The Proper Study of Mankind in Pope and Thomson

Alexander Pope's An Essay on Man is usually considered within a certain set of local contexts; whether as a part of his unfinished opus magnum, as an episode in his friendship with Bolingbroke, as a theodicy, or as a happy disguise for "penury of knowledge and vulgarity of sentiment."[1] Perhaps counterintuitively, it was also a specifically targeted response to James Thomson's The Seasons. While re-situating Thomson's pre-Romantic diction as an emanation of his own local context, and challenging the notion of Pope's Augustan exceptionalism by showing his thorough engagement with a poet writing apparently far outside his own cadre, I show how the two poets used a common theodical framework of physico-theology, but from it derived opposed conclusions. The Seasons and An Essay on Man present differently inflected theodicies that are strongly correlated to the two writers' deeply held political and religious commitments, and to their beliefs about the future of British literary production.

Physico-theology is a scientific theodicy whose genealogy came through Robert Boyle.[2]Thomson's interpretation of physico-theology attributes consciousness to matter down to an almost atomic level; in The Seasons the component parts of beings and organisms — eyes, ears, even cells — are endowed with agency.[3] In An Essay on Man conversely, these component parts only have consciousness or agency in particular formations or combinations.[4]Pope's poem seems to be a conventionally physico-theological work, and appears to adopt the profoundly Whiggish structures of Thomson's poem, while in fact replacing Thomson's values with his own opposed political economy. That Pope and Thomson's poems are both theodical is well known, but revealing the specific correspondences between the two shows how the differing theodicies were stalking-horses for altogether large cultural debates.[5] Thomson praises scientific enquiry, which Pope scorns as hubristic. Thomson asserts that nature produces spontaneous and egalitarian order, while Pope insists that only God's law prevents anarchy and implies that nature exists to serve man under God. Thomson hails

Britain as a polite state built on a participatory government; Pope sees Britain as succeeding only where it obeys laws given by God or the Ancients. An Essay on Man is a bravura attempt to foreclose the discursive space opened up by Thomson's poem. Pope reclaims the fashioning of both the nation and its literary culture as the preserve of a small elect.[6]

The physico-theological perspective holds that the best way to understand God is through a rigorous scientific understanding of God's work, creation. The implicit politics of physico-theology depends upon the equal participation of all members of the natural commonwealth in the overall scheme in a "conjunctive all."[7] Physico-theology was immensely popular, as was Thomson's formulation of it; The Seasons was the one of the best-selling poems of the eighteenth-century.[8] Physico-theology was first articulated by Walter Charleton in The Darknes of Atheism Dispelled by the Light of Nature: A Physico-Theologicall Treatise (London: 1652), and was expanded upon by John Ray in his 1692 The Wisdom of God and his 1693 Three Physico-Theological Discourses[9]William Derham gave the 1711-2 Boyle lectures, and transformed Ray's more limited account of the natural world into a thorough-going account of (in particular) man in Physico-Theology: Or, a Demonstration of the Being and Attributes of God, from His Works of Creation (1713).[10] Derham's was the most recent and influential formulation of physico-theology for Thomson. Physico-theology was a markedly Whiggish school of thought, devoted to the open and consensual derivation of scientific knowledge, political decisions and literary norms.[11]

Pope's engagement with, and transvaluation of, the physico-theological values expressed in Thomson's poem was central to his larger project of self-fashioning. Pope's Essay on Man appears to use the same machinery as Thomson's poem, but repurposes it to his own ends. Pope's poem advances a conflicted position that man both does and does not occupy a privileged place in nature. Rather than being an embedded part of a system encompassing all flora and fauna, Pope sometimes suggests that nature exists to furnish man with his needs.[12] While Pope is often strongly pitched against anthropocentrism, he sometimes implies a quasi-anthropocentric belief in a categorical

difference between man and the rest of nature; such a belief has a constellation of corollaries: the positions that human self-knowledge is the best way to understand God, that scientific enquiry is hubristic and disobedient, and that obedience to the laws unilaterally devised by God, King and a small literary elite was the only sure path to a virtuous and moral society. *

On the 20th of March 1727, Sir Isaac Newton, alchemist, mathematician, Member of Parliament, Warden and Master of the Royal Mint and President of the Royal Society, died. Following his death, different factions sought to cast Newton's life in competing lights. Pope wrote the following epitaph:

> Nature, and Nature's Laws lay hid in Night.
> God said, Let Newton be! and All was Light.[13]

Pope intended this couplet to be inscribed on Newton's tomb. Although it was rejected as an inscription, it is profoundly revealing. It imagines a thoroughly Augustan Newton, ushering us between binaries of Night and Light. The Epitaph emphasizes Newton's works as an individual genius in his Opticks ("Light") and the Principia (“Nature's Laws”) over Newton's work as a member of society at the Mint, in Parliament, as an economist, lecturer, teacher and as luminary of the new era of science. In fact, the Newton that Pope imagines is a lot like Pope himself: a lone ranger and epistemological deus ex machina, singlehandedly bringing truth to the people through his great works.

Thomson also memorialized Newton, and his To the Memory of Sir Isaac Newton (1727) gives a much fuller account of the extent Newton's career, praising his work on planetary movements, gravity, comets, the movement of sound, and the composition of light and color.[14] Thomson's memorial underscores Newton's importance to contemporary British patriots.[15] "O Britain's boast!”, he writes:

> O'er thy dejected country chief preside,
> And be her Genius call'd! her studies raise,
> Correct her manners, and inspire her youth;
> For, though depraved and sunk, she brought thee forth,
> And glories in thy name! ...
> thy sacred dust

Sleeps with her kings, and dignifies the scene.[16]

For Thomson, and other Whigs, Newton represents Britain's actual present and possible future greatness. Newton's personal qualities ("how mild, how calm, / How greatly humble, how divinely good" (To the Memory of Sir Isaac Newton, 148-9)) are imagined as fostering moral fiber, the intellectual caliber of the nation's unborn scientists, and national stature as a whole. Both Pope's couplet and Thomson's poem treat Newton's discoveries physico-theologically — tending toward the greater discovery of good through scientific enquiry. Pope highlights the congruity of Newton's work with Christian orthodoxy in a way that is wholly appropriate; as Newton wrote to Richard Bentley, of the Principia, "Sir, When I wrote my Treatise … I had an Eye upon such Principles as might work with considering Men, for the Belief of a Deity."[17] In Pope's imagining, Newton's advancement of the popular understanding of all things natural was indistinguishable from the advancement of the popular understanding of God. Indeed, so compatible are Newtonian natural philosophy and theology for Pope that Newton is a transparent agent of God's creation in his couplet; God's vehicle for revelations about the mechanics of his creation. Pope and Thomson were not, however, so closely aligned in the future; between Pope's 1727 couplet and his publication of An Essay on Man in 1733 (and probably by the time he was composing it in 1730-1), Pope recognized the magnitude and sophistication of the system Thomson espoused in The Seasons, its political corollaries and literary consequences. An Essay on Man was a counterblast to that system and to its implications for Britain's political, scientific, religious and literary self-imagination.

Thomson's The Seasons is a vast undertaking; "the one poem written in the century following Paradise Lost that can lay genuine claim to epic status."[18] The poem's size and unusual composition have led to its being variously described as an epic, an ode, and most recently eco-georgic.[19] The poem encompasses the seasonal cycle of Britain's weather, flora and fauna, contemporary agricultural methods, the daily and seasonal rhythms and customs of both village and city life, and recent scientific and geographical research.[20]

Physico-theology was an embellishment of the Great Chain of Being to make it compatible with contemporary scientific and philosophical debates. God was in every living thing equally, and the intricate interrelation of the parts of God's creation was itself a proof of God's existence. Jonathan Kramnick cites Margaret Cavendish's claim that matter was "rational and sensitive" in its "smallest particles. According to this view, Kramnick writes, "The ultimate material of the world … has a kind of consciousness out of which the consciousness of larger entities is made."[21] Physico-theology, then, was capable of holding both panpsychism, as expressed by Cavendish, and emergence, since the interrelation of consciousnesses to produce the consciousness of a higher entity — emergence — was itself a demonstration of the existence and beneficence of God. As Ray writes in his Preface to The Wisdom of God,

> The particulars of this Discourse serve not only to Demonstrate the being of a Deity, but also to illustrate some of his principal Attributes, as namely his Infinite Power and Wisdom. The vast multitude of Creatures, and those not only small but immensely great: The Sun and the Moon, and all the Heavenly Host, are Effects and Proofs of his Almighty Power. …The admirable Contrivance of all and each of them, the adapting all the parts of Animals to their several uses: The Provision that is made for their Sustenance … And Lastly, Their mutual Subserviency to each other, and unanimous conspiring to promote and carry on the publick Good, are evident Demonstrations of his Sovereign Wisdom. (WG, PrefaceA7-8)

The system that Ray describes is not a mute mechanism designed by God as evidence of his potency: "mutual subserviency" indicates that each component part of the system is animate, and that all component parts contribute to the glorification of God, and that interactions among parts are integral to that glorification and to the sustenance of the whole. Accordingly, Ray is adamant that anthropocentrism is misguided:

> It is a generally received Opinion, That all this visible World was created for Man; that Man is the end of the Creation. … For My part, I cannot believe that all the things in the World were so made for Man, that they have no other use. For it is highly absurd and unreasonable, to think that Bodies of such vast magnitude as the fixt Stars, were only made to twinkle to us; nay, a multitude of them there are, that do not so much as twinkle, being either by reason of their distance or of their smalness, altogether invisible. (WG I:167-9)

Not only is creation not designed around Man's convenience: much of it exists in spite of man's ignorance of it. This raises the important corollary that aspects of God's creation are created as much for themselves as for Man: "There are many species in Nature, which were never yet taken notice of

by Man … which yet we are not to think were created in vain; but … to partake of the overflowing Goodness of the Creator, and to enjoy their own Beings" (WG i:169, emphasis mine). If species were created to enjoy their own beings then they are conscious, soul-bearing creatures. It follows, therefore, that physico-theology posits that the souls of trout, for example, are as divine as those of humans. Physico-theology applies the paradoxically anthropomorphic labels like "people" or "tribes" to all animals, to anything that has an animus.[22] This vision of God's creation that was at once systematic, self-justifying through the very fact of its operation, and fully participatory, found strong political sympathy among supporters of William III. These supporters were anxious to shore up the Godliness of their elected monarch and to emphasize the rightness of a system in which all could participate (rather than their experience of exclusive and non-representative government under James II).

Physico-theologists could count among their fellow travelers Whig thinkers like John Dennis, Joseph Addison and Anthony Ashley Cooper, the third Earl of Shaftesbury, whose dearest ambition was that a system for all things might be devised. Isaiah Berlin writes that "the world is a single system which can be described an explained by the use of rational methods... It is not surprising that this view was most strongly held and most influential... in the seventeenth century in Western Europe. From Descartes and Bacon and the followers of Galileo and Newton ... their ideal of a unified system of all the sciences, natural and humane, has been the programme of the modern Enlightenment."[23] Physico-theology was just such a system. The more perfect the physico-theology, the more it maps onto the physical reality of the world as discovered by empirical and natural science, and co-ordinates that reality with Anglican doctrine. Physico-theology was the natural theological analogue to the systems of Whiggish political philosophy — especially Locke's — that sprung up after the accession of William III; The Seasons was the principal poetic encapsulation of that system.[24] Physico-theology is also the main ground on which Pope and Thomson competed over the period between the first edition of Thomson's Winter (1726) and Pope's publication of the Essay

on Man (1733). Thomson's Seasons uses physico-theology to articulate a Whiggish and participatory political philosophy.[25] An Essay on Man was a counterblast to the panpsychism of Thomson's system and to its implications for Britain's political, scientific, religious and literary self-imagination.

Thomson's poem is an epic of nationhood and an exploration of man's place in the natural world, which Thomson imagines being like well-ordered civic society. In The Seasons, natural law is a spontaneous and emergent phenomenon of a functioning social order in which all parts are equal under God. Pope sometimes inverts these relationships, making nature subordinate to man, such that natural law is instead God's investiture of authority in Man. Pope takes Thomson's paean to rationalist Whiggish society and transforms it into praise of a more autocratic state recognizable from Jacobite visions of statehood, opposed to scientific enquiry and presumed equality among citizens, and founded instead on obedience to God's law.[26] Pope's final move is to connect this more hierarchical political sphere to a hierarchical literary sphere, in which Pope gives laws to the country's readers and writers. Pope conflates his moral and literary exceptionalism and suggests that his prominence is a matter of national importance.

In The Seasons all natural bodies draw on the animating spirit and are bound together by it. There is a close political analogue to this binding participation: all office-holders, no matter how trivial, after the accession of William III had to swear an Oath of Allegiance and Supremacy to William and Mary in order to retain their offices and be deemed active participants in the commonwealth. Thomson articulates the nature of this force repeatedly in The Seasons, as here in Spring:

> HAIL, Mighty Being! Universal Soul
> Oh Heaven and Earth! Essential Presence, hail!
> To Thee I bend the Knee, to Thee my Thoughts
> Continual climb, who, with a Master-Hand,
> Hast the great Who into Perfection touch'd,
> By Thee the various vegetative Tribes,
> Wrapt in a filmy Net, and clad with Leaves,
> Draw the Live Aether, and imbibe the Dew.[27]

The "Essential Presence" is what allows plants to respire. Here and throughout The Seasons Thomson reconciles theology with contemporary scientific research, such as the fact that plants drink from the air using their leaves. This encapsulates what John Sitter and Philip Connell have called the "apologist," reconciling principle of physico-theology.[28]

As is commensurate with acknowledging all animate beings to be equally worthy before God, throughout The Seasons Thomson uses anthropomorphic nouns for non-human subjects. Thomson's goal, in line with Ray and Derham, is to treat all forms of life equably: "from the vegetable world/ To higher Life, with equal Wing ascend / My panting Muse" (Sp, 27-8). Accordingly Thomson describes birds as "The plumy People" (Sp, 12), "the houshould, feathery people" (W, l.88), and "the gay troops" (Sp 28). Swallows are "The swallow-people" (A, l.781) and Thomson tends carefully to the feathered race's "little Souls" (Sp, 30), asking in one of the many passages pitched against hunting, "But you, ye Flocks, / What have ye done? ye peaceful People, what / To merit Death?" (Sp 30).[29] Keenleyside writes that "human" and "people" are not "stable" terms in Thomson system; rather, they are inclusive terms for consciousness-bearing organisms.

Thomson emphasizes the scientific basis for this apparently figurative language, and conjoins this with implicit metrical arguments for its descriptive accuracy. Near the start of Spring, Thomson insists:

> These are not idle Philosophic Dreams:
> Full Nature swarms with life. ...
> Thro' subterranean Cells,
> Where searching sun-Beams never found a Way,
> Earth animated heaves. The flowery Leaf
> Wants not it's soft Inhabitants. (Sp, 10)[30]

The three stressed syllables of "Earth animated heaves" provide a sharp contrast to the previous line's regular iambic pentameter. This metrical interruption of alternating strong and weak stresses with three strong syllables aurally describes the marked activity of the earth. The trio of vowels that start the words, along with the full stop that follows them, slows down the rhythm of the verse to a chthonic pace. The return to alternating strong and weak syllables in "The flowery Leaf" corresponds

to the return of the poetic vision to more usual subjects than the heaving cells of the earth. Thomson articulates his enthusiasm for life in its vegetable forms in his references to "abundant vegetable soul" (W, l.570), "living Herbs" (Sp15), and "the flowery race" (S, l. 211-2. Thomson also praises insects, since "Nor shall the muse disdain / To let the little noisy summer race / Live in her lay" (S, l.235-7), and describes the "nameless Nations" (Sp, 10) and the "Ten thousand forms! Ten thousand tribes!" that "People the blaze" (S, l.248-9).[31]

Ever adversarial, Pope's clearest engagement with The Seasons refers to the moment when Thomson explicitly addresses critics of "th'unbounded scheme of things" (S, l.279): "Wanders a critic fly: his feeble ray / Extends an inch around, yet blindly bold / He dares dislike the structure of the whole." (S, l.293-5) These myopic detractors, among whom Pope would shortly number, Thomson imagines as flies: aimless and too insignificant to perceive the magnitude or magnificence of the system in which they too are enmeshed. Pope responded directly to the "critic fly" in this couplet from An Essay on Man: "Why has not man an microscopic eye? / For this plain reason: man is not a Fly." (EI:193-4). This couplet tries to dismiss both of Thomson's claims; that critics of his poem are qualitatively no different from flies (which is in accordance with the panpsychic interpretation of creation) and that they are shortsighted.

Pope's couplet also gives the hint of the grounds on which Pope's whole objection will be founded. Thomson's metaphor is predicated on the animate equivalence of men and flies, and since both are part of Nature, and God's spirit animates both, they are equally participants in the overall system. Pope's blunt remark, "man is not a Fly", insists upon the categorical difference between man and nature that underscores his reinterpretation of physico-theology so as to reject participatory panpsychism in favor of a more hierarchical emergent theory of consciousness, according to which consciousness only inheres in particular configurations of atoms. Moreover, Pope's opprobrium for men who use a "microscopic eye" (as we will see below) is not only a sideswipe at over-particular critics like Dennis, but also a sure reference to the Royal Society, and specifically to Robert Hooke.

As Goodman observes, in his censure of the "microscopic eye," Pope is unexpectedly more in accord with John Locke than is Thomson. For Locke, any single artificially enhanced sense would disorder the way in which sense-data achieve their "Audience in the Brain," and such disorder would leave sense-data unable to "be perceived by the Understanding" resulting in "Sounds without Signification."[32]

The specificity with which Pope's couplet addresses Thomson's lines makes it quite unmistakable that Pope's poem is meant as a rebuttal of Thomson's. Sitter quite accurately connects An Essay on Man with The Seasons as a pair of "eco-theological" poems, but overlooks that the two poems treat the question of the existence of God's presence in his creation differently.[33] Where Thomson urges his "panting Muse ... To higher Life, with equal Wing ascend," (Sp, 27-8) Pope's Muse's wing, however, is unequal. Pope appears to endorse a physico-theological system of Thomson's sort, but he actually treats nature as a resource on which man is entitled to draw upon for his own betterment.

Thomson certainly anticipated that his poem would attract Pope's attention. This might seem on its face as strange apprehension; why should publishing a four thousand line Whiggish theodicy constitute Thomson sticking his head above the literary parapet? Pope's 1729 Dunciad Variorum had been published only the year before and had taken aim at the ephemeral effluvia of Grub Street, rather than works on the scale of The Seasons. But it has been remarked that Pope's Dunciad made a straw man out of Whiggism, using a very outdated socio-political model that no longer bore much resemblance to its actual political context.[34] Physico-theology's fresh efflorescence in the early 1710s, and Newton's association with it, however, explain why Pope might have been agitated.[35] Although Newton died in 1727, his scientific career had begun to wane roughly around the time of George I's accession to the throne in 1715. After the publication of the second edition of the Principia, and especially following his appointment as Master of the Mint in 1717, Newton was mostly pre-occupied with theological and alchemical pursuits. So to claim, as Thomson did in his

poem to Newton's memory and in The Seasons, to be the chief national memorialist for Newton, his scientific methods and his discoveries was to engage directly with social and political circumstances leading up to 1715. It was thus reasonable for Thomson to worry that Pope would want to intervene in Thomson's memorialization of Newton and his system. The Britain of the time leading up to the arrival of the house of Hanover was the Britain of Pope's youth, the crucible of his literary success, his deepest friendships, most lasting rivalries and strongest political commitments. The Seasons was a reminder, also, that the years immediately following the first publication of Derham's treatise could easily have turned out very differently. In the same year, 1713, Dennis had rather acutely accused Pope of jockeying, in his Essay on Criticism for the position of poet Laureate to the Pretender in the event of a coup.[36] When that coup was attempted in 1715, it failed. George I continued to reign, and the intellectual and cultural transformations that had begun with the Williamite regime continued largely unabated. The Seasons would have forcibly reminded Pope of how entirely he had been on the wrong side of history.

However, Thomson's anticipation of Pope's intervention took an ingenious shape. Pope is the only living poet mentioned by name in the 1730 edition of Thomson's poem. Thomson celebrates Pope:

> ... from the muses' hill will Pope descend,
> To raise the sacred hour, to make it smile,
> And with the social spirit warm the heart:
> For tho' not sweeter his own Homer sings,
> Yet is his life the more endearing song. (W, 469-473)

A celebration of Pope as a supporter of "the social spirit" may be a little ironic, but this remains an extremely canny move.[37] Not without looking ungracious could Pope satirize a poet who had named him the chief living envoy from Parnassus. Thomson's public persona was safe: Pope returned the compliment by never mentioning Thomson.

While Thomson's self-inoculation against ad hominem attacks from Pope was strong enough, noone ever managed entirely to deter Pope from competition. Pope takes Thomson's politicized system and makes it seem apolitical; he refers to the same Lockean and Shaftesburyean political

genesis stories that Thomson does, but uses them without attribution and attaches them to his exclusive structure. Where Thomson mentions Locke and Shaftesbury as figures for readers to admire and emulate, Pope transposes their ideas onto his own ideological structure based on giving laws rather than consensually devising them. Finally, by endowing only certain higher-level creatures with consciousness, principally Man, Pope worked to displace Nature from the diffuse center of the system Thomson had articulated. For example, Pope's quatrain on the fitness of man's sensory capacities to his place in the Great Chain of Being reads:

> Presumptuous Man! the reason wouldst thou find,
> Why form'd so weak, so little, and so blind!
> First if thou canst, the harder reason guess,
> Why form'd no weaker, blinder, and no less! (EI:35-8)

The poet's own footnote to this passage reads: "He is not therefore a Judge of his own perfection or imperfection, but is certainly such a Being as is suited to his Place and Rank in the Creation" (E I: 35fn) On its face, this seems an orthodox articulation of physico-theological principles: the attunement of man's sensorium, and therefore his ability to perceive and interact with the world around him, accords to his God-given station within it. A comparison with the parallel passage in Thomson's Spring, however, reveals the two poets' contrasting agendas:

> And to the Curious gives th'amazing Scenes
> Of less'ning Life: by Wisdom kindly hid
> From Eye, and Eye of Man : for if at once
> The Worlds in Worlds enclos'd were push'd to Light,
> Seen by his sharpen'd Eye, and by his Ear
> Intensely bended Heard, from the choice Cate
> The freshest Viands, and the brightest Wines,
> He'd turn abhorrent, and in Dead of Night,
> When Silence sleeps o'er all, be stunn'd with Noise. (Sp, 11)

Pope's quatrain addresses the "reason" that Thomson finds in Spring for the sensitivity of the human sensorium, and finds it implicitly “Presumptuous." The sensory overload that Thomson warns against isn't justification enough for the attunement of the sensorium for Pope: his note makes clear, Man's senses have been divinely made to conform to his station in Nature. But those people whom Thomson refers to as "the Curious" – those who have microscopic eyes – are even worse than

presumptuous. There is an anti-scientific strain running through Pope's poem.[38] In the passage immediately following the "Fly" couplet, Pope continues: "Say what the use, were finer optics giv'n, / T'inspect a mite, not comprehend the heav'n?" (E, I:195-6) With this unmistakable reference to Hooke's Micrographia and his engraving of a flea, Pope alleges that microscopic vision is useless because it doesn't advance our faith in, or knowledge of, God. Pope represents the kind of scientific enquiry that was foundational to the Royal Society as both literally and figuratively myopic.

This is not to say that Pope's poem is devoid of conventional physico-theology. The third epistle begins,

> Look round our world; behold the chain of love
> Combining all below and all above.
> See plastic nature working to this end,
> The single atoms each to other tend,
> Attract, attracted to, the next in place
> Form'd and impell'd its neighbour to embrace. (E, III.7-12)

This is an instance of conventional Newtonian theistic naturalism, expressing the inverse square law, the law of universal gravitation, through a quasi-religious metaphor of love. The couplets perform the attraction among parts that they describe. In its argument, it seems a relatively Thomsonian passage. The epistle continues:

> Nothing is foreign; parts relate to whole;
> One all-extending, all-preserving soul
> Connects each being, greatest with the least;
> Made beast in aid of man, and man of beast;
> All serv'd, all serving: nothing stands alone;
> The chain holds on, and where it ends, unknown. (E. III.21-26)

This passage seems just as conventionally physico-theological as the previous one. But passage ends with a distinctly un-Thomsonian sublimity. Thomson admits the bounds of knowledge, but not the bounds of what is knowable; Pope's ascent to the "unknown" end of the Great Chain gestures towards a an "unknown" that is just as religiously-inflected as the "chain of love."

An Essay on Man is also expressedly anti-anthropocentric; Sitter writes that Pope dismisses anthropocentrism as "theological presumption and anthropocentric complacency."[39] Pope continues the third epistle:

> Has God, thou fool! work'd solely for thy good,
> Thy joy, thy pastime, thy attire, thy food?
> Who for thy table feeds the wanton fawn,
> For him as kindly spread the flow'ry lawn:
> Is it for thee the lark ascends and sings?
> Joy tunes his voice, joy elevates his wings.
> Is it for thee the linnet pours his throat?
> Loves of his own and raptures swell the note.
> The bounding steed you pompously bestride,
> Shares with his lord the pleasure and the pride. (E, III.27-36)

The pitch of this passage accords with the ventriloquized lines spoken by Pride in the first epistle, "for me … for me… my foot-stool earth" (E, I:133-40).[40] The question of Pope's attitude toward anthropocentrism, however, is confused by his description of pre- and post-lapsarian human interactions with nature. Later in the third epistle, Pope describes the prelapsarian "state of nature":

> The state of nature was the reign of God:
> Self-love and social at her birth began,
> Union the bond of all things, and of man.
> Pride then was not; nor arts, that pride to aid; (E, III: 147-50)

The problem with reading these lines as a prescription for contemporary practice is that they describe a specifically inaccessible state. This raises the distinct possibility that the Shaftesburyan, Whiggish sociality Pope describes among nature's beings is in fact impossible in a fallen world.[41] The possibilities for postlapsarian interaction, however, seem distinctly less egalitarian: "the voice of nature" instructs "man" to learn how to bend creation to his will. And the end result of this process, by which nature rose to art, is distinctly unWhiggish:

> … by nature crown'd, each patriarch sate,
> King, priest and parent of his growing state; (E, III: 214-5)

Pope presents monarchical, hierarchical order as, in some sense, natural to postlapsarian humankind, since the social love of prelapsarian interaction of all with all is by definition impossible. The hierarchical order that Pope — however reluctantly — advocates is some distance removed from Thomson's optimistic description of the present-day "conjunctive all." The opening couplet of the second epistle of the Essay on Man, "Know then thyself, presume not God to scan; / The proper study of Mankind is Man" (E, II:1-2) puts Pope's anthropological approach (problematic to reconcile with the unsettled matter of Pope's stance on anthropocentrism) front and center. Pope's

argument here is perhaps a circular extension of the principle expounded in I:35fn, that since human perception is attuned by God to a certain level, the most respectful exploration of God limits itself to the objects naturally perceivable, without resort to artificial perceptual aids like the microscope. Pope's end-stopped couplet rhyme (scan/man) aurally reinforces the sense of the couplet: verb and object are inescapably juxtaposed. The OED cites this particular couplet in its definition of "scan": "2. To criticize; to test or estimate the correctness or value of; to judge by a certain rule or standard."[42] The OED's reading of Pope sympathetically interprets the couplet as an appeal to conventional piety and humility. The structure of Pope's couplet, however, surely implies that "scan" is being used as a near-synonym for "study". "Scan" had several meanings in the eighteenth century, including "3.To examine, consider, or discuss minutely." Compare to Thomson's deployment of the same verb, "scan" from Autumn:

> Oh Nature! all sufficient! overall!
> Enrich me with the knowledge of thy works!
> Snatch me to heaven; thy rolling wonders there,
> World beyond world, in infinite extent,
> Profusely scatter'd o'er the void immense,
> Shew me; their motions, periods, and their laws,
> Give me to scan; thro' the disclosing deep
> Light my blind way: the mineral Strata there;
> Thrust, blooming, thence the vegetable world:
> O'er that rising system, more complex,
> Of animals; and higher still, the mind,
> The varied scene of quick-compounded thought,
> And where the mixing passions endless shift;
> These ever open to my ravish'd eye;
> A search, the flight of time can ne'er exhaust! (A, l.1252-1265)

Pope and Thomson do in fact use the same sense of "scan": minute examination. For Thomson, the proper study of mankind is man, but it is also everything else animal, vegetable, and mineral: his use of "scan" relates to the abstracted properties of Nature's "rolling wonders". Buried in the middle of a line and as a subordinated part of speech (to "give"), "scan" is one component of Thomson's sentence roughly equivalent to other verbs of inquiry; "light" and "shew". Thomson's integration of

"scan" into his syntax counterpoints the distance Pope introduces through his syntactical oppositions.

Of course, "scan" also refers to the measurement of poetic meter. In a literal sense, Pope's couplet inveighs against religious poetry in favor of poetry on human subjects. But Thomson and Pope's relative meters also bespeak their competing agendas. Pope's couplets are almost universally end-stopped, and couplets are typically loosely connected units of sense. Syntax and meter are very closely aligned to create a solidly linear movement of sense. Thomson's syntax and meter, however, are not closely aligned; his blank verse is heavily enjambed and units of sense are arranged in irregular and apparently organic passages that correspond only loosely, if at all, to line endings. Pope's poetic form implies an artificial deeply hierarchical organizing logic to its content. Pope's couplet form corresponds to the theory of emergent cognition he espouses such meaning only inheres in predetermined syntactical of formal units. For Thomson, on the other hand, semantic units are irregularly and organically placed within and across lines.

Thomson's form, on the other hand, recalls Andrew Marvell's closing peroration in On Mr Milton's Paradise Lost: "The verse created like thy theme sublime, / In number, weight, and measure, needs not rhyme."[43] Miltonic imitation was undoubtedly a major objective for Thomson in The Seasons, but Thomson's choice of blank verse accords just as much with the "natural," interlaced and reciprocal system of God's presence in nature as it does with literary imitation. Milton wrote in his introduction to the 1674 edition of Paradise Lost that "This neglect then of Rhime so little is to be taken for a defect, though it may seem so perhaps to vulgar Readers, that it rather is to be esteem'd an example set, the first in English, of ancient liberty recover'd to heroic Poem from the troublesom and modern bondage of Rimeing."[44] Nigel Smith quite reasonably extrapolates that Milton "associated rhyme with bondage, tyranny and custom, " and Thomson's choice of blank verse, like Milton's, corresponds to his political commitment to a free and Whiggish Britain.[45] Thomson's verse is squarely within the tradition of Whig verse celebrated by Addison in his An Account of the

Greatest English Poets Addison writes in praise of the Whig poet Charles Montagu, "How negligently graceful he unreins / His verse, and writes in loose familiar strains." [46] Addison's own enjambment performs the unreining that he describes: the metaphor of unreining, of unbinding a horse to let it move naturally and unimpeded by man's artifice, is enacted by the displacement of the object of the verb over the line break. Abigail Williams writes in her analysis of this passage, "the excellence of Montagu's verse is inseparable from the excellence of his subject matter, moreover, the praise of the literary merits of the poem displays Addison's own commitment to the Williamite regime. Aesthetic and evaluative judgements cannot be separated from political concerns, since the appraisal ... conflates literary form and political content."[47] "Unreined" enjambment is a literary form whose Whiggish pedigree can be traced back from Thomson to Milton via Addison. Both Pope and Thomson's choices of meter are intimately connected, therefore, to what they choose (in Pope's sense) to "scan": their scientific, political, religious and literary agendas.

Pope reflects on Thomson's own agendas, parodying physico-theological vision as that of "the poor Indian / whose untutor'd mind / Sees God in clouds, or hears him in the wind," and thus equating physico-theology with a rudimentary and mystical panpsychism (E, I:99-100). Pope is ironic about the Indian (and even suggests the Indian as a type for himself when he writes that the Indian "thinks ... His faithful dog shall bear him company"[48]) but prefers him to the man mislead by "proud Science ... taught to stray /Far as the solar walk, or milky way." (EI:101-2) Scientists, in Pope's understanding, are searching for an "Angel's wing" or "Seraph's fire," (E, I:110) a potent pair of images that evoke Luciferian ambition and Promethean theft. Behind Pope's condemnations of science lurk the implications that some knowledge is forbidden and that seeking that knowledge is a transgression against God, parallel to Eve's eating of the fruit of the Tree of Knowledge, as though through the disobedience of critical enquiry we re-enact the Fall.[49] As Pope writes shortly after; "In Pride, in reas'ning Pride, our error lies; / All quit their sphere, and rush into the skies. ... Men would be Angels, Angels would be Gods. / Aspiring to be Gods, if Angels fell, / Aspiring to be Angels, Men

Rebel." (E, I:123-8) Pope's lines trace the arc of upward movement through aspiration and ambition and following fall. Even without the explicit comparison to Lucifer and man's first disobedience, the key word "error" strongly connotes the fall. For Pope, a scientist's desire to "rush into the skies", such as Thomson's asking Nature to "snatch me to Heaven," is a cardinal disobedience.

This contrast between the poets' cosmic epistemology theory of consciousness also corresponds to the contrast between Protestant and Catholic approaches to science. Catholicism forbade the use of bodies in anatomy as a desecration of God's gift (man's body). The principal surgical schools in Europe were in Leiden, Huguenot areas of France and Protestant parts of Germany. Pope's quarrel in An Essay on Man was not necessarily with science per se but with the structures of learning that it promulgated. These structures were open, depended on debate, were heavily discursive and took for granted the existence of external truths that persistent enquiry could uncover. (The discovery of knowledge was also, in a way, a goal of Thomson's poetry.) The intellectual procedures of science derived knowledge bottom up from first principles; conversely, Catholic natural philosophy gave laws from the top down and declared knowledge by fiat. Not coincidentally, the modern Whiggish Britain represented by the Royal Society was by definition Protestant and supported the accession of William and Mary, while the Catholic political-scientific economy represented by Pope's poem endorsed the divinely given right of kings to rule, and held that that right was inalienable. In other words, Thomson's poem is the intellectual offspring of the victors of the Revolution of 1688, while Pope's is the offspring of its losers, the Jacobites.

This contrast between Pope and Thomson's attitudes to science and divinity was one that had already been struck by their differing accounts of the lovers John Hewit and Sarah Drew, who were killed by lightning at Harcourt Stanton in July 1718.[50] The incident was reported in the press and Pope wrote the lovers an epitaph, which was engraved on their tomb.[51] Thomson's account of the incident appears in Summer, ll.894-944. Where Pope's account rather sentimentally claims that "Victims so pure Heaven saw well pleased," Thompson's theodicy rises only far enough to exclaim,

"Mysterious Heaven!"[52] Thomson's account of the storm is decidedly scientific in contrast to Pope's, which explicitly accredits God as the source, ("the Almighty ... / Sent his own lightning ... /And snatch'd them in celestial fire" On Two Lovers, 5-18). Thomson conversely traces the origins of the storm from 'unusual darkness', the supposed fermentation of "nitre, sulphur, vitriol" in the "baleful cloud," thunder, hail and finally to lightning, whether as a lone strike or "in red whirling balls." (S, 828-68) Only once he has described the physical process of the storm does Thomson backtrack and mention the storm's victims, "Celadon" and “Amelia." (S, 896-7) Insofar as divinity enters the picture for Thomson, it is as a dimly perceived arbiter of providence: the mystery of Heaven that Thomson invokes is the opaque calculus of justice, not of the origins of lightning.

Conversely, Pope's account of the event uses the behavior of the natural world as a God-given index to the morality of men and women, and he interprets the death of Hewit and Drew as a narrative of virtue rewarded:

> Here pitying Heaven that virtue mutual found,
> And blasted both, that it might neither wound.
> Hearts so sincere, the Almighty saw well pleased,
> Sent his own lightning, and the victims seized.
> [...]
> Think not, by rigorous judgment seized,
> A pair so faithful could expire;
> Victims so pure Heaven saw well pleased,
> And snatch'd them in celestial fire.
>
> Live well, and fear no sudden fate;
> When God calls virtue to the grave,
> Alike 'tis justice soon or late,
> Mercy alike to kill or save. (On Two Lovers, 2-22)

Pope's poem is a theodicy, which takes as its task a Panglossian explanation of an apparently inexplicable tragedy. The difference between Thomson and Pope's accounts of the storm and its consequences are concomitant to their cosmologies: Thomson focuses on the total movements of nature, Pope on the souls and fates of humankind. Just as An Essay on Man scorns those who "inspect a mite, not comprehend the heav'n," Pope here focuses on constructing a providential argument for the heavenly event rather than on examining the event itself, since the movements of

particles in the air are events that take place without consciousness (and implicitly, therefore, without import). In Pope's poem, the only probative value of the fate of Hewit and Drew is that which can be extracted through a closing moralitas. Pope is unconcerned with the operation of the laws of the natural world compared to obeisance to divine laws.

Thomson's memorialization concentrates on the physical laws at work in the event since, according to physico-theology, the operations of Nature are divinely inspired and it is through studying them that we can discover more about God. Thomson's only mention of divinity is equivocally poised between admiration and awed dismay: "From his void embrace / (Mysterious heaven!) that moment, in a heap / Of pallid ashes fell the beauteous maid" (S, l.936-938). Keenleyside argues acutely that Celadon's mistake is a kind of anthropocentrism; that Thomson undercuts "Celadon's ironic assurance that Amelia is different from a tree or a sheep or a tower. Thomson insists that she is not."[53] The single parenthetical mention of Heaven shows that Thomson's poem is concerned first and foremost with discovering the laws of nature through scientific enquiry and that it hopes through that discovery to reach up to understanding God. Pope, on the other hand, posits that the reader's key concern should be her own moral rectitude, and that "The proper study of Mankind is Man" (E II:2)

Pope's interest in displacing the newer model of science represented by Thomson's poem with his own, much older, model, didn't have much to do with science. Pope's chief concern was with the shape of the intellectual cultures likely to coexist with contemporary science. Pope was opposed to the very notion of a collaborative and polyphonic intellectual culture because it would have run counter to his own ambitions for intellectual and literary hegemony.[54] The irony is that Pope chose to make these claims on politically enemy territory and was fighting, by 1733, a distinctly rearguard action. To assert the necessity of a hegemonic intellectual culture that proceeded by imitation from natural laws in a poem that was in part responding to the Royal Society's greatest verse advocate was characteristically radical. Still more remarkably, Pope was largely successful.

The mode of learning that Pope proposes as an alternative is quite different from that described by Thomson. Rather than analysis, argument, dispute or deduction, Pope imagines early man bidden by Nature:

> Go, from the Creatures thy instructions take:
> Learn from the birds what food the thickets yield;
> Learn from the beasts the physic of the field;
> Thy arts of building from the bee receive;
> Learn of the mole to plow, the worm to weave;
> Learn of the little nautilus to sail (E, III:172-177)

Pope imagines man made to rule over Nature, "Man's prerogative to rule, but spare" (E, III:160) and envisions civilization as the combination and perfection of natural techniques: a conventional Aristotelian version of art's imitation of nature. In this advocacy for the imitation of nature we see the consistency of Pope's intellectual commitments between the Essay on Criticism and his Essay on Man. In each work Pope aims to castigate would-be innovators by urging them to conform to rules that he declared were innate and natural, "Learn hence for ancient rules a just esteem; To copy nature is to copy them" (Essay on Criticism, 139-140). Pope assumes the prerogative of declaring what is natural and what not, and so, in the role of self-appointed prophet, the privilege of making the laws that he urges others to follow.

Pope sees man as ruling Nature with noblesse oblige. Thomson however is explicit that men who put nature to their own ends and use it as a mere means, as Pope imagines they ought to do, are “Tyrants." Before the fall, Man was "A Stranger to the Savage Arts of Life, / Death, Rapine, Carnage, Surfeit, and Disease, / The Lord, and not the Tyrant of the World,” (Sp, 15) whereas Thomson addresses contemporary man as "tyrannic lord!" and asks, "how long, how long, / Shall prostrate nature groan beneath your rage, /Awaiting renovation? When oblig'd, / Must you destroy?" (A, l. 1089-93) For Thomson, Man should participate in the betterment of Nature rather than presuming to rule over it.

Thomson's opposition to hunting stems from this specter of tyranny. Thomson and Pope disagree fundamentally on the difference between man and animal. Thomson believes that they differ

in degree; Pope holds that they differ in kind. And this is why Pope anoints men the "imperial race" (E, I:209). Sitter suggests that "In most of its eighteenth-century uses "man's imperial race" suggests human kinship with other animals and responsibility for them" (21). Whether man has a prerogative to care for animals or the entitlement to use them for his needs, the corresponding political analogy is clear. Thomson's vision is a conversely fully participatory vision of Nature in which all animate creatures co-exist in a comparable and scaled system (Ray's "mutual conspiring" (WG,A8)); Pope's imagination of Nature is one with a single qualitatively different ruler, set apart from all other beings. This correlates to Thomson's collaborative vision of British intellectual culture (viz. his citation of Locke and Shaftesbury) as opposed to Pope's autocratic model (in which Locke and Shaftesbury's political origins narratives are arrogated without credit). Thomson's nature is harmonious and co-operative, like a Whig Commonwealth, and Pope's is subordinated, like a Tory monarchy. Pope's justification of hunting is worth examining in some detail for the way in which it bespeaks his political philosophy:

> Grant that the pow'rful still the weak control;
> Be Man the wit and tyrant of the whole:
> Nature that tyrant checks; he only knows,
> And helps. another creature's wants and woes.
> Say will the falcon, stooping from above,
> Smit with her varying plumage, spare the dove?
> Admires the jay the insect's gilded wings?
> Or hears the hawk when Philomela sings?--
> Man cares for all: to birds he gives his woods,
> To beasts his pastures, and to fish his floods. [...]
> All feed on one vain patron, and enjoy
> Th'extensive blessing of his luxury. [...]
> Nay, feasts the animal he dooms his feast,
> And till he ends the being makes it blest;
> Which sees no more the stroke, or feels the pain,
> Than favour'd man by touch ethereal slain.
> The creature had his feast of life before;
> Thou too must perish when thy feast is o'er! (E, III: 49-70)

Pope argues that man's domestication of animals is itself natural, and that for man to hunt kept fish and game is as natural as a falcon's hunt of a dove. Pope suggests that animals choose to submit to man's domestication out of enlightened self-interest, and that the contract between man and kept

animal is "blest" and mutually beneficial. The whole arrangement of the man and the ruled stock of animals that Pope imagines is a Hobbesian Leviathan: while outside the man's rule falcon, jay and hawk, predate on defenseless prey, the man's subjects enjoy his protection and the use of his resources in return for their lives. There is no doubt that in Pope's poem the man's stock are his subjects: in being "blest" by submitting to his rule they endorse his divinely given right to dominate them.[55]

This passage on hunting is close to the heart of the Essay on Man's political arguments and to their literary pay-off. Pope justifies hunting in his poem so emphatically because the qualitative difference it implies between hunter and hunted corresponds to the qualitative difference between ruler and subject and, implicitly, between writer and reader. The two portrayals of hunting reveal opposed political philosophies, but they also reveal Thomson's commitment to a participatory Commonwealth of Letters and Pope's respective adherence to a Monarchy of Letters, with himself as monarch. The harmonious co-existence that Thomson imagines is replaced by organized and divinely sanctioned subordination to a single ruler. Pope's earlier claim that "All are but parts of one stupendous whole, / Whose body nature is, and God the soul," (E, I:267-8) is of a piece with his emergent theory of consciousness and the hierarchical, even Cartesian, vision that corresponds to it. Not only does the couplet mark a distinction between God and nature, a distinction that Thomson effaces through panpsychism, but it portrays God as animating nature's otherwise inert body. For Pope, there is as categorical a difference between God and nature as between atoms and soul, man and animals. The analogical import of this difference is tremendous. Instead of elective monarchy, Pope's poem promotes divine right. Where Thomson's poetry creates an open discursive space rich in tributes to British writers and thinkers, Pope insists upon a closed arena governed by his own diktat.

An Essay on Man shows Pope wresting Thomson's Whiggish literary structures into a form that is at once monarchist and self-promoting. Pope's implicit deployment of Jacobite rhetoric in the Essay on Man is aimed at the furtherance of literary objectives, rather than at political, let alone

Stuart, goals. The Jacobite rhetorics in the Essay on Man— the supremacy of God's law over Man's law, the importance of natural law, and the folly of man's investigations and interferences — are deployed without any emphasis on, or interest in, their political corollary. But the obliqueness of the political reference does nothing to detract from its centrality to Pope's work in the Essay on Man. Even though the resulting literary artifact appears apolitical, in fact it seethes with political rhetoric directed to literary ends.

This is a complex and ingenious series of maneuvers. Pope's conservative, hybrid form of writing recasts Whig ideologies in a mold that is roughly Jacobite and which has the ultimate goal of preserving whatever control possible over literary production.[56] Pope's transformation of Thomson's version of fully panpsychic physico-theology into a softer, quasi-anthropocentric perspective is his most thorough-going and successful domination of Whiggish thought. That Pope performed this recasting from blank verse into couplets symbolizes on a formal level the ideological transformation he effected. The obvious disconnection between the pursuit of the natural sciences and Pope's poem — since natural scientists were unlikely to take to heart Pope's "Then drop into thyself, and be a fool!" (E, II:30) — has one final consequence. Pope's poem was not intended to shape the scientific sphere; that battle was well beyond him. But An Essay on Man was intended to make it impossible to write a progressive and ideologically committed poem. It necessitated a separation of literature from scientific advocacy. Despite the magnitude of Thomson's achievement he had very few imitators after the Essay on Man; most eighteenth-century verse after 1733 addressed the moral quandaries of man's "isthmus of a middle state," an isthmus that was considered contiguous neither with the animal and vegetable kingdoms nor with the celestial. An Essay on Man was Pope's most successful fusion of Jacobite exceptionalism with Whiggish universalism, and it ensured that for eighteenth-century poets to come like Samuel Johnson, "The Proper Study of Mankind" would remain "Man."

Notes

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[1] Samuel Johnson, Life of Pope, Works of Samuel Johnson ed. John H. Mittendorf (Yale University Press, 2010), 23:1219. http://yalejohnson.com, Accessed October 13th 2016.

[2] Robert Boyle endowed a series of lectures considering the relationship between the new philosophy and science in his will. The first of these was given in 1692 by Richard Bentley. As Kevis Goodman notes, Bentley's physico-theology was focused on finding analogues in the natural world for the social exchange on which Whiggish mercantile society was modeled. See Goodman, Georgic Modernity and British Romanticism: Poetry and the Mediation of History (Cambridge: Cambridge University Press, 2004), 48. On the composition of physico-theology and its role in complementary systems of knowledge, see Scott Mandelbrote, "Early Modern Natural Theologies," in Russell Re Manning (ed.) The Oxford Handbook to Natural Theology (New York: Oxford University Press, 2013), 75-99, Peter Harrison, "Physico-Theology and the Mixed Sciences: The Role of Theology in Early Modern Natural Philosophy," in The Science of Nature in the Seventeenth Century (Springer, 2005), 165–183, and Brian W. Ogilvie, "Natural History, Ethics, and Physico-Theology," in Gianna Pomata (ed.) Historia: Empiricism and Erudition in Early Modern Europe (Cambridge, MA: MIT Press, 2005), 75-104.

[3] Jonathan Kramnick encapsulates this distinction as follows: "materialists … tended to move in one of two other directions: either consciousness is intrinsic to matter, or consciousness emerges from matter. According to the first view, individual atoms are really not "devoid of sense" after all; rather, they have some sort of consciousness on their own. According to the second view, consciousness is a higher-order property that somehow emerges out of the activity of lower-order, senseless atoms," Actions and Objects (Stanford: Stanford University Press, 2010), 67. Roughly speaking, the first view corresponds to Thomson and panpsychism, the second to Pope and "emergence." Heather Keenleyside helpfully reframes these contrasts through Bruno Latour as respectively "translation or mediation" which mixes "humans and nonhuman things" together, and "purification," which fixes them as "distinct ontological kinds" in "Personification for the People: on James Thomson's The Seasons," ELH 76 (2009): 447-472, 447.

[4] Alexander Pope, Essay on Man, in Poetry of Alexander Pope, ed. John Butt (New Haven: Yale University Press, 1963). All citations of Pope are from this edition. All references to this text are hereafter cited parenthetically by line number and abbreviated E. Kramnick writes that "For Cartesians … our brains have a physical substance and our souls an immaterial substance. The soul can think because that is what it does" (Actions and Objects, 66). Pope distributes souls only to particular material formations; in Kramnick's terms, "Individual atoms are insensible, yet composures of atoms have sentience" (Actions and Objects, 69). Thomson by contrast writes that "These are not idle Philosophic Dreams;/ Full Nature swarms with Life" (Spring, 1730, 9). All references to this text are hereafter cited parenthetically with page numbers and abbreviated Sp. Winter, Autumn and Summer are cited with line numbers and are abbreviated W, A, and S respectively.

[5] There is a considerable critical heritage devoted to Thomson's theodical structure, from Patricia Meyer Spacks' The Varied God: A Critical Study of Thomson's The Seasons (Berkeley: University of California Press, 1959), to Ralph Cohen, The Unfolding of The Seasons: A Study of Thomson's Poem (Baltimore: The Johns Hopkins Press, 1970), and more recently Keenleyside, "Personification for the People," John Sitter, "Eighteenth-Century Ecological Poetry and Ecotheology," Religion and Literature 40 (2008): 11-37, and Phillip Connell, "Newtonian Physico-Theology and the Varieties of Whiggism in James Thomson's ," 72 (2009): 1-28. The systematic theodicy of Pope's poem was first noted — and attacked — by Jean-Pierre Crousaz in An examination of Mr. Pope's Essay on man (London: 1739). More charitable recent evaluations have included Maynard Mack, "Introduction to Essay on Man" in Collected in Himself: Essays Critical, Biographical, and Bibliographical on Pope and Some of His Contemporaries (Newark, DE: University of Delaware Press, 1982); A. D. Nuttall, Pope's "Essay on Man" (Boston: Unwin, 1984); Oscar Kenshur, Dilemmas of Enlightenment (Berkeley: University of California Press, 1993) 159-172, and Katherine Quinsy's "Dualities of the Divine in Pope's Essay on Man and the Dunciad," in Kathryn Duncan (ed.) Religion in the Age of Reason: A Transatlantic Study of the Long Eighteenth Century (New York: AMS Press), 2009.

[6] Nutall has observed that most "criticism of the Essay on Man has tended ever since to be Crousazian or Warbutonian" (Pope's "Essay on Man", 184). I do not intend to praise or blame Pope's poem; rather to show one local ecology of significance in which it participated.

[7] Thomson, Summer, (Dublin, 1730), l. 1178.

[8] See William St. Clair in The Reading Nation in the Romantic Period, (Oxford: Oxford University Press, 2004). St. Clair adduces Thomson's popularity from his publication during a particularly fortuitous window of copyright law. This is undoubtedly true. But the poem's popularity also owes to Thomson's canny combination of Miltonism and popular patriotism.

[9] Ray, The Wisdom of God Manifested in the Works of the Creation in Two Parts (London: 1692), which will be hereafter abbreviated WG and Three Physico-Theological Discourses (London: 1693). Ogilvie writes that Ray "adduced the human hand and eye as the best proofs of design in the world. ... His argument is sustained by the welter of detail from natural history that he offered," ("Natural History, Ethics, and Physico-Theology," 95).

[10] Derham writes that "I found my self in many things to have been anticipated by some of other them, especially by my Friend, the late great Mr. Ray. And therefore in some Places I shortened my Discourse, and referred to them; and in a few others, where the Thread of my Discourse would have been interrupted, I have made use of their Authority, as the best Judges." Physico-Theology: Or, a Demonstration of the Being and Attributes of God, from His Works of Creation, (London: 1713), henceforth PT, A5. See also Mandelbrote, "The Uses of Natural Theology in Seventeenth-Century England," Science in Context 20 (2007): 451-480, 462, 468, and Lisa M. Zeitz, "Natural Theology, Rhetoric, and Revolution: John Ray's The Wisdom of God, 1691-1704," Eighteenth-Century Life 18.1 (1994): 120-133, 121.

[11] See Sitter, "Eighteenth-Century Ecological Poetry and Ecotheology," 11-12.

[12] The problematic and inconsistent arguments of the Essay on Man have been amply noted by critics from Crousaz to Samuel Johnson, A. D. Nuttall, and Sitter. As Bernard Fabian summarizes in "Pope and Lucretius: Observations on 'An Essay on Man';" "the traditional concept of the Chain of Being, that is, of the linear gradation in one ontological scale of the realms of being, is taken to be the key concept of the Essay. But … the Chain had, for Pope and his contemporaries, both linear and circular connotations" in Modern Language Review 74 (1979): 524-537. The incompatibility of the linear and circular interpretations of the Great Chain gives rise to the unresolved friction between the arguments Pope propounds in different books of the Essay.

[13] Alexander Pope, Epitaph. Intended for Sir Isaac Newton, In Westminster Abbey, in The Poems of Alexander Pope.

[14] Thomson's indebtedness to physico-theology and allegiance to Newtonianism can be evidenced from the fact that while writing Winter in 1726 he was also teaching at Watts', "an academy for the dissemination of Newtonian philosophy" (Goodman, Georgic Modernity, 41).

[15] On the discourse of Patriotism in 1730s Britain see in particular Christine Gerrard, The Patriot Opposition to Walpole: Politics, Poetry, and National Myth(Oxford: Oxford University Press, 1994), and Dustin Griffin, Patriotism and Poetry in Eighteenth-Century Britain (Cambridge: Cambridge University Press, 2005).

[16] James Thomson, The Complete Poetical Works of James Thomson, ed. J. Logie Robertson (New York: Oxford University Press, 1908), 190, 201-9.

[17] Sir Isaac Newton, Four Letters from Isaac Newton to Dr. Bentley (London: 1756), 1.

[18] Christine Gerrard, "James Thomson, The Seasons" in Blackwell Companion to Eighteenth-Century Literature (Oxford: Blackwell, 2006), 197.

[19] Sandro Jung, Epic, Ode or Something New: The Blending of Genres in Thomson's ," Papers on Language & Literature 43 (2007): 146-165, and David Fairer, "'Where Fuming Trees Refresh the Thirsty Air': The World of Eco-Georgic," Studies in Eighteenth-Century Culture40 (2011): 201-218.

[20] Cohen's intricate account of the structural logic of Thomson's poem, The Unfolding of "The Seasons, remains unsurpassed. While my account is what Thomson would call, in The Art of Discrimination (Berkeley: University of California Press, 1964), "product criticism" I am deeply indebted to Cohen's work of "process criticism," which so compellingly argues for the philosophical cohesion of The Seasons.

[21] Kramnick, Actions and Objects, 67.

[22] See for example Derham's references to "tribes" (PT, 6) and Ray's at WG I:23. Ray writes simply at the beginning of his discussion of fauna, "I proceed now to the consideration of Animate Bodies endowed with a Sensitive Soul, called Animals" (WG, I:104).

[23] Isaiah Berlin, "The Divorce between the Sciences and the Humanities," in The Proper Study of Mankind: An Anthology of Essays, ed.s Henry Hardy and Roger Hausheer (Farrar, Straus and Giroux: New York, 2000), 327-8.

[24] Thomson's The Seasons was published as a full four-poem cycle in 1730, but was extensively revised in 1746. Throughout this chapter I will refer to Thomson's 1730 edition. Since no scholarly text of this earlier edition exists, I refer to the original printed text.

[25] Heather Keenleyside writes, "Thomson also follows Anthony Ashley Cooper, third Earl of Shaftesbury .. to connect … self to society. Shaftesbury writes; a creature therefore be "otherwise good and useful to himself than as he contributes good to society and to that whole of which he himself is a part" (459).

[26] The justness of man's rule over, of care for, his creatures is critical. Whether man is "imperial" in the sense of being a responsible caretaker or an unjust "tyrant" is a key issue to which this essay returns. See also Sitter, "Eighteenth-Century Ecological Poetry and Ecotheology," 21-25.

[27] Thomson, Spring, p.27.

[28] Sitter, "Eighteenth-Century Ecological Poetry and Ecotheology,", and Philip Connell, "Newtonian Physico-Theology and the Varieties of Whiggism in James Thomson's The Seasons", Huntington Library Quarterly 72 (2009): 1-28.

[29] Sitter treats Thomson's anthropomorphism as emphasizing "the communal existence of swarms of insects or flocks of birds or schools of fish" as well as highlighting "shared characteristics" ("Eighteenth-Century Ecological Poetry and Ecotheology," 17, 18) among the named creatures. Keenleyside builds on this to suggest that the "basic unit of Thomson's ontology is not the unique individual, and it is not necessarily human" ("Personification for the People," 453).

[30] Both here and elsewhere, Thomson is certainly drawing on Addison's Spectator #519. Addison writes: "If we consider those parts of the Material World which lie the nearest to us, and are therefore subject to our Observations and Enquiries, it is amazing to consider the Infinity of Animals with which it is stocked. Every part of Matter is peopled: Every green Leaf swarms with Inhabitants. There is scarce a single Humour in the Body of a Man, or of any other Animal, in which our Glasses do not discover Myriads of living Creatures." The Spectator, ed. Donald Bond, 5 vol., (Oxford: Oxford University Press, 1965), 4:346.

[31] Goodman uses "the nameless Nations" to access the effaced labor relations "behind, or in this case within" The Seasons (Georgic Modernity, 60).

[32] Locke, Essay Concerning Human Understanding, 2.3.1, 3.2.2, cit. Goodman, Georgic Modernity 52-3. It is important to note that the key issue is proportionality. Locke and Pope inveigh against a disproportion in sensory acuity so as to maintain a strict order. Thomson warns against constant and involuntarily heightened sensory perception ("for if at once / The Worlds in Worlds enclos'd were push'd to Light/ … He'd turn abhorrent" (Sp, 10)) but encourages selectively enhanced single senses, particularly sight, to aid the understanding.

[33] Sitter, "Eighteenth-Century Ecological Poetry and Ecotheology".

[34] See Gerrard, "Pope, Politics and Genre" in The Patriot Opposition to Walpole (Oxford: Oxford University Press, 1994).

[35] For a counter-case, arguing a degree of incompatibility between Newton and physico-theology, see Neal C. Gillespie, "Natural History, Natural Theology, and Social Order: John Ray and the 'Newtonian Ideology,'" Journal of the History of Biology 20 (1987): 1-49.

[36] John Dennis, Reflections Critical and Satyrical, upon a late Rhapsody, Call'd, An Essay upon Criticism (Bernard Lintot, n.p.: [1711]); "he is, I suppose, politckly setting up for Poet-Laureat against the coming-over of the Pretender" (27).

[37] Pope's much remarked-upon "talent for friendship" was balanced, it is increasingly recognized, by a concomitant talent for enmity. For one account, see Paul Baines and Pat Rogers, Edmund Curll: Bookseller (Oxford: Oxford University Press, 2007).

[38] See for example passages such as E II.19-42.

[39] Sitter, "Eighteenth-Century Ecological Poetry," 25.

[40] See also Sitter, "Eighteenth-Century Ecological Poetry," 32.

[41] See Douglas Canfield, "The Fate of the Fall in Pope's "Essay on Man," The Eighteenth Century 23 (1982): 134-150.

[42] "scan, v." OED Online. March 2014. Oxford University Press. 12 October 2016.

[43] Andrew Marvell, On Mr Milton's Paradise Lost, in The Poems of Andrew Marvell, ed. Nigel Smith (London: Longman, 2007), ll.53-4.

[44] John Milton, Introduction" to Paradise Lost, (London: 1674).

[45] Smith, Headnote to On Mr Milton'sParadise Lost, in The Poems of Andrew Marvell, 181.

[46] Joseph Addison, An Account of the Greatest English Poets, in The Miscellaneous Works of Joseph Addison, ed. A. C. Guthkelch, (London: Bell, 1914), 138-9.

[47] Abigail Williams, Poetry and the Creation of a Whig Literary Culture 1681 - 1714 (Oxford: Oxford University Press, 2005), 6.

[48] Pope, Essay on Man, I:111-112. Pope remarked to Joseph Spence that when he died he hoped that the immortal souls of his dogs (all thirteen of whom were Great Danes called Bounce) would go to heaven with him, see Observations, Anecdotes, and Characters of Books and Men, ed. J. Osborne (Oxford: Clarendon Press, 1966). See also Sitter, "Eighteenth-Century Ecological Poetry," 16-7.

[49] See especially Essay on Man, ll. I:113-130.

[50] See Spacks, Reading Eighteenth Century Poetry (Oxford: Blackwell, 2009), Stefanie Lethbridge, James's Thomson's Defence of Poetry: Intertextual Allusion in "The Seasons", Studien zur Englisch Philologie, (De Gruyter: Tubingen, 2003), and Gerrard, "The Seasons" in A Companion to Eighteenth-Century Poetry, 197-209. In this case, Pope's poem predates Thomson's memorialization.

[51] Lady Mary Wortley Montagu wrote a rebarbative response in her final Turkish Embassy letter, characterized by a distinct cynicism about the future happiness of the lover's married state and about the felicitousness of being eulogized by Pope. This is only one of many possible causes for the rift between the two.

[52] Pope, On Two Young Lovers Struck Dead by Lightning, in The Complete Poems, l.17, and Thomson, Summer, 937.

[53] Keenleyside, "Personification for the People," 460.

[54] See Christian Thorne: "What is more, if there is one feature that unites Swift, Pope, and Gay, at least in their Scriblerian mode, it is their common loathing of discourse not a particular discourse but discourse as such, the very procedure of public argument," "Thumbing Our Nose at the Public Sphere: Satire, the Market, and the Invention of Literature," PMLA 116 (2001): 531-544, 533.

[55] The most compelling arguments for the political significances of Pope's most prominent hunting scene, that in Windsor Forest, are found in Pat Rogers' The Symbolic Design of Windsor-Forest: Iconography, Pageant, and Prophecy in Pope's Early Work (Newark: University of Delaware Press, 2004) and Pope and the Destiny of the Stuarts: History, Politics, and Mythology in the Age of Queen Anne (Oxford: Oxford University Press, 2005). Rogers reads pro-Stuart sympathies in the hunt.

[56] It is important to note that I am not suggesting that the Essay on Man is a Jacobite poem. Rather, I am suggesting here that Pope draws on rhetorical and argumentative strategies that have their roots in the literary culture that sprang up to support the Jacobite cause.