Two Theses: Kenelm Digby's Oeconomy of Nature and the Immortal Soul

Devyn Gwynne

A Thesis in
The Department of
History

Presented in Partial Fulfillment of the Requirements for the
Degree of Master of Arts (History) at
Concordia University
Montreal, Quebec, Canada

May 2024

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By: Devyn Gwynne

Entitled: Two Theses: Kenelm Digby's Oeconomy of Nature and the Immortal Soul

And submitted in partial fulfillment of the requirements for the degree of

Master of Arts (History)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final Examining Committee:

_____ Chair
Dr. Elena Razlogova

_____ Examiner
Dr. Darragh Languay

_____ Examiner
Dr. Shannon McSheffrey

_____ Supervisor
Dr. Ted McCormick

Approved by _____
Dr. Alison Rowley, Chair of Department

May 2024 _____
Dr. Pascale Sicotte, Dean, Faculty of Arts and Science

ABSTRACT

Two Theses: Kenelm Digby's Oeconomy of Nature and the Immortal Soul

Devyn Gwynne

"Two Theses: Kenelm Digby's Oeconomy of Nature and the Immortal Soul" investigates the role of two themes in the life's works of Kenelm Digby (1603-1665): the idea of nature as working in a systematized way to place things to their best use; and, the idea that the human soul is immaterial, hence immune to the workings of nature, and rather immortal. This thesis argues that these two themes ought to be considered as foundational to Digby's writings throughout his life and that their co-existence with his simultaneously scientific and experimental efforts to understand nature are mutually intertwined. Furthermore, "Two Theses: Kenelm Digby's Oeconomy of Nature and the Immortal Soul" reveals Digby's uniquely multifaceted project which ultimately uses mechanical philosophy to posit ideas of an interconnected nature, what we now recognize as ecological recycling, and how personal belief shapes the creation of knowledge.

To Benji, who does not like reading or writing

Acknowledgments

There are many people I would like to thank for their support and encouragement; but, most of all I must extend my biggest thanks to my supervisor Professor Ted McCormick for the years of guidance. Professor McCormick has always encouraged and believed in me and my work and for that I am forever grateful.

I would like to sincerely thank my committee members Professor Darragh Languay and Professor Shannon McSheffrey for their invaluable feedback. Many thanks to Professor Michael Ferguson, Professor Sarah Ghabrial, and Professor Theresa Ventura for helping me through earlier iterations of this project.

There would be no project without the lovely baristas at Myriade who have saved me time and time again from under-caffeination. All my friends and colleagues at the 'yap lounge' have my deepest gratitude for the many hours of co-work and commiseration throughout my time here, my experience would not be the same without all of you. To my non-academic friends Étienne and Mathieu, who were always there to share a drink and a meal and listen to my trials and tribulations over the years, thank you. My 'emotional support graduate student' Victoria Kelly deserves a special thanks for our time spent working and crunching deadlines together, I am pleased to call you a friend and colleague. And lastly, a thanks to my parents, who have always supported my pursuits. I have nothing but love for you all.

Contents

List of Figures

God took the stars and he tossed 'em
Can't tell the birds from the blossoms
Tom Waits

Introduction

Kenelm Digby (1603-1665) has been described as everything from a mountebank, to a founder of mechanical philosophy, to the creator of the concept of an oeconomy of nature, to an eccentric quack. This thesis follows the new trend put forward by recent writers to resituate him within the philosophical canon as someone whose contributions and networks deserve a more serious consideration. In the only edited volume on Digby, Laura Georgescu and Han Thomas Adriaenssen discuss just this: using his works as a lens to situate the broader conversations on philosophy, nature, and religion in his time. In this thesis I argue that by looking at palingenesis (the idea of a potentiality for rebirth in plants), ecological recycling, physicotheology, and the idea of a resurrection for the human soul, Digby further articulates his vision for the future of nature versus the human. Within this is the argument that the human soul must not regenerate like material things and rather must be reserved for a single resurrection when Christ returns. His project is thus two-fold: finding (a Catholic) God in nature and proving the immortality of the human soul.

Throughout his life, Digby was tied to the study of nature and, in theological and philosophical terms, how humans are differentiated from nature. This thesis looks at the continuous themes of the oeconomy of nature and the immortality of the human soul materialized in a systematic search for both nature and human's workings. *Two Treatises* (1644) is the first example of Digby's grappling with these themes; but, there is a continued search into the workings of nature and the soul throughout his life's works into

A Discourse Concerning Infallibility in Religion (1655), the *Powder of Sympathy* (1657), and *Vegetation of Plants* (1661). Digby's works received multiple reprints, editions, and translations in many languages demonstrating a longstanding interest in his writings, partly because of the level of fame he reached in his life. His ideas would even continue to be transmitted beyond his lifetime by his assistant George Hartman who published a posthumous *Choice and Experimented Receipts in Physick and Chirugery* (1668) and *A choice collection of rare chymical secrets and experiments in philosophy as also rare and unheard-of medicines, menstruums, and alkahests* (1669). His only remaining son, also named Kenelm too published *The Closet Opened* (1671) that covered his many "Cookery" recipes.

Digby's life in general was quite public. His first diplomatic mission consisted, in 1623, of helping his uncle attempt to organize the marriage of Charles I, then Prince, and the Infanta Maria of Spain. Despite their lack of success, for his efforts, Digby was knighted by King James I the same year. Digby married Venetia Stanley in 1625. Stanley, the muse of poet Ben Jonson and a former courtesan of Richard Sackville, was quite famous in England. Digby was given command of a ship called *The Eagle* in 1627, and in 1628 he took the vessel with a fleet of English ships and attacked several French merchant ships in Scanderoon off the coast of Turkey. He claimed this attack was to free English slaves while the loot he gathered was a bonus.[1] This not only brought Digby a certain degree of fame, but also multiple lawsuits from concerned parties doubtful of the legality of his actions. Part of the loot was gifted to Charles I, including the first Greek pedestal to

[1] For more on Digby's trip to Scanderoon, see Joe Moshenska, "Sir Kenelm Digby's Interruptions: Piracy and Lived Romance in the 1620s," *Studies in Philology* 113, no.2 (Spring 2016): 424-483.

be a part of the royal collection. With the King's acceptance of these gifts, the petitioners retracted their lawsuits. To many, this act made him a national hero, and this continued to be a part of his reputation until his death. On his return voyage he penned the loosely autobiographical *Loose Fantasies,* about him and his wife, under pseudonyms Theagenes and Stelliana, which was circulated despite any formal publication.[2] In November of 1630, he was appointed Naval Commissioner and made a Commissioner to Virginia while also serving on a Council for New England, although these appointments were strictly administrative.[3]

Digby converted to Anglicanism in December of 1630, pledging allegiance to the Church of England, likely for his position as Naval Commissioner. In 1631, Digby and the Guinea Company were granted a patent for trade in Guinea, Binney, and Angola. At the time, the Company traded exotic woods, ivory, and pelts in search of gold. Digby was brought into the company to save it from bankruptcy, but, he withdrew himself from the company by the end of 1631.[4] In 1632, Digby introduced painter Anthony Van Dyck, who had studied under Peter Paul Reubens, to Charles I. Van Dyck was knighted and made the court painter within the year. Van Dyck and Digby remained very close friends until

---

[2] The extent to which *Loose Fantasies* was circulated is unclear, while still others suggest it was a private story. Jackson I. Cope makes a strong argument for its clearly public presence. Jackson I. Cope, "Sir Kenelm Digby's rewritings of his life" in *Writing and Political Engagement in Seventeenth-Century England,* Derek Hirst and Richard Strier eds. (Cambridge: Cambridge University Press, 1999), 52-68.

[3] For this Commissioner role he is gifted Bradley Manor, lands in Lancaster, Denbigh, and Chester.

[4] For more on the Guinea Company see L.M. Svalastog, "Mastering the worst of trades: England's early Africa companies and their traders, 1618-1672" (PhD diss., Leiden University, 2018), 87-114.

Van Dyck's death in 1641. They first met in the 1620s and upon his death, Digby wrote that they shared a "una vicendevole collegatino di genio," a mutual connection of genius.[5]

Digby's wife died in 1633 and he reclused himself into a section of Gresham College. When Digby found Stanley dead in her bed in 1633, he wrote to his friend Van Dyck to paint her in situ resulting in the *Venetia, Lady Digby, on her Deathbed* of the same year. Digby, despite many moves in his life, kept this painting with him until his death in 1665. Rumours circulated that Digby had accidentally killed her. She was known to drink a concoction of his making called Viper Wine, made from the poison of a venomous snake thought to have medicinal qualities. So much gossip surrounding her death ensued that an investigation into her death was launched and an autopsy performed. It is noted that Digby, despite being distraught with grief, insisted on being present during her autopsy. They examined her organs for damage and upon opening her skull found that she had suffered a cerebral hemorrhage so large that it liquified her brain. Digby was freed of any wrongdoing and exiled himself to Gresham Collage where he donned a distinct mourning dress with which he would come to be associated.[6]

At Gresham he turned to philosophy and experimentation. Bruce Janacek argues that it is distinctly Stanley's death that pushes Digby into alchemy.[7] Afterwards, Digby

---

[5] Cf. Giovan Pietro Bellori *le vite de' pittori, sculpturi et architetti moderni,* ed. Evelina Borea, 1976: 280. In John Peacock, *The look of Van Dyck: the self-portrait with a sunflower and the vision of the painter* (London: Routledge, 2006), 217, n.1.

[6] For more on Digby's stay at Gresham see Betty Jo Dobbs, "Studies in the Natural Philosophy of Sir Kenelm Digby Part II. Digby and Alchemy," *Ambix* 20, no.3 (November 1973): 146-149.

[7] Bruce Janacek, "Kenelm Digby's Natural Philosophy," in *Rethinking the Scientific Revolution*, ed. Margret J. Osler (Cambridge: Cambridge University Press, 2000), 92.

spent his spare time collecting books. After the death of his mentor Thomas Allen in 1634, Digby was left his book collection and made his first donation of manuscripts to the Bodleian later that year. Digby left for Paris shortly after and converted publicly back to Catholicism. In the following years, Digby would convert two noble women and would publish one account, *A Conference with a Lady about Choice of Religion,* in 1636. Digby became friends with Marin Mersenne and his affiliates in Paris where Mersenne seems to have introduced Digby to Rene Descartes and Thomas Hobbes. Mersenne sent Digby a copy of Descartes' *Discours de la Méthode* in 1637 and Digby sent another copy to Hobbes the same year.[8] Digby returned to England in 1638 after the death of Ben Jonson. A long-time patron of Jonson, Digby published Johnson's second volume of plays in 1640.

By 1639 a strong anti-Catholic movement built up in Scotland and England and Digby petitioned generally for English Catholic funds for Charles I's expeditions into Scotland alongside Queen Henrietta Maria. For his involvement in this matter and his efforts to convert the Earl of Downe to Catholicism, Digby was called into the House of Commons on charges. When the charges were dropped, Digby left for France. While in France, Digby was involved in a duel with a Frenchman named Lord Mount le Ros. Digby published a pamphlet on this event titled *Sir Kenelm Digby's Honour Maintained*. Le Ros allegedly instigated the duel when he said "slanderous words" about the King of England, resulting in le Ros' death. Digby seems to have taken this to the King of France on the grounds that he was upholding the honour of a King and thus acting honourably.

[8] Laura Georgescu and Han Thomas Adriaenssen, eds. *The Philosophy of Kenelm Digby (1603–1665)* (Cham: Springer Nature Switzerland), 2022, 7. eBook, https://doi.org/10.1007/978-3-030-99822-6

Digby was not punished in France and was instead sent back to England where he served almost two years in prison at Winchester House from 1641-3. There, he wrote both *Observations on Religio Medici* in '41 and drafted *Two Treatises* in '43 during the last few months before his release. Besides writing, Digby continued to work on his experiments as well.[9] He was released upon written request of Anne of Austria on the condition that he would leave England. Upon his release, he once again went to Paris and published *Two Treatises*. Later in 1644, Digby helped Queen Henrietta Maria escape to Paris, where she made him the Ambassador to the Vatican.[10]

Two Treatises had made quite a name for Digby. It was one of the first treatise to cite Descartes' philosophy and was also a notable attempt to translate the philosophy of Aristotle into the current age. Looking at themes of language, of motion, the workings of the natural world, and the question of the immortality of the human soul, this work was considered Digby's magnum opus. Thomas White cited *Two Treatises* and used Digby's name in the title of *Institutionum Peripateticarum* in Lyon 1646, which would be later translated into English in 1656 as *Peripatetical Institutions*. It is known as White's best attempt to argue the use of mechanical philosophy to Scripture and Catholicism more generally, and was heavily influenced by Digby.

---

[9] It has been noted that Digby turned to bottle design, apparently hiring a glassmaker at the next-door glass manufacturing facility named John Colnett. He hired him to make special bottles to his specificities that would later be argued in a court to be the first design of the modern wine bottle for sparkling beverages. Dobbs, "Studies in the Natural Philosophy of Sir Kenelm Digby Part II," 150.

[10] Digby makes two missions to Rome, one in 1645 and another in 1647, both unsuccessful; yet, Digby would also petition some 20,000 crowns from Pope Innocent X from the Papal Curia to equip an army to march against Engilsh Puritans. See Harold Hartley, ed. *The Royal Society: Its Origins and Founders* (London, The Royal Society), 1960, 203.

While in Paris in 1647, Digby met Nicaise Lefebvre, who was teaching at the Jardin du Roi.[11] Digby would later support the appointment of Lefebvre as chemist to Charles II in 1660. When he attempted to return in 1649 Digby was once again banished from England for his alliance to the Catholic royal family. His estates were seized and much of his fortune lost, and thus he returned to Paris. While there, in 1652, Digby published *A Discourse Concerning Infallibility in Religion*, a conversation on his and White's physicotheological interests with his cousin the Earl of Bristol.[12] Digby and White both shared an interest in reconciling Aristotle's teleology with mechanism.

By this time, Digby was writing to Oliver Cromwell from Paris, petitioning him for greater Catholic rights. By 1653, Digby had incurred some ten thousand pounds of debt and petitioned the Council of State for a portion of his estate. [13] He was granted entrance to England again in November, 1653 to meet with the Council and was allowed to stay on the condition of good behaviour and not interfering with Parliament or politics. As an outspoken Catholic in Cromwellian England, Digby had his estates withheld, could not vote, and was prohibited by law to hold office. Upon his return, his first place of residence was at Whitehall, the residence of Lord Protectorate Cromwell, where he managed to live quite comfortably for nearly two years. As they had become friends, Digby was

---

[11] Georgescu and Adriaenssen, eds. *The Philosophy of Kenelm Digby (1603–1665),* 169.

[12] While the conversation is between two Catholics, John Ponce would accuse the Earl of being an Atheist for his part in this discourse see M.R.F. Williams, 'John Ponce's response to Kenelm Digby's "A Discourse Concerning Infallibility in Religion" (Paris, 1652),' *Archivium Hibernicum* 65 (2012): 192.

[13] Roughly 2.8 million dollars in today's currency. Eric W. Nye, "Pounds Sterling to Dollars: Historical Conversion of Currency," accessed Wednesday, April 17, 2024, https://www.uwyo.edu/numimage/currency.htm

derogatorily labeled Cromwell's "favourite." Little is written about this time in Digby's life or of their friendship. During his stay, Digby translated an Albertus Magnus manuscript *A Treatise of Adhering to God*; and, in 1656, he returned to Paris where he resided until after the Restoration.

During this stay in Paris, Digby managed to get an invitation to a small "Scientifical Assembly" in the south of France, Montpellier. In 1657, he attended three meetings: one, on the Philosopher's stone; another on the creation of the world; and the third on the Powder of Sympathy, which he led and later published as *The Powder of Sympathy.*[14] Published in Paris in 1658, it would in the following decades be reprinted some twenty times. The remedy meant to cure a wounded person (without any broken bones, as Digby specified), by putting a powder of vitriol (sulphuric acid) to the weapon or thing having caused the wound instead of the wound itself. The principal case used to demonstrate its sympathetic use was Digby's curing of the wound of James Howell, the author of *Dendrologia* (1640). Digby cites his first approach to the cure through a Carmelite monk who shared the cure with him in the 1620s in Florence. The powder was strikingly similar to that of George Talbot, a colleague of Digby's who was also associated with this sympathetic wound salve, and earlier writers like Paracelsus, Johann Van Helmont, and Francis Bacon also wrote about weapon salves and sympathetic cures.

Digby used a relative familiarity with these writings as a way to base the traditions of this study and lend legitimacy to his own workings from these traditions. In *The Powder*

[14] R.T. Petersson cites that Digby's talk was roughly two hours long. R.T Petersson,, *Sir Kenelm Digby: The Ornament of England 1603-1665* (Cambridge: Harvard University Press, 1956), 267.

of Sympathy, Digby used an older Paracelsian language to posit his knowledge of the workings of the universe and ultimately its possibilities for medicine. To Petterson, "the Powder was indisputably the most famous universal cure of the century."[15] In 1659, Henry More published his *The Immortality of the Soul*, citing Digby as an authority specifically from his work on the *Powder of Sympathy*. Digby's powder would even reach New England in the works of John Winthrop Jr.[16] To Boyle, Digby's powder's efficacy showed "that Nature may perform divers Cures, for which the help of Chirurgery is wont to be implor'd."[17] Boyle would also advocate for its use on livestock especially.[18] Pierre Borel's *Bibliotheca chimica* (1656), even cites a 'de Loberie' as the owner of important chymical manuscripts, and as "a most studious [curiosissimus] priest of Paris" who specifically tried Digby's powder of sympathy to successful ends.[19]

The sympathetic part of this treatise is contextualized by Seth Lobis as a reclamation of sympathies from magicians which Digby utilized alongside "a worldview [Digby] could neither fully abandon nor fully embrace."[20] By outwardly arguing that his

---

[15] Petersson, *Sir Kenelm Digby,* 262.
[16] For further on Digby and Winthrop see Walter W. Woodward, *Prospero's America: John Winthrop Jr., Alchemy, and the Creation of New England Culture 1606-1676* (Chapel Hill: University of North Carolina Press, 2010), 92, 196, 264.
[17] Robert Boyle, *Some Considerations Touching the Usefulnesse of Experimental Naturall Philosophy Propos'd in a Familiar Discourse to a Friend, by Way of Invitation to the Study of it, by the Honorable Robert Boyle Esq; Fellow of the Royal Society [Some considerations touching the usefulnesse of experimental natural philosophy. Part 1-2]* (Oxford, 1663), 121, Early English Books Online.
[18] Boyle, *Considerations*, 233-4.
[19] Lawrence M. Principe, "Sir Kenelm Digby and His Alchemical Circle in 1650s Paris: Newly Discovered Manuscripts," *Ambix* 60, no. 1 (2013): 14.
[20] Seth Lobis, *The Virtue of Sympathy: Magic, Philosophy, and Literature in Seveneteenth-Century England* (New Haven: Yale University Press, 2015), 51.

powder was not operating through so-called occult qualities, I argue it to be a demystification of the spiritual world; thus, a part of justifying this larger search for the oeconomical workings of nature, and more broadly a part of the situating of salts as a universal spirit. At the time, vitriol was considered a salt. Salts in this period had a broad definition, including naturally or artificially made minerals such as alum, nitre or saltpeter, vitriol, sal ammoniac, and sea salt, but also things with a crystalline appearance. Though there were medicinal outcomes posited for both humans and non-humans, the program here was in the way Digby argued his understanding of the world and how it works.

Digby was also a member of the Royal Society of London, where he demonstrated experiments and served on several committees. Although not a part of the initial founding members, Digby joined the then-named Society for Promoting Philosophical Knowledge by Experiments after their 28th of November 1660 meeting where he and forty others were proposed membership.[21] In 1661 Digby was asked to present his research on plant generation, later published as a *Discourse Concerning the Vegetation of Plants,* at one of the Society's first meetings at Gresham College. He presented the life cycle of a bean and its process of becoming a plant. This was a written representation of a practice in nature that could be understood and utilized philosophically as an analogy for human medicine. In addition to this 1661 presentation, *Vegetation of plants* would be presented at least once

[21] For more on the Royal Society see Hartley, ed. *The Royal Society: Its Origins and Founders.*

more and would also be the Royal Society of London's first official publication later that year.

As I argue below, this treatise situates both oeconomy and the soul's immortality through the demonstration of palingenesis. Using vegetative matter, Digby demonstrates a difference between regeneration and re-birth, hinting at the immaterial being a key element to true re-birth, i.e. resurrection.

Digby was elected a member of their Council in 1662/3, and later served on a ship-building committee, and then on the Chemical Committee in 1664 until his death. Within the Society, Digby was key in sharing multiple works, notably Frenicle de Bessy's *De Corpore Saturni* in 1661 that would work off his colleague Christopher Wren's treatise of the same name from 1658.[22] And, later, Peter Shaw, who republished Francis Bacon's *Sylva Sylvarum* in 1733, cited Digby and his *Vegetation of Plants* as a chief authority of this knowledge of nature. Therefore, it seems that Digby was more influential than has been fully considered.

Digby's natural philosophy is predicated on the nature of what he calls bodies, an all-encompassing term for material things, against the soul, regarded as immaterial. Appealing to both Descartes and Aristotle's theories, Digby's philosophy stands as an intermediary amongst his peers as an integration of new and old philosophies.[23] Key here

---

[22] J. A. Bennett, "Christopher Wren: Astronomy, Architecture, and the Mathematical Sciences," *Journal for the History of Astronomy* 6 (1975): 158, 1975JHA.....6..149B Page 149 (harvard.edu)

[23] For more on this "intermediary" nature of Digby's philosophy as related to magic and alchemy, see Graham Parry, *The Seventeenth Century: The Intellectual and Cultural Context of English Literature, 1603-1700 (*Essex: Longman Group, 1989), 157-163.

is the idea of arguing new philosophies through past ones and re-articulating past philosophies in new ways. A large part of Digby's philosophy was integrating Aristotelianism into mechanical philosophy. As John Henry mentions "the new mechanical philosophy, in its early stages, owed as much to Aristotelianism as it did to Descartes," as Aristotelianism was the jumping-off point for the so-called new philosophy of Descartes.[24]

This new philosophy to Digby was a project thus of re-interpreting Aristotle into mechanistic terms: "Let any man read his [Aristotle's] books of Generation and Corruption, and say whether he doth not expressly teach, that mixation (which he delivereth to be the generation or making of a mixt body) is done per *minima*, that is in our language and in one word by atomes."[25] These minima echoed Aristotelian *minima naturalia* where the smallest parts of a substances could take part in the bodies operations. Digby thus updated Aristotle's *Categoria* into his own, emphasizing the role of density and rarity, quantity and divisibility in his definition of bodies and theory of matter. Digby himself placed his project as one that is working against the "pretenders of Aristotle" who had "introduced a modell of doctrine (or rather of ignorance) out of his words, which he never so much as dreamed of; howbeit they alleage texts out of him to confirm what they

[24] John Henry, "Atomism and Eschatology: Catholicism and Natural Philosophy in the Interregnum," *The British Journal for the History of Science* 15, no. 3 (November, 1982): 214.
[25] Kenelm Digby, *Two Treatises: In the one of which, The Nature of Bodies; In the other, The Nature of Mans Soule; is Looked Into: In Way of Discover of The Immortality of Reasonable Soules* (Paris, 1644), 343. Early English Books Online.

say."[26] To Digby, they were "perverters of Aristotle," whereas he situated his own work to "enlarge ourselves to more particulars than [Aristotle] hath done."[27]

In his "updates," Digby solidified movement and extension in his definitions of bodies. This focus on motion and movement in Digby's engagements worked off of Descartes' theory of matter which rested on extension and the body's motion; and, similarly to Digby, Cartesian theory of matter was both founded on motion but also on the idea of material bodies and their qualities.[28] What Descartes put forward was a mechanistic conception that, as Stephen Gaukroger shows, "had recourse to nothing other than contact action involving transfer of motion/momentum."[29] Digby used the term bodies in nature to include animals, insects, objects, materials, and more, and unlike Descartes embedded them with a metaphysical rationale for their movements. Deborah J. Brown and Calvin G. Normore describe Descartes as "a proto-system theorist, one who sees organic systems forming dynamically from basic, law-governed interactions among the corpuscles," but what this thesis contends is that Digby's oeconomy of nature and nature's spirits too show a law-governed dynamic system.[30] While Descartes' "nothing but motion" may sound simplistic, or even fatally deterministic, Digby posited a different kind of determinism with actions ultimately guided by God, embedding the actions of

[26] Digby, *Two Treatises*, 344.
[27] Digby, *Two Treatises*, 345, 343.
[28] Robert Hugh Kargon, *Atomism in England from Hariot to Descartes* (Oxford: Oxford University Press, 1966), 65.
[29] Stephen Gaukroger, *The Collapse of Mechanism and the Rise of Sensibility: Science and the Shaping of Modernity, 1680-1760* (Oxford: Oxford University Press, 2010), 198.
[30] Deborah J. Brown and Calvin G. Normore, *Descartes and the Ontology of Everyday Life* (Oxford: Oxford University Press, 2019), 105.

bodies and spirits with an anthropomorphized understanding of their movements towards a best place in nature.[31] Catherine Wilson argues that the Cartesian shift away from Aristotelianism coincides with a "widespread commitment to the homogeneity of matter."[32] Digby's transformative philosophy of matter as heterogenous thus places him in a different light than Descartes.[33]

In the preface to *Two Treatises*, Digby describes his focus on the nature of bodies asks:

> why I should spend so much time in the consideration of bodies, whereas none that hath formerly written of this subject hath in any measure done the like…But truly, I was by an unavoidable necessity hereunto obliged [against] a current doctrine… For we have very slender knowledge of spiritual substances, can reach no further into their nature, than to know that they have certaine powers, or qualities; but can seldome penetrate so deep, as to descend to the particulars of such Qualities or Powers.[34]

Digby saw his contemporaries' literature lacking in their ways of explaining bodies, substances, and their actions. Thus, to understand these spiritual substances and their particulars, Digby looked to consider the bodies' qualities or powers. To him, experimentation and demonstration of workings were key. To reach into their nature, Digby sought a more in depth explanation of what consisted of a body and why it would operate as it does.

---

[31] John Sutton has argued that even though Descartes was seeking reduction in his definitions, the complex and puzzling nature of both Nature and humans remained. See. John Sutton, *Philosophy and memory traces: Descartes to connectionism* (Cambridge: Cambridge University Press, 1997), 84.
[32]Catherine Wilson. *Epicureanism at the Origins of Modernity* (Oxford: Oxford University Press, 2008), 50, https://doi.org/10.1093/acprof:oso/9780199238811.001.0001
[33] To Brown and Normore: "Digby's account of automata illustrates how such self-moving natural bodies can be treated as indivisibles, with activities proper to them qua wholes and emerging from the heterogeneity and hierarchical organisation of their parts and their motions." *Descartes and the Ontology of Everyday Life,* 72-78.
[34] Digby, *Two Treatises*, preface.

Digby mainly discussed three kinds of "spirits": a universal spirit, a substance dictated by laws throughout everything, a spirit of movement, and the Sprits of humans, made immaterial by God. In his preface he also explains that the second part, *On the Immortality of the Soul*, was written first and then he realized a need to write the first part *On the Nature of Bodies* to define his points on nature's materiality versus the souls immateriality better. A need to define the soul is reflected throughout Digby's life's works; yet, he framed his search to both nature and the soul as a unique project of making both comprehensible. "For what hope could I have," he continued:

> out of the actions of the soule to convince the nature of it to be incorporaeal; if i could give no other account of bodies operations, then that they were performed by qualities occult, specificall, or incomprehensible? Would not my adversary presently answer, that any operation, out of which I should presse the soules being spirituall, was performed by a corporeal occult quality: and that as he must acknowledge it as incomprehensible, so i must likewise acknowledge other qualities of bodies, to be incomprehensible: and therefore could not with reason presse him to shew how a body was able to doe such an operation, as i should infer must of necessity proceed from a spirit, since neither could give an account of … [this is] the remedy of this inconvenience…I have taken my beginnings from the commonest things that are in nature: namely, from the notions of Quality, and its first differences: which are the most simple, and radicall notions that are, and in which all the rest are to be grounded. [35]

The "rest" that he referenced here was the proof of the soul. The search for the operations of bodies, and the search for a comprehensibility in their workings, to him must start with the most common notion of quality from which everything else was built onto. Quantity was therefore all material which can be divided, and to Digby, it was essential that the material be divided into many parts.[36]

---

[35] Digby, *Two Treatises*, preface.
[36]Martine Pécharman, "Kenelm Digby on Quality as Divisibility," *Vivarium* 58, no.3 (April 2020): 198. doi:10.1163/15685349-12341384.

This ordering of nature and the relationship of humans to it points to two things of highest importance to Digby: medical solutions and the cycle of life, death, and rebirth. Digby showed the possibilities for medicinal cures within the laws which govern nature. He posited that these laws outline a universal spirit or substance likely to form the makeup of the universe: salt. Simultaneously, to him, these laws and workings of nature had to distinguish between the use and re-use of organic matter in plants and animals versus the life cycle of the human and the immortality of their soul.

He was not the first Digby to meditate on the matter of nature and God, interestingly enough. His grandfather, Everard Digby, also discussed somewhat similar matters in his *Dissuasiue From taking away the lyuings and goods of the Church* (1590). In a similar vein to Digby's own works, Everard discusses how:

> If wee looke into the law of nature, or the rules of humanitie, not much dissonant from the conclusions, of morall philosophie, we shall see plainly, that those creatures which receaue the greatest portion of blessing, they render the most againe, not once retracting the former yeilde. The fields for one pore graine receaued, send forth manie scores againe. The fishes multiplie in all the coastes of the wide Ocean seas: the beastes their young, the Bees their honey, the sheepe their lambe, their wool, their skin: the litle poore larke, shee mounteth vp into the clowds with a sweet song which solaceth thee, either riding by the waie, or plowing in the field, or sitting in thine howse at home. All creatures by kinde yeeld giftes of thankefull grace vnto the Lorde. The Lord of his meere mercie, without al merite hath giuen him all the beastes of the field, the fowles of the aier, the fishes of the sea vnder his dominion, he hath giuen him an vnderstanding soule, & made him steward of his housholde.[37]

Everard here is pointing to nature having laws, different from humans', that have an ability to be regenerated, passed down from God to humans with an analogy of being a

[37] Everard Digby, *Euerard Digbie his dissuasiue From taking away the lyuings and goods of the Church* (London: Robert Robinson and Thomas Nevvman, 1590), 9-11. Early English Books Online.

good governor of the household. This steward of the household is echoed later by Kenelm, yet he went a step further in fleshing out what exactly was involved in this cycle of creatures. Digby used a key thematic point of interest in articulating this: the oeconomy of nature. Whereas Everard positioned nature in relation to man's dominion over nature, Kenelm worked more towards understanding both man through his soul and the ways nature worked independently from it.

Oeconomy came from the Greek *oikonomia*, with the roots *oikos* meaning the household, and *nemein*, meaning management. This idea of household management holds in it an ideal of ends and means, with the person managing the property or resources of the estate or the home to their best ability and use. As Karen Harvey states, the "oeconomy's *raison d'être* was to unite the moral and economic."[38] This moral and economic unity, which prioritizes order under nation, can be traced back to Xenophon and his *Oeconomicus,* a Socratic dialogue concerning wealth, labour, public and personal governance of finances, husbandry, and "profitable estate management." The estate that was oeconomic elevated itself through a pride in the profitable use of all its resources. Xenophon outlined this idea of profitable estate management as one where the administrator had "everything […] orderly arranged, not in the first chance place, but in that to which it naturally belongs," this was described as the most "oeconomical result" for all parties from the top down in the hierarchy.[39] There lay an idea of "best" being not

[38] Karen Harvey, *The Little Republic: Masculinity and Domestic Authority in Eighteenth-Century Britain* (Oxford: Oxford University Press, 2012), 26.
[39] Xenophon, *Oeconomicus, on the management of a farm and household,* trans. H. G. Dakyns (North Carolina: Project Gutenburg, 1998), III. https://www.gutenberg.org/cache/epub/1173/pg1173-images.html.

only what makes the most profit for the owner or manager, but also a consideration of the psychological and moral attributes of achieving ones' best purpose.[40] The term was also used in Aristotle's *Economics* which covered the management of peoples' lives, how the nature of reality places people in accordance to a hierarchy of beings and how following these accords would create an overall well-being under its administration by the different governing bodies/authorities. Aristotelian oeconomy also spoke of an upper class of "masters and mistresses" who had their home, property, livestock, and "human chattel" to manage with an emphasis on the ability to acquire, preserve, improve, and make use.

Digby shared an interest in updating Aristotle's ideas with White. White, or 'Blacklo' his pseudonym, was a well-known Catholic reformer in London. The Blackoists' main project was ecumenism, the unification of Christian faiths under one "true faith." In *Controversy-logicke, or, The methode to come to truth in debates of religion* (1659) White described his ecumenism as a "consideration, or rather, an experiment," in compromises directed to those who "profess the Law of Christe,"while speaking to "sensible men on both sides," meaning both Protestant and Catholic.[41] They advocated for a reversal of laws against Catholics; but, even further wanted Papal and Episcopal reform, autonomous

[40] This idea of the psychological good from the oeconomy under God pops up frequently in Christian writings. For example, John of Demascus' *Concerning the Divine Oeconomy* talks about the nature of God's goodness and how his care is shown in the oeconomy of things, regardless of human understanding of the greater picture. Basil of Caesarea's *Hexæmeron* discussed the oeconomy as essential under God and the importance of useful labour. This can also be seen in the traditions of the emblem book, Digby is known to have had R. Lubbaei, *Emblemata Moralia & Oeconomica* (1609), in his possession too.

[41] Thomas White, *Controversy-logicke, or, The methode to come to truth in debates of religion written by Thomas White, Gentleman* (Paris: 1659), 6, 215, 188. Early English Books Online.

English Bishops installed in England, the denouncement of Papal infallibility, a fidelity to the English commonwealth, the rejection of the doctrine of purgatory, and the expulsion of Jesuits, whom they saw as the main proponents of the divisions within the church.[42] Upon reconverting to Catholicism in 1634, Digby began publicly advocating for others to do the same. Digby's engagements on this level were also guided by his foundational belief that he would be reunited with his wife in the afterlife. Catholicism was thus a key part of his project that ought to be placed in conversation with his natural philosophical interests in proving both the oeconomy of nature and the defining principles of material versus immaterial things.

Digby wrote that one must:

> …considereth the whole course of nature set on foot by God Almighty for this admirable work; and fixeth his foot at every particulate joynt, not stirring it from thence till he have fully examined and discussed what must necessarily follow… will evidently disern that it is throughout impossible, any thing should happen in it otherwise then just what and how it doth.[43]

Thus, finding God's existence in nature is used as a tool to argue the place of the immortal soul as equally logical in its own place akin to the course of nature. Digby exemplifies this by looking at the idea of the soul's state in the afterlife to ultimately find God's knowledge and argue this through the demonstrative tools of experimental science. True knowledge is thus attainable from the "top of the chain."[44]

---

[42] Henry, "Atomism and Eschatology," 229.
[43] Kenelm Digby, *A discourse concerning the vegetation of plants spoken by Sir Kenelme Digby at Gresham College on the 23 of January, 1660: at a meeting for promoting the philosophical knowledge by experiments* (London, 1661), 47-8. Early English Books Online.
[44] Petersson, *Sir Kenelm Digby*, 185.

Looking at this element in his works, alongside a mourning painting he commissioned, *Portrait of Kenelm Digby*, by Van Dyck in 1633 (*fig.1),* Digby emblematized this search for both an infinite knowledge and his reunification with Stanley through the metaphor of a sunflower, a heliotrope that pointed to God. Within this portrait, there is the representation of both finding God's knowledge, and positing the future of his own soul in the afterlife, which were both quests that lasted his whole life.

Digby thought many of his works were describing science, a term he employed to mean an imparted knowledge of different practices.[45] What Stephen Gaukroger illustrates in *The Emergence of a Scientific Culture: Science and the Shaping of Modernity 1210-1685* is that science in the early modern era redefined inquiry and understandings of the natural world and human's relation/place within it. The goals of enquiry itself were changed, the scholar and the scholarly practice were both a cognitive practice of those participating in creating and disseminating knowledge and a cultural product of the culture that surrounds and creates them; so, these enquiries themselves had begun to incorporate individualized inquiry of the scholar legitimatized by the scholarly practice.[46] The legitimatizing of scholarly practice Gaukroger references is described as making space for religious ideas to be proved or incorporated with more legitimacy than before, especially

[45] Digby described science alongside art as such: "It was certaine he had be|queathed to him a science or art whereby to gouerne himselfe and steere his course so as to be able to arriue safely into his wished hauen, and to that end which he was created for. And lastly, I vrged, that since the men who liue in ages af|ter his who taught them this science (which we call Religion) can not be conceiued to receiue it immedia|tly from his mouth…." Kenelm Digby, *A discourse concerning infallibility in religion written by Sir Kenelme Digby to the Lord George Digby, eldest sonne of the Earle of Bristol.* Paris: Peter Targa, 1652, 10. Early English Books Online. https://name.umdl.umich.edu/A35974.0001.001.

[46] Stephen Gaukroger, *The Emergence of a Scientific Culture: Science and the Shaping of Modernity 1210-1685* (Oxford: Oxford University Press, 2006), 1-3.

in terms of finding knowledge through God's design of the universe.[47] This framework covers both Digby's physicotheological and philosophical projects, and speaks to his demonstrations of experiments to articulate these material and immaterial binaries.

As stated, this thesis insists upon the insuperability of Digby's conceptualization of the oeconomy of nature and the immortality of the human soul, and the concurrent importance of religion, personal belief, and his engagement with his peers. Mirroring Digby's own first philosophical treatise *Two Treatises: in the One of which, the Nature of Bodies; in the Other, the Nature of Mans Soule is looked into: In way of Discovery of the Immortality of Reasonable Soules*, this thesis "Two Theses: The Oeconomy of Nature and the Immortal Soul," is an allusion to the same divide: The first chapter is thus dedicated to the oeconomical workings of nature, the ways nature re-uses and recycles matter, and further the role a "universal spirit," salt, plays in this oeconomy; whereas the second chapter looks at the physicotheological argumentation of the immortal soul and the ways this belief in a singular resurrection and his version of Catholicism more generally were integral to his life's works. In this light, this thesis shows how older ideas of the natural and super-natural world were utilized and incorporated in seventeenth-century natural philosophy and the role personal and theological beliefs played in the creation of knowledge.

[47] Gaukroger, *The Emergence of a Scientific Culture*, 7-8.

Chapter 1: Towards an Interconnected Nature: Salts, Regenerations, and the Oeconomy of Nature

Digby's life ought to be considered through both his belief in the immortal soul and in his idea of nature's working which places everything into its best place. I argue that the key underlying operational system in Digby's writings, the oeconomy of nature, is a pivotal aspect and must be comprehensively studied across his works. While Peter Remien has started to resituate this system as being of historiographical importance, Digby's oeconomy has a much greater place in his body of works than has been previously recognized. This chapter situates his ideas of a systematized nature and its relations to the composition of nature.

A part of Digby's project was the reintegration of previous philosophies, including that of Aristotle, Paracelsus, and Van Helmont, among others. Coinciding with this reintegration was a working off the writings of his contemporaries and friends Descartes, Boyle, and Johann Rudolf Glauber. These explanations were also theories of causation, with the outcome of an intellectualized understanding of non-human and human agents alike. As we will see below, Digby used spirits, attractions, and sympathy as his main ideas of explanation. In his discussions of the oeconomy of nature, he posited spirits as operational within the structure and integrates an idea of a universal spirit—salt—as a key element to the function of the system. The universal spirit is described as key to the makeup to nature in *Vegetation of Plants*. To Digby, within this "empire of nature," only fermentation causes all diseases.[48] The diseases of the plant, and also those of the human

[48] Digby, *Vegetation of Plants*, 14-15.

as in his *Powder of Sympathy,* all had an equally natural remedy: Salt. Thus, in looking at the mechanization of the oeconomy of nature, I argue that the roles of salts within the oeconomy as a universal spirit and their practical, i.e. alchemical, and experimental examples, become clear tools of proving this oeconomy's mechanisms.

Key to this is also an idea of knowledge itself being located ultimately with God, which acknowledges an element of a forever unknowable part of nature's workings, which my second chapter is devoted to.[49] Nature as a term, to Digby, speaks to the metaphysical universe. Karen Raber and Thomas Hallock situate this term during the early modern period as "…point[ing] to physical laws of the universe beyond human control."[50] Digby's nature was vague: everything in nature that was divisible was a body and hence material, while the things that were indivisible were therefore immaterial. The definition of the material and its ability to be divisible is not the focus of my work here, rather the governing principles of these things and their actions are. Though, as mentioned, his writings looked to explain these laws and things beyond human control, nature was posited to be different from humans.

His definition of material effects and causes was ordered and arranged into an oeconomy under God that applied equally to humans and to non-humans. The agent responsible for this ordering, God, was described as:

---

[49] Peter Alexander, *Ideas, Qualities and Corpuscles* (Cambridge: Cambridge University Press, 1985), 63-64.
[50] Karen Raber and Thomas Hallock, *Early Modern Ecostudies: From the Florentine Codex to Shakespeare* (New York: Palgrave, 2008), 1.

> That Provident Architect, out of whose hands these master-pieces issue, and to whom it is as easy to make a chain of causes, of a thousand or million of links, as to make one link alone[51]

These links reference a chain of ordered being, a "scale of creatures," the *scala naturae*. Arthur Lovejoy's argues that this scale comes out of a "principle of plenitude," an idea he links to both Plato and Aristotle.[52] Andraes Blank characterizes the similar way in which Digby presented the revolutions in nature as a "chain of transformation."[53] Instead of the more static chain of being, this speaks to a more dynamic state of the chain as a whole and its ability to be changed along the way. Digby dedicated his life to understanding these laws of the universe and everything's place within it and to him these links spoke to the individual revolutions in nature.

Digby figured the chain of transformations into an oeconomy. The idea of an "oeconomy of nature" was that nature worked to put these bodies into their best place. This term first appeared in his *Two Treatises* as he described:

> … that looking upon these strange actions and this admirable oeconomy of some living creatures… he will discern how these are but material instruments of a rational agent, working by them; from whose orderly prescriptions they have not power to swerve in the least circumstance that is. Every one of which, consider'd singly by it self, hath a face of no more diffrently, than that (for example) an Engineer should so order his matters, that a Mine should be ready to play exactly at such an hour…[54]

Here, Digby outlined movement and operations as of an agent who organized these actions in a so-called admirable oeconomy. Where the chain and link made by God

---

[51] Petersson, *Sir Kenelm Digby*, 185.
[52] Arthur O. Lovejoy, *The Great Chain of Being: A Study in the History of an Idea* (Cambridge: Cambridge University Press, 1936), 52.
[53] Andreas Blank, "Composite Substance, Common Notions, and Kenelm Digby's Theory of Animal Generation," *Science in Context* 20, no. 1 (March 2007): 16.
[54] Digby, *Two Treatises*, 412.

ordered nature, it too ordered the Engineer, the Mine, the Man in its own way. The ability to make one link as easily as thousands underlined an idea that all these actions were really one action only God could understand. Digby's program was to place nature as a higher power beyond human control; yet, also spoke to a larger community within that made up the chain itself.

Applying this oeconomy to the bodies of non-humans, in *Vegetation of Plants* Digby described a bean sprouting:

> to afford way and liberty to the dilation of the swelled body…and in that little natural body, we may read the fate which hangeth over political ones… It happen then to this this swollen Bean, now broken prison…. And in a word, the whole oeconomy of nature conspireth to set here a period to the extension of the Plant.[55]

It was the oeconomy here that made a bean into a plant, using extension, i.e. motion. Based on Aristotle's and Xenophon's works, the oeconomy of nature also fed off of an idea that had been Christianized by St. Augustine of an divinely ordered world that triumphed over chaos.[56] This interest in explaining nature through economic analogy was a balance between understanding the degree of intelligibility of principles and explanations on one hand, and a reverence for God's creations and a level of unintelligibility of his workings on the other. Digby situated God as the divine Architect who created these orderly operations to be inherently active and spiritualized, having an oeconomy of workings and outcomes only God, the Architect, had the blueprints for.

[55] Digby, *Vegetation of Plants*, 10-12, 26.
[56] Wilson, *Epicureanism,* 45.

Sergius Kodera points out that, for Digby, "spirits seem to have some kind of agency," and here this is where he can be differentiated from Descartes.[57] Of Descartes, Digby said: "Monsieur des Cartes way (in which no spirits are required) the apprehension must of necessity be carried precisely according to the force of the motion of the externe object."[58] Digby, like Descartes, did not deny that animals were alive, and subjects them to having similar internal motions as humans. These motions were also called "spirits." Digby described them as having sympathies: attractions that guided them towards their place in the oeconomy. The idea of this sympathy goes back to Empedocles, who was considered the first to discuss universal sympathy.[59] As Kodera aptly puts it, Digby's program was "more one of translation than of radically 'overcoming' older traditions."[60] To Kodera, this situating of the spirits into nature describes a preservation of this idea of "God's ordering hand and it made a direct and constant intervention into nature superfluous."[61] Digby was updating an older idea of ordering hand into mechanical terms through integrating God into the motions and spirits of the world. So the oeconomy of nature and the ways matter interacted developed a status of agency, with each agent and each action having purpose and order under a providential understanding of effects that guided them towards their final place within the hierarchy.

---

[57] Sergius Kodera, "Translating Renaissance Neoplatonic panpsychism into seventeenth-century corpuscularism: the case of Sir Kenelm Digby (1603-1665)," *Intellectual History Review* (December 2023): 6. https://doi.org/10.1080/17496977.2023.2287083.
[58] Digby, *Two Treatises*, 227.
[59] Kodera, "Translating Renaissance Neoplatonic panpsychism," 4.
[60] Kodera, "Translating Renaissance Neoplatonic panpsychism," 12-3.
[61] Kodera, "Translating Renaissance Neoplatonic panpsychism," 13.

Before Digby wrote about the oeconomy, he discussed agents of nature in his fictionalized memoirs, *Loose Fantasies*, from c.1624. "Nature" he begins,

> without other tutor, teacheth us how all agents work for some precise end, and to obtain that, do contribute all their endeavours, and make use of all the means that are within the reach of their power. But, herein, natural agents that are guided by an original necessity, have one great advantage...for they are levelled by a certain and never failing rule which was given to all things when their first being was given them, and from the which they cannot depart nor swerve without the immediate and express inte-ressing of him that was their lawgiver, who governs them with infinite justice, wisdom, and goodness.[62]

This becomes the oeconomy as he posited nature as having its own system of governance, which stood an agent for its own ends despite being below God. They are guided by necessity in the same sense as the engineer, as the oeconomical ruler who puts things to their best use with little waste. Oeconomy, and nature's oeconomy especially, is in tune with the ideas of the hierarchical links of political, economical, theological, and metaphysical chain which links everything from God downwards.

Digby grounded his idea of a governance in nature as things having a purpose with an idealized status within the hierarchy. Remien argues that Digby's oeconomy of nature is a founding concept in what we now recognize as studies of ecology and modern environmentalism.[63] But, Digby's claim was far from being a scientific or ecological claim we would recognize today; it was still a legitimation of a naturalized order under the King/God in a hierarchical structure, even though there was a grappling with agency. This idea of oeconomy was used in the seventeenth century to describe the oeconomical

---

[62] Kenelm Digby, *Loose Fantasies*, in *Private Memoirs of Sir Kenelm Digby, Gentleman of the Bedchamber to King Charles the First*, ed. Sir Nicholas Harris (London: Saunders and Otley, 1827), 1- 2.

[63] Peter Remien, *The Concept of Nature in Early Modern English Literature* (Cambridge University Press, 2019), 154, 165.

state, the oeconomical ruler, and then in Digby's case, the oeconomical nature; all of which operated on this hierarchical stratification of who and what gets placed where and to what end. When Digby looked to better understand and construct a *truer* doctrine of nature's qualities, the laws he understood to be there were shaped by his idea of a political landscape.

We can see this political landscape in the stratum of who decides what is best for the rest, with either the manager of the house or estate, the King, or God being the one at the top. Andrea Finkelstein notes that these early modern economic ideas, despite not directly discussing value exchange or accumulation and growth, are political economic ideas, explicitly speaking of and to the political community within a commonwealth.[64] Digby framed *Vegetation of Plants* as being "profitable to the Commonwealth" and posited an idealized commonwealth under a prudent governor in *Two Treatises*.[65] The idea of knowledge creation that can be used for the commonwealth continued into his posthumously published works. George Hartmann edited and published the manuscript Digby gave him as *A choice collection of rare chymical secrets and experiments in philosophy* with a note that Digby had wished it to be published for "the Advantage and Comfort of miserable Men."[66]

---

[64] Andrea Finkelstein, *Harmony and the Balance* (Michigan: Michigan University Press, 2000), 252.
[65] Digby, *Vegetation of Plants,* 57-58; Digby, *Two Treatises*, 384.
[66] George Hartman, *A choice collection of rare chymical secrets and experiments in philosophy as also rare and unheard-of medicines, menstruums, and alkahests* (London, 1682), A4. Early English Books Online.

In *Vegetation of Plants* Digby explained that by looking at the workings of nature which "may repaire a decaying plant" at different stages, it was "prosperous," as "not only the Philosophy of it is pleasing and considerable; but also the practice of it may be profitable to the Commonwealth, and usefull (with due Analogy) even to humane bodyes."[67] He claimed that by examining nature's workings through this art, one could find that "it is this Salt which giveth foecundity to all things. And from this Salt (rightly understood) not onely all Vegetables, but also all Mineralls draw their origine."[68] His conception of salt came from his understanding of the transmutability of various salt and salt-like minerals.[69] The key to the most practical elements of Digby's philosophy was the use of the oeconomy of nature for the advantage of not only just humans but also non-humans.

This conceptualization of salts as having fecundity stemmed from the idea that they were hermaphroditical and thus representative of both masculine and feminine ideas of reproduction.[70] Both Digby and Glauber emphasis on both the generation and regeneration of things and the re- integration of salts as essential to the fecundity of life

---

[67] Digby, *Vegetation of Plants,* 58.
[68] Digby, *Vegetation of Plants*, 60-61.
[69] There was a spike in interest by Digby's contemporaries Daniel Coxe and Johann Glauber in the transmutation and production of saltpeter from sea salt. See: "A Continuation of the Discourse Concerning Vitriol, Begun in Numb. 103. Shewing, That Vitriol Is Usually Produced by Sulphur, Acting on, and Concoagulating with, a Metal; And Then Making Out, That Allom Is Likewise the Result of the Said Sulphur; As Also Evincing, That Vitriol, Sulphur, and Allom, Do Agree in the Saline Principle; And Lastly, Declaring the Nature of the Salt in Brimstone, and Whence It Is Derived,"*Philosophical Transactions (1665-1678)* 9 (1674); Johann Rudolf Glauber, *The Works of the Highly Experienced and Famous Chymist, John Rudolph Glauber* (London, 1689); and, more broadly Anna Marie Roos, *The Salt of the Earth* (Leiden: Brill, 2007), 35- 6.
[70] Marie Roos, *The Salt of the Earth*, 21.

under God worked off the Paracelsian *tria prima*, the trinity of elements composing the universe: Sulphur, Mercury, and Salt. To Paracelsus these elements were essential to remedies as they were integrated into the fabric of everything. Digby presented similar conclusions; thus, to increase the fecundity and produce growth, the oeconomy is presented as the process itself, something to tap into.

Growth is ascribed to be the work of fermentation, which is followed by "a totall Putrefaction, Dissolution, and Destruction of the compound [Death]," from which the cycle starts again.[71] The process of growth, of the continual betterment of the plant was described as "never consenting to be idle and sit still, she betaketh her self to works of less robustuous force."[72] As "nature intendeth the betterment of any body," it was through fermentation where things could reach a nobeler state where balance and harmony could be restored.[73] Tapping into the fermentation process meant utilizing salt for growth and fecundity as it was thought to casts off the destructive parts that affect the whole body.[74]

Paracelsus similarly inquired into the regeneration and transformation of things in nature in his treatise *Concerning the Nature of Things* (1537). Speaking of the generation of things and the way that change operates in nature he observed:

> This is to revive the dead by regeneration, and clarification, which indeed is a great, and profound miracle of Nature. According to this processe may all Birds bee killed, and made alive againe, and made new: and this is the highest, and greatest miracle, and mystery of God...that all the creatures of God should be forced to

[71] Digby, *Vegetation of Plants*, 13
[72] Digby, *Vegetation of Plants*, 27.
[73] Digby, *Vegetation of Plants*, 16-17.
[74] Digby, *Vegetation of Plants*, 15-16.

> obey, and be subject to him, especially the whole Earth, and all things which are bred, live, and move in, and upon it....[75]

This profound miracle of nature was echoed in Digby's exemplification of regeneration in animals[76] and plants. Digby's core example was a regenerative experiment on crayfish, where he explained this same process of things being made anew:

> Wash them clean from any Earthinesse; and boyle them very throughly (at least two houres space) in sufficient quantity of faire water. Keep this decoction, and put Crevisses into a Glasse-Limbeck, and distill all the Liquor that will arise from them; which keep by it self. Then calcine the Fishes in a reverberatory Furnace, and extract their Salt with your first decoction; which filter, and then evaporate the humidity. Upon the remaining Salt poure your distilled Liquor, and set in a moist place to putrifie; and in a few dayes you shall find little animals moving there, about the bignesse of Milet Seeds.[77]

Here, salt was shown to be that which was essential to re-making life. The act of regenerating crayfish was presented as something which nature does and that by replicating this process one was utilizing it as God made it.[78]

The oeconomy of spirits and their attractions in *the Powder of Sympathy* also touched on its application to/in the human. In *the Powder of Sympathy* he described the oeconomy of nature with: "one may remark, within the course, and oeconomy of nature, sundry sorts of attractions," situating an attractive oeconomy.[79] The powder of sympathy was

---

[75] Paracelsus, *A new light of alchymie...Concerning the Nature of Things*, trans. Michal Sędziwój (London, 1650), 3-4, 15.
[76] This does stray from his contemporaries experiments on animals as Digby did not apply this idea of reviving dead animals such as birds or mammals, rather his ideas of the reviving of animals is in the cycle of generation where new life comes from.
[77] Digby, *Vegetation of Plants*, 83-4.
[78] Now, the probable cause of this experiment working was due to the sand being kept in the mixture likely containing already fertilized eggs.
[79] Kenelm Digby, *A late discourse made in a solemne assembly of nobles and learned men at Montpellier in France touching the cure of wounds by the powder of sympathy : with instructions how to make the said powder : whereby many other secrets of nature are unfolded*, (London; 1658), 53. Early English Books Online.

pitched to work through attractions, attractions that were throughout everything in this world. Sympathies connected two or more things through sensing each other by interactions and/or "mingling," as Digby put it, via attraction.

To cure the wound, it utilized the sympathy between the wound and wound maker. Digby proposed this cure to be possible without even seeing the patient, as the attractions were what must be cured. So, the oeconomy was therefore placing spirits in their best use both within and for the body.

Digby's internal spirits in the human body were described as such:

> Within a living body, such as is mans the intern spirits do aid, and contribute much facility to the spirits that are without, such as those of fruits are, to make their journy the more easte to the brain. The great Architect of nature in the fabrick of human body, the masterpeece of corporal nature, hath placed there some intern spirits, to serve as centinells, to bring their discoveries to their General, viz. to the imagination, who is as it were the Mistresse of the whole family, whereby a man might know, and understand what is done without the Kingdom, within the great World; and that it might shun what is noxious, and seek after that which is profitable.... the inward spirits bring all their acquisitions to the imagination; and if she be not more strongly bent upon another object, she falls a forming certain Idaeas and Images, because that the atomes from without being conveyed by these intern spirits, to our imagination erect there the like edifice, or else a model in short resembling the great body whence they come forth. And if our imagination hath no more use of those significative atoms for the present, she rangeth them in some proper place, within her Magazin, which is the memory.[80]

Here, the analogy of the internal spirits as sentinels to a General, alluded to an oeconomy of nature under God in a hierarchical organization; but also medicinally, these internal spirits helped the corporeal hierarchy, which was presented to have functioned similarly to the oeconomy of nature.

[80] Digby, *Powder of Sympathy*, 89-90.

To further prove his point of the attractive oeconomy of nature, Digby utilized an example from St. Ephrem the Syrian (c.306-373), telling how: "…dry onions, which bud in the house, when those in the garden begin to come out of the earth, and to embalm the air with their spirits; shewing thereby by these known examples of nature, the communication between living persons, and the souls of the dead."[81] The communication between onion spirits showcased the idea of onions at different stages joining in some sense to bud at the same time, implying that they were still connected through purpose beyond the status of living and dead. Digby also demonstrated its validity with an analogy of smell, writing,

> I have sailed by sea along those coasts divers times, and I have observed alwayes, that the Mariners know when they are within thirty or forty leagues of the Continent, (I do not exactly remember the distance) and they have this knowledg from the smell of the Rosemary, which so abouuds in the fields of Spain; I have smelt it as sensibly, as if I had had a branch of Rosemary in my hand, and this was a day or two before we could discover land, tis true, the wind was in our faces, and came from the shore.[82]

Just as the nose could smell something from far away, through the intermingling of the sprits of the smell and one's nose, he argued that the weapon and the injury too have mingled spirits from the same operation. Thus, Digby pitched this sympathetic powder's legitimacy by rearticulating his idea of the workings of nature. The *Powder of Sympathy* thus ultimately showed how the learned man could use the interconnection of things in nature through demonstrating these interactions and their applicability to common problems.[83]

---

[81] Digby, *Powder of Sympathy*, 80.
[82] Digby, *Powder of Sympathy*, 51-2.
[83] Petersson points out that Van Helmont was imprisoned for stating that saint's relics operated sympathetically and argues that despite Digby's similar arguments, Digby did

Digby further demonstrated this interconnectedness in birth and death in nature by showing how nature regenerates, reuses, and repurposes things. To Digby, nature repurposed things whereas attractions placed each thing in relation to the other. Through their sympathies, all things were said to be repurposed, where "everything containeth formally all things."[84] This worked off the Aristotelian idea of form, where the things in nature are thought to have either actual or potential form, where something has what they are and what they ought to become (with often both being embedded in their form), actualized or not.[85] He applied this to mean a regeneration and recycling in nature to the same end:

> at every degree change it into a different thing, such as is capable to result out of the present compound, (as we have said before) till it arrive to its full perfection. Which yet is not the utmost period of natures changes; for, from that, (for example, from corn or an Animal) it carries it on, still changing it, to be meal or a Cadaver, from thence, to be bread or durt, after that, to be blood or grass. And so, still turning about her wheel (which suffers nothing to remain long in the state it is in), she changes all substances from one into another: And, by reiterated revolutions, makes in time every thing of every thing. As when of mud she makes Tadpoles, and Frogs of them, and afterwards mud again of the Frog: or when she runs a like progress, from Earth to Worms, and from them to Flies, and the like; so changing one Animal into such another, as, in the next precedent step, the matter in those circumstances is capable of being changed into; or rather (to say better) must necessarily be changed into.[86]

Changing one animal into another, one thing into another in a state of necessary revolution and use was in tune with a classical definition of oeconomy: one who was

---

not fall into the consideration of heresy was because his works had been "welled up from tradition, strengthened itself through practice, and was corroborated, checked, and tested by followers of the atomistic philosophy. Petterson, *Sir Kenelm Digby*, 263.

[84] Digby, *Two Treatises*, 216.

[85] Margret Osler, *Reconfiguring the World. Nature, God, and Human Understanding from the Middle Ages to Early Modern Europe* (Baltimore, The John Hopkins University Press, 2010), 6-7.

[86] Digby, *Two Treatises*, 219-220.

oeconomical used everything to its proper ability, reducing waste. When he talked of the corn, the animal, the meal, the cadaver, the bread, the dirt, the blood, the grass, he reflected how these things went from things to sustenance, nutrients, and back to the soil again. Once again, their perfect state was decided by nature so that each substance was made anew. The tadpoles, the frogs, the mud, and the flies, that afterwards become the mud again showed this circular concept of life and decomposition we recognize today, even if it is heavily simplified. The d became the frog until it was time to become mud again. This process, or progress as Digby put it, was an articulation how things in nature change, argued through demonstration and observation.

At the same time, he talked about each agent's stage of life, which no living thing was exempt from. As Blank notes, "in this way, the mutual dependence between the parts of an animal provides Digby with an account of animal self-motion without invoking an immaterial principle of agency."[87] Digby showed that there was a whole working of the world that had its own ends. In another demonstration of this working, he relayed the experience of another learned fellow:

> …he once observ'd in Spain, in the Spring season, how a stick, lying in a moist place, grew, in tract of time, to be most of it a rotten durty matter; and that, at the dirty end of the stick, there began a rude head to be form'd of it by little and little; and, after a while, some little legs began to discover themselves near this unpolish'd head, which daily grew more and more distinctly shaped. And then, for a pretty while (for it was in a place where he had the conveniency to observe daily the progress of it, and no body came near to stir it in the whole course of it) he could discern where it ceas'd to be a body of a living creature, and where it began to be dead stick or dirt; all in one continuate quantity or body. But, every day the body grew longer and longer, and more legs appear'd; till at length, when he saw the Animal almost finish'd, and near separating it self from the rest of the stick; he stay'd then by it, and saw it creep away in a Caterpillar, leaving the stick

[87] Blank, "Kenelm Digby's Theory of Animal Generation," 12.

> and dirst, as much wanting of its first length, as the worms body took up. Peradventure, the greatest part of such creatures makes their way by such steps into the world. But, to be able to observe their progress thus distinctly, as this Gentleman did, happens not frequently.[88]

This caterpillar, which emerged from the dead stick, was presented as proof of nature's regenerative quality; but, also reflected a marvel and infrequency in observing such examples. From the present day, we understand it to be common knowledge that caterpillars metamorphize: they grow from eggs and cocoon themselves to transform into something else, be it moth or butterfly. Without this knowledge, Digby posited that maybe these caterpillars were made anew from this rotten matter. What would be next for the caterpillar was unmentioned, however, like the tadpoles and the frogs, Digby made it clear that the reader was to expect another change in the works for this animal.[89] This showed both another stage of life and an act of nature reordering and governing in an idealized sense.

The communications between the living and the dead, the caterpillar from the stick, followed Digby's larger corpus' argument that attractions and spirits guided a nature where everything was interconnected. The spiritualized world, what used to be called an *anima mundi*, a soul of the world, was in Digby's work translated into his oeconomy of nature. C. B. Wilde has described the attribution of God into the fabric of how nature works as making "activity intrinsic to nature not by attributing powers, but

---

[88] Digby, *Two Treatises*, 220.

[89] Digby even these revolutions outside of his academic writings, as noted in the journal of Lady Fanshawe, it was apparently a party discussion point. Fanshawe notes how Digby charismatically tells the group how barnacles apparently turn into birds in Jersey, to great laughter of the group. See E.W. Bligh, *Sir Kenelm Digby and His Venetia* (London: Sampson Low, Marston & Co. Ltd., 1932), 260-261.

by making God, the supreme spirit, immanent in the world," and thus making nature "spiritualized, and hence made active, by God's immediate presence."[90] Digby's use of the universal spirit described a foundational element of the world; yet, it was fraught with contradiction. Kodera states that "the concept of a world soul becomes explicit and an integral part of his arguments," yet Digby avoided the unification of his version of a universal spirit and that of the Stoic idea of the anima mundi or world spirit.[91] Regardless of Digby's efforts to shy away from the *anima mundi* explicitly against a Stoic revival in the seventeenth century, Janacek argues that "Digby's reference to a Universal Spirit may be a reference to the Stoic *pneuma*, a medium that the matter of the cosmos shaped into its present state and provided the shape of living creatures on earth as well."[92] Interestingly, throughout Digby's works, Salts, or Mineral Salts, were often thought to be, or make up, the *universal spirit* and/or to be connected through spirits. Thus, Digby like others began to update this *anima mundi* and the *pneuma*, instead to one towards salt, while also integrating it into his own idea of a universal spirit.

Hartman noted in a recipe for a "Universal Spirit," that of Nitre, that "You must have the Spirit of Natural fusible Salt, which is the Principle of all Metals, Vegetables, and Animals," echoing Digby's *Vegetation of Plants*, but also speaking to a larger idea of the universal spirit that could be composed of salt.[93] Glauber too had his own version of the

---

[90] C. B. Wilde, "Matter and Spirit as Natural Symbols in Eighteenth-Century British Natural Philosophy," *The British Journal for the History of Science* 15, no. 2 (1982): 101-2. http://www.jstor.org/stable/4025963.
[91] Kodera, "Translating Renaissance Neoplatonic panpsychism," 12.
[92] Janacek, "Catholic Natural Philosophy," 112.
[93] Hartman, *A choice collection*, 86.; Utilizing this nitrious universal spirit to cure, Hartman cites a story where Digby uses this *Powder of Sympathy*, here, instead an

"universal spirit," what he called the *Universal menstruum* or *solvent.* His universal spirit is described as:

> …this admirable liquor, which may be made not only of the common sal terra, or salt Peter, but also of the fix'd salt of all vegetables… tis no matter of what subject is prepared, for it has still the same Virtues that are ascribed to it… the common sal terra and the fix'd salt of vegetables are of one and the same Nature and Essence: For the genuine sal terra, or salt-peter, may be made of salt of Tartar; and of Sal terra, Nitre, a fixed Salt, like Salt of Tarter; and of Salt of Tarter Spirit of Wine: of Wine Vinegar, Nitre, and of Nitre, corrosive Vinegar. So those Salts partake of either nature, and will managed at pleasure; neither are they undeservedly by the ancient Philosophers, called Hermaphroditick Salts.[94]

He continued by saying that "it is nothing else but the naked Salt of the Earth."[95] Digby and Glauber were influenced by Van Helmont and Sendivogius. William R. Newman and Lawrence M. Principe emphasize "that the important work on the classification of salts that remain a key part of Boyle's chymistry...was... built upon a Helmontonian foundation," and I would add that these were also foundational to Digby's works.[96]

---

example of a girl with a nosebleed who was treated by this powder mixed with water. Instead of the previous notation that the powder could heal without even seeing the patient, here the patient was instructed to bathe her nose in the solution to heal it.

[94] Johann Glauber, *The Works of the Highly Experienced and Famous Chymist, John Rudolph Glauber Containing Great Variety of Choice Secrets in Medicine and Alchymy, in the Working of Metallick Mines, and the Separation of Metals : Also various Cheap and Easie Ways of Making Salt-Petre, and Improving Barren-Land and the Fruits of the Earth : Together with Many Other Things very Profitable for all the Lovers of Art and Industry / Translated into English, and Published for Publick Good by Christopher Packe* (London: 1689), 153.

[95] Glauber, *The Works*, 163.

[96] Newman and Principe, *Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chymistry* (Chicago: University of Chicago Press, 2005), 283.; Many of these discussions on salts come from the works of Sendivogius' *de lapide philosophorum* from 1604, see. Antonio Clericuzio, *Elements, Principles and Corpuscles: A Study of Atomism and Chemistry in the Seventeenth Century* (Dordrecht: Kluwer Academic Publishers, 2000), 38-9.

Van Helmont considered alchemy itself as the "Art of Separating Salts" stemming from its prefix al and the Greek hals: salt.[97] Similarly, salt, for Glauber (described as *sal artis*) was: "the prophet's return signaled the beginning of the millennium, instituting a new regime of goodness and plenty, and in the form of salt, he would bring about a great reformation in medicine and alchemy, making possible alchemical transmutation," as Pamela Smith recounts.[98] Smith continues to describe how this salt, to Glauber, "would change the world because it contained, like all salts but far more powerfully, the vital spirit that caused generation in the cosmos."[99] Glauber theorized from his time around a Swiss spring that a compound he calls *sal mirable* or *sal artis*, a mix of common salt and vitriol, was a key aspect of this universal spirit.

Van Helmont's works appeared in Digby's collections, as Lawrence M. Principe found in his archival research at the Bibliothèque Nationale et Universitaire de Strasbourg alongside printed editions of Paracelsus' works.[100] Despite Digby's large collections of Van Helmont's manuscripts, he described Van Helmont to Boyle in a letter as "a liar and a badly informed street-corner gossip…although (as foolish people are accustomed to say) there are many things in his writings that can be found to have been said wisely; when, in fact, he has made many witty remarks, which wiser and more solid scholars can

[97] Newman and Principe, *Alchemy Tried in the Fire*, 275.
[98] Pamela Smith, "Vital Spirits: Redemption, Artisanship, and the New Philosophy in Early Modern Europe," in *Rethinking the Scientific Revolution*. Ed. Margret J. Osler (Cambridge: Cambridge University Press, 2000), 120.
[99] Smith, "Vital Spirits," 121.
[100] Principe, "Sir Kenelm Digby,"3-24.

take hold of and bring to a conclusion."[101] Despite this, Digby built off Van Helmont's idea of the world both connected to an original element, salt, and also off this idea of sympathy.

This salt in the earth was also discussed in soil fertilization debates. As Justin Neihemier-Dohoney points out it was thought "that unlocking the chemical secrets of saltpeter provided the key to understanding plant, animal, metal, and mineral generation and growth and the vital principles that made all life possible."[102] Discussing both the place of salts and their attractions, Digby described these vital principles as "in the Aire a hidden food of life."[103] Antonio Clericuzio describes *The Vegetation of Plants* as covering the same thing: this process of generating life that was inherently tied with salts, "namely to scrutinize the role of salts and of the hidden seminal principles as the active principles responsible for the generation and the growth of living organisms."[104] Despite Clericuzio's assertion that Digby's work " had little or no impact on the research of plants" the use of Digby's writings on vitriol for fertilization was referred to in reference to its application for "oeconomical and georgical industries" in a letter from Hartlib to Boyle in

[101] Digby to Boyle 19 June 1658, *The Correspondence of Robert Boyle Volume 1: 1636–61 Electronic Edition*, 284-5.
[102] Justin Niermeier-Dohoney,"'Rusticall chymistry': Alchemy, saltpeter projects, and experimental fertilizers in seventeenth-century English agriculture," *Hist Sci* 60, no.4 (December 2022): 557. doi: 10.1177/00732753211033159.
[103] Digby, *Vegetation*, 62.
[104] Antonio Clericuzio, "Digby on Plants and Palingenesis," in *The Philosophy of Kenelm Digby (1603–1665)*, eds. Laura Georgescu and Han Thomas Adriaenssen (Cham: Springer Nature Switzerland, 2022), 165.

1656; and, this idea of saline particles in plants and animals cycled into the works of Nehemiah Grew and his *The Anatomy of Plants* (1682).[105]

Grew described "all saline shoots, of themselves, are; as those of Alum, Vitriol, Sal Ammoniac, Sea Salt, Nitre, &c," and "[t]hat the said Salt is nothing else but that of Animals and Vegetables, freed from its true Spirit and Sulphur, and some Saline particles, specifically Animal or Vegetable, together with them. For both Animal and Vegetable Bodies being continually carried by all Rivers into the Sea."[106] There was a continuation here of the idea of revolutions in matter and its repurposing connected by salt.

There was a clear view of the potentiality of salt here for various problems present to these writers. What was profitable projected the gains onto the cycles of nature, not to be interrupted but harnessed looking to finite results rather than infinite ones. And, Digby wrote that knowing these motions did not present the ability to intervene:

> In the same manner, if interrupting the action of any of those causes which I have established for the true foundation of the Sympathetical Powder, I alter, retard or hinder the cure of the wound; I may boldly conclude, that the foresaid causes are the legitimate, and genuine true causes of the cure, and that we need not amuse our selves to make indagations for any other.[107]

This idea of perpetuality and profit did not ignore environmental limits, and it did not neatly fit the economic idea of infinite growth from an alienation of the role of the

---

[105] Antonio Clericuzio, "Digby on Plants and Palingenesis," 164; Robert Boyle, *Correspondence*, 202-204.
[106] Nehemiah Grew, *The Anatomy of Plants with an Idea of a Philosophical History of Plants, and several Other Lectures, Read before the Royal Society / by Nehemjah Grew* (London, 1682), 234.; Benjamin Worsely also pitched salt in the form of salt-peter as fertilizer to Samuel Hartlib, as in Charles Webster, *The Great Instauration* (London, Gerald Duckworth and Co. Ltd.) 377-8.
[107] Digby, *Powder of Sympathy*, 146.

environment's interconnectedness that would come to be key in economic thought.[108] Digby in fact advised to avoid thinking of a "perpetuall miracle of the production of vegetables," or animals, advocating instead for looking at nature as something that God made where everything naturally does "just what and how it doth."[109] His idea of perpetual motion in nature was: "That every effect whatsoever must have of pure necessity some cause, and therefore that the body moved there, ought necessarily to receive its movement from some other body, which is contiguous to it."[110] Thus, the chain of things requires other parts to continue its motions, already designed by God. This differed from other examples of perpetual projects that posited an artificially fabricated perpetuity.[111] Profit was therefore not from intervention, as he described exemplifying the making of a plant:

> But if nothing have intervened to hinder or alter the ordinary course; then, this more watry then unctuous juyce, making its way into the aire ... and so it beginneth to be formed there into a new Plant, of a shape, figure, and nature proportioned to the great one it shooteth from.[112]

The idea of growth and proportion was inherent to the course of nature, building off the Aristotelean concept of augmentation. Change was a perfecting force, moving things into a better state, and Digby integrated this with the idea of motion pushing this force.[113]

---

[108] Peter Remien, "Oeconomy and Ecology," 1122-1123.
[109] Digby, *Vegetation of Plants,* 47-8.
[110] Digby, *Powder of Sympathy*, 145.
[111] Such as the perpetual fire of Digby's contemporary Cornelius Drebbel; see Vera Keller, *The Interlopers* (Baltimore: John Hopkins University Press, 2023), 137.
[112] Digby, *Vegetation of Plants,* 30-1.
[113] Christopher Crosbie, "Philosophies of Retribution: Kyd, Shakespeare, Webster, and the Revenge Tragedy Genre" (PhD diss., The State University of New Jersey, 2007), 23-24. https://rucore.libraries.rutgers.edu/rutgers-lib/23881/PDF/1/play/.

Despite Digby's distinction of life versus Life, the latter being strictly human, there was always a layer of anthropomorphizing. Like Aristotle, Digby rooted the idea of living things as being those that have a soul, i.e. humans. Digby argued that he was different from the plant—the plant does not have Life— because he had a series of changes and was still himself, whereas the plant changed in the cycle. Despite not having a soul or Life, Digby presented objects in nature in a hierarchy that was explicitly analogous to the human strata. His work was instead to pitch the understanding of the motion in this oeconomy of nature in order profit in the *spagyric* sense to apply the art of knowledge of chemical solutions for medical ailments. The *spagyric*, an "art of analysis," derived from the Greek *span*, to pull apart, and *ageirin*, to put together, and was considered an art in the seventeenth century. This way of analysis mixed philosophies of illnesses and ailments and their practical application using chemical treatments.[114] By pulling apart these interconnected pieces and their motions, he put together their purpose. Knowing how nature works, how the oeconomy of nature works, was essential to the greater knowledge of all actions and changes, and presented another proof of this interconnected nature that could be helpful to all.

Therefore, Digby's reinterpretation of Aristotle made sense as he became increasingly interested in the understanding of everything at its most basic level. Digby shared this knowledge while selling himself as a man of knowledge and of authority. The underlying workings Digby argued were that as salt gave this fecundity, and by tapping

[114] Alexander, *Ideas, Qualities and Corpuscles*, 15.

into it without altering or manipulating things outside of their normal order one could use salt as the curative element for health and generation more broadly.

Digby's intellectual projects were for the commonwealth, an idealized common good and community that included his intellectual circles and that of the various monarchs he supported and communicated with. Where the spirits are able to communicate growth in the onions, then maybe, the tadpole or the crayfish could be generated from the mud or sand in the same function, the wound healed from the sword. Thus, the transmutation of things for medicinal and health purposes, the resurgence of the idea of all matter having an origin, such as salt, play into the ideas of being able to be both understand and transform things for better use, yet, a use that nevertheless operated within limits. Through Digby's spirits which mingle or converse, non-human agents who act within an oeconomy and/or have political concerns or agendas, with nature re-using and recycling non-human life, there is a clear search for understanding the interconnectedness of everything in the world and a positing of a mutually beneficial relationship with nature.

Chapter 2: Finding Knowledge and (Re)Connections: Palingenesis, Physicotheology, and (Im)Material Definitions

The oeconomy of nature served two ends: one, as the previous chapter argues, was to demonstrate a practical working of nature whereby knowing the makeup of fertility, posited as salt, could be utilized to reach the most oeconomical outcome; the other, that the soul must transcend this oeconomy as it did not have divisible parts and therefore was immaterial. This chapter will show the physicotheological aims of Digby's project which served to prove the immortality of the human soul and its need to differ from the material cycles of nature. Physicotheology was the use of natural philosophical means of argumentation to describe the divinely created universe.[115] Giorgio Agamben asks the question "what is the relation between economy and Glory?"[116] I ask something similar: What is the relation between the oeconomy and the eternal glory of the human soul? In examining Digby's works alongside that of his friend Thomas White, this chapter shows the role the soul plays in the argumentation of the oeconomy.

Digby argued that God had formulated nature and humans as two different things: one with recycling operations and the other with resurrecting souls. John Henry, who has written extensively on Digby's Catholicism and his ideas of the resurrection, places this and ecumenism as key tenets in Digby's and White's works. Vittorio Gabrieli and John Peacock both have dedicated work to understanding Digby's religion and how it was

[115] Similar to a simultaneous idea *pansophia*: the harmonious balance of senses, reason, and scripture outlined by Commenius's *Pansophiae Prodromus* (1639), see Charles Webster, *The Great Instauration* (London, Gerald Duckworth and Co. Ltd., 1975), 108-110.
[116] Giorgio, Agamben*, The Kingdom and the Glory: For a Theological Genealogy of Economy and Government* (Stanford: Stanford University Press, 2007), xii.

connected a longing to be reunified with his wife after death. Looking beyond the works of Digby himself and into the patroned portraiture by Van Dyck, the soul as immaterial was shown to be beyond a philosophical or theological project and even an intimate search to reconnect with his wife Venetia Stanley who passed in 1632. A crux in the physicotheology of Digby and White was this engagement with the immortal soul and its proofs through demonstrations of knowledge.

Digby's project of proving the immortality of the human soul differed from Protestant ideas of the soul in which the resurrection of the soul was key to gaining immortality. His Catholic project was to prove an innate immortality in the soul itself.[117] Despite the reformative nature of his work, Digby's program was distinctly Catholic. Part of the philosophy for which Digby wrote through these ideas falls into two concepts: palingenesis and an idea of a spiritualized world.

Digby was associated with Thomas White who founded a secret organization of English Catholics called the Blackloists. White, also known as "Blacklo," was pushing for a reformation of Catholicism, following a reintegration of older beliefs in a general resurrection.[118] Key to this reform was demonstrating theological claims could be made clearer through philosophical argumentation. Digby and White's demonstration of the rhetoric of philosophical argumentation and its role in society coincided with laws against Catholics in the mid 1650s who had their estates withheld and were unable to vote or take office. In *The grounds of obedience and government* (1655), published during Oliver

[117] John Henry, "The General Resurrection and Early Modern Natural Philosophy: A Preliminary Survey," *Zygon* 58, no. 4 (December 2023): 924.
[118] Henry, "Atomism and Eschatology,"223.

Cromwell's rule, John Henry cites *grounds of obedience* as White and Digby's "boldest attempt to ingratiate the Blackloist cause to Oliver Cromwell."[119] As Henry has shown, the Blackloist cause was to integrate mechanical philosophical reason into faith. White, in his *Notes on Mr. F.D.'s Result of a dialogue concerning the middle state of souls in a letter* (1660), argued his position as one that:

> must depend on the determination of this Question, before which final decision 'tis not improper that Scholars try their utmost endeavours, to examin and prepare both sides for discovery of the truth. Nor is it in the least my intention to charge the Church with any of these irregularities; but onely to refute the errours, and reprove the abuses of particular persons[120]

This project was thus one founded in rhetoric, philosophy, and reform.

Digby himself described this true doctrine as one where "there can be but two ways to performe that worke; the one, by writing; the other, by being handed downe from generation to generation, by the mouths of them who first and immediately received it from Christ, and taught it to those that they conversed with."[121] Despite this "true doctrine" being what Digby sought after, that was more reconciliatory with Protestant demands of the Christian religion separated from the Vatican, the general consensus on Digby and White was that they were both simply Papists, even years after their deaths.[122]

Physicotheology was the enmeshment of philosophical argumentation and theological questions; and White, Boyle, and Digby all positioned their theological reformations on the premise of newer forms of philosophical proofs and rhetoric. As Ian

---

[119] Henry, John. "Atomism and Eschatology," 230.
[120] Thomas White, *Notes on Mr. F.D.'s Result of a dialogue concerning the middle state of souls in a letter* (Paris, 1660), 10. https://name.umdl.umich.edu/A65798.0001.001
[121] Kenelm Digby, *On the Infallibility of Religion* (London, 1652), 184–85.
[122] De Moulin to Boyle 1 October 1673, *Correspondence of Robert Boyle. Volume 4: Correspondence: 1668-77 Electronic Edition*, 362-3.

Hacking notes, the category of truth and knowledge gets refurbished in this century through the changes in the concept of demonstration itself.[123] To Digby and White the Catholic church had come to be a champion of the Aristotelian ideas of natural philosophy that both White and Digby sought reform. Digby suggested that the pinnacle of this new kind of demonstration that ought to be utilized was exemplified in White's works and White thought the same of Digby, whose idea of truth was founded on this relaying of examples and stories to demonstrate and canonize his idea of knowledge. [124]

White wrote, in an essay dedicated to Digby, *Periphatical Institutions,* that there was "in Nature and in things beyond Nature, a no-lesse connection of Terms & force of Consequences, then in Mathematicks."[125] The "'Digbaean method',' he wrote, "could solve all the problems of natural philosophy: the causes of motion, gravity, light, colours, and so on. And, more importantly, it could solve all the problems of the nature of the soul."[126] This method was a way of joining philosophical argumentation and demonstration with theological belief by first defining the human body and human soul because of the belief in the resurrection, which was the method employed in *Two Treatises*. To Digby, "that of necessity the soule must be begunne, layed, hatched, and perfected in the body."[127] The soul and the body were distinct, yet the body was rebuildable. The soul could be resurrected via its substantial form, the human body therefore could not be

---

[123] Ian Hacking, *The Emergence of Probability* (Cambridge: Cambridge University Press, 2006), 185.
[124] Digby, *Two Treatises,* 7.
[125] Thomas White, *Peripateticall Institutions* (London, 1646), The Authour's Design.
[126] Thomas White, *An exclusion of scepticks from all title to dispute: being an answer to the vanity o dogmatizing* (London, 1665), 1-2.
[127] Digby, *Two Treatises*, 442.

recycled as it had instead the purpose to be resurrected once. This means that upon death the soul had to be placed on the scales, judged upon death rather than placed elsewhere as in the doctrine of purgatory. White talked very highly of Digby and his project. Whereas White kept his writing grounded in theology, Digby integrated his theology into natural philosophy.

Palingenesis, or re-birth, in humans was supposed to be a process where the souls from heaven were given a re-birth. When Digby looked at the potentiality for palingenesis in plants in his natural philosophical treatise *Vegetation of Plants*, he looked at whether a plant could be given a new birth from its ashes. Digby spent much of his life trying to accomplish this. As Anna Marie Roos points out, Paracelsus, and neo-Paracelsians like Quercetanus, who was translated into English in the early 1600s by Thomas Thymme, was key in reintegrating ideas of palingenesis and the roles of salt in it.[128] Quercetanus described his work on the plant as such:

> Many the witnesses have I still full of life
> Who, of nettle upon nettle, have observed their shapes
> Within the salty lye which from their ashes flowed, .
> Lyes which, one day, at the bottom being set
> Into a crystal shape thus to resemble
> Root, leaf, stem and flower of that plant,
> That the eye, all-seeing, takes cognizance at once,
> The tongue gives it name, only the hand
> Is deceived when picking it up, not feeling
> Those needles smarting when piercing the tender skin.
> I am not the contriver of this: no, de Luynes, thou it is
> Who found the secret when lodging by my side.
> The secret of which 'tis known that
> Although the body shall die,

[128] Marie Roos, *Salt of the Earth*, 13-19.

> In its ashes make the images their resting place.[129]

Describing this same work, Digby described:

> So to bring it to a kind of glorifyed body, such as we hope ours will be after the Resurrection. Quercetanus the famous Physician of King Henry the fourth telleth us a wonderfull story of a Polonian Doctor that shewed him a dozen glasses Hermetically Sealed, in each of which was a different Plant; for example, a Rose in one, a Tulip in another, a Clove-Gilly-flower in a third; adso of the rest. When he offered these Glasses to your first view, you saw nothing in them but a heap of Ashes in the bottom. As soon as he held some gentle heate under any of them, presently there arose out of the Ashes, the Idaea of a Flower; the Flower and the Stalk belonging to those Ashes; and it would shoot up and spread abroad to the due height and just dimensions of such a Flower; and had perfect Colour, Shape, Magnitude, and all other accidents, as if it were really that very Flower. But when ever you drew the heate from it, as the Glasse and the enclosed Aire and matter within it grew to cool by degrees, so would this Flower sink down by little and little, till at length it would bury it self in its bed of Ashes. And thus it would doe as often as you exposed it to moderate heate, or withdrew it from it. I confesse it would be no small delight to me to see this experiment, with all the circumstances that Quercetan setteth down.[130]

Digby continued to recite his version, as he could not replicate the recipe of Quercetanus instead citing a colleague who assured him he had done it:

> I did, by instructions from the former Author; and I found it exactly true as he recounteth it. It is worth your knowing. I calcined a good quantity of Nettles, Roots, Stalks, Leaves, Flowers; in a word the whole Plant. He produceth the example in this very Plant; and I would not vary in the least circumstance from what he taught. With fair water I made a lye of these Ashes; which I filtred from the insipide Earth. This lye was exposed by me in the due season to have the Frost congeale it. I performed the whole work in this very house where I have now the honour to discourse to you. I calcined them… when the water was congealed into ice, there appeared to be abundance of Nettles frozen in the ice. They had not the colour of Nettles. No greennesse accompanyed them. They were white. But otherwise, it is impossible for any Painter to delineate a throng of Nettles more exactly, then they were designed in the water. As soon as the water was melted, all these Idaeall shapes vanished: but as soon as it was congealed again, they presently appeared afresh. And this game I had severall times with them, and brought Doctor Mayerne

[129] Quercetanus, via Francois Secret, "Palingenesis, Alchemy and Metempsychosis in Renaissance Medicine," *Ambix* 26, no. 2 (1979): 81.
[130] Digby, *Vegetation of Plants*, 72-5.

> to see it; who I remember was as much delighted with it as my selfe. What could be the reason of this Phoenomen?[131]

Digby's results on the resurrection of plants were also thus inconclusive. However, the reason he hypothesized this could be done was that, "a main part of the Essentiall substance of a Plant is contained in his fixed Salt."[132]

William Davidson of Aberdeen, whom Digby met in Paris, was made the intendent of the Jardin du Roi in 1647 and was also experimenting on palingenesis in plants, attempting similar resurrections from their ashes.[133] Digby mentioned that he witnessed Davidson's palingenesis experiments and it was likely that these were the same experiments on pines and firs that were discussed in Daniel Coxe's later *Philosophical Translations* vol. 9, "107. Touching the Identity of All Volatil Salts, and Vinous Spirits; Together with Two Surprizing Experiments Concerning Vegetable Salts, Perfectly Resembling the Shape of the Plants, Whence They Bad Been Obtained."[134] Coxe, likely influenced by Digby, spoke of a search for the governing principle in this experiment, and as the title of his article suggests, he too came to the conclusion that salts were the solution. Despite having said to see Davidson resurrect the plant, Digby was not entirely successful in this matter, only regrowing a plant that was a different colour from the original. He remained firm that salts were essential to this process however.

---

[131] Digby, *Vegetation of Plants*,76- 8.
[132] Digby, *Vegetation of Plants*, 78-9.
[133] Clericuzio, "Digby on Plants and Palingenesis," 169.
[134] Daniel Coxe, "A Continuation of Dr. Daniel Coxe's Discourse, Begunin Numb. 107. Touching the Identity of All Volatil Salts, and Vinous Spirits; Together with Two Surprizing Experiments Concerning Vegetable Salts, Perfectly Resembling the Shape of the Plants, Whence They Bad Been Obtained," *Philosophical Transactions (1665-1678)* 9 (1674): 177.

Digby did succeed in demonstrating an example of palingenesis in crayfish however. In his *Vegetation of plants,* Digby proclaimed that "none of these Idaeas doe come so neare unto the reall *Palingenesis*, as what I have done more then once upon Cray-Fishes."[135] Whereas Quercetanus' focused on heat in his experiments, Digby includes salt in combination with heat as being key to tapping into the cycle of "every thing is like a River that is in a perpetuall course," which to him was a part of this oeconomical functioning of nature which perpetually repurposed matter.[136]

However, Digby made the distinction that for a true function of palingenesis there must therefore be something immaterial required for it. "Let us come back to our Plant, and enquire if it be not possible to render it perpetuall, or rather to convert it into a permanent substance and state," Digby posited.[137] He concluded however with: "Were not this then a true Palingenesis of the originall Plant? I doubt it would not be so."[138] To Digby, the reason this did not succeed was because there was no soul within the plant. Without the soul, he argued, "consequently, there could be no Resurrection of it after once it is destroyed."[139] While this is investigation into the death of the plant versus the person, as R.T Petersson notes, "aimed at a clearer understanding of the indestructability of matter," it ends up being a tool to demonstrate the difference in the human soul and the natural world.[140] "The Supreme Architects hand," Digby wrote, "that steereth and

[135] Digby, *Vegetation of Plants*, 83-4.
[136] Digby, *Vegetation of Plants*, 94.
[137] Digby, *Vegetation of Plants, 73.*
[138] Digby, *Vegetation of Plants, 80.*
[139] Digby, *Vegetation of Plants, 81.*
[140] Petterson, *Sir Kenelm Digby*, 108.

governeth it, is never enough to he admired; who hath set on foot such an exact concurrence of divers and most distinct causes, to conspire all to one and the same end, that still in generall nature ariveth to her destined period without being frustrated of the scope she levelleth at."[141] So, there existed then a divide, one that was simultaneously equal yet separate.

Thus, death was the distinguishing feature that ontologically separates nature from humans under the idea of palingenesis. Death was not the enemy to Digby though. Whereas material things could be repurposed, Digby cautioned against this applicability to humans as it would take away the human souls' ability to change after "this long and tedious Pilgrimage on Earth" through the spiritual rebirth in the afterlife.[142] Digby did not apply this to the human as he argued that despite the continual transformations of the body, it remained tied to the soul which must remain the same in order to be resurrected.[143] His understanding of the perpetual recycling of natural things was thus contrasted with an idealism of the human soul needing to return to the corporeal form. Whereas the human body, or parts of it, had to be kept to resurrect and reconnect with the soul, the plant had a possibility to be "render[ed] perpetuall, or rather convert it into a permenant substance and state, no longer subject to the Vicissitudes of time; and outwards Agents that destroy all things."[144] These agents that destroyed all things were a change from Paracelsus' "Death, which is the Enemie of our body, of our health, and the

[141] Digby, *Vegetation of Plants*, 45.
[142] Digby, *Vegetation of Plants,* 86.
[143] Digby, *Vegetation of Plants,* 94, 98-99.; William R. Newman, *Promethean Ambitions: Alchemy and the Quest to Perfect Nature* (Chicago: University of Chicago Press, 2005), 232.
[144] Digby, *Vegetation of Plants,* 73.

Enemie of Medicinall, and all naturall things...."[145] So, the immaterial, the substance that made the human soul, had to have a different function, as Digby argued that the human bodily identity came from its association to the soul.

To Martine Pecharman, the soul in Digby's mind was described to be a spiritual substance, not corporeal.[146] Here, Digby defined the nature of a body as having parts that consisted of different dispositions and proportion of parts so that he could show the soul as immaterial and non-divisible.[147] Like Descartes, Digby maintained that force comes through expansion, creating movement, and that ultimately this movement came from God. This touched on age-old problems in Christianity: mainly the questions of whether the body itself was needed for resurrection.[148] This prompted questions about whether decomposition or consumption of remains posed problems for resurrection, or if as Digby, White, and Boyle believed, God could, through motion, reform the body upon the resurrection.

Boyle too looked at these themes in his *Some Physico-Theological Considerations about the Possibility of the Resurrection* (1675). Discussing how the body could decompose or be consumed by another and still be resurrected, Boyle posited that "this portion of Matter, how many changes and disguises soever it may have undergone in the mean time, will return to be what it was; and if it were before part of another Body to be reproduced, it

[145] Paracelsus, *A new light of alchymie*, 20.
[146] Pécharman, "Kenelm Digby," 192.
[147] Pécharman, "Kenelm Digby," 194-5.
[148] St. Paul even asked in 1 Corinthians 15:35 "How are the dead raised up? and with what body do they come?"

will become capable of having the same Relation to it that formerly it had."[149] Emphasizing the same dichotomy as Digby, Boyle noted "that the Christian Doctrine doth not ascribe the Resurrection to Nature."[150] Boyle too came to the conclusion that as these "advantageous changes such an Agent as God can work by changing the Texture of a portion of Matter." [151] As John Henry notes, to Boyle, "since God must have added other matter to Adam's rib, in order to make Eve, nothing prevents God from re-making humans in future."[152] Thus, the question of bodily resurrection could be brought about in ideal terms by God and motion as God was demonstrated to change materials in nature.

Whereas Boyle's project was more or less to show the ability for the advancement of "Empire of Man over the Creatures," Digby's goal was to understand.[153] In the analogy of the onion, both budding and dead, Digby, in a way, refers here to the Catholic concept of intercession, where through "the communication between living persons, and the souls of the dead," the living could petition their problems to the dead to discuss with God. To Digby the "whole course of nature set on foot by God Almighty" to be found alluded to an understanding of God's miracle of the world.[154] Thus, when God became a part of the natural order that nature itself was inherently active.

Conversely, to Glauber, the process of alchemy was instead one which refined or "redeems" all those who practice after the Fall. Digby rather embeds the search for

---

[149] Robert Boyle, *Some Physico-Theological Considerations about the Possibility of the Resurrection* (London, 1675), 27. Early English Books Online.
[150] Boyle, *Some Physico-Theological Considerations*, 29.
[151] Boyle *Some Physico-Theological Considerations*, 38-9
[152] John Henry "The General Resurrection," 910.
[153] Boyle, *Usefulnesse of Experimental Naturall Philosophy*, The Publisher to the Reader.
[154] Digby, *Vegetation of Plants*, 47.

understanding the natural world itself as a connection to God. In a similar way, by focusing on the *tria prima*, the interests in salt can be considered a search for God within the fundamental make up of bodies. As Agamben posits, the trinitarian idea of the Catholic Church was implemented to understand this course of nature, which was also an act of understanding God's oeconomy. A key point in this oeconomy was that it functions on material things, replacing and repurposing them to their best use, with the best use for the human soul being distinctly different as it must be able to be resurrected.

For this reason, the cycles of life and death that are inherent to nature are seen to be inapplicable to the human as Digby's idea of the human soul required a single resurrection that could not exist in this constant cycle of decay and re-birth. Digby stated that "what hope could I have, out of the actions of the soule to convince the nature of it to be incorporeall if I could give no other account of bodies operations, then that they were performed by qualities occult, specificall or incomprehensible?"[155] This idea of the soul's immateriality was also argued by Walter Charleton in *The Immortality of the Human Soul Demonstrated by the Light of Nature* (1657), and in Henry More's *The Immortality of the Soul* (1659).[156]

Digby dreamt of an afterlife where he could be "studying day and night to invent new pleasures and delights" alongside Stanley.[157] As Michael Foster and John Peacock

[155] Digby, *Two Treatises,* 224.
[156] These differ from their contemporary Thomas Hobbes. Hobbes considered the question of immortality along the same lines as Thomas Aquinas, requiring the resurrection itself of both body and soul to be unified to reach immortality.
[157] Digby, *Two Treatises,* 447.

argue, Digby's obsession with resurrection intimately linked with his idea of being re-unified with Venetia Stanley in the next life.[158] Shortly after she died, he claimed:

> God and passing through the Angels, the orbes of heavan and planets, downe to the lowest elements, knitting together the intellectual, the celestiall and the material world, and lapping in aeternall providence, and her two handmaides, chance and fortune … did binde together my wifes and my hands, hartes, and soules, which death cannot loose.[159]

It is clear that the question of the immortal soul was always one that posited an answer of being reunited with her. Besides his belief in their connection beyond the grave, Peacock argues that Digby thought of his late wife as an intercessor between himself and God's infinite knowledge. Digby believed that once a person died they became privy to "this amplitude of knowledge, [that] is common to all humane soules, when they are seperated from their bodies."[160] This idea of being re-unified with Stanley was therefore combined with the idea of reaching knowledge.

Even in his letters from 1663, Digby described her, some thirty years after her death, as a, "Braue Soule, if thou beest so neere me, or where thou mayst heare my voice, or comprehend the motions of my heart which thinketh of nothing but thee," continuing with:

> But sometimes (though very rarely) nature will show vnto us, as if to iustifye her power, that she can make a Master piece perfect on euery hand, so that on no side of it censorious critikes shall be able to finde a blemish or a shadow. But (alas) when she parteth with such a Phoenix out of her bosome, and deliuereth her vp in her due season into fortunes handes, that enuious Goddesse repining att the perfection of the others worke, looketh seldom wth a benigne eye vpon her:

---

[158] Michael Foster, "Sir Kenelm Digby (1603-65) as Man of Religion and Thinker— I: Intellectual Formation," *The Downside Review* 106, no. 362 (1988): 44.
[159] Kenelm Digby, "Letter to John Digby London, 1633," ed. Vittorio Gabrieli, "A New Digby Letter-Book: 'In Praise of Venetia'," *The National Library of Wales Journal* 9, no.2 (Winter 1955): 147.
[160] Digby, *Two Treatises,* 428.

> whereby we often see that they haue the worst fortune, who have in them selues groundes to hope and deserue the best. The Phoenix of this age was my wife: for as in exactnesse of beauty and features, in goodlinesse of shape and person, and in gracefulnesse of behauior, she exceeded ye handsomest of her age, euen of their owne acknowledgement.[161]

Hence, Digby clearly remained deeply connected to his mourning and his search for her until his own death. Digby formulated his will in January of 1665, noting that he wished to be buried in an unmarked grave next to the funerary monument of his wife in London and noting an annuity be paid to White of 60 pounds a year.[162] Some six months later, on his way to Paris, Digby died, likely of the wave of plague that would sweep the area in the following months.

[161] Digby, via Michael Martin, "Love's Alchemist: Science and resurrection in the writing of Sir Kenelm Digby," *Prose Studies* 32, no. 3 (2010): 231-2.
[162] Which let him live comfortably until his death in 1676.

A part of this search, for both her soul and the knowledge she was closer to than he, was represented in the portrait painted by Van Dyck, *Portrait of Kenelm Digby*, from c.1635 (*fig*. 1).

Figure 1: Anthony Van Dyck. *Portrait of Kenelm Digby*, c.1635, oil on canvas, 915 x 710 mm, National Maritime Museum, Greenwich, London.

The *Portrait of Kenelm Digby* shows the sitter and patron, Digby, in three-quarters profile looking at the viewer with his right hand to his heart and a large sunflower immediately to his right in the close background. As Peacock argues, to Digby, the contemplation of love and the contemplation of the universe served a similar devotional purpose towards God.[163] In Digby's portrait, the sunflower points upwards in the same direction as his hand over his chest, while his gaze faces the viewer. Digby, dressed in the black colour of mourning is positioned only with this sunflower in a very simplified emblematic style.

[163] Peacock, *The look of Van Dyck*, 238.

Heliotropes follow the sun as a way of showing the path towards God. They were often thought of as following the sun each day, having its life tied to the sun's power, and ultimately, to the power of God himself. The heliotrope, both stone and flower, is allegorized as saviour pointing to the sun. This sunflower presents a different allegory than the more well-known *Self-Portrait with a Sunflower* from c.1632 by Van Dyck. Van Dyck's sunflower and gold chain— given to him by the King— show his uniquely close relationship to the monarch.[164] Whereas God as the Sun, center of all, alludes to the King as in Van Dyck's self-portrait, the Sun and God were also understood to be connected to salvation or unlimited knowledge or both, in Digby's world view. Upon his death in 1665, Digby's estate began cataloguing his library in which he amassed over four thousand books mostly in English, Latin, Italian, and French. This catalogue, the *Bibliotheca Digbeiana* contains a few notable emblem books on the virtues connected to the heliotropic sunflower. Turning to these images known to be in Digby's possession, it is clearer that this quest for the afterlife's possibilities is represented using imagery from emblem books.

[164] Kevin Sharpe, "Van Dyck, the Royal Image and the Caroline Court," in *Van Dyck & Britain,* ed. Karen Hearn (London: Tate Publishing, 2009), 16-17.; Peacock, *The Look of Van Dyck*, xvii.

First turning to Ceasar Ripa's *Iconologia*, or *Della Nouissima Iconologia* (or *Iconologia or Moral Emblems* as it would be anglicized later), a three-volume set of books pertaining to the moral virtues and their iconographical representations and symbols. Digby's copy was dated 1625 and has one representation of the sunflower shown in the representation of *Ispiratione* (*fig*.2).[165]

Figure 2: Ceasar Ripa. *Della Nouissima Iconologia Parte Seconda*, 1625, 386.

The figure of a man walks towards the sunlight with a sword in his right hand and a sunflower in his left lifted above his shoulder. He walks the earth with this head of snakes, representing sin, most of which point in either the direction he faces or towards the sunflower. The sun points from the left and shines onto the path the figure walks, as the sunflower is held upwards it too looks upon the path ahead. The sunflower, or heliotrope, becomes something which, in its innate power of following the sun, guides

[165] Ceasar Ripa, *Della Nouissima Iconologia (*Padova, 1625*)*, 386.

the person along a path or journey of inspiration itself—and the connections to God were inseparable to anyone viewing it.

Similarly, in the *Emblematum Libri duo* by Andreae Alciati, the emblem of the Power of Love (*fig*.3) is also guided by a heliotrope, this time the daisy.

Figure 3. Andrea Alciato. *Les Emblems*, 1614, 110.

Dated to 1614, from Geneva, and printed in Latin, this copy is one of the versions made by Jean de Tournes. De Tournes Latin copies were made with the same or similar woodcut plates for the emblems themselves as those in his French copies.[166] This version of the text was widely circulated, like *Iconologia,* and had both image and text of emblems broadly connecting to average life. Cupid holds flowers in his left hand and a fish in his right. The flowers with long oval petals coming from the centre are accompanied by a text that speaks of the flowers symbolizing Love's (or Cupid) abilities to control and rule the

[166] Henry Green, *Andrea Alciati and his books of emblems; a biographical and bibliographical study* (London, Trübner & co., 1872), 89.

land, with the fish in his other hand representing the sea. Cupid's heliotropes are facing upwards towards God to represent Love's power on earth.

The common theme amongst these is the lone figure guided by the heliotrope upwards towards a higher power. Therefore, knowing Digby's unique quest for the resurrection of the soul alongside his wife and this ideal of infinite knowledge, the sunflower speaks to the allegory of *Ispiritione,* or inspiration, and the idea of the power of love, both depicted in emblem books we know were in his possessions.

Speaking of the soul's representation, Digby expressed "as if he, who findeth himselfe dazeled with looking vpon the sunne, had reason to complaine of that glorious body, and not of his owne weake eyes, that can not entertaine so resplendent a light."[167] This adds another dimension to Digby's physico-theological practice. Whereas his works alongside White focused on philosophical argumentation to prove theological concerns, and his own writings argued for the difference between material nature and immaterial humanity, this personal materialization of his grief and belief in the immortal unity with Stanley showed the distinctly intimate nature of all his projects. Digby needed to prove the human soul immortal, it had to be immaterial, or he would be faced with the idea of never being reunited with Stanley. Whether it was love like Cupid, or God's knowledge like inspiration, Digby was longing for an idealized future after death.

The *Portrait of Kenelm Digby*, is marked with an inscription on the back: *Omnis In Hoc Sum*. These are the last few words of the eleventh line of Horace's Epistles 1.1 and they have been translated to "to that am I wholly given," or, "am wholly involved

[167] Digby, *Two Treatise*, 422.

with."[168] That which he would be wholly given, was surely a trifold project which was set to prove the immateriality of the soul through the materiality of nature and his reconnection with Stanley. Here, he argued that knowledge was an innate proof of the human soul as well: "where all we ayme at is to proue (and I conceiue we haue done it very fully)," he wrote, "that when Identity betweene two or more thinges, presenteth it selfe to our vnderstanding, it maketh and forceth knowledge in our soule."[169]

To Digby, to gain the definition of the immortal soul "we ought to beginne our search, with enquiring *What Mortality is.*"[170] Mortality was that which he argued was seen in bodies' obligation to the laws of nature, namely orderly motion and the nature of divisibility. As the soul was attached to Being, he argued that it was indivisible, and thus immaterial and immortal: "Now this knowledge, is the most eminent part of deeming; and of all our acquisitions, is the most inseparable from us: and indeed in rigour, it is absolutely inseparable by direct meanes."[171] This immortal state is spoken as if:

> They enquire after a maker of the world we see, and are ourselues a maine part of; and hauing found him, they conclude him (out of the force of contradiction) to be aeternall, infinite, omnipotent, omniscient, immutable, and a thousand other admirable qualities they determine of him. They search after his tooles and instruments, wherewith he built this vast and admirable pallace, and seeke to grow acquainted with the officiers and stewardes, that vnder him gouerne this orderly and numerous family. They find them to be inuisible creatures, exalted aboue vs more then we can estimate, yet infinitely further short of their and our maker, then we are of them. If this do occasion them, to cast their thoughts vpon man himselfe,

---

[168] Horace, *Satires. Epistles. Art of Poetry,* trans. H. Rushton Fairclough (Cambridge: Harvard University Press, 1926), 250-251. 10.4159/DLCL.horace-epistles.1926; Michael C. Mascio, "Aristippus, Ulysses, and the Philosophus Polutropos in Horace Epistles, Book 1," *The Classical World* 111, no. 2 (2018): 227. https://www.jstor.org/stable/48553406.
[169] Digby, *Two Treatises*, 371.
[170] Digby, *Two Treatises*, 350.
[171] Digby, *Two Treatises*, 368-9.

> they find a nature in him (it is true) much inferiour to these admirable Intelligences, yet such an one, as they hope may one day arriue vnto the likenesse of them: and that euen at the present, is of so noble a moulde, as nothing is too bigge for it to faddome, nor any thing too small for it to discerne. Thus we see knowledge hath no limits; nothing escapeth the toyles of science; all that euer was, that is, or can euer be, is by them circled in[172]

This world of knowledge belonging to the world of the spirits was posited to show this boundless project of science, of imagination, and of all these macros and micros. These souls must have "first, that by apprehension, the very thing apprehended is by it selfe in our soule: next, that the notion of Being, is the first of all notions, and is resumed in all others: and thirdly, that what is added to the notion of Being, is but *respects* to other things," or more plainly: the ability to apprehend concepts, to have a distinct sense of being, and to be able to place ones being and apprehensions in respect or relation to others.[173] And, as he continued: "And to say the truth, if knowledge be taken properly, we do not know eternity; howeuer by supernaturall helpes we may come to know it."[174] Part of this rationalization of the soul came off the work of White, as Digby posited that as "followeth euidently, that the soule is a moouer and a beginner of motion."[175] Speaking of this movement, which is more the cognisance of free will, he continued:

> And in this second way, our soule of her owne nature communicateth her selfe to quantitatiue thinges, and giueth them motion: which followeth out of what we haue already prooued; that a soule, in her owne nature, is the subiect of an infinite knowledge, and therefore is capable of hauing such a generall comprehension, as well of time, and of the course of all other thinges, as of the particular action he is to doe[176]

---

[172] Digby, *Two Treatises*, 378.
[173] Digby, *Two Treatises*, 394.
[174] Digby, *Two Treatises*, 410.
[175] Digby, *Two Treatises*, 412.
[176] Digby, *Two Treatises*, 412.

Digby even asked how the soul can *know*. Despite his attempts to rationalize through the notions of Judging, Negations, Universalities, Senses, Reason, amongst others, his most honest answer was a simple, though perhaps unsatisfactory: "I know not how, by the power of the soule... that this mystery is as we say"[177]

Digby turned to meditate on what exactly could be within this power of the soul in the afterlife. The sun reappears:

> When my eye of contemplation, hath beene fixed vpon this bright sunne, as long as it is able to endure the radiant beames of it; whose redundant light veyleth the looker on, with a darke mist: lett me turne it for a litle space, vpon the straight passage, and narrow gullet, through which thou striuest (my soule) with faint and weary steppes, during thy hazardous voyage vpon the earth, to make thy selfe a way: and lett me examine, what comparison there is, betweene thy two conditions; the present one, wherein thou now findest thy selfe immersed in flesh and bloud; and the future state that will betide thee, when thou shalst be melted out of this grosse oore, and refined from this meane alloy… in studying day and night to inuent new pleasures and dilights for me[178]

This world that the afterlife provides knowledge, pleasure, refinement. Yet, despite this, Digby still stated:

> let me sadly reflect vpon my owne present condition: lett me examine what it is, I so busily, and anxiously, employ my thoughts and pretious time vpon: lett me consider my owne courses, and whither they leade me: lett me take a suruay of the liues, and actions, of the greatest part of the world, which make so loude a noise about my eares: and then may I iustly sigh out from the bottome of my anguished hart; to what purpose haue I hitherto liued?[179]

This being a concluding section of the *Two Treatises*, combined with his overall argumentation of the work being to prove this immortal soul situates this anguished heart as a part of his philosophy.

---

[177] Digby, *Two Treatises*, 394.
[178] Digby, *Two Treatises*, 447.
[179] Digby, *Two Treatises*, 448.

Digby also took up a similar project in his *A Discourse Concerning Infallibility in Religion* in 1655. His argumentation here would take up the concept of Providence. Providence was the pre-established ordering of things by God. "Gods prouidence," Digby wrote "hath committed them, do pronounce his decrees to them in a le|gislatiue way. But so piercing a iudgement as yours that knoweth there is an orderly and naturall connexion betweene all causes and their effects.[180]" Catholic providence was thus another way of describing the cause and effects of nature.

Again, demonstration comes forward as a key point of argumentation. Demonstration, alongside rationality, was labeled by Digby as "whatsoeuer is Rationall is immortall," situating philosophical argumentation as a key tenet in the proof of the soul. [181] Digby referenced his own works from *Two Treatises*, and argued that in this work he has shown that by looking at quantities of things that are material, i.e. their ability to be divided into multiple parts, he concluded that it worked "to shew that our soule is a spirit, voyde of all quantity and materiality."[182] *Infalibility* was thus a rearticulation of these "properties of knowledge" of proving the immortality of the human soul which Digby had made in *Two Treatises*.

Another Catholic affiliate to Henrietta Maria, John Ponce, criticized Digby's *Infallibility* on the grounds that Digby was too close to Thomas White. "[Y]ou have been misleadd by your great master," Ponce said.[183] Ponce too was critical of the use of

[180] Digby, *Infallibility in Religion,* 6.
[181] Digby, *Infallibility in Religion,* 26.
[182] Digby, *Infallibility in Religion,* 30.
[183] Ponce, in Williams, "John Ponce's response to Kenelm Digby," 193.

demonstration, "if demonstration be taken for rigour," he warned.[184] To him however, there was no use in demonstrating the immortal soul, regardless of the soundness of the reasoning. To have to prove the immortality of the soul was a wasted effort on those who require proof or demonstration to Ponce as he labeled them non-believers. Ponce also viewed this as against God's ability to "annihilate souls," which to him negated the distinction of corporeal vs incorporeal. This points to a difference in programs between Catholics more broadly.

White's *Peripaticall Institutions* argued that Digby's demonstrations of material versus immaterial showed a new prospect for Christian theology, one where philosophical argumentation could prove Catholic doctrines. Part of this lay in the representation of Aristotelian conceptions in a new light, arguing a re-understanding of Aristotle as an atomist. The crux of this understanding came from focusing on the ways in which Aristotle found truth in experimentation, observations, and engagements with nature. *Peripaticall* refered to the Aristotelian principles that White sought to re-frame. The book was dedicated to Digby and his *Two Treatises,* especially on the second part *Treatise on the Immortality of the Human Soul.* Digby and White thus fell into a new kind of Aristotelianism that situated conversations of both demonstrations and knowledge in opposition to a Pyrrhonic claim that nothing was knowable.[185] There lay a commonality in their projects to prove the immortality of the soul: both White and Digby argue for a fundamental purpose of *scientia* and demonstrative proof to base both their

[184] Ponce, in Williams, "John Ponce's response to Kenelm Digby," 208.
[185] Marco Sgarbi, "Thomas White, an Aristotelian Response to Scepticism," *Archive of the History of Philosophy and Social Thought* 58 (2013): 85-87.

understandings of nature and theology. This interconnects the physicotheological project with a clear epistemic central goal of also proving how and what constitutes knowledge.

Digby's presentation of the failed palingenesis of plants and the successful one of crayfish frames a regenerative nature within natural things as distinctly different from a resurrection. Whereas the crawfish could be re-used along the lines of the oeconomy, the immaterial, the human soul, could not be re-used as it must be saved for the resurrection. This worked alongside the argument that the plant or the animal lacks an immaterial element inherent only to humans. The oeconomy, which was what rules the natural world, could not govern the soul as Digby's Catholicism demanded a singular resurrection. As the sun points to the immaterial knowledge of God, the sunflower follows this, encapsulating this quest for understanding the ways nature works as thus always incomplete, always only an attempt at understanding God's miraculous and mysterious workings using the language of natural philosophy. The afterlife, therefore, always included knowledge to Digby, knowledge he attempted to achieve through physicotheological reasoning and this yearning for the reunification of himself and his wife.

Conclusion

Digby's interests and engagement with the natural world were a part of a multiplicitous project which cannot be simply examined under a single straightforward intellectual or philosophical history. Part of the reason Digby has been considered eccentric lies in his philosophical program having generally been noted to be difficult to understand as he manages to hold many seemingly contradictory ideas. Anne-Laure de Meyer calls Digby "homme double" for the very reason that he embodies a tension of oxymorons and paradoxes.[186] And, Stefania Tutino even describes Digby's writings as "verbose and slightly irritating."[187] As Digby cannot be placed as a dogmatic figure, since he upheld heterodoxies and multiple ideas simultaneously, his contributions require a reconsideration of his place in the canon of science and epistemology.

Since the works of Thomas Longueville in 1896, and E.W. Bligh in 1932, Digby and his networks have been a point of interest to historians. His networks included the Republic of Letters, the Newcastle, or the Cavendish, circle, the Hartlib circle, the Mersenne circle, alongside connections in North America, Ireland, and French/Parisian philosophical circles, and royal networks with Spain, Denmark, and Italy. A large part of this reach of his communications was his fluency in six languages: French, Latin, Spanish, English, Italian, and German. He frequently traveled across Europe throughout his life and spent most of his time in either London or Paris.

---

[186] Anne-Laure de Meyer, *Sir Kenelm Digby (1603-1665): Un Penseur À L'Âge Baroque* (Paris: Honoré Champion 2021), 540-541.
[187] Tutino, *Thomas White*, 8.

Parts of Digby's engagements with his contemporaries remains understudied. Advancing the quest for knowledge was integral to Digby's life works, and engaging with past works and their translations was where he focused his energy and time in the last years of his life. Of his collections, some 5000 manuscript pages still reside at Bibliothèque Nationale et Universitaire de Strasbourg and have yet to be fully studied.[188] Amongst these are copies of Paracelsus and Van Helmont's works on medicine and alchemy, as well as books pertaining to the philosopher's stone and metallic transmutations of gold. Digby frequently traveled seeking out manuscripts for his collections. He was notably dedicated to improving the Bodleian's collections, sharing his "chymical books."[189] Likely because of his role as a collector and experimentalist, he was also associated with the creation of a Chemical Council dedicated to "great medical arcana" in 1657.[190]

On top of his collecting, another aspect of Digby's life that has remained underexamined is his opening of a Parisian style Salon in his house at Covent Garden in 1660 where he conducted experiments and demonstrations. He likely opened this salon after his time in Paris in the late 1650s at the Jardin du Roi where he conducted experiments on extracting oil of sulphur from fixed mercury, and further attempted the transmutations of gold. There remains little information on how his salon functioned or the events that took place there.

Despite his on-paper involvement with the Royal Society of London after its founding and up to his death, it is unclear whether Digby was a productive or absent

[188] As noted by Lawrence Principe. Principe, "Sir Kenelm Digby," 3-24.
[189] Georgescu and Han Thomas Adriaenssen, eds. *The Philosophy of Kenelm Digby*, 170.
[190] Georgescu and Han Thomas Adriaenssen, eds. *The Philosophy of Kenelm Digby*, 170.

member of the Society. Vera Keller indicates that beyond his role as an author, within the society Digby is a figure who was in the position of critic and participant, an authoritative judge on matters of experiments, scientific trials, and discoveries.[191] This suggests that Digby likely played a serious role as an observer and authority in how scientific knowledge was created and maintained as a council member and as someone who lectured within the Society. Earlier work on Digby, such as R.T. Petersson's, called Digby's work for the Society "spasmodic and unimpressive" and yet, in the same vein he cites Digby's participation in the works of Christiaan Huygens in a work on gunpowder, a presentation on a sympathetic powder for indigestion, experiments on navigation with Wren, Petty, and Goddard, a presentation on an *oculus mundi*, a report on the weather forecasting methods of John Dee, and accounts of embryo theories and strange foetal examples of interest to the Society.[192]

Digby and his work have clearly had a profound lasting impact on scientific study, even if only recently acknowledged. Following the idea of a 'scientific' community put forward by Thomas Kuhn and those who have engaged with his ideas, Digby was actively working on research with the premise of doing something of interest to him with an engagement with his peers and the scholarly works he had available to him, making him well involved in the community at the time.[193] Digby has, in older historiographies, been

---

[191] Vera Keller, *Knowledge and the Public Interest, 1575-1725* (Cambridge: Cambridge University Press 2015), 248, 256, 270-71.
[192] Petterson, *Sir Kenelm Digby*, 297.
[193] Thomas Nickles, "Some Puzzles about Kuhn's Exemplars," in *Kuhn's The Structure of Scientific Revolutions Revisited,* eds. Vasso Kindi and Theodore Arabatzis. (New York: Routledge, 2012), 130.

placed as an eccentric or even as upholding the 'outdated' ideas of a previous age, leading to his theories dismissed as uninfluential. His engagements with the then "canon" of philosophy, building in his contemporaries works, heavily involved with intellectual conversations, groups, and exchanges throughout Europe, heading his own salon and experimentations, and his legacy clearly continued beyond his death—these all paint a picture of an intellectual whose works deserve to be considered more deeply in the history of natural philosophy more broadly.

What I have argued is the ways in which Digby's theological belief in the soul's resurrection and his methods of knowledge production factor into the creation of his natural philosophy, which was at the time a codification of how nature itself works. Digby's work constitutes an integration of previous intellectual works and those of his contemporaries to argue his belief in a structured and ordered nature that must be inherently different from that of the soul. By demonstrating the structure of nature, the oeconomy of nature, Digby buttresses an ordered distinction that the soul must have a different providence than things governed under this oeconomy. The oeconomy of nature ordered natural matter in a way that prioritized the best place of things and their best use. Digby argued that this meant a recycling and repurposing of matter. His own theological and personal beliefs distinctly prohibited him from applying a regenerative cycle to the human as he believed that the process of resurrection required a single re-birth and reunification of soul and body, reunified by the same organizing force of movement by God.

Since Carolyn Merchant's *The Death of Nature* (1990) and her exploration into the sixteenth and seventeenth century idea of nature "as dead and passive," there has been a shift towards putting nature into history and writing non-human agents' histories.[194] Mechanical philosophy has been linked to an idea, retrospectively labeled the destructive determinism capitalistic thought, of considering nature as inert and only serving humans as materials or things to be used, without agency or purpose beyond serving Man. Digby's engagements with the natural world, the placement of nature as something to be used, yet with an explicit acknowledgement of environmental limits, provides a distinctively different perspective of this idea in this period. While Digby too looked at an idea of nature not being alive in an Aristotelian sense, the incorporation of God into the function of motion within an oeconomy placed agency into things in a way that can only be understood in context. Figuring Digby as someone who upholds heterodoxies rather than dogmas positions his works uniquely in the history of philosophies and theologies.

In Digby we can discern an epistemological and demonstrative quest to prove his theological interests. It is thus that through demonstrations in nature, on one hand, and to the soul, on the other hand, the definition of guiding principles for both nature and humans are codified. Similarly to Aristotle, Digby too used the idea of a "nature" as being something which essentially causes the motion of an individual thing. Yet, nature as an oeconomer (one who orders things oeconomically) and this spiritualized idea of motion situates a different kind of agency within nature. Digby's distinctions of nature versus

[194] Carloyn Merchant, *The Death of Nature* (New York: Harper & Row, 1990), xvi.

humanity does situate the human as different, but, for distinctly personal ends, towards being unified with his lost wife and with God's infinite knowledge.

The idea of objective science, the quest for science untainted by the subjective experience does not exist. The common idea of this era, an era of applied "scientific revolution(s)," is that there was a distinct "triumph" of Science, of empirical objective taxonomical knowledge over the Aristotelianism or occultism of pervious eras. Osler situates seventeenth century mechanical philosophy as something that was distinctly implemented to *replace* Aristotelianism, yet Digby showed an alternative of reintegrating Aristotelianism into mechanism.[195] Arguably one of the first Cartesian mechanical philosophers in the sense of engaging with the works of Descartes, Digby was obsessed with translating philosophy and theology more generally into these mechanical terms. And, being the first to be engaging with Cartesianism his work should also be recontextualized in that history as well. [196]

I argue that Digby ought to be resituated in the history of systemic thought and theorization of the natural world in a way that complicates this vision of the period. A more encompassing idea is the one put forward by Ian Hacking who links the idea of experimental interests becoming incorporated into knowledge during the sixteenth and later centuries is attributed to a "transformation of an old concept of [the] sign into a new concept of evidence."[197] Catherine Wilson argues that Aristotelianism did not have an

---

[195] Margret Osler, *Reconfiguring the World* (Baltimore: The John Hopkins University Press, 2010), 77.
[196] Which John Sutton does quite well in relation to theories of cognition. Sutton, *Philosophy and memory traces*.
[197] Hacking, *The Emergence of Probability*, 38.

adequate vocabulary for the explanations needed to further the understandings of artisans or alchemists, and I add that it became inadequate for the experimentations and theories coming from the new philosophies of the latter half of the seventeenth century.[198] Aristotle's translation into mechanical language provides both an engagement with an authority on the natural world and in its translation shows a need to re-formulate it to meet the epistemological needs of both White and Digby. By merging the practical and philosophical, Digby was using demonstrations simultaneously to show an appreciation for older ideas of what constituted wisdom and proof, and to translate them into this "new" age. This transformation of demonstration itself provides evidence to both Digby's ontological and theological inquiries. In tune with redefining demonstration and enquiry itself, motion too gets redefined.[199] Digby's use of Cartesian philosophy heavily directed his conclusions of a motion-based world, yet he and Descartes had very different understandings of God in this cosmos. Whereas in Descartes' view, God had transcended creation and enquiries into nature could not reach Him, to Digby and his colleague White, it was chiefly through natural philosophy that one could reach this natural theology.[200] Throughout his life Digby's project was one that worked to integrate this natural knowledge into his theology, to prove God's innate presence in the universe.

Walter Charleton and *Oeconomia Animalis* (1669) would follow Digby's way of mediating with the world. And later figures, such as Linneaus, would write *Oeconomia*

---

[198] Wilson, *Epicureanism*, 49-50
[199] Galileo is most commonly attributed to this change in redefining motion, see Osler, *Reconfiguring the World,* 94-99.
[200] Gaukroger, *The Emergence of a Scientific Culture*, 151.

Naturea (1747), continuing this legacy of investigations into nature's oeconomy and the workings of the universe. Linneaus' *Oeconomia* functioned as an engagement with the science of nature for use, and as Remien and Lisbet Rausing argue, keeps the theological aspects Digby integrated.[201] David Hume too takes up an idea of animals being "bestowed with so scrupulous an oeconomy," in his *Dialogues concerning natural religion* (1779).[202] Although no longer spelled with an o, Charles Darwin would even talk about the economy of nature in his *On the Origin of Species* (1859). Rausing, who albeit does not link these ideas as far back as Digby, does argue that these empiric and utilitarian positioning of science constitutes the framework of modernity itself.[203] Thus, Digby should be considered in the long and very human tradition of trying to understand the way nature works; and, in a similar vein, the meditation of what our purpose is and what the future holds for us and our loved ones across life and death.

While sympathies and spirits through the air may seem far-fetched, the idea of an interconnected cosmos, where things in nature are repurposed and re-used composes a much more familiar landscape of the natural world in our current time. When Digby wrote that "there is in the air a hidden food of life" he pictured a universal spirit of salt that composed the universe decades before any understanding of either CO2's role in photosynthesis or carbon's role in the makeup of most matter. The formation of the

---

[201] Remien, *The Concept of Nature,* 154-55; Lisbet Rausing, "Underwriting the Oeconomy: Linneaus on Nature and Mind," in *Oeconomies in the Age of Newton*, eds. Margaret Schabas and Neil De Marchi (Durham and London: Duke University Press, 2003), 187
[202] David Hume, *Dialogues Concerning Natural Religion* (London, 1779), 120, https://name.umdl.umich.edu/004895521.0001.000
[203] Rausing, "Underwriting the Oeconomy," 182.

oeconomy of nature being something where everything is reused and re-made parallels in many ways our understanding of ecological recycling and provides a useful historical example of ways to contextualize responsible relations to nature in respects to environmental limits. While a strictly ecocritical approach to this topic is not the body of this work, it does point to a larger more multifaceted history of different approaches to the natural world and our relations to it.

Bibliography
Primary Sources

Alciati, Andreae. *Emblematum Libri*. Geneva: Jean de Tournes, 1614.

Boyle, Robert. *Some Considerations Touching the Usefulnesse of Experimental Naturall Philosophy Propos'd in a Familiar Discourse to a Friend, by Way of Invitation to the Study of it, by the Honorable Robert Boyle Esq; Fellow of the Royal Society [Some considerations touching the usefulnesse of experimental natural philosophy. Part 1-2*]. Oxford, 1663. Early English Books Online.

--. *Some Physico-Theological Considerations about the Possibility of the Resurrection*. London, 1675. Early English Books Online.

--. *The Correspondence of Robert Boyle Vol. 1-4. Electronic Edition*. Charlottesville: InteLex Corp., 2004. https://pm.nlx.com/xtf/view?docId=boyle_c/boyle_c.00.xml;chunk.id=div.el.boyle.corr.pmpreface.1;toc.depth=2;toc.id=div.el.boyle.corr.pmpreface.1;hit.rank=0;brand=default

Coxe, Daniel. "A Continuation of Dr. Daniel Coxe's Discourse, Begunin Numb. 107. Touching the Identity of All Volatil Salts, and Vinous Spirits; Together with Two Surprizing Experiments Concerning Vegetable Salts, Perfectly Resembling the Shape of the Plants, Whence They Bad Been Obtained," *Philosophical Transactions (1665-1678)* 9 (1674): 169-182. https://www.jstor.org/stable/101168

Descartes, Rene. *Discours de la méthode*. Les Échos du Maquis, 2011. https://philosophie.cegeptr.qc.ca/wp-content/documents/Discours-de-la-m%C3%A9thode.pdf.

Digby, Everard. *Euerard Digbie his dissuasiue From taking away the lyuings and goods of the Church.* London: Robert Robinson and Thomas Nevvman, 1590. Early English Books Online.

Digby, Kenelm. *Two Treatises: In the one of which, The Nature of Bodies; In the other, The Nature of Mans Soule; is Looked Into: In Way of Discover of The Immortality of Reasonable Soules.* Paris, 1644. Early English Books Online.

--. *A discourse concerning infallibility in religion written by Sir Kenelme Digby to the Lord George Digby, eldest sonne of the Earle of Bristol.* Paris: Peter Targa, 1652. Early English Books Online. https://name.umdl.umich.edu/A35974.0001.001.

--. *A treatise of adhering to God; written by Albert the Great, Bishop of Ratisbon. Put into*

English by Sir Kenelme Digby, Kt. Also a conference with a lady about choyce of religion. London: Henry Herringman, 1654. Early English Books Online.

--. *A late discourse made in a solemne assembly of nobles and learned men at Montpellier in France touching the cure of wounds by the powder of sympathy : with instructions how to make the said powder : whereby many other secrets of nature are unfolded.* London, 1658. Early English Books Online.

--. *A discourse concerning the vegetation of plants spoken by Sir Kenelme Digby at Greshan College on the 23 of January, 1660: at a meeting for promoting the philosophical knowledge by experiments.* London, 1661. Early English Books Online.

Glauber, Johann Rudolf. *The works of the highly experienced and famous chymist, john rudolph glauber containing great variety of choice secrets in medicine and alchymy, in the working of metallick mines, and the separation of metals: Also various cheap and easie ways of making salt-petre, and improving barren-land and the fruits of the earth: Together with many other things very profitable for all the lovers of art and industry*. London: Thomas Milbourn, 1689. Early English Books Online.

Grew, Nehemiah. *The Anatomy of Plants with an Idea of a Philosophical History of Plants, and several Other Lectures, Read before the Royal Society.* London: W. Rawlins, 1682.

Hartman, George. *A choice collection of rare chymical secrets and experiments in philosophy as also rare and unheard-of medicines, menstruums, and alkahests…* London, 1682. Early English Books Online.

Horace, *Satires. Epistles. Art of Poetry.* Translated by H. Rushton Fairclough. Cambridge: Harvard University Press, 1926. 10.4159/DLCL.horace-epistles.1926.

Hume, David. *Dialogues Concerning Natural Religion: By David Hume, Esq*. London: 1779. Eighteenth Century Collections Online, https://name.umdl.umich.edu/004895521.0001.000

Paracelsus. *A new light of alchymy taken out of the fountain of nature and manual experience : To which is added a treatise of sulphur/ written by micheel sandivogius, i.e. an agrammatically, divileschi genus amo. also nine books of the nature of things, written by paracelsus; also a chymical dictionary ... all which are faithfully translated out of the latin into the english tongue by J.F.* Translated by Michal Sędziwój. London: A. Clark, 1650. Early English Books Online.

Ripa, Ceasar. *Iconologia, Della Nouissima Iconologia*. Padova, 1625.

White, Thomas. *Peripateticall institutions. In the way of that eminent person and excellent*

philosopher Sr. Kenelm Digby. The theoricall part. Also a theologicall appendix of the beginning of the world. London: John Williams, 1646. Early English Books Online.

--. *The grounds of obedience and government.* London: J. Flesher, 1655. Early English Books Online. https://name.umdl.umich.edu/A65787.0001.001

--. *Controversy-logicke, or, The methode to come to truth in debates of religion written by Thomas White, Gentleman.* Paris, 1659.

--. *Notes on Mr. F.D.'s Result of a dialogue concerning the middle state of souls in a letter from Thomas White*. Paris, 1660.

Xenophon. *Oeconomicus, on the management of a farm and household.* Translated by H. G. Dakyns. North Carolina: Project Gutenburg, 1998. https://www.gutenberg.org/cache/epub/1173/pg1173-images.html

Secondary Sources

Ackerman, Catherine A. "Fashionable Platonism and Sir Kenelm Digby's 'Private Memories'." *CLA Journal* 5, no. 2 (December 1961): 136-141. JSTOR. https://doi.org/10.4000/rhetorique.527.

Adrieaenssen, Han Thomas and Sander de Boer. "Between Atoms and Forms: Natural Philosophy and Metaphysics in Kenelm Digby." *Journal of the History of Philosophy* 57, no. 1 (January 2019): 57-80. DOI: https://doi.org/10.1353/hph.2019.0002.

Agamben, Giorgio. *The Kingdom and the Glory: For a Theological Genealogy of Economy and Government.* Translated by Lorenzo Chiesa. Stanford: Stanford University Press, 2007.

Alexander, Peter. *Ideas, Qualities and Corpuscles: Locke and Boyle on the External World*. Cambridge: Cambridge University Press, 1985.

Bennett, J. A. "Christopher Wren: Astronomy, Architecture, and the Mathematical Sciences." *Journal for the History of Astronomy* 6 (1975): 149-184. 1975JHA.....6..149B Page 149 (harvard.edu)

Barros, Paula." « *Piety to a dead man* » : les limites de la consolation dans la pratique épistolaire de Sir Kenelm Digby (Angleterre, 1633)." *Exercises de rhétorique* 9 (2017): https://doi.org/10.4000/rhetorique.527.

-- . "In Fortune Fair and Foul: Happiness and Care of the Self in Sir Kenelm

Digby's Letter-Book *In Praise of Venetia*." *Critical Survey* 32, no. 3 (Autumn 2020): 82-93. doi:10.3167/cs.2020.320308.

Blank, Andreas. "Composite Substance, Common Notions, and Kenelm Digby's Theory of Animal Generation." *Science in Context* 20, no. 1 (March 2007): 1-20. doi:10.1017/S0269889706001116.

Bligh, E.W. *Sir Kenelm Digby and his Venetia*. London: Sampson Low, 1932.

Brown, Deborah J. and Calvin G. Normore. *Descartes and the Ontology of Everyday Life*. Oxford: Oxford University Press, 2019.

Burns, William E. *The Scientific Revolution: An Encyclopedia*. Santa Barbara: ABC-CLIO, 2001.

Canary, Robert H. and Henry Kozicki, eds. *The Writing of History: Literary Form and Historical Understanding.* Madison: University of Wisconsin Press, 1978.

Cormack, Lesley B., Steven Walton, and John A. Schuster, eds. *Mathematical Practitioners and the Transformation of Natural Knowledge in Early Modern Europe.* Cham: Springer Nature Switzerland, 2017. eBook, doi: 10.1007/978-3-319-49430-2.

Clericuzio, Antonio. *Elements, Principles and Corpuscles: A Study of Atomism and Chemistry in the Seventeenth Century*. Dordrecht: Kluwer Academic Publishers, 2000.

Clucas, Stephen and Timothy Raylor. "Kenelm Digby's two treatises and the reception of the Galilean science of motion." *Galileana: Journal of Galilean Studie*s 17 (2020): 91-116. Birkbeck Institutional Research Online, https://eprints.bbk.ac.uk/id/eprint/41018/.

Crosbie, Christopher. "Philosophies of Retribution: Kyd, Shakespeare, Webster, and the Revenge Tragedy Genre." PhD diss., The State University of New Jersey, 2007. https://rucore.libraries.rutgers.edu/rutgers-lib/23881/PDF/1/play/.

Davenport, Anne A. "Baroque Fire (A Note on Early-Modern Angelology)." *Early Science and Medicine* 14 (2009): 369-397. DOI: 10.1163/157338209X425623.

Davis, Edward B. "Robert Boyle, the Bible, and Natural Philosophy." *Religions* 14, no. 795 (May 2023):1-17. https://doi.org/10.3390/rel14060795

De Meyer, Anne-Laure. *Sir Kenelm Digby (1603-1665): Un Penseur À L'Âge Baroque*. Paris: Honoré Champion, 2021.

Dear, Peter. *Revolutionizing the Sciences*. New Jersey: Princeton University Press (Third

Edition), 2019.

Dilucia, Niall. "Salvation and Sir Kenelm Digby's philosophy of the soul." *History of European Ideas* 49, no. 3 (2023): 506-522. https://doi.org/10.1080/01916599.2022.2084635.

Dobbs, Betty Jo. "Studies in the Natural Philosophy of Sir Kenelm Digby." *Ambix*, 18, no.1, (1971): 1-25, DOI: 10.1179/amb.1971.18.1.1

--. "Studies in the Natural Philosophy of Sir Kenelm Digby Part II. Digby and Alchemy." *Ambix* 20, no.3, (1973): 143-163, DOI: 10.1179/amb.1973.20.3.143

--. "Studies in the Natural Philosophy of Sir Kenelm Digby Part III. Digby's Experimental Alchemy—*The Book of Secrets*." *Ambix* 21, no.1 (1974): 1-28, DOI: 10.1179/ amb.1974.21.1.1

Elmer, Peter. *Medicine in an Age of Revolution.* Oxford: Oxford University Press, 2023.

Finkelstein, Andrea. *Harmony and the Balance: An Intellectual History of Seventeenth-Century English Economic Thought*. Michigan: Michigan University Press, 2000.

Foster, Michael. "Sir Kenelm Digby (1603-65) as Man of Religion and Thinker— I: Intellectual Formation." *The Downside Review* 106, no. 362 (1988): 35-58. https://doi.org/10.1177/001258068810636203

--. "Sir Kenelm Digby (1603-65) as Man of Religion and Thinker — II." *The Downside Review* 106, no. 363 (1988): 101-125. https://doi.org/10.1177/001258068810636303

--. "Digby, Sir Kenelm (1603–1665), natural philosopher and courtier." In *Oxford Dictionary of National Biography.* 23 Sep. 2004 https://doi.org/10.1093/ref:odnb/7629.

Gabrieli, Vittorio. "A New Digby Letter-Book: 'In Praise of Venetia'." *The National Library of Wales Journal* 9, no.2 (Winter 1955): 113-148.

--, ed. *Loose Fantasies.* Roma: Edizioni di Storia e letteratura, 1968.

Gaukroger, Stephen. *The Emergence of a Scientific Culture: Science and the Shaping of Modernity 1210*-1685. Oxford: Oxford University Press, 2006.

--. *The Collapse of Mechanism and the Rise of Sensibility: Science and the Shaping of Modernity, 1680-1760.* Oxford: Oxford University Press, 2010.

Georgescu, Laura and Han Thomas Adriaenssen, eds. *The Philosophy of Kenelm Digby*

(1603–1665). Cham: Springer Nature Switzerland, 2022. eBook, https://doi.org/10.1007/978-3-030-99822-6

Glacken, Clarence J. *Traces on the Rhodian Shore: Nature and Culture in Western Thought from the Ancient Times to the End of the Eighteenth Century*. Berkeley: University of California Press, 1967.

Golinski, Jan. *Making Natural Knowledge: Constructivism and The History of Science*. Chicago: University of Chicago Press, 2005.

Green, Henry. *Andrea Alciati and his books of emblems; a biographical and bibliographical study*. London, Trübner & co., 1872.

Grenell, Robert Gordon. "Sir Kenelm Digby, Embryologist." *Bulletin of the History of Medicine* 10, no. 1 (June 1941): 48-52. JSTOR, https://www.jstor.org/stable/44440639.

Hacking, Ian. *The Emergence of Probability*. Cambridge: Cambridge University Press, 2006.

Hanson, Kristan M. "Sunflower: Knowledge, Myth, and Meaning." *Plant Humanities Lab,* Dumbarton Oaks, 2021. https://lab.plant-humanities.org/sunflower/

Harris, Sir Nicholas, ed. *Private Memoirs of Sir Kenelm Digby, Gentleman of the Bedchamber to King Charles the First*. London: Saunders and Otley, 1827.

Hartley, Harold, ed. *The Royal Society: Its Origins and Founders.* London: The Royal Society, 1960.

Harvey, Karen. *The Little Republic: Masculinity and Domestic Authority in Eighteenth-Century Britain.* Oxford: Oxford University Press, 2012.

Hearn, Karen ed. *Van Dyck & Britain*. London: Tate Publishing, 2009.

Hedesan, Georgiana. "Alchemy in Early Modern England." *Ambix* 60, no. 3 (2013): 285-288. DOI: 10.1179/0002698013Z.00000000034

Hedrick, Elizabeth. "Romancing the Salve: Sir Kenelm Digby and the Powder of Sympathy." *The British Journal for the History of Science* 41, no. 2 (June 2008): 162-185.

Hengstmengel, Joost. *Divine Œconomy: The Role of Providence in Early-Modern Economic Thought before Adam Smith.* Rotterdam: Erasmus University Rotterdam, 2015.

Henry, John. "Atomism and Eschatology: Catholicism and Natural Philosophy in the

Interregnum." *The British Journal for the History of Science* 15, no. 3 (November 1982): 211-239. JSTOR, https://www.jstor.org/stable/4026219.

--. "Occult Qualities and the Experimental Philosophy: Active Principles in Pre-Newtonian Matter Theory." *History of Science* 24, no. 4 (December 1986): 335-381.

--. "The General Resurrection and Early Modern Natural Philosophy: A Preliminary Survey." *Zygon* 58, no. 4 (December 2023): 905-927. https://doi.org/10.1111/zygo.12913

Hirst, Derek and Richard Strier eds. *Writing and Political Engagement in Seventeenth-Century England.* Cambridge: Cambridge University Press, 1999.

Holden, Thomas. *The Architecture of Matter: Galileo to Kant.* Oxford: Oxford University Press, 2004. https://doi.org/10.1093/0199263264.001.0001.

Janacek, Bruce. *Alchemical Belief: Occultism in the Religious Culture of Early Modern England*. University Park: Pennsylvania University Press, 2011.

Kargon, Robert Hugh. *Atomism in England from Hariot to Descartes*. Oxford: Oxford University Press, 1966.

Keller, Eve. "Embryonic Individuals: The Rhetoric of Seventeenth-Century Embryology and the Construction of Early-Modern Identity." *Eighteenth-Century Studies* 33, no. 3 (Spring 2000): 321-348.

Keller, Vera. *Knowledge and the Public Interest, 1575-1725*. Cambridge: Cambridge University Press, 2015.

--. *The Interlopers.* Baltimore: John Hopkins University Press, 2023.

Kindi, Vasso and Theodore Arabatzis. *Kuhn's The Structure of Scientific Revolutions Revisited.* New York: Routledge, 2012.

Kodera, Sergius. "Translating Renaissance Neoplatonic panpsychism into seventeenth-century corpuscularism: the case of Sir Kenelm Digby (1603-1665)." *Intellectual History Review* [online] (December 2023), Taylor & Francis Online, https://doi.org/10.1080/17496977.2023.2287083.

Lewis, Rhodri. *William Petty and the Order of Nature: An Unpublished Manuscript Treatise.* Tempe: Arizona Center for Medieval and Renaissance Studies, 2012.

Lobis, Seth. "Sir Kenelm Digby and the Power of Sympathy." *Huntington Library*

Quarterly 74, no. 2 (June 2011): 243-260. JSTOR, https://www.jstor.org/stable/10.1525/hlq.2011.74.2.243.

--. *The Virtue of Sympathy: Magic, Philosophy, and Literature in Seveneteenth-Century England.* New Haven: Yale University Press, 2015.

Longueville, Thomas. *The Life of Sir Kenelm Digby*. London: Longmans, Green & Co. 1896.

Lovejoy Arthur O. *The Great Chain of Being: A Study in the History of an Idea*. Cambridge: Cambridge University Press, 1936.

Marie Roos, Anna. *The Salt of the Earth: Natural Philosophy, Medicine, And Chymistry in England 1650-1750.* Leiden: Brill, 2007.

Martin, Michael. "Love's Alchemist: Science and resurrection in the writing of Sir Kenelm Digby." *Prose Studies* 32, no. 3 (2010): 221-239. https://doi.org/10.1080/01440357.2010.528920.

Mayr, Otto. *Authority, Liberty, & Automatic Machinery In Early Modern Europe.* Baltimore: Johns Hopkins University Press, 1989.

Mellick, Sam A. "Sir Kenelm Digby (1603-1665): diplomat, entrepreneur, privateer, duellist, scientist and philosopher." *ANZ Journal of Surgery* 81 (2011): 911-914. doi: 10.1111/j.1445-2197.2011.05708.x

Merchant, Carloyn. *The Death of Nature.* New York: Harper & Row, 1990.

Miles, Wyndham. "Sir Kenelm Digby, Alchemist, Scholar, Courtier, and Man of Adventure." *Chymia* 2 (1949): 119-128. JSTOR, https://www.jstor.org/stable/27757138.

Mitchell, W.J.T. ed. *The Politics of Interpretation.* Chicago: University of Chicago Press, 1983.

--. *Landscape and Power.* Chicago: University of Chicago Press, 2002.

Mascio, Michael C. "Aristippus, Ulysses, and the Philosophus Polutropos in Horace Epistles, Book 1." *The Classical World* 111, no. 2 (2018): 227. https://www.jstor.org/stable/48553406.

Moran, Bruce T. *Distilling Knowledge.* Cambridge: Harvard University Press, 2006.

Moshenska, Joe. "'Spencerus isthic conditur': Kenelm Digby's Transcription of William

Alabaster." *Spenser Studies: A Renaissance Poetry Annual* 27 (2012): 315-328. doi: 10.7756/spst.027.013.315-328.

---. "Sir Kenelm Digby's Interruptions: Piracy and Lived Romance in the 1620s." *Studies in Philology* 113, no. 2 (Spring 2016): 424-483. Project Muse, https://doi.org/10.1353/sip.2016.0010

Multhauf, Robert P. *Neptune's Gift: A History of Common Salt.* Baltimore: John Hopkins University Press, 1978.

Newman, William R. *Gehennical Fire: The Lives of George Starkey, an American Alchemist in the Scientific Revolution*. Chicago: University of Chicago Press, 2003.

--. *Promethean Ambitions: Alchemy and the Quest to Perfect Nature.* Chicago: University of Chicago Press, 2005.

Newman, William R. and Lawrence M. Principe. *Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chymistry.* Chicago: University of Chicago Press, 2005.

Osler, Margret J., ed. *Rethinking the Scientific Revolution*. Cambridge: Cambridge University Press, 2000.

--. *Reconfiguring the World. Nature, God, and Human Understanding from the Middle Ages to Early Modern Europe.* Baltimore: The John Hopkins University Press, 2010.

Niermeier-Dohoney, Justin Robert. "A Vital Matter: Alchemy, Cornucopianism, and Agricultural Improvement in Seventeenth-Century England." PhD diss., University of Chicago, 2018. https://knowledge.uchicago.edu/record/1409?ln=en

--."'Rusticall chymistry': Alchemy, saltpeter projects, and experimental fertilizers in seventeenth-century English agriculture." *Hist Sci* 60, no.4 (December 2022): 546-574. doi: 10.1177/00732753211033159.

Nye, Eric W. "Pounds Sterling to Dollars: Historical Conversion of Currency." Accessed Wednesday, April 17, 2024, https://www.uwyo.edu/numimage/currency.htm

Pagel, Walter. *Paracelsus: An Introduction to Philosophical Medicine in the End of the Renaissance.* Basel: Karger, 1982.

Parry, Graham. *The Seventeenth Century: The Intellectual and Cultural Context of English Literature, 1603-1700.* Essex: Longman Group, 1989.

Peacock, John. *The look of Van Dyck: the self-portrait with a sunflower and the vision of the*

painter. London: Routledge, 2006.

Pearse, Harry. "Historical faith and philosophical theology: the case of Thomas White." *Intellectual History Review* 26, no.2 (2016): 221-243, DOI: 10.1080/17496977.2016.1144421

Pécharman, Martine. "Kenelm Digby on Quality as Divisibility." *Vivarium* 58, no.3 (April 2020): 191-218. doi:10.1163/15685349-12341384.

Petersson, R.T. *Sir Kenelm Digby: The Ornament of England 1603-1665*. Cambridge: Harvard University Press, 1956.

Pearse, Henry John. "Natural Philosophy and Theology in Seventeenth Century England." PhD diss., King's College, 2016. DOI: 10.17863/CAM.8702.

Preston, Claire. *The Poetics of Scientific Investigation in Seventeenth-Century England*. Oxford: Oxford University Press, 2015.

Principe, Lawrence M. "Sir Kenelm Digby and His Alchemical Circle in 1650s Paris: Newly Discovered Manuscripts." *Ambix* 60, no. 1 (2013): 3-24. https://doi.org/10.1179/0002698012Z.00000000019.

Prinke, Rafal J. "New Light on the Alchemical Writings of Michael Sendivogius (1566–1636)." *Ambix* 63, no. 3 (2016): 217-243. Taylor & Francis Online, https://doi.org/10.1080/00026980.2016.1246845.

Prins, Jan. "Ward's polemic with Hobbes on the source of his optical theories." *Revue d'historie des sciences* 46, no. 2/3 (Avril-Septembre 1993): 195-224. JSTOR, https://www.jstor.org/stable/23633820.

Pyle, Andrew. *Atomism and Its Critics*. London: Thoemmes Press, 1997.

Raber, Karen and Thomas Hallock. *Early Modern Ecostudies: From the Florentine Codex to Shakespeare*. New York: Palgrave, 2008.

Reid, Alfred S. "Hawthorne's Humanism: "The Birthmark" and Sir Kenelm Digby." *American Literature* 38, no. 3 (November 1966): 337-351. JSTOR, https://www.jstor.org/stable/2922905.

Remien, Peter. "Oeconomy and Ecology in Early Modern England." *PMLA/Publications of the Modern Language Association of America* 132, no. 5 (2017): 1117-1133. doi:10.1632/pmla.2017.132.5.1117.

--. *The Concept of Nature in Early Modern English Literature*. Cambridge:

Cambridge University Press, 2019. Cambridge Core, https://doi.org/10.1017/9781108654906.

Schabas, Margaret, and Neil De Marchi eds. *Oeconomies in the Age of Newton*. Durham and London: Duke University Press, 2003.

Secret, Francois. "Palingenesis, Alchemy and Metempsychosis in Renaissance Medicine." *Ambix* 26, no. 2 (1979): 81-92. DOI: 10.1179/amb.1979.26.2.8.

Sgarbi, Marco. "Thomas White, an Aristotelian Response to Scepticism." *Archive of the History of Philosophy and Social Thought* 58 (2013): 83-96. ISSN 0066–6874.

Southgate, Beverley C. "A medley of both': Old and new in the thought of Thomas White." *History of European Ideas* 18, no. 1 (1994): 53-60. DOI: 10.1016/0191-6599(94)90146-5

Sutton, John. *Philosophy and memory traces: Descartes to connectionism*. Cambridge: Cambridge University Press, 1997.

--. "Soul and Body." In Peter Anstey ed. *The Oxford Handbook of British Philosophy in the Seventeenth Century*. Oxford: Oxford University Press, 2013: 285-307.

Svalastog, J.M. "Mastering the worst of trades: England's early Africa companies and their traders, 1618-1672." PhD diss., Leiden University, 2018. https://hdl.handle.net/1887/65635

Thomas, Keith. *Religion and the Decline of Magic*. New York: Charles Scribner's Sons, 1971.

--. *Man and the Natural World: A History of the Modern Sensibility*. New York: Pantheon Books, 1983.

Thompson, Jon W. *The Metaphysics of Resurrection in Seventeenth-Century Philosophy*. Cham: Springer Nature Switzerland, 2022. eBook, https://doi.org/10.1007/978-3-031-10168-7.

Tutino, Stefania. *Thomas White and the Blackloists: Between Politics and Theology during the English Civil War*. Burlington: Ashgate, 2008.

von Erhardt-Siebold, Erika. "The Heliotrope Tradition." *Osiris* 3 (1937): 22-46. JSTOR, https://www.jstor.org/stable/301579.

Webster, Charles. *The Great Instauration: Science, Medicine, and Reform 1626-1660*. London, Gerald Duckworth and Co. Ltd., 1975.

Wilde, C. B. "Matter and Spirit as Natural Symbols in Eighteenth-Century British Natural Philosophy." *The British Journal for the History of Science* 15, no. 2 (1982): 99-131. JSTOR, http://www.jstor.org/stable/4025963

Williams, M.R.F. "John Ponce's response to Kenelm Digby's 'A Discourse Concerning Infallibility in Religion' (Paris, 1652)." *Archivium Hibernicum* 65 (2012): 189-208. JSTOR, https://www.jstor.org/stable/23621271.

Wilson, Catherine. *Epicureanism at the Origins of Modernity*. Oxford: Oxford University Press, 2008. https://doi.org/10.1093/acprof:oso/9780199238811.001.0001

Woodward, Walter W. *Prospero's America: John Winthrop, Jr., Alchemy and the Creation of New England Culture, 1606-1676*. Chapel Hill: University of North Carolina Press, 2010.

Woolf, Daniel. *The Social Circulation of the Past: English Historical Culture 1500-1730.* Oxford: Oxford University Press, 2003.

Wolfe, Jessica Lynn. "'Men Are Lived Over Againe' The Transmigrations of Sir Thomas Browne." *Huntington Library Quarterly* 83, no. 1 (Spring 2020): 61-94.