

The theoretical ‘turn’ to the material in the humanities: spooky power and ‘shadowy presence’

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How happy is the little stone
That rambles in the road alone,
And doesn't care about careers,
And exigencies never fears;
Whose elemental coat of brown
A passing universe put on;
And independent as the sun,
Associates or glows alone,
Fulfilling absolute decree
In casual simplicity.

~ Emily Dickinson

In their book describing the recent theoretical ‘turn’ to the material in the humanities, Serenella Iovino and Serpil Opperman write:

Developing in bodily forms and in discursive formulations and arising in co-evolutionary landscapes of natures and signs, the stories of matter are everywhere: in the air we breathe, the food we eat, in things and beings of this world, within and beyond the human realm. All matter, in other words,

is a 'storied matter'". (Iovino and Oppermann 1)

This emerging interpretive paradigm, organized around non-anthropocentric material approaches to criticism, can also be applied to Shakespeare. I've examined the role of coal and the sun, both non-human, in a number of his works, and found hidden allegorical narratives characterizing the ways that humans become entangled with energy sources such as coal or the sun. Coal and the sun are non-human players yet Shakespeare recognized that any material, the nonhuman as well as the human, has agency or "agentic capacities" (Emmett Nye, 141). Such non-human material agency, in the words of David Abram, can also be thought of as an "expressive presence":

"Nonhuman" here denotes "a community of expressive presences" not only sentient beings animals or other biological organisms, but also impersonal agents, ranging from electricity to hurricanes, from metals to bacteria, from nuclear plants to information networks" (Abram qtd. in Iovino and Opperman 3)"

The sun, of course, as a material object, is an unparalleled player in the emergent history of all life on earth while coal, a fossil fuel, has been a massively influential material or actant in the unfolding history of humans on earth. It was during Shakespeare's era that coal became a critical fuel resource for England (especially London), so that "it was described already in 1597 as 'one principall commodity of this Realme'" (Nef 3). However, though "scholars are aware that Elizabeth's reign marks the beginning of an epoch in the history of British coal mining... they rarely appear to appreciate how rapid was the expansion of the industry between the accession of Elizabeth and the Revolution of 1688" (Nef 14).

As Britain became the first country in the world to transition from wood (sun-

driven) energy to fossil fuels, British society experienced upheavals. Economic changes, with a progression towards a market economy (with labor specialization and early capitalism), as well as pollution were the notable effects of coal, which burned with a “continual cloud of choking, foul-smelling smoke... leaving behind a heavy deposit of thick black soot on the clothing and faces of all attending” (Nef 13). Coal was only accepted as the price of wood rose and people were priced out of the market for wood, starting with poorer people (Freese 33). One source of ‘drama’ (in the sense of a situation of conflicting emotions and forces) in Shakespeare’s society, then, was the rise of coal to become economically dominant, though it was often unwelcome, and the voices against it were therefore suppressed or ignored.

Shakespeare recognized that coal, as a material with obvious and massive agency (i.e, a very “expressive presence”), could productively take its hidden place in his own dramas, where, disguised as a human character, it could entangle itself in the lives of human characters and reflect the historical circumstances surrounding his work.

This paper will first explore, using *Othello* as an example, how this material entanglement is expressed in one illustrative case. Next, I will explain how Giordano Bruno’s ideas on materials and matter, revolutionary in the 1500s and early 1600s, were the source for Shakespeare’s basic understanding. Ramon Mendoza writes that “unquestionably, Bruno’s atomistic conception of matter is the closest one to contemporary atomistic theory ever developed before the late nineteenth century...” (Mendoza 114). Bruno’s scientific ideas about matter were intrinsic to his insights in cosmology: “the similarity of structure, composition, movements of all heavenly bodies, independently of their distance from Earth, an insight whose validity has remained unchallenged until this day, and is the fundamental theoretical presupposition of contemporary astronomy and cosmology...” (Mendoza 91). Addressing the philosophical implications of Bruno’s

views on matter, Mendoza writes:

The cornerstone of Bruno's ontology is his insight: matter is intelligent and intelligence is material.... it is of the essence of matter to be self-propelling, to evolve, and to bring forth from itself all the forms it is capable of adopting. Matter is self-organizing and self-metamorphosing. In order to organize into ever new forms and structures, it does not need external pushes and pulls, nor does it need a God or a demiurge to put order into its native chaos. Matter is in and by itself supremely energetic and resourceful. (Mendoza 119)

Then, turning from *Othello* to *Hamlet*, I will show how Shakespeare uses, specifically, the famous "alas, poor Yorick" scene to pay solemn tribute to Bruno's materialist ideas and to Bruno himself (*Hamlet* was written one year after Bruno's execution in 1600). Finally, I will show how the famous soliloquy starting with the lines "to be or not to be" is an oblique but central 'living demonstration' of this non-anthropocentric materialist philosophy.

I shall begin with *Othello*, an allegory, in my reading, about man (*Othello*) doing away with the sun economy (*Desdemona*) as he is spurred on by coal (*Iago*). As *Othello* begins to question whether *Desdemona* is faithful or not, *Iago*, briefly alone on the stage in Act 3, sinisterly exults:

The Moor already changes with my poison
Dangerous conceits are in their natures poisons,
Which at the first are scarce found to distaste,
But with a little act upon the blood
Burn like the mines of sulphur. (III.iii.325-329)

“Mines of sulphur” is a minimalistic, oblique reference to coal mining and coal burning, which released lots of sulphur; in Elizabethan London, there were no scrubbers in the chimneys to capture pollutants. “Conceits” (a conceit is an extended metaphor) is a hint that an allegory is at work here. Later, in Act Five, after Othello realizes his mistake in killing Desdemona (who, as the sun figure is associated again and again with the imagery of light), he roars climactically, “Blow me about in winds! Roast me in sulphur!/ Wash me in steep-down gulfs of liquid fire!/ O Desdemon! Dead, Desdemon! Dead!/O, O!” (V.ii.279-282). Othello, by accepting Iago’s version of events, by *choosing* Iago (as people in Britain, and then in its successive market economies, chose coal, and then oil, as a fuel) uses imagery with the same important word which Iago uses and one that chemically and materially indicates coal: “sulphur”. In imagery at least, Othello *becomes* coal smoke (“Blow me about in winds”) and pieces of coal (“Roast me in fire”) and then ashes (“wash me in steep-down gulfs of liquid fire”), completing the trio of material forms in which people would encounter coal. (The “steep down gulfs of liquid fire” could either refer to some sort of chimney, perhaps a smelter or furnace, where large amounts of coal were burned, or to coal mines, which had steep shafts and were dangerous and often experienced catastrophic explosions.⁸⁾

This moment in Act Five ritually represents in chronological human history the moment in the future (the future in relation to the Elizabethan era) when people will collectively realize with dismay that fossil fuels have led them into sever-

8 Barbara Freese, in *Coal: a Human History*, describes coal mining in 17th century England: “Dark, damp, cramped, and chilly, the mines had ceilings that could collapse on your head, air that could smother you, poison you, or explode in your face, and water that could rush in and drown you or trap you forever. Coal mining was one of the few occupations in which a person faced a very real risk of death by all four classical elements—earth, air, fire, and water. It was probably the most dangerous profession of a dangerous time, vivid and literal proof of the depths to which a society would sink for fuel. One moralist of an earlier century concluded that the need to send people to work in such horrid places was itself evidence that God was punishing humanity for the original sin.” (Freese 47)

ing many vital natural, cultural and economic connections with the sun that had sustained them for millennia. Indeed, as we now watch the global following of Greta Thunberg, the rise of Extinction Rebellion and the growing popularity of the 'peak oilers' (who scan reports on the production of oil and watch for the peak of petroleum while tracking the economic ramifications), among other myriad climate and anti-fossil fuel movements, we can see that humans expressing shock, horror, dismay and panic at the loss of the sustainable sun economy is now common. Therefore, it is likely that by now the world, in a collective way, has reached the stage anticipated in Act 5 of *Othello* and ritually enacted by him in his cries. We are all collectively mourning Desdemona's death and Othello's "O" groans are now ours too.

As Daniel Vitkus notes in an essay on Othello's 'O' groans, "the 'O' is a paradox in a single symbol—the ultimate primal word signifying nothingness and absence but also suggesting the circle of wholeness and perfection" (Vitkus, 348). And this completed O, this circular journey, is also why the recent theoretical material turn in the humanities is significant. After a long critical journey, we have finally started to turn away from human-centered, human-normative readings and, broadly enlarging our vision to include the non-anthropomorphic realm, we can look closely at specific materials in Shakespeare and recognize that both non-human ones and human ones (since we are comprised of materials too) possess active and dynamic agency.

With this potent completion of the circle or Othello's "O", it is necessary to ask "how did Shakespeare correctly predict that such a moment would occur, from his vantage point in 1604?" After all, 1604 was still before electricity, computers, and all sorts of advanced scientific technology which can be used to run scenarios with various resource parameters and which we take for granted today.

The phenomenological approach to understanding materials, including humans (who are materials and also biological beings), that Shakespeare seems

to have used was deeply implicit in Giordano Bruno's work. Bruno's idea of a universe, one in a state of constant flux and transformation, is one of the basic premises of his work.

Bruno refuses to privilege animate or 'living' matter over inanimate matter in his dialogues on nature. Both types of matter have agency and dynamic and self-transformative capacities. For example, in Bruno's *The Expulsion of the Triumphant Beast*, Jupiter decides to reform the cosmos by replacing 'bad' constellations with 'good' constellations in the sky, and his reason to do this is to save himself from death and oblivion. The good stars will exert a positive influence on Jupiter's future and fate, but first, he exerts an influence on the stars by tossing out the ones he doesn't want and allowing in the ones he likes.

The Expulsion of the Triumphant Beast can be read allegorically as the story of a civilization (Jupiter) which has become old and moribund, so, as a last resort, it calls on Momus (the god of satire, who has been locked away in a star as punishment for arguing too severely against the errors of the gods) to help reform its cosmology and religious outlook (the sky, the heavens). Writing this book (which was singled out for special mention as particularly heretical at Bruno's trial for heresy) can only be "a source of discontent" and he should "esteem silence to be much better than speech" (*The Expulsion of the Triumphant Beast* 70), Bruno writes in the introduction. What spurs him on to write is the "eye of Eternal Truth" (*The Expulsion of the Triumphant Beast* 70), and by this term he means a future perspective that will have seen history or the material situation unfold or emerge in such a way that vindicates his radical ideas. It is this unfolding of material circumstances (of which we are just one part) which gives matter its agency and existential significance:

We here, then, have a Jove well taken as something variable, subject to the Fate of Mutation: he however, knowing that together in one

infinite entity and substance there are innumerable particular natures (of which he is one individual), which, since they in substance, essence and nature are one, likewise, by reason of the number through which they pass, incurs innumerable vicissitudes and a kind of motion and mutation. (*The Expulsion of the Triumphant Beast* 75)

It is the material circumstances surrounding Jupiter which have changed and provide the reason that his body is withering, and this is a source of concern for him and his society since the dialogue makes it clear that he used to be vigorous and virile (as is also well known from Greek myths, where Zeus (known later as Jupiter in Rome) is known both for his womanizing and energetic temper tantrums).

Furthermore, matter also has agency in Bruno's dialogue *Cause, Unity and Principle*, where, for example, Dicsono asks Teofilo: "Do you claim, then, that matter is act? Do you also claim that matter in incorporeal things coincides with act?" and Teofilo replies: "Yes, as the possibility to be coincides with being" (*Cause, Unity and Principle* 79). Moreover, in his book *Essays on Magic*, the distinction between the 'subject' and 'object' is called into question when Bruno writes "in the order of the universe, one can recognize that there is one spirit which is diffused everywhere and in all things, and that everywhere and in all things there is a sense of grasping things which perceives such effects and passions" (*Essays on Magic*, 111). And, implying an uncertain distinction between 'animate' and 'inanimate' matter, Bruno adds "I declare that if the voice operates outside the body which produces it, and enters as a whole into innumerable ears on all sides, then why cannot the whole substance, which produces the voice which is tied to certain organs in the body, be located in different places and parts?" (Bruno, *Essays on Magic*, 114).

Returning to *Othello* then, the lines "Blow me about in winds! Roast me

in sulphur!/ Wash me in steep-down gulfs of liquid fire”, not only show Othello ‘becoming’ coal in imagery, but more importantly, these lines reveal Shakespeare’s own iconoclastic, Brunian approach to matter. Coal, something inert, has agency: Iago’s line “I am what I am” (I.ii.65)) reveals his core existential dynamic dimension: his very existence brings about his agency. Materially speaking, if people use coal to heat a room or to cook their dinner, then their own materiality is biologically partly, at least, due to coal, necessitated by coal and partakes of coal. Coal acts on them and they act on coal, by mining it, selling it, and so forth. Establishing companies, new technologies, and capitalistic economies, we are enmeshed in a material network that includes coal. Othello, man, is actually comprised, in a sense, of coal too. His atoms and molecules are in his body courtesy of coal, the fuel which made his hot dinner and warm room possible. As Wendy Wheeler writes, “what goes on *inside* an organism, and *between* an organism and its environment (the two processes being intimately connected) always involves... what we must call interpretations” (Iovino and Opperman 4). Materials, including our bodies, shift and change, incorporating new materials and releasing some materials.

Shakespeare therefore implicitly acknowledges the deep structures beyond the visible (our cells that must stay warm and nourished, our mitochondria that must have energy) that connect our bodies to coal, even though scientifically speaking, ‘cells’ and ‘mitochondria’ had not yet been discovered in the Elizabethan era. In fact, it was also Bruno who posited the material phenomenon of the inner biological workings of the human body:

The secrets of our nature, Bruno already says in his earlier work, lie within the deepest recesses of material bodies: there, if anywhere, is to be found ‘the monad of monads’, the shape of things to come. It is for this aspect of his thought that Bruno was considered by many nineteenth cen-

ture historians of science as one of the earliest precursors of a theory of evolution. (Gatti 82)

As for 'Desdemona's death', the loss of nature, or even the planet, which spells a crisis for people, this could be predicted also based on material observation: more and more smoke from coal, developing capitalism based on fossil fuel extraction, and fewer and fewer forests and fields. This was the death of the sun-based economy, and it was also based on the observation of material phenomena of the situation in London in the late 1500s and early 1600s.

The basic temporal dimension of the coal-based economy (Othello's moment of realization that Iago has tricked him and is really his enemy), could also be predicted based on the materialism of Bruno's work. Bruno correctly visualized both the structure of the solar system and extended Copernicus' mathematical model by adding that the sun's heat and light were central to the movement of earth around the sun, making Bruno's model thermodynamic (and correct). Bruno also concretely pointed to the materially generative role of photosynthesis when he explained that the sun's light was the "father of substances, the author of life" (*The Expulsion of the Triumphant Beast* 69). Both Bruno and Shakespeare could have watched London's skies becoming more and more filled with smoke, while its economy became more and more dependent on coal (Bruno was staying in London from 1583-1585), so both Shakespeare and Bruno could use materiality ("substances") to foresee that a society that emphasized material and population growth based on a huge but finite source of energy would surely go into crisis on a finite planet.

Shakespeare not only used materialism as the basis for his work, but in *Hamlet*, his coded autobiographical explanation of his artistry, he also wants to explain, in way that does justice to its fundamental position, how it functions as the basis for his prophetic works. In *Hamlet*, where he divulges his innermost

secrets (“Stand and unfold yourself” is how he promises to do this at the start of the play), therefore, besides explaining how he (Prince Hamlet in the allegory) is a fighter for the sun economy against coal (Claudius in the allegory), he also points to the virtues and the necessity of thinking along such material lines.

Rather than using Bruno, whose terminology is necessarily obscure and archaic, I will use the work of Maurice Merleau-Ponty, a French phenomenologist, to explain the elegance of Shakespeare’s defense of phenomenology and material notions in *Hamlet*. However, it should be underscored that everything that Shakespeare needed to learn in this regard, he could have learned from Bruno’s work. Just as Shakespeare did not need to know the words “energy”, “cells” and “mitochondria” to recognize and convey the idea that a human body needs food to survive, Shakespeare did not need to have read Merleau-Ponty in order to conceptualize the basic materialist ideas of Merleau-Ponty in his dramas.

The famous, quintessentially Shakespearean monologue starting with the lines “To be or not to be, that is the question”, is a virtual tutorial on phenomenology and its material basis, as is another famous scene, “Alas, poor Yorick”.

Starting with the “Alas, poor Yorick” scene in the allegory I am describing, Hamlet naturally represents Shakespeare, while Yorick, the dead clown “of infinite jest” (V.i.185), is actually Bruno, who had spoken of the unique power of jesters and clowns to use nonsense and games to speak truth to power (when Momus is called to help Jupiter) in *The Expulsion of the Triumphant Beast*, and who used the word “infinite” in his conception of the universe. “He hath bore me on his back a thousand times” (V.i.185-6) says Hamlet of Yorick, because all the ideas and philosophy articulated by Bruno (who was executed in 1600, the year before Shakespeare wrote *Hamlet*) were an enormous source of support and inspiration for the playwright. Imbued with layers of allegorical significance, these two corresponding pairs of characters (Prince Hamlet and Yorick, Shakespeare and Bruno), two alive, and two dead, two fictional and two real, are all still vibrantly

dynamic and lively in their respective material forms. The skull, imparting much that is scintillating to this scene, is in fact an active participant, and it plays the role of the dead Bruno, whose works are the material gifts from the man when he was alive. (But whose dead flesh and burned bones still continue also to have their own agency as Bruno's death did have an impact on the continuing history of the Catholic Church; i.e. books are and were not the only material remnant and impact of the dead Bruno.) Probably Shakespeare entertained a virtuosic desire to conduct a public dialogue between himself and the by then dead Bruno, with both of them in symbolically suitable disguises, and the materialist philosophy of Bruno would be shown, by this dialogue, to be QED, *quod est demonstrandum*, or *the proof is complete*. And it is shown to be such, but it is in a bit of a coded form, quite necessarily.

Starting when the skull emerges in the scene, the gravedigger shows the skull to Hamlet and Hamlet asks "Whose was it?" (V.i.175) At this early point the skull has no special significance to Hamlet. It is only after the gravedigger divulges that "This same skull, sir, was, sir, Yorick's skull, the King's jester" (V.i.180-2) that the skull takes on meaning for Hamlet, who then exclaims, with feeling, "Alas, poor Yorick". The significance of the skull therefore resides inside Hamlet's own material body; yet, it also necessarily entails the existence of the skull as well. Writing about Maurice Merleau-Ponty's view of the process of assigning meaning onto matter, Diana Coole writes:

If for Merleau-Ponty it is corporeality that introduces meaning or structure into matter, this is because the body literally incarnates material capacities for agency. Existence is for him an internally productive, formative process wherein meaning and matter are irreducibly woven: "the very process whereby the hitherto meaningless takes on meaning." The phenomenological task is to show how consciousness emerges from, yet

remains enmeshed in, this material world. To remain faithful to its own insights here, it must “plunge into the world instead of surveying it.” (Coole, 101)

Far from being a passive object (where inanimate objects and animate objects are divided) the skull has obvious agentic capacity to stir change in Hamlet, who exclaims “my gorge rises at it”; literally this means his stomach flinches or flutters as he recalls his memories of Yorick. We can think of this involuntary fluttering action also as part of “nature’s unfurling”, in the words of Merleau-Ponty, rather than that Hamlet or the skull are separate. They are entangled together in the same material ‘cosmic mesh’, as everyone and everything is.

Sounding like Bruno’s notion of “innumerable vicissitudes” befalling matter (whether it is a person or not vicissitudes always and constantly befall matter, at a fast or slow rate), Merleau-Ponty’s concept of “nature’s unfurling” depends on the fact that “our apprehending nature/matter entails a raft of bodily accomplishments, linguistic practices, and cultural assumptions” (Coole, 101). The material body itself is the home of meaning and significance and these things can and do change, so meaning and significance (or how to react to the skull one is holding) change as well. Or as Bruno put it: “a Jove well taken as something variable, subject to the Fate of Mutation just as he, from one who at first was not Jove, afterward was made Jove, so he, from one who at present is Jove, finally will be other than Jove”. (*The Expulsion of the Triumphant Beast*, 75)

Underscoring the agency and dynamism of the skull, Hamlet then turns from talking about Yorick in the third person, by addressing Horatio (“I knew him, Horatio”) to directly addressing the skull: “Where be your gibes now, your gambols, your songs, your flashes of merriment, that were wont to set the table on a roar? Not one now to mock your own grinning—quite chop-fall’n. Now get you to my lady’s chamber, and let her paint an inch thick...” (V.i.189-193) Partly, this

idea that the skull should be alive again and move about is a joke and Hamlet is merely now clowning with the fallen clown. But underneath this jesting is the truth: the skull is an active agent and participates in the scene as fully as the living characters. In the hidden allegory, Bruno's living body is not here, yet Bruno is present; the dead Bruno is in a sense actually *here* in this scene through his ideas and books and influence. He has great agentic capacity though he is no longer a conscious actor.

Finally let's consider the iconic "To be or not to be" monologue:

To be, or not to be- that is the question;
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune
Or to take arms against a sea of troubles,
And by opposing end them. To die- to sleep-
No more; and by a sleep to say we end
The heartache, and the thousand natural shocks
That flesh is heir to. 'Tis a consummation
Devoutly to be wish'd. To die- to sleep.
To sleep- perchance to dream: ay, there's the rub!
For in that sleep of death what dreams may come
When we have shuffled off this mortal coil,
Must give us pause. There's the respect
That makes calamity of so long life.
For who would bear the whips and scorns of time,
Th' oppressor's wrong, the proud man's contumely,
The pangs of despis'd love, the law's delay,
The insolence of office, and the spurns
That patient merit of th' unworthy takes,

When he himself might his quietus make
 With a bare bodkin? Who would these fardels bear,
 To grunt and sweat under a weary life,
 But that the dread of something after death-
 The undiscover'd country, from whose bourn
 No traveller returns- puzzles the will,
 And makes us rather bear those ills we have
 Than fly to others that we know not of?
 Thus conscience does make cowards of us all,
 And thus the native hue of resolution
 Is sicklied o'er with the pale cast of thought,
 And enterprises of great pith and moment
 With this regard their currents turn awry
 And lose the name of action.- Soft you now!
 The fair Ophelia!- Nymph, in thy orisons
 Be all my sins rememb'ed. (III.1.55-89)

The opening lines may be the most famous in Shakespeare, and are referenced innumerable times in countless media. But there is a reason for their fame: they capture the very essence of Shakespeare's underlying philosophy. Popular culture, with its unerring sense, somehow recognized these lines as the 'deepest' or bedrock point of the play even if the exact meaning of the lines (the power of the material world which Shakespeare asserts underlies our existence and defines every part of ourselves) escaped conscious articulation.

In these lines, Shakespeare leads us directly to stand at the edge of the border of life and death, as we follow him in his deliberations about whether or not to it is better for people to 'make our quietus with a bare bodkin'. This border indeed presents us with a dark and mysterious chasm— an "undiscover'd coun-

try". Having no experience with death (and dying is the only way to 'shuffle off this mortal coil'), the reader's mind draws an insistent blank here as phenomenology tells us it should. Thus the realization that we are material beings (which is the goal of the lines and the main thrust of "To be or not to be") is presented as a phenomenal experience, not didactically: the more rhetorical or apparent thrust of Hamlet's complaint that he is not resolute enough to kill himself. Our contingent material being is fully conceptualized in the mind as a basic phenomenon (since we must lack any phenomenal experience with death if we are alive to read these lines) with these clever lines which are, on the surface, Hamlet complaining about his lack of resolution. But the message has gotten through. As David Abram puts it, "*All our knowledge ... is carnal knowledge*":

We are in *and of* the world, materially embedded in the same rain-drenched field that the rocks and the ravens inhabit, and so can come to knowledge only laterally, by crossing paths with other entities and sometimes lingering, responding to a thing's sparkle or its calloused coolness, slowly becoming acquainted with its characteristic tenor and style, the unique manner in which it resists our assumptions. *All our knowledge, in this sense, is carnal knowledge.* (Abram, 72)

In the wake of philosophers such as Maurice Merleau-Ponty, Edmund Husserl (who "realized that the 'role of phenomenology is not so much to break the bond that unites us with the world as to reveal it to us and explicate it'" (Husserl qtd. in Coole 100)), and Spinoza (1632-1677) (who was excommunicated by his synagogue for his early work on materialism), this idea is not very radical, nor is it heretical, for our times.

In Bruno, again, "matter is intelligent and intelligence is material" (Mendoza 119) and Merleau-Ponty similarly writes, "It is not that life is a power

of being or a spirit, but rather, that we install ourselves in perceived being/brute being, in the sensible, in the flesh". (Merleau-Ponty qtd. in Coole, 103) The body's own material is the origin for all the ideas and perceptions it has: as Hamlet says, "there is nothing either good or bad but thinking makes it so" (II.ii. 250). (Hamlet is talking about why Denmark seems a prison to him and on the surface his lines imply an 'it's all subjective' idea but more deeply the thought can be seen as materialist: it is thinking, the brain, that makes it so.)

In Shakespeare's era, these materialist ideas were novel and threatening: the Church, for example, claimed its truths were absolute, independent of any person whatsoever. Moreover, the heretical implications of the materialist ideas were, for Bruno, fatal and only really were overturned with Darwin:

For more than two millennia, alphabetic civilization had claimed a special origin for humankind, asserting that human were divinely fashioned to serve as God's representatives on earth. This presumption was challenged and overturned by Charles Darwin it is an inescapable implication of the evolutionary insight: we humans are corporeally related, by direct and indirect webs of evolutionary affiliation, to every other organism that we encounter. (Abram 77).

(And as I noted, Bruno has been regarded as a precursor of Darwin)

However, the "To be or not to be" soliloquy is not a solitary statement of philosophy. The implications of "To be or not to be" in Shakespeare are profoundly related both to the Goddess (the Divine Feminine) and to coal and fossil fuels. Hamlet's famous soliloquy is not presented as an isolated poem, but it stands within a hidden allegory about a man who fights, undercover and through many centuries, against a material substance, coal, because it is polluting, finite and it harms the planet, which is the same, materially, as harming ourselves. And, moreover,

this soliloquy is not, actually, a soliloquy (lines performed while the speaker is alone on the stage), because while Hamlet says these lines, Ophelia is sitting near him quietly pretending to read a book (Polonius: "Read on this book/ That show of such an exercise will color your loneliness" (III.i.43-4)).

Why is Ophelia there and why does this 'soliloquy' end with Hamlet's address to her? "Soft you now,/Nymph, in thy orisons/ Be all my sins remembered."

"Orisons" are prayers, and so Hamlet seems to be piously (or maybe defiantly) asking Ophelia to pray for his sins (perhaps including his contemplation of suicide in this speech). However, this is just a surface appearance. Ophelia's association with prayers and a mythical Greek supernatural female figure, a nymph, gives her a religious dimension. A nymph is a mythical creature associated with the air, seas, forests, or water, or particular natural spots. Often found in the goddess Diana's entourage, nymphs are seen as divine spirits who animate or maintain Nature (embodying the soul of a natural spot), and are often portrayed as young and beautiful maidens.

Moreover, this religious dimension is not a Christian one at all: it alludes to the pagan pre-Christian religion of ancient Greece based on material elements in nature: the moon, the sun, the stars, the rocks, the ocean, and so forth. This material and religious link we have to other animals and nature also references, as David Abram, says, "totemism" which is the "animistic assumption, common to countless indigenous cultures but long banished from polite society, that human beings are closely kindred to other creatures, and indeed have various other animals as our direct ancestors" (Abram 77).

So the materialism which Shakespeare proposes is linked to keeping material nature sacred and honoring it as we respect ourselves. Ophelia is quietly present for Hamlet's statement about materialism because she embodies its spiritual implications. His "sins" are therefore really pagan heresies of Shakespeare's

time, the notions that we are embedded in sacred nature and belong to nature in an intimate and material way just like any animal, plant or rock. As I've showed in several other papers, Shakespeare also seems to have picked up his idea of the Goddess, the sacred material world that includes us as just another part, from Bruno.⁹⁾

Good policy, respecting the Divine Feminine, would unite behind the climate science to mitigate the harm done to the planet (our only home) by fossil fuels with economic policies that restrict pollution, development, consumerism and consumption. It seems like a 'dry' religion, based on science, perhaps, but this is a religion that respects science and details about materials, such as whether they pollute the water and air and whether they are safe to drink and eat.

In a very fundamental way, erroneous thinking about man's "divine" separation from nature (or man's absolutely "superior" position to nature, which man supposedly has "dominion" over according to some) has caused our environmental disasters. Human-centered literary criticism and human-centered economic thinking have disregarded material realities by placing humans at the center of the universe and by separating "mind" over matter. This erroneous idea about man's position in nature is also alluded to by Othello when he uses the phrase "not wisely" to characterize the way he loved Desdemona, whom he has just killed:

9 See my papers:

https://www.academia.edu/35067970/Thou_being_a_goddess_I_forswore_not_thee_the_Divine_Feminine_in_the_Pleasant_Conceited_Comedie_Called_Love_s_Labor_s_Lost

and

https://www.academia.edu/28847228/My_Mistress_Eyes_Are_Nothing_Like_the_Sun_Hidden_Lovers_in_Shakespeares_Sonnets

and

https://www.academia.edu/37234061/The_fair_the_chaste_and_inexpressive_she_the_Divine_Feminine_in_As_You_Like_It

Speak of me as I am nothing extenuate,
Nor set down aught malice. Then must you speak
Of one that lov'd not wisely but too well. (V.ii.342-4)

Loving “not wisely but too well” means treating Desdemona (a nature goddess figure in disguise) horribly, taking her for granted, strangling her, not believing her, and so forth. In Shakespeare’s era, coal smoke blackened the skies in London. In our era, our dumping of millions of tons of plastic into the ocean every year is a modern-day example of loving “not wisely but too well”. “Objects are not conscious actors, but they are ineluctable parts of networks that human beings must master and use” (Emmett and Nye, 141). Without such mastery and understanding, both Othello and we fail. The following, an excerpt from *The Guardian*, shows how lack of comprehension about what materials do and how they behave, coupled with naive faith in our ‘divine’ material separation from the planet, has drastically poisoned our water and threatens all species, including us:

The most comprehensive study to date of microplastics in California has turned up a mind-boggling amount of plastic particles in the San Francisco bay.

An estimated 7 trillion pieces of microplastics flow into the San Francisco bay via stormwater drains alone, researchers discovered. Nearly half of the microscopic particles found in stormwater looked suspiciously like tiny fragments of car tires, which rainfall washes off the streets and into the ocean.

Treated wastewater contributed an additional 17bn particles of plastic, according to the study. Researchers also found plastic in sediment collected from the bay and its many tributaries and inside the digestive tracts of fish.

“It was basically everywhere we looked,” said Rebecca Sutton, an environmental scientist at the San Francisco Estuary Institute, a local institution that led the three-year, \$1.1m research effort. (*The Guardian*, 10/5/2019)¹⁰

To be clear, the Goddess, Divine Feminine, or religion of nature, that Bruno (as well as Shakespeare) proposes, is not achieved through a mystical or ecstatic union. It is an intellectual process of correctly placing humans within the earth, nature (and the cosmos) we all share and this process is philosophically handled through such ideas as the materialist ideas of Bruno, Merleau-Ponty, and others. In an essay on *Lo Spaccio*, Arthur Imerti writes:

Certainly the most heretical aspect of Bruno’s heretical philosophy in *Lo Spaccio* is his concept of a religion of nature, derived from his doctrine of “immanence.”

In developing his concept of “immanence,” Bruno establishes the premise that “animals and plants are living effects of Nature,” which, he declares, is nothing else but God in things,” or, expressed in other terms, “natura est deus in rebus.” Thus, according to Bruno the universe is an emanation of the Deity within it. Referring to Bruno’s universe, Spaventa declares that it is not “the tomb of dead divinity,” but rather “the seat of living divinity the true and only life of God.” Bruno’s Deity, since he is the substance of all things, cannot limit or divorce himself from his infinite universe; for, according to Cassirer, in Bruno’s universe, “the one and infinite substance cannot help but reveal itself to itself, in an infinity of effects.”

10 <https://www.theguardian.com/environment/2019/oct/04/san-francisco-microplastics-study-bay> accessed 11/30/2019

..... Bruno believes that Divinity, which is latent in nature, "working and glowing differently in different subjects ... through diverse physical forms in certain arrangements succeeds in making them participants ... in her being, in her life and intellect." He alludes to the "ladder of Nature ... by which Divinity descends even to the lowest things," just as all rational beings "by means of a life, resplendent in natural things," rise "to the life which presides over them."

From Bruno's philosophy of nature is derived his philosophy of knowledge. Since multiform nature in which all opposites coincide is, according to him, the infinite emanation of a Deity who is absolute reason, she (nature) is the teacher of all rational beings. The inference we may draw from *Lo Spaccio* is that the more deeply man penetrates into the laws of nature, by virtue of his intellect, the closer will he come to an understanding of the unity that exists between him and the immanent principle It is then through purely intellectual processes, rather than through a mystical experience, that rational beings can become one with God." (Imerti, *The Expulsion of the Triumphant Beast* 45).

Another famous book of Bruno's *L'eroici furori* (*The Heroic Furies or The Heroic Enthusiasts*) contains a re-telling of the Actaeon and Diana myth which proposes that the western philosopher's 'eureka' moment comes when he realizes that there is no separation between his mind (or spirit) and his body (i.e. material). In Bruno's retelling of this narrative, Acateon is the Heroic Lover (a western philosopher) in pursuit of the Divine Truth:

This truth is sought as a thing inaccessible, as an object not to be objectized, incomprehensible. But yet, to no one does it seem possible to see the sun, the universal Apollo, the absolute light through supreme

and most excellent species; but only its shadow, its Diana, the world, the universe, nature, which is in things, light which is in the opacity of matter

Many then wander amongst the aforesaid paths of this deserted wood, very few are those who find the fountain of Diana. Many are content to hunt for things less elevated Rare, I say, are the Actaeons to whom fate has granted the power of contemplating the nude Diana and who, entranced with the beautiful disposition of the body of nature, and led by those two lights, the twin splendor of Divine goodness and beauty become transformed into stags; for they are no longer hunters, but that which is hunted. For the ultimate and final end of this sport is to arrive at the acquisition of that fugitive and wild body, so that the thief becomes the thing stolen, the hunter becomes the hunted in that universal one, he comes to understand to such an extent, that he becomes of necessity included, absorbed, united (*The Heroic Enthusiasts*, 66-7) (my emphasis)

The Heroic Lover, the philosopher in search of the truth, catches sight of the beautiful Divine truth of Nature (embodied in the Goddess Diana) and at that moment, he becomes an animal (a stag) and is consumed by his dogs. Through understanding that he is an animal like any other (a stag, etc.), that he is subject to material vicissitudes and is part of nature in every way, including the spiritual dimension, this philosopher is united into nature (as the dogs devour him) and this wise and lucky philosopher ceases to exist ‘separately’ from nature or ‘above’ it (hunting it, spying on it). He has learned to love wisely and well.

Finally, coming full circle and back to the topic of the humanities and literature, it must not be forgotten that books and plays are also very much “material” things, words preserved on paper. French philosopher and critic Pierre Macherey calls literature a “determinate reverie” and theorizes that it has:

Reveal[ed] and actively contribute[d] to certain fracture lines which run deep into historical reality and into the forms in which that reality is lived, imagined and represented. Seen from this angle, literature is no longer a matter of pure aesthetic creation, but becomes a form of knowledge, the material bearer of certain truth effects which require deciphering; and it is these truth effects which justify the interest we bring to it. (quoted in Thomas, 129) (my emphasis)

David Thomas adds that:

Macherey's critic is always in the grip of centrifugal forces, finding himself thrown back out toward the ideological currents and historical circumstances that had first supplied the text with its conditions and emergence, "probing [the text]... for those neuralgic points at which it betrays the shadowy presence within it of conflicting historical powers". (Thomas, 129)

In witnessing the shadowy presence of Giordano Bruno in Yorick's skull held aloft by Hamlet, or the shadowy presences of coal and the sun appearing respectively in the sinister Iago and the gentle Desdemona, I must acknowledge the spooky and beautiful power of the non-anthropocentric materialist approach to criticism and feel extremely grateful for the recent theoretical 'turn' to the material in the humanities.

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