannot well be judged of himself, because he is a Party, and so may be Partial" (Cavendish 1664, p. 147), a contention pointing to the situatedness of the human being within the whole of nature. Regardless of what humans might think, all creatures in nature enjoy the same "excellence" as man, as it may be surmised by how crucial these are for human life. In fact, animals and plants are best conceived of as "fellow-creatures" of humankind:

if we observe well, we shall find that the Elemental Creatures are as excellent as Man, and as able to be a friend or foe to Man, as Man to them, and so the rest of all Creatures; so that I cannot perceive more abilities in Man then in the rest of natural Creatures; for though he can build a stately House, yet he cannot make a Honey-comb; and though he can plant a Slip, yet he cannot make a Tree; though he can make a Sword, or Knife, yet he cannot make the Metal. And as Man makes use of other Creatures, so other Creatures make use of Man, as far as he is good for any thing: But Man is not so useful to his neighbour or fellow-creatures, as his neighbour or fellow-creatures to him, being not so profitable for use, as apt to make spoil (Cavendish 1664, p. 147).

This understanding of nature as a "whole" entity, one encompassing the human, the animal and the vegetable world, stood quite at odds with the influential arguments made by contemporary mechanistic philosophy for a stark separation between man and nature. This may be noticed, for example, in the debates on animal sentience, with many mechanistic philosophers in England endorsing the Cartesian idea of the animal-machine (Williams 2016, p. 93). In the *Observations upon Experimental Philosophy* (1666), a philosophical treatise which was published as a companion piece to the scientific utopia *A Description of the Blazing World* (1666), Cavendish derides precisely those philosophers who "yet deny, nay, rail against nature's self-moving power, condemning her as a dull, inanimate, senseless and irrational body: as if a rational man could conceive, that such a curious variety and contrivance of natural works should be produced by senseless and irrational motion" (Cavendish 2001, p. 71). Thinking of man as an exceptional being is, once more, a logical fallacy, for there can be no division between the human and the non-human if "every part of nature contains the same rational principle as humans" (Shaheen 2012, p. 636; see also Peterman 2023). The very logic of the empiricist experiment, in which the human observer establishes a separation from the non-human specimen to observe it from afar, possibly with the added diaphragm of instruments like the microscope, is for Cavendish a violation of the organicist principle of nature (see also Cottagnies 2010).

Interestingly, Cavendish's criticism of experiments as creating an artificial divide between the human and the non-human was enacted via fictional means (Lawson 2015, p. 584). For example, as Cristina Malcolmson argues, *The Blazing World* portrays hybrid animal philosophers as a means to problematize the assumptions of early experimenters on the separation between human observers and non-human specimens (2013, p. iii; Lawson 2015, p. 587). As the presence of a fictional "Madam" persona in the *Philosophical Letters* also shows, the use of literary devices to convey philosophical knowledge was no random act on Cavendish's part. Her works in prose and poetry serve many functions, among which that of exploring the ramifications of her philosophical ideas by providing alternative scenarios to her readers, letting them imagine, for instance, a world

without the “various theories of sexual and racial inferiority which were current in Restoration England” (Iyengar 2002, pp. 650-651).

Another area in which Cavendish’s poetry allows readers to experiment with counter-factuality is that of human-environment relationships, as it may be seen in *Poems, and Fancies* (first edition 1653). As explained by Liza Blake, who recently edited a digital critical edition, *Poems and Fancies* is divided into five parts, devoted respectively to natural philosophy and atomism, moral discourses, nature, women, and war (2019, “Introduction”). The collection has a strong environmentalist drive, with the question of human dominance over the rest of nature being thematized in several poems included in part II. Beasts feature heavily, for example in the comparison between humankind and animals enacted in “A Moral Discourse of Man and Beast”. There seems to be a stark contrast at first, with man being described as “a creature like himself alone; / In him all qualities do join as one” (Cavendish 1653a, p. 98, ll. 1-2). However, distinctive human qualities are actually borrowed from animals: some men are fierce like lions, others as crafty as foxes, others still strong and free like horses. The careful use of words like “seem” and “as” to introduce the similes between men and animals drives home the point that humans are not that different to other creatures of nature. If anything, they should be deemed as imperfect counterfeits:

For men want wings to fly up to the sky.
Nor can they like to fish in waters lie.
What man like roes can run so swift, and long?
Nor are they like to horse, or lions strong.
Nor have they scent like dogs, a hare to find,
Nor sight like swine, to see the subtle wind.
Thus several creatures, by their several sense,
Have better far (than man) intelligence. (*Ibid.*, ll. 155-162)

If it is not intelligence, what is it that makes humans special compared to animals? It is the arts and crafts, in which “man in gen’ral doth them animals far excel” (*Ibid.*, l. 164) and makes them able to create “stately towers” and “such things as time cannot devour” (*Ibid.*, ll. 169-170). But this apparent panegyric suddenly turns into a condemnation of the way humans make use of their creativity to exploit nature for profit:

What creature makes such engines as man’s hand,
To traffic and to use, at sea and land,
To kill, or spoil, or else alive to take,
Destroying all that other creatures make?
This makes man seem of all the world a king,
Because he power hath of everything. (*Ibid.*, ll. 171-176)

Cavendish’s criticism of man’s tendency to draw a divide between himself and animals was radical but not unprecedented. Discussions on animal souls and metempsychosis were amongst the most wide-ranging in the English seventeenth-century thought (Harrison 1993), and there is evidence showing that some religious positions based on passages from the New Testament grouped men and beasts as the “creatures” to which God had reserved its benevolence, a belief that resulted in forms of ethical vegetarianism (Rudrum 2003).

More unconventional is, however, Cavendish’s interest in the plant kingdom. In the next and final section, it will be shown how Cavendish gives voice to trees, making them into active participants to philosophical debates on their nature, so as to mount an argument about the importance of non-human figures and, at the same time, question the self-appointed superiority of humankind compared to the rest of nature. Cavendish did so to advocate a view of nature that, in the words of

Justin Begley, "was not predominantly constructed around aptitudes that humans identified as valuable or significant" (Begley 2021, p. 306). Focusing on Cavendish's environmental poetry will eventually allow us to draw connections to our present-day concerns with the Anthropocene, showing that the study of poetry written centuries ago is important not just in terms of literary history, but as a vehicle to better understand how literature may help reshape human relationships with the natural environment.

4. Cavendish's Posthumanism in *Poems, and Fancies*

As we have seen, in Cavendish's philosophical system all matter has both vitality and the ability to know, including plants. As Katie Whitaker has argued, although these ideas on nature were fully fleshed out in over a decade of philosophical reflections, early signs are noticeable in a number of poems in *Poems, and Fancies*, especially those in which non-human entities like beasts and trees are pitted against man to highlight how humans took advantage of nature for their own benefit (2003, pp. 141-142).

The question of human arrogance animates "A Dialogue between an Oak and a Man Cutting Him Down". Choosing an oak tree as the subject of a poem had significant political overtones; King Charles II had famously hidden inside an Oak in Shropshire as he fled Revolutionary England in 1651 (Stamper 2002), a symbolism that was relevant to a royalist writer like Cavendish who had lived in France as an exile during the Interregnum years. But Cavendish's oak is not just a topical reference, for the tree speaks, and, on top of that, it does so to engage a woodcutter in a dialogue on competing concepts of human-environment relationships. This appears from how the oak addresses the woodcutter in the very first lines:

Why cut you off my boughs, which largely bend,
And from the scorching sun do you defend,
Which did refresh your fainting limbs from sweat,
And kept you free from thund'ring rains and wet,
When on my bark your weary head you'd lay,
Where quiet sleep did take all cares away,
The whilst my leaves a gentle noise did make,
And blew cool winds that you fresh air might take? (Cavendish 1653a, p. 66, ll. 1-8)

The woodcutter responds that the Oak should be thankful for being cut down, for it will be made into "a ship to traffic on the main" (*Ibid.*, ll. 68-69) or "a stately house" wherein "shall princes live of great renown" (*Ibid.*, ll. 104-105). The woodcutter being referred to as "Man" points to a universal claim: Cavendish's view of humankind seems to be that of a species which understands nature as mere resource. To this belief, the oak curtly retorts that "More honor 'tis to be in Nature's dress / Than any shape that men by art express" (*Ibid.*, ll. 126-127). This response rests on a condemnation of human pride, which the oak despises, insisting that "I am not like to man, would praises have, / And for opinion make myself a slave" (*Ibid.*, ll. 128-129). In a challenge to what Whitaker calls "the entire Judeo-Christian tradition of man's superiority over the natural world and his God-given right to use it as he wills" (2003, pp. 141-142), the oak seeks the same degree of self-determination enjoyed by humankind. The woodcutter, however, brings the poem to a close by suggesting that there is no common ground between man and plant. In the last stanza, "Man" claims that, compared with other creatures, he has "something more, which is divine. / He hath a mind, doth to Heav'n aspire;" (Cavendish 1653a, ll. 149-150). His eventual decision to spare the oak mainly comes from a perceived position of superiority, as it appears from the final two lines in which the woodcutter tells the oak: "If you, as man, desire like gods to be, / I'll spare

your life, and not cut down your tree” (ll. 162-163) – a kind act that, however, works more as an act of particular piety rather than an overall questioning of the environmental outlook of human beings.

This back-and-forth between the two metonymic types – the oak standing for nature and the woodcutter for humankind – is Cavendish’s dramatization of the philosophical problem of recognizing nature’s independence from human goals. What Begley calls man’s “self-aggrandisement” with respect to the rest of nature may be thought of as a form of exceptionality bias, one leading to man’s inability to make a fair assessment of the capacities of non-human creatures (Begley 2021, p. 319). The question, then, is whether human beings are wired in such a manner as to make this bias impossible to avoid. This very problem is thematized in “A Dialogue betwixt Man and Nature”, also included in Part II of *Poems, and Fancies*. In this dialogue, “Man” complains that the misery of his species is mainly due to nature’s reticence in revealing her secrets. Man does not know himself, and “Nature gives no such knowledge to mankind”, offering, instead, “strong desires to torment the mind, / And senses, which like hounds do run about, / Yet never can the perfect truth find out./ O Nature—Nature!—cruel to mankind,/ Gives knowledge none, but misery to find” (Cavendish 1653a, p. 58, ll. 13-18). Significantly, Nature’s riposte is that humankind as a whole have no right to complain, because rather than studying nature in communion with nature herself, they have chosen to conceive of her as a resource to be mobilized for gain:

But men amongst themselves contract and make
A bargain for my tree; that tree they take,
Which cruelly they chop in pieces small,
And form it as they please, then build withal,
Although that tree by me was made to stand
Just as it grows, not to be cut by man. (*Ibid.*, ll. 21-26)

The reason offered by man in response to nature’s argument is a rehashing of the distinction between human and non-human. Based on the philosophical premise that nature is inanimate, the “Man” in the poem contends that: “trees are dull and have no sense, / And therefore feel no pain, nor take offense” (*Ibid.*, ll. 27-28). Nature’s astute rejoinder is that men kill beasts, even if they clearly have “life and sense, and passions strong” (*Ibid.*, l. 29). As with the desire to hunt, the reason for human desire to cut down trees lies not in nature herself; at an age of dramatic economic and scientific progress, Nature suggests, their desire is merely for human-centred improvements.

By making nature talk eloquently to men about her own status, Cavendish finds an application to her philosophical idea that plants have a value which is different from that of being profitable entities. In particular, Cavendish noted that the ability to self-clone, self-heal, regenerate, and live for centuries, are all beyond the capacity of human beings (Begley 2021, p. 320). This emphasis on the unique characteristics of plants questions the idea that human beings enjoy special privileges within nature. If human beings are “finite parts of an infinite Nature” (Lawson 2015, p. 586), man enjoys no higher order status, and the scientific project of watching nature from the outside to make her reveal her secrets is thus bound to fail. The epistemological ramifications of the limit-ness of humanity are elaborated on in the *Philosophical Letters*:

what Man knows, whether Fish do not Know more of the nature of Water, and ebbing and flowing, and the saltness of the Sea? or whether Birds do not know more of the nature and degrees of Air, or the cause of Tempests? or whether Worms do not know more of the nature of Earth, and how Plants are produced? or Bees of the several sorts of juices of Flowers, then [*sic*] Men? And whether they do not make there Aphorismes and Theoremes by their manner of Intelligence? For, though they have not the speech of Man, yet thence doth not follow, that they have no Intelligence at all (Cavendish 1664, pp. 40-41).

In this sense, it can be argued with Liza Blake that Margaret Cavendish was a "posthumanist", meaning that "she was intensely interested, across the various genres in which she wrote, in thinking *beyond* the human" (2020, p. 434). The reason for her posthumanism, however, is not necessarily (as Blake maintains) that in her philosophy Cavendish presents a form of vitalism that "privileges qualities other than agency" (*Ibid.*). Agency is important to Cavendish's outlook, at least in terms of fictional experimentations. Cavendish uses fiction to create possible worlds by which one can entertain philosophical ideas that are hard to grasp, allowing readers to "experience a version of the life that we are blocked from pursuing in the actual world" (Cunning 2022).

This argument is often made with regards to her prose fiction, especially *The Blazing World*, but it can be extended to her poetry too. In the poems from *Poems, and Fancies* discussed above, Cavendish imagines a world in which nature debates philosophical principles on an equal footing with man. The fact that nature talks points to the possibility of man acknowledging his being "inextricably a part of the nature he seeks to know" and that "there simply exists no outside vantage point from which to view and thereby to control some object called nature" (Keller 1997, p. 457).

Although it finds ample application in *Poems, and Fancies*, this world-creating function of poetry was not exclusive to it. Cavendish most likely held a belief in the power of poetry to enable counterfactual thinking, as shown by "Of Sense and Reason", a poem from the *Philosophicall Fancies* (1653b) – a sort of companion work to *Poems, and Fancies* – in which she speculates about "what the world might look like if we were only able to recognize everything around us as alive" (Blake 2020, p. 445):

If everything hath sense and reason, then
 There might be beasts, and birds, and fish, and men
 As vegetables and minerals, had they
 The animal shape to express that way;
 And vegetables and minerals may know
 As man, though like to trees and stones they grow. (Cavendish 1653b, p. 56, ll. 1-6)

Therefore, her environmental poetry is not just the Horatian *utile et dulce* conduit for her philosophical idea that "human beings would benefit from emulating the behavior and thinking of nonhuman creatures" (Cunning 2022). It is also an experimental platform by which readers can explore the post-humanist idea that the exceptionality of humankind is a self-appointed privilege, and that the belief that nature is a resource at man's disposal may be challenged by a close observation of nature herself.

While recent criticism has noted that the act of anthropomorphizing non-human entities in narrative is usually instrumental to a more "fixed and stable concept of the human" (Fudge 2006, p. 109), this does not seem to apply to Cavendish. Her anthropomorphism is an example of what Jane Bennett understands as the post-humanist goal to "catalyze a sensibility that finds a world filled not with ontologically distinct categories of beings (subjects and objects) but with variously composed materialities that form confederations" (2010, p. 99). The act of reading allows the contemplation of different ontologies of nature, making us free from our exceptionality bias as human beings when discussing non-human entities.

All of this has important consequences for our present-day concerns with the Anthropocene. Public debates, such as that on Robert Pepperell's "Posthuman Manifesto", have led to the realization that humans "are no longer the most important things in the universe" (Pepperell 2003, p. 177). Pepperell's conclusion that humanists are yet to accept this argument was perhaps valid with regard to the state of the art in the early noughties, but it fails to grasp the potential of works that sit deep in literary history such as Cavendish's, in which this wished-for "posthuman" realization seems to have already occurred.

New scholarly labels abound, of course, and they are important to think of complex phenomena in fresh ways. But this does not mean that the phenomena being described are absolutely new, nor that our conceptions of nature are entirely novel. For one, Cavendish's poetry may well be considered as an early instance of New Materialism. If the main tenet of this recent philosophical position is that matter is not inert because its properties – its “excess, force, vitality, relationality, or difference” – make it “active, self-creative, productive, unpredictable”, Cavendish does write like a New Materialist (Coole, Frost 2010, p. 9). Is that a paradox of history? More like an anachronism: we are so used to think of materialism in the Cartesian terms of human versus non-human that we forget that, prior to Descartes, conceptions of an organicist nature were not just possible but even widespread. So, the “New” in New Materialism might well be retooled as a recovery of philosophical approaches prior to the rise of Cartesian dualism. Similarly, when we think of post-humanism as the means to overcome the polarity between subjective relativism and Cartesian objectivity, Cavendish's poetry of nature is certainly post-humanist, and we have good reason to call it that despite her poems having predated the label by some three centuries and a half (Blake 2010, p. 41).

In this sense, Cavendish's poetry experiments with insights that are very pertinent to our present-day debates on the human body and the environment, such as the one, investigated by neuro-cognitive scientists like Antonio Damasio and Francisco Varela, that human consciousness is “not localized in a set of neural connections in the brain alone, but is highly dependent on the material substrate of the biological body, with emotion and other dimensions as supportive structure” (Lenoir 2002, p. 205). Significantly, in Cavendish's poems nature does not talk to herself but engages man in conversation, in what is arguably a textualized reproduction of the author's dialogue with her readers. By looking at themselves from the outside and immersing themselves into the poetry, human beings can dispel the illusion of objectivity, leading observers to relinquish their special, external role and accept their being, in Katherine Hayles's words, “part of the system being observed” (1999, p. 9).

A second important post-humanist conclusion may be drawn from our discussion of Cavendish's environmental poetry, and that is that human intelligence does not evolve in a vacuum but solely “through interaction with the environment and other creatures” (Lenoir 2002, p. 207). Thinking in these terms allows us to revisit the importance of human historiography, which, as Dipesh Chakrabarty has compellingly argued, in modern times has systematically been understood as a field entirely separated from the history of nature. This persistent belief generates problems to our present-day understanding of the Anthropocene, because we are apt to think of human vicissitudes as phenomena that exist on a much smaller scale from that of natural forces. In this historiographical sense too is nature being used as a resource, for it only serves as the “backdrop” against which human actions are set. Even when conceived of as an “agentive presence” in history, as in Fernand Braudel's landmark study on the Mediterranean Sea, there persists an assumption of incommensurability between humankind and nature (Chakrabarty 2009, p. 205).

The concept of Anthropocene has forcibly given centre stage to the idea that nature, “this slow and apparently timeless backdrop for human actions”, can actually transform itself as a result of human actions to the point of endangering both the planet and humankind (*Ibid.*). To acknowledge this change, and to think of human beings as forces that affect the planet, is to cast a critical eye on the concept of nature as a material or symbolic resource, and, most importantly to the literary historian, on the rhetorical means used to express this view. As Kelsey McColley notes, one of the major changes brought about by the Baconian scientific project was to separate the language of natural philosophy and natural history from that of poetry, so as to better convey the objectivity sought by the external observer. This, in turns, would facilitate “the unrestrained technology and commerce that eventually produced the current environmental predicament” (2007, p. 1). Recog-

nizing this, and thinking of human beings not as outside observers but as actors involved in the history of nature, is, in Chakrabarty's formulation, "to scale up our imagination of the human" (Chakrabarty 2009, p. 206). Cavendish's poems on talking nature stand as a compelling reminder that centuries ago, creative means were used to allow readers the possibility of exploring alternative relationships with a changing environment. As Cavendish's poetry stimulated the imagination of her seventeenth-century readers, it also allows us present-day readers to make a leap of fancy, so to say, one by which we can more easily contemplate the interrelatedness of human beings with nature which the concept of the Anthropocene has managed to uncover.

REFERENCES

- Ballaster, Ros (1992), *Seductive Forms: Women's Amatory Fiction from 1684 to 1740*, Oxford, Clarendon Press
- Begley, Justin (2021), *Margaret Cavendish and Vegetable Life*, in Fabrizio Baldassarri and Andreas Blank (eds.), *Vegetative Powers: The Roots of Life in Ancient, Medieval and Early Modern Natural Philosophy*, Cham, Springer, pp. 305-324.
- Behn, Aphra (1992), *The Works of Aphra Behn: Volume 1 Poetry*, edited by Janet Todd, Columbus: Ohio State University Press.
- Bennett, Jane (2010), *Vibrant Matter: A Political Ecology of Things*, Durham, Duke University Press.
- Bladen, Victoria (2022), *The Tree of Life and Arboreal Aesthetics in Early Modern Literature*, New York and Abingdon, Routledge.
- Blake, Liza (2010), *Posthuman Physics*, in *Postmedieval: A Journal of Medieval Cultural Studies*, 1, pp. 39-45.
- Blake, Liza (2019), *Introduction*, in Margaret Cavendish, *Margaret Cavendish's Poems and Fancies: A Digital Critical Edition*, edited by Liza Blake, Toronto, University of Toronto Mississauga, URL = library2.utm.utoronto.ca/poemsandfancies/category/section/part1/page/2/.
- Blake, Liza (2020), *After Life in Margaret Cavendish's Vitalist Posthumanism*, in *Criticism*, 62, pp. 433-456.
- Cavendish, Margaret (1653a), *Poems, and Fancies*, London, printed by T.R. for J. Martin, and J. Allestrye.
- Cavendish, Margaret (1653b), *Philosophicall Fancies*, London, printed by Tho. Roycroft for J. Martin and J. Allestrye.
- Cavendish, Margaret (1664), *Philosophical Letters: Or, Modest Reflections upon Some Opinions in Natural Philosophy*, London, no publisher.
- Cavendish, Margaret (2001), *Observations upon Experimental Philosophy*, edited by Eileen O'Neill, Cambridge, Cambridge University Press.
- Chakrabarty, Dipesh (2009), *The Climate of History: Four Theses*, in *Critical Inquiry*, 35, pp. 197-222.
- Concilio, Carmen (2023), *Digging into Precarious Lives in the Anthropocene: Stratigraphy in Postcolonial Literature*, in Elisabetta Marino and Bootheina Majoul (eds.), *Precarity in Culture: Precarious Lives, Uncertain Futures*, Newcastle upon Tyne, Cambridge Scholars Publishing, 116-131.
- Coole, Diana and Frost, Samantha (2010), *Introducing the New Materialism*, in Diana Coole and Samantha Frost (eds.), *New Materialisms: Ontology, Agency, and Politics*, Durham, NC, Duke University Press, pp. 1-43.
- Cottagnies, Line (2010), *Utopia, Millenarianism, and the Baconian Programme of Margaret Cavendish's The Blazing World (1666)*, in Chloë Houston (ed.), *New Worlds Reflected: Travel and Utopia in the Early Modern Period*, London, Routledge, pp. 71-91.
- Crawford, Rachel (1998), *English Georgic and British Nationhood*, in *ELH*, 65, pp. 123-158.
- Cunning, David, *Margaret Lucas Cavendish*, in Edward N. Zalta and Uri Nodelman (eds.), *The Stanford Encyclopedia of Philosophy*, Stanford, Stanford University, URL = <https://plato.stanford.edu/archives/win2022/entries/margaret-cavendish/>.
- Detlefsen, Karen (2009), *Margaret Cavendish on the Relation between God and World*, in *Philosophy Compass*, 4/3, pp. 421-438.

- Duncan, Stewart (2012), *Debating Materialism: Cavendish, Hobbes, and More*, in *History of Philosophy Quarterly*, 29, pp. 391-409.
- Earle, Rebecca (2012), *The Columbian Exchange*, in Jeffrey M. Pilcher (eds.), *The Oxford Handbook of Food History*, Oxford, Oxford University Press, pp. 341-357.
- Fudge, Erica (2006), *Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England*, Ithaca, Cornell University Press.
- Fussell, G. E. (1971), *Crop Nutrition: Science and Practice before Liebig*, Lawrence, Coronado Press.
- Goodman, Kevis (2008), *Georgic Modernity and British Romanticism: Poetry and the Mediation of History*, Cambridge, Cambridge University Press.
- Harrison, Peter (1993), *Animal Soul, Metempsychosis, and Theodicy in Seventeenth-Century English Thought*, in *Journal of the History of Philosophy*, 31, pp. 519-544.
- Hartley, Beryl (2010), *Exploring and Communicating Knowledge of Trees in the Early Royal Society*, in *Notes and Records of the Royal Society*, 64, pp. 229-250.
- Hayles, Katherine N. (1999), *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago and London, The University of Chicago Press.
- Hobsbawm, Eric J. (1965), *The Crisis of the Seventeenth Century*, in Trevor Aston (ed.), *Crisis in Europe 1550-1660: Essays from Past and Present*, London, Routledge, pp. 1-67.
- Iovino, Serenella (2018), *Italo Calvino and the Landscapes of the Anthropocene: A Narrative Stratigraphy*, in Serenella Iovino, Enrico Cesaretti and Elena Past (eds.), *Italy and the Environmental Humanities: Landscapes, Natures, Ecologies*, Charlottesville, University of Virginia Press, pp. 67-77.
- Iyengar, Sujata (2002), *Royalist, Romancist, Racialist: Rank, Gender, and Race in the Science and Fiction of Margaret Cavendish*, in *ELH*, 69, pp. 649-672.
- Keller, Eve (1997), *Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science*, in *ELH*, 64, pp. 447-471.
- Kelsey McColley, Diane (2007), *Poetry and Ecology in the Age of Milton and Marvell*, Aldershot, Ashgate.
- Lawson, Ian (2015), *Bears in Eden, Or, This Is Not the Garden You're Looking For: Margaret Cavendish, Robert Hooke and the Limits of Natural Philosophy*, in *British Journal for the History of Science*, 48, pp. 583-605.
- Lennard, Reginald (1932), *English Agriculture under Charles II: The Evidence of the Royal Society's "Enquiries"*, in *The Economic History Review*, 4, pp. 23-45.
- Lenoir, Timothy (2002), *Makeover: Writing the Body into the Posthuman Technoscape*, in *Configurations*, 10, pp. 203-220.
- Lewis, Simon L. and Maslin, Mark A. (2015), *Defining the Anthropocene*, in *Nature*, 519, pp. 171-180.
- Low, Anthony (1983), *New Science and the Georgic Revolution in Seventeenth-Century English Literature*, in *English Literary Renaissance*, 13, pp. 231-259.
- Lowry, S. Todd (2003), *The Agricultural Foundation of the Seventeenth-Century English Oeconomy*, in *History of Political Economy*, 35, pp. 74-100.
- Lynch, William T. (2001), *Solomon's Child: Method in the Early Royal Society of London*, Stanford, Stanford University Press.
- Malcolmson, Cristina (2013), *Studies of Skin Color in the Early Royal Society: Boyle, Cavendish, Swift*, Farnham, Ashgate.
- Markley, Robert and Rothenberg, Molly (1993), *Contestations of Nature: Aphra Behn's The Golden Age and The Sexualizing of Politics*, in Heidi Hutner (ed.), *Rereading Aphra Behn: History, Theory and Criticism*, Charlottesville, University Press of Virginia, pp. 301-321.
- Marvell, Andrew (1772), *The Works of Andrew Marvell, Volume 1*, London, Printed for T. Davies.
- McNeill, John (2016), *Introductory Remarks: The Anthropocene and the Eighteenth Century*, in *Eighteenth-Century Studies* 49, pp. 117-128.
- McNeill, John and Engelke, Peter (2014), *The Great Acceleration: An Environmental History of the Anthropocene since 1945*, Cambridge, MA, and London, The Belknap Press of Harvard University Press.
- Mirzoeff, Nicholas (2014), *Visualizing the Anthropocene*, in *Public Culture*, 26, pp. 213-232.
- Moore, Jason W. (2016), *The Rise of Cheap Nature*, in Jason W. Moore (ed.), *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*, Oakland, PM Press, pp. 78-115.
- O'Briain, Katarina (2018), *Dryden's Georgic Fictionality*, in *Eighteenth-Century Fiction*, 30, pp. 317-338.

- Oreskes, Naomi (2007), *The Scientific Consensus on Climate Change: How do We Know We're Not Wrong?*, in Joseph F. C. DiMento and Pamela Doughman (eds.), *Climate Change: What It Means for Us, Our Children, and Our Grandchildren*, Boston, MIT Press, pp. 65-99.
- Pepperell, Robert (2003), *The Posthuman Condition: Consciousness Beyond the Brain*, Portland, Intellect.
- Peterman, Alison (2023), "Actions of a Body Sentient": Cavendish on the Mind (and against Panpsychism), in Uriah Kriegel (ed.), *Oxford Studies in Philosophy of Mind Volume 3*, Oxford, Oxford University Press, pp. 399-431.
- Rudrum, Alan (2003), *Ethical Vegetarianism in Seventeenth-Century Britain: Its Roots in Sixteenth-Century European Theological Debate*, in *The Seventeenth Century*, 18, pp. 76-92.
- Russell, John E. (1966), *A History of Agricultural Science in Great Britain 1620-1954*, London, Allen and Unwin.
- Shaheen, Jonathan (2012), *The Life of the Thrice Sensitive, Rational and Wise Animate Matter*, in *HOPOS*, 11, pp. 621-641.
- Stamper, Paul (2002), *The Tree that Hid a King: The Royal Oak at Boscobel, Shropshire*, in *Landscapes*, 3, pp. 19-35.
- Steffen, Will, Crutzen, Paul and McNeill, John (2007), *The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?*, in *Ambio*, 36, pp. 614-621.
- Steffen, Will, Grinevald, Jacques, Crutzen, Paul and McNeill, John (2011), *The Anthropocene: Conceptual and Historical Perspectives*, in *Philosophical Transactions of the Royal Society A*, 369, pp. 842-867.
- Todd, Janet (1996), *The Secret Life of Aphra Behn*, London, André Deutsch.
- Wallerstein, Immanuel (1974), *The Modern World-System I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*, New York, Academic Press.
- Wallerstein, Immanuel (2011), *The Modern World-System II: Mercantilism and the Consolidation of the European World-Economy, 1600-1750*, Berkeley, Los Angeles and London, University of California Press.
- Whitaker, Katie (2003), *Mad Madge: The Extraordinary Life of Margaret Cavendish, Duchess of Newcastle, the First Woman to Live by Her Pen*, New York, Basic Books.
- Williams, Linda (2016), *The Anthropocene and the Long Seventeenth Century, 1550-1750*, in Tom Bristow and Thomas H. Ford (eds.), *A Cultural History of Climate Change*, London and New York, Routledge, pp. 86-107.
- Wright, Gillian (2021), *The Restoration Transposed: Poetry, Place and History, 1660-1700*, Cambridge, Cambridge University Press.
- Young, Elizabeth V. (1993), *Aphra Behn, Gender, and Pastoral*, in *Studies in English Literature, 1500-1900*, 33, pp. 523-543.
- Zalasiewicz, Jan et al. (2015), *When Did the Anthropocene Begin? A Mid-Twentieth Century Boundary Level Is Stratigraphically Optimal*, in *Quaternary International*, 383, pp. 196-203.
- Zottola, Angela and de Majo, Claudio (2022), *The Anthropocene: Genesis of a Term and Popularization in the Press*, in *Text & Talk*, 42, pp. 453-473.

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