

Reading the Book of Nature: Natural Theology in Early Modern Spain, 1436-1825

Submitted for the Doctor of Philosophy in Theology and Religion

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G.A. Klaeren

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Reading the Book of Nature: Natural Theology in Early Modern Spain, 1436-1825

SHORT ABSTRACT:

This dissertation is an analysis of the development of natural theology in early modern Spain. It examines the definitions and uses of natural theology that occurred within Spanish Catholicism, 1436-1825. This dissertation makes three main arguments: firstly, that the modern parameters of natural theology are ahistorical and insufficient to understanding the term's history; secondly, that the development of natural theology in early modern Spain was contextually determined and distinct from other forms; and thirdly, that understanding these historical contexts and the formation of natural theology reveals new ways of understanding the relationship between theology, philosophy, and the natural sciences.

The parameters of natural theology in early modern Spain were constantly redefined, influenced by ideas about human nature, the intelligibility of the natural world, the noetic effects of sin and the capabilities of human reason, the credibility of experimentalism and observation in the natural sciences, and the authority granted to the Church and to Scripture. As these notions were reshaped in Spain, new and alternative ideas about the scope and legitimacy of natural theology arose. As a result, natural theologies varied in purpose; for example, natural theology was used alternatively throughout the period for evangelization, apologetics, catechesis, and devotion or worship.

This dissertation explores the historical causes for these variations. It challenges scholars of historical theology to recognize a wider definition and use of natural theology. It reconceptualizes the historiography of early modern intellectual history by showing how natural theology was directly related to philosophical and scientific endeavors in the Spanish mentality. Finally, it suggests new ways of developing the "new natural theology" in contemporary discussions. The dissertation incorporates original and archival research of dozens of works from the early modern Iberian world, and consists of an introduction, five chapters, and a conclusion.

FULL ABSTRACT:

This dissertation is a historical theological study examining the changing definition and use of natural theology in early modern Spain (1436-1825). Natural theology, most broadly understood, refers to the generation of knowledge about a divine being from natural sources; it attempts to study or describe God without recourse, therefore, to special revelation. In early modern Spain, natural theology could represent, for example, philosophical attempts to construct rational arguments for the existence of God, the devotional contemplation of God reflected in the works of creation, the description of divine attributes from the study of human nature or human reason. This dissertation analyses the different definitions and uses of natural theology in early modern Spain and explains why these differences occurred due to different historical concerns and contexts. This dissertation makes three main arguments which span its diachronic structure: firstly, that the modern parameters of natural theology are ahistorical and insufficient to understanding the term in past use; secondly, that the development of natural theology historically in early modern Spain was contextually determined and distinct from other forms of natural theology (for example, those experienced in seventeenth- and eighteenth-century England); lastly, that a careful historical theology therefore reveals new ways of understanding the historical relationship between science, religion, and philosophy by examining the way that nature, reason, and the knowledge of God were constructed, articulated, and contested

throughout the early modern period. Natural theology is shown both to have been informed by and to have directly impacted theological doctrines of creation and fallenness, the formation of natural philosophies for the study of the natural world, and the scope and limits of human reason in metaphysics, for example.

This dissertation argues that contemporary notions of natural theology are often too-limited in scope for understanding how natural theology functioned in the past. Modern discussions concerning natural theology are largely the inheritors of a certain *type* of natural theology – the physico-theological tradition of seventeenth-century Britain. This tradition has been widely studied, but little scholarly attention has been given to natural theology within Spain or, indeed, early modern Catholicism. Within natural theology’s latitudinous definition, however, exists the possibility for a variety of ‘natural theologies’ which differ in definition and purpose. Different definitions of “nature,” rival rationalities mediated through culturally-contingent contexts, theological ideas surrounding the noetic effects of sin and the rational powers of humanity, and the discernible order or intelligibility of the natural world (particularly through experimental observation in the natural sciences) all function as ‘experimental parameters’ in shaping the role which natural theology has. As these ideas were challenged and reshaped in Spain during the early modern period, new and alternative ideas about the scope and legitimacy of natural theology were formed. As a result, these natural theologies varied in the purposes; among other reasons, natural theology was used alternatively throughout the period for evangelization, apologetics, catechesis, and devotion or personal worship.

This shows, therefore, the second conclusion of this research: that in order to understand natural theology, it is crucial to situate it within a discrete historical context in order to better understand its definition and use. Common challenges or factors in the formation of different natural theologies serve as key themes which unify the work and allow for a clearer understanding of change over time in the intellectual and theological history of early modern Spain. By closely examining case studies of natural theology and situating them in their historical contexts, I show, for example, natural theology’s relationship with other spiritual and devotional movements, to Spanish scholasticism, to recent advancements made in the natural sciences, and to the rise of secular philosophies. Scholars of natural theology in Protestant England have offered explanations for the rise of physico-theological discourse there, but many of these explanations are insufficient for understanding why natural theology flourished in Spain. Spanish natural theology was the result of uniquely Spanish factors, including the reliance on late-medieval Catholic theologians (including Thomas and Bonaventure), the role of religious orders in developing theological trends, the presence of a censoring and monitoring Inquisition, the structure of the university system and the development of the experimental sciences. I explore several of these historical factors in the final chapter of the demonstration, contrasting them to the current historiography of natural theology.

Thirdly, by showing the flexibility of the term “natural theology,” the ways in which it was redefined and rearticulated, it demonstrates natural theology’s constructedness and dependence on the central notions of “nature,” “reason,” and the “knowledge of God.” These terms, fundamental to natural theology, also connected it to other theological, philosophical, and scientific endeavors of early modern Spain. Natural theology, thus understood, challenges scholars of both early modern intellectual history and historical theology to reconceptualize of the way in which theology, science, and philosophy cooperated to interpret the natural world, to define and articulate rationality, and to create ways of making and discerning meaning. By showing how natural theology in Spain was connected, for example, to the formation of natural

philosophies and to the study of the natural world, my work suggests a new framework for understanding how theology informs science. By examining examples and forms of natural theology which have not previously been part of the historical record, my work challenges the historiography of early modern intellectual history. It also speaks to contemporary discussions surrounding the “new natural theology” and invites theologians to consider underexplored articulations and purposes of natural theology (as, for example, has been recently advocated by theologians such as T.F. Torrance and Alister McGrath). The changing contours of natural theology in early modern Spain are not to be understood as progressive development or improvement towards the present-day; accordingly, my research does not make any overall claims about what natural theology “should” do – but by demonstrating how different Spanish theologians responded to a variety of new ideas and challenges throughout the early modern period, I show what natural theology “could” do.

The dissertation consists of an introduction, five chapters, and a conclusion, all following the development of natural theology diachronically in early modern Spain (1436-1825). After an introducing the definition and the most important theological conversations related to natural theology, each of the first four chapters examines Spanish natural theology in a specific historical context. The final chapter is a comparative analysis of early modern natural theology in Spain to the better-known examples of England and France and a description of the unique historical factors crucial to the formation of natural theology in Spain. The dissertation then concludes by considering future areas of inquiry and how this work invites a reassessment of modern natural theology. The overview of the dissertation is as follows:

<u>Frontmatter:</u>	(Title Page, Abstract, Acknowledgments, Table of Contents, List of Tables)
<u>Introduction:</u>	Natural Theology in Early Modern Spain: Promise and Potential
<u>Chapter One:</u>	The Origins of Natural Theology in Late-Medieval and Early Modern Spain: Ramón Sibiuda and the Legacy of the <i>Liber Creaturarum</i> , 1436-1616
<u>Chapter Two:</u>	Knowing Nature, Self, and God in Renaissance Spain: Natural Theology and the Separation of Man and Nature (1498-1590)
<u>Chapter Three:</u>	Between Metaphysics and Mysticism: Three Visions of Natural Theology in Baroque Spain (1563-1720)
<u>Chapter Four:</u>	Repurposing and Expanding Natural Theology in Enlightenment Spain (1720-1825)
<u>Chapter Five:</u>	Accounting for Differences: Historical Explanations for Spanish Natural Theology Compared to Foreign Works
<u>Conclusion:</u>	Reconceptualizing Natural Theology’s Past and Future
<u>Endmatter:</u>	(Bibliography)

The first chapter, “The Origins of Natural Theology in Late-Medieval and Early Modern Spain,” examines the impact which patristic and medieval writers of natural theology had in forming a foundational definition and understanding for the concept of natural theology in Spain. It especially focuses on the ‘first’ known work of natural theology in Spain, the *Liber Creaturarum* (c. 1436, 1484/5) of Ramón Sibiuda, a Catalan theologian and philosopher. Sibiuda, strongly influenced by Franciscan theologians of the late-medieval period, argued that the study and reflection of man and the natural world as created beings could bring individuals to a deeper and more meaningful relationship with God by revealing the obligation of a created thing to love its

creator. Although his book was not published in Spain, adaptations of it abounded, making it fundamental to understanding the subsequent traditions of natural theology in Iberia. This Sibiudan tradition was subsequently challenged and reshaped in the sixteenth-century, studied in the second chapter particularly by examining Alexo de Venegas's *Primera Parte de las Diferencias de libros que hay en el universo* (1540). Here, I examine Venegas's developments to natural theology in Spain, including his insistence that natural theology was accessible to all humanity, and his decision to separate the study of human reason and natural philosophy. I argue that the adoption of natural theology by Spanish mystics, including a heretical sect known as the *alumbrados*, resulted in a divergence between works of natural theology which studied human nature and the created world and which relegated some forms of natural theology to a marginal status.

In the third chapter, "Between Metaphysics and Mysticism," I examine the different forms of natural theology in Baroque Spain, presenting three alternative visions: metaphysical natural theologies of reason, symbolic or thaumatic natural theologies reliant on the observation of the natural world, and mystical natural theologies of devotion. In the fourth chapter, "Repurposing and Expanding Natural Theology in Enlightenment Spain (1720-1825)," I show that in addition to rational arguments used for the defence of the faith (particularly against atheism and deism), the study of the order, regularity, and disposition of the natural world became a prominent focus within works of natural theology. I show how natural theology was both repurposed for apologetics and expanded by developments in the natural sciences. While Spanish natural theology during the seventeenth and eighteenth centuries was influenced by works of physico-theology, it remained nonetheless distinct on several points. To clarify these points, as well as to emphasize the contextual embeddedness of natural theology in space and time, I compare the differences between the historical factors which led to the production of early modern Spanish and early modern English works of physico-theology. These factors are explored in detail in the final chapter, "Accounting for Differences." The dissertation concludes by examining ways in which the historical example of early modern Spanish natural theologies might challenge and refocus contemporary concerns and conversations regarding natural theology, science, and religion.

This dissertation utilizes resources from numerous libraries and archives, including digital access and collections, including the Rare Books and Manuscripts collection of the Weston Library and the Bodleian Libraries of the University of Oxford, the John Carter Brown Library of Brown University, the British Library, the Biblioteca Nacional de España (National Library of Spain), and the Archivo Histórico Nacional (National Historical Archives) of Spain. The majority of these primary resources are printed works in Spanish, although the dissertation also incorporates manuscripts as well as primary sources in other languages (notably, English, French, Portuguese, and Latin). The dissertation has also incorporated most of the work from my MSt thesis on natural theology in the enlightenment (Oxford 2018), largely in the fourth chapter.

My research is the first work to fully study the subject of natural theology in the early modern Iberian world. Furthermore, it has discovered a vast corpus of works of natural theology that existed in Spain and makes these writings accessible to Anglophone scholarship. It challenges both the existing historiography of the intellectual and theological traditions of the early modern period as well as theological scholarship on the definition, scope, and use of natural theology as a category of thought. It makes a significant contribution, therefore to both theological studies as well as the intellectual history of religion.

**Introduction: Natural Theology in Early Modern Spain: Problems and Potential
Pathfinding and the Natural Knowledge of God**

In the summer of 1805, the explorers Lewis and Clark were at a metaphorical crossroads. Having been commissioned to explore the newly-acquired territory of the Louisiana Purchase and to secure land rights in the Pacific Northwest along navigable waterways, they had set out from Pittsburgh over a year previously and traveled up the Missouri River to present-day Montana, where the river now forked into southern and northern directions – each unknown to the expedition. “An interesting question was now to be determined;” wrote Lewis in his journal – which of the rivers was the Missouri?¹ The stakes were high, as Lewis contemplated the decision in his entry for June 3rd:

To mistake the stream at this period of the season...and then be obliged to return and take the other stream would not only loose [sic] us the whole of this season but would probably so dishearten the party that it might defeat the expedition altogether. convinced [sic] we were that the utmost circumspection and caution was necessary in deciding on the stream to be taken.²

In the end, Lewis and Clark split into two parties for ten days to scout both directions. Only after confirming that the northern stream was a tributary did the expedition travel onward to the headwaters of the Missouri.³

Lewis and Clark had chosen the Missouri as their path, and they were challenged by the difficulty of staying on course. To travel from Pittsburgh to the Pacific, however, one need not go via the Missouri. If someone were to ask how to travel this route, there are countless ‘correct’

¹ Unless otherwise noted, all translations are my own; when alternative translations of sources are used, these are specified. Lewis Journal, June 3, 1805. Meriwether Lewis, “The Journals of the Lewis and Clark Expedition,” The Journals of the Lewis and Clark Expedition [University of Nebraska-Lincoln Libraries Electronic Text Center], accessed March 19, 2020, <http://lewisandclarkjournals.unl.edu>.

² Lewis Journal, June 3, 1805. Lewis.

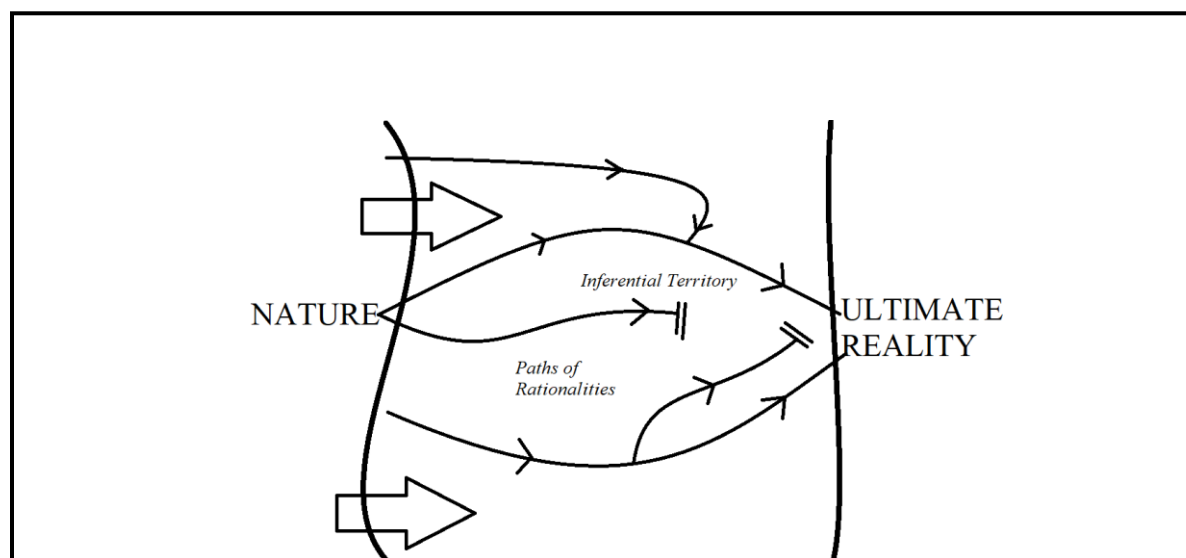
³ The National Parks Service and the Bureau of Land Management maintain a commemorative overlook of this historic site, known as “Decision Point,” outside of Loma, Montana.

answers. Establishing some ground rules and clarifying through questions would be necessary. How long can the trip take? Is there a required mode of transportation? Imagine that the question was clarified to ask what the *best* way to travel this route is. This question is hardly better. What is the questioner's definition of 'best'? The answer given reveals assumptions made for each question: i.e. it is better to be scenic than to be fast, or it is better to travel by train than by airplane. To make the claim that one way is better than another requires the articulation of a set of definitions and axiological criteria. For Lewis and Clark, the best route was likely the one with the highest probability of success. For a modern traveler, the 'best' route might involve a leisurely journey in a luxurious train car or riverboat cruise.

Natural theology, the subject of this dissertation, can be likened to wayfinding – in this case, charting courses from nature to God. Like explorers navigating through the wilderness, natural theologians travel from nature to God through different ways of knowing; unlike Lewis and Clark, however, who knew they wanted to reach the Pacific by way of the Missouri, neither the point of departure nor the destination is necessarily known, nor are the methods of travel or routes agreed upon. At its most basic definition, natural theology is the term used to describe the establishment of knowledge about a divine being(s) from natural sources. It is “natural” because it relies upon “natural” sources, and it is “theology” because it is a study which seeks to generate information or knowledge about a divine being(s). This is, unfortunately, about all that can be feasibly defended as a central definition of the term. The long history of natural theology is a record of the past attempts to find paths which lead from the study or contemplation of nature (whatever that is) to the knowledge of God (whatever that may look like). Wesley Wildman has described the project of natural theology as the cumulative efforts to create paths from nature to “ultimate reality” – an endeavor which involves crossing through what Wildman has described

as “inferential territory.”⁴ He provides the following “map” of natural theology as a possible way of understanding its goals.

Fig. i: Wildman’s ‘Map’ of Natural Theology⁵



Wildman thus envisions the record of natural theology as a series of attempts to move from nature to ultimate reality.⁶ The map which Wildman proposes is useful because it highlights the three central ideas with which any natural theology must contend and which form the common themes of this study of historical theology: (1) Nature, (2) Rationality, and (3) the Knowledge of God.

The particulars of the paths through these three ‘realms’ have varied greatly in time and place – accordingly, the definition and use of natural theology has changed. Just as picking a

⁴ Wildman eschews what he describes as the “potentially parochial” and anthropomorphic conception of God in favor of a Weberian-influenced conception of “ultimate reality” (Wildman 407); this position is not shared by this dissertation. Wesley J. Wildman, “Behind, Between, and Beyond Anthropomorphic Models of Ultimate Reality,” *Philosophia* 35, no. 3 (June 21, 2007): 407.

⁵ A version of this illustration was presented by Wildman as part of a panel; see Wesley J. Wildman, “God and the Book of Nature in the 21st Century” (Lecture for the Ian Ramsey Centre for Science and Religion, Theology Faculty Main Lecture Room, Gibson Building, University of Oxford, March 11, 2020).

⁶ Wesley J. Wildman, “Theology Without Walls: The Future of Transreligious Theology,” *Open Theology*, Is Transreligious Theology Possible?, 2, no. 1 (April 1, 2016): 246.

path to the Pacific involves deliberate choices and agreed-upon ‘ground rules’ of travel, any one of the meandering ways from nature to God found in natural theology reveals how followers of that theology thought about nature, rationality, and the knowledge of God. It gives an indication of how the practitioner of a given natural theology envisioned its purpose or application and helps to understand related theological and philosophical concepts, for example, doctrines or ideas about reason and nature. A close study of any one path or a group of inferential trails can even help to understand the historical context in which those paths were formed; certainly, understanding the historical context can assist in accounting for the particular ‘navigational’ decisions of a given expression of natural theology.

This dissertation is an historical analysis of the various forms of natural theology which occurred in a specific place (Spain) at a specific time (1436-1825) in order to better understand the contextuality and constructedness of natural theology (and of theological ideas more broadly). It demonstrates this fundamental point: natural theology contained many different practices and arguments; these different practices reveal how individuals and societies at given times and places thought about nature, rationality, and the knowledge of God. To historians, this dissertation reconceptualizes the religious and intellectual history of early modern Europe by demonstrating how the conceptual category of natural theology creates a unified way of understanding the efforts of theologians and philosophers, particularly in the Iberian World and within early modern Catholicism. At the same time, this dissertation challenges modern theologians and philosophers engaged in the larger project of the “revival of natural theology” to engage with the entire catalog of historical examples of natural theology, to avoid anachronistic or ahistorical caricatures, and to use the past as a template for developing their own natural

theologies.⁷ As the Marco Damonte has argued, “Natural Theology is not absolute, but depends on a metaphysical, anthropological, and religious vision which forms a matrix (*quadro*) in which it is made possible.”⁸ This dissertation is an analysis of the *quadro* which produced dozens of theological and philosophical works of natural theology in Spain during the early modern period, and by extension, it helps to better situate other natural theologies in similar historical matrices.

Contemporary Natural Theologies and the Challenge of History

Even as a contemporary term, “natural theology” (*theologia naturalis*) is “highly ambiguous.”⁹ A survey of present-day philosophers and theologians (see Fig. 2) reveals a spectrum which ranges from projects which attempt to discern the existence of God or Being or Ultimacy, to those that wish to describe the character or attributes of this being; from studies that begin with the scientific observation of the external world to those that analyse the logical structure and coherence of human reason; from cosmic fine-tuning to arguments from aesthetics. Charles Taliaferro describes natural theology as “the practice of philosophically reflecting on the existence and nature of God independent of real or apparent divine revelation or scripture...”, and cites as a basis for this William Alston’s description of it as “the enterprise of providing

⁷ In this project might be considered post-Barthian responses to viable forms of natural theology, including: Richard Swinburne, “The Revival of Natural Theology,” *Archivio Di Filosofia* 75, no. 1/2 (2007): 303–22; Alister E. McGrath, *Re-Imagining Nature: The Promise of a Christian Natural Theology* (Chichester: John Wiley & Sons, 2016); Alister E. McGrath, *The Open Secret: A New Vision for Natural Theology* (Oxford: Blackwell Publishing, 2008), <http://ebookcentral.proquest.com/lib/oxford/detail.action?docID=416542>; Nicholas Thomas Wright, *History and Eschatology: Jesus and the Promise of Natural Theology* (London: Society for Promoting Christian Knowledge, 2019); Egil Asprem, “Five Schools of Natural Theology: Reconciling Science and Religion,” in *The Problem of Disenchantment: Scientific Naturalism and Esoteric Discourse 1900-1939*, Numen Book Series, Volume 147 (10 July 2014: Brill, Leiden), 199–286; Thomas F. Torrance, *Reality and Scientific Theology*, 2001 Edition (Original 1985) (Eugene: Wipf and Stock Publishers, 2001); Alexander J.D. Irving, *T.F. Torrance’s Reconstruction of Natural Theology: Christ and Cognition* (Lanham, Maryland: Lexington Books (The Rowman & Littlefield Publishing Group, Inc.), 2019); Marco Damonte, *Una nuova teologia naturale: la proposta degli epistemologi riformati e dei Tomisti Wittgensteiniani* (Rome: Carocci, 2011).

⁸ Damonte, *Una nuova teologia naturale*, 138.

⁹ Alan G. Padgett, “Theologia Naturalis: Philosophy of Religion or Doctrine of Creation?,” *Faith and Philosophy* 21, no. 4 (November 1, 2004): 494.

support for religious beliefs by starting from premises that neither are nor presuppose any religious beliefs.”¹⁰ He therefore differentiates it from “revealed theology” which relies upon revelatory knowledge sources, writing that “...Natural theology, on the other hand, develops arguments about God based on the existence of the cosmos, the very concept of God, and different view of the nature of the cosmos, such as its ostensible order and value.”¹¹ Within this definition lies a wide latitude of theological practices, including cosmological arguments, ratiocination from consciousness, and even suppositions based on human morality.¹²

The key themes of “nature,” “reason,” and “the knowledge of God” form the fundamental ideas which support most of these definitions, but the variations on how each is interpreted are numerous and often unstated in modern scholarship, leading to misunderstandings and unnecessary confusion or controversy. Moreover, “natural theology” has also been applied to the category of theological activity dedicated to cultivating a doctrinal, Christian approach to nature. Alan G. Padgett advocates that scholars divide *theologia naturalis* into two academic practices: “natural theology,” meaning the “philosophical arguments concerning the existence and nature of a god,” and “theology of nature,” referring to attempts to develop a doctrine of nature and creation by reference to revealed theology.¹³

Such modern definitions and separations may have the merit of utility to contemporary practitioners, but they falter when applied to the historical study of the genre. From the moment we attempt to bring any of the modern luggage of natural theology into the past, we find that,

¹⁰ Charles Taliaferro, “The Project of Natural Theology,” in *The Blackwell Companion to Natural Theology*, ed. William Lane Craig and J.P. Moreland (Chicester: Wiley-Blackwell, 2012), 1.

¹¹ Taliaferro, 1; Padgett, “Theologia Naturalis,” 494; Padgett notes that natural theology need not concern the existence of a deity but can simply describe the attributes of that deity - for example, Cicero's *On the Nature of the Gods*. Marcus Tullius Cicero, *M. Ciceronis De Philosophia*, ed. Paulus Manutius, vol. 2: De natura deorum, De divinatione, De fato, De legibus, De universitate, Arati versus in latinum conversi, Q. Ciceronis de petitione consulatus (Venice, 1565).

¹² McGrath, *Open Secret*, 2.

¹³ Cited in Padgett, “Theologia Naturalis,” 494, ft. 8.

regrettably, it is oversized and unable to make the journey with us. Moreover, we discover that the ideas which are central to the discipline of natural theology (nature, rationality, the knowledge of God) do not look the same then as they do now. These terms, far from having any universality, were thought of differently across early modern Spain, and, therefore, the natural theologies which were produced at different times engaged the ontologies of nature, of reason, and of divine being in drastically divergent ways. The result of anachronistically examining the past for any precedents to our modern definitions is that the historiography has generated a genealogy for the history of natural theology which is incomplete – it tells only the story of the particular seeds of natural theology that have grown into the forms which flourish in religious discussion today and which have been revived in the last decades of scholarship as the “new natural theology.”¹⁴

¹⁴ Discussed in detail in the conclusion.

Fig. ii: Contemporary Definitions of Natural Theology¹⁵

Alvin Plantinga	"...the attempt to provide proofs or arguments for the existence of God...of producing proofs or arguments for <i>theism</i> ..."
Alister McGrath	"...a general enterprise of exploring symbolic and discursive correlations between the natural world and God."
James Barr	"... 'by nature', that is, just by being human beings, men and women have a certain degree of knowledge of God and awareness of him, or at least a capacity for such an awareness; and this knowledge or awareness exists anterior to the special revelation of God..."
Wesley Wildman	"...direct entailment from the world to God...to infer a partial metaphysics of ultimacy from a partial ontology of nature."
John Polkinghorne	"...the search for the knowledge of God by the exercise of reason and the inspection of the world."
Arthur Peacocke	"...looking at developments in the sciences...and then thinking about any possible implications they might have for Christian theology...relating their best knowledge of the natural world to these wider issues of intelligibility and meaning which they formulated in Christian terms."
Ian Barbour	"...the scientific interpretation of nature provides the ground for a rational argument for a religious interpretation..."
Richard Swinburne	"...arguments from evident features of the natural world to the existence of God..."
Peter Harrison	"...an activity that from "neutral" premises offers arguments that establish the existence of God and certain of his attributes."
Andrew Chignell and Derk Pereboom	"...the project of arguing for the existence of God on the basis of observed <i>natural facts</i> ...using the cognitive faculties that are "natural" to human beings – reason, sense-perception, introspection – to investigate religious or theological matters."

¹⁵ Alister E. McGrath, *Science and Religion: A New Introduction*, 2nd ed. (Oxford: Wiley-Blackwell, 2010), 110; Alvin Plantinga, "The Prospects for Natural Theology," *Philosophical Perspectives* Vol. 5, Philosophy of Religion (1991): 287; Andrew Moore, "Should Christians Do Natural Theology?," *Scottish Journal of Theology* 63, no. 2 (2010): 128; Alister E. McGrath, "Loving Science, Discovering God: An Autobiographical Reflection on Science and Theology," *Theology and Science* 17, no. 4 (October 1, 2019): 438; James Barr, *Biblical Faith and Natural Theology: The Gifford Lectures of 1991 Delivered in the University of Edinburgh* (Oxford: Clarendon Press, 1993), 1; Wesley J. Wildman, "Comparative Natural Theology," in *The Oxford Handbook of Natural Theology*, ed. John Hedley Brooke, Russell Re Manning, and Fraser Watts (Oxford: Oxford University Press, 2013), 370; John C. Polkinghorne, *Science and Creation: The Search for Understanding*, 2006 Edition (Original 1998 SPCK) (West Conshohocken: Templeton Foundation Press, 2006), 8; Arthur Peacocke, *Creation and the World of Science: The Re-Shaping of Belief*, 2004 (First published, 1979, Reprinted 1998) (Oxford: Oxford University Press, 2004), 47; Ian G. Barbour, "Experiencing and Interpreting Nature in Science and Religion," *Zygon: Journal of Religion and Science* 29, no. 4 (December 1994): 465; Swinburne, "The Revival of Natural Theology," 303; Peter Harrison, *The Territories of Science and Religion* (University of Chicago Press, 2015), 71; Andrew Chignell and Derk Pereboom, "Natural Theology and Natural Religion," *Stanford Encyclopedia of Philosophy*, Spring Edition 2017, <=<https://plato.stanford.edu/archives/spr2017/entries/natura-theology/>>; Jonathan R. Topham, "Natural Theology and the Sciences," in *The Cambridge Companion to Science and Religion*, ed. Peter Harrison (Cambridge: Cambridge University Press, 2010), 59; Torrance, *Reality and Scientific Theology*, 38, xiv (two definitions); Thomas Dixon, "Natural Theology," in *New Dictionary of the History of Ideas*, ed. Maryanne Cline Horowitz (Charles Scribner's Sons, 2005), 1610, <https://ezproxy-prd.bodleian.ox.ac.uk:2608/apps/doc/CX3424300536/GVRL?u=oxford&sid=GVRL&xid=544ac10c>.

Jonathan Topham	“...a type of theology which relies on reason (which is natural), unaided by any evidence derived from God’s revelation through scriptures, miracles or prophecies (which is supernatural).”
Thomas F. Torrance	“...an independent conceptual system, claiming to have its value precisely in that independent status, as a sort of <i>praeambula fidei</i> , antecedent to positive theology, fulfilling a mediating and apologetic function...to reach and teach knowledge of God, apart altogether from any interaction between God and the world, and proceeds by way of abstraction from sense experience and inferential and deductive trains of reasoning from observed or empirical facts.” (historical definition)

The Genealogy of Natural Theology

Because the concept has changed definition and use over time and place, it is crucial that scholars of natural theology are attentive to the historical settings in which past authors employed the term and contextualize the works of natural theology within the circumstances in which they were written. In *Re-imagining Nature*, Alister McGrath has emphasized the need to understand natural theology as a mutable concept and proposes a “genealogical approach which seeks to identify how this idea has been understood.”¹⁶ This method, in addition to liberating natural theology from the definitional hegemony of the present, allows us to see how the term evolved in different historical contexts, displaying alternative applications and interpretations of the way in which individuals viewed the relationship between God and nature.

McGrath has outlined six categories of Christian natural theology that developed in the history of western philosophy and theology; two of the approaches have been the most significant historically.¹⁷ The first is the intellectual exercise of using reason to discern truths about God and metaphysics, without using revealed knowledge. The second is the practice of studying the natural world and natural order to prove or support the existence and character of God.¹⁸ Many scholars have studied these two forms of natural theology as they were practiced in the medieval and early modern periods. Scott Mandelbrote and Peter Harrison have examined, for example, the particular historical trajectory of natural theology in early modern England, a

¹⁶ McGrath’s definition of natural theology as “the systematic exploration of a proposed link between the everyday world of our experience and another asserted transcendent reality” encompasses both the ontotheological and cosmotheological, subsuming under “experience” both phenomena of the mind and of the external world. McGrath, *Re-Imagining*, 11.

¹⁷ McGrath, 19–21.

¹⁸ McGrath, 19–21.

narrative which has dominated the historiography of early modern natural theology as the sole explanans and which is discussed in chapter five (“Accounting for Differences”).¹⁹

I argue that the definitional permeations of natural theology, both contemporarily and historically, is a main reason that this subject has been so often neglected or misunderstood, especially in historical studies. There is a pronounced silence within the historiography of Spain on the subject. Although Spain was known for its theological activity and defence of Catholicism throughout the early modern period, almost no work of secondary scholarship has studied Spanish natural theology.²⁰ Revered intellectual historians and historical theologians of Spain such as Melquiades Andrés Martín, Marcelino Menéndez Pelayo, and Mario Méndez Bejarano are almost entirely silent on the matter, and only recently have some scholars revived it as a possibly useful category of analysis.²¹

Spanish Natural Theologies: An Inclusive Approach to What-Might-Have-Been

An Inclusive Approach

¹⁹ Scott Mandelbrote, “The Uses of Natural Theology in Seventeenth-Century England,” *Science in Context* 20, no. 3 (2007): 451–80; Scott Mandelbrote, “Early Modern Natural Theologies,” in *The Oxford Handbook of Natural Theology*, ed. Russell Re Manning, John Hedley Brooke, and Fraser Watts (Oxford: Oxford University Press, 2013), 75–99; Peter Harrison, “Natural Theology, Deism, and Early Modern Science,” in *Science, Religion and Society: An Encyclopedia of History, Culture, and Controversy*, ed. Arri Eisen and Gary Laderman (London: Routledge, 2015), 426–33; Peter Harrison, “Physico-Theology and the Mixed Sciences,” in *The Science of Nature in the Seventeenth Century*, Studies in History and Philosophy of Science (Springer, Dordrecht, 2005), 165–83; Harrison, *Territories*.

²⁰ A handful of articles have been published in the last twenty years. There is only one exception as a full-scale study: María M. Portuondo, *The Spanish Disquiet: The Biblical Natural Philosophy of Benito Arias Montano* (Chicago: The University of Chicago Press, 2019). This work is limited in its conceptualization of natural theology and restricts its application to natural philosophical observations of the created, observable, external world for the generation of knowledge about God.

²¹ Melquiades Andrés Martín, *La teología española en el siglo XVI*, vol. 1, 2 vols., Biblioteca de autores cristianos 13 (Madrid: Biblioteca de Autores Cristianos, 1976); Marcelino Menéndez y Pelayo, *Historia de los heterodoxos españoles*, Digital edition (Alicante: Biblioteca Virtual Miguel de Cervantes, 2003), <http://www.cervantesvirtual.com/obra/historia-de-los-heterodoxos-espanoles/>; Mario Méndez Bejarano, “Cataluña en la edad media,” in *Historia de la filosofía en España hasta el siglo XX* (Madrid: Renacimiento, 1929), 97–116, <http://www.filosofia.org/aut/mmb/hfe11.htm>. Bejarano briefly discusses the subject when writing on Ramón Sibiuda.

One of the more significant contributions to the historical study of natural theology is an unpublished doctoral thesis by Thomas Woolford (Cambridge, 2011).²² Woolford writes that natural theology, “being subject to changes occasioned by philosophical and theological faddism and development, needs to be considered within a particular chronological *locus*.”²³ Accordingly, he analysed in his work the development of natural theology and its impact on natural philosophy in the “late Renaissance” (a term which remains undefined throughout the thesis). The result is a historical account that is far more sensitive to the nuances of natural theology in this time. However, there are two problems with Woolford’s research that my dissertation addresses. Firstly, while Woolford focuses on a “chronological *locus*,” he neglects to place similar restrictions on *place*, which are critical to the localized production of knowledge and the mediation of ideas through a particular sociocultural context. Secondly, Woolford does not embrace an inclusive approach to the definition of natural theology during the late Renaissance, but excludes all forms of natural theology except for those predicated on the scientific observation of the external world.

Woolford admits that his study “avoided pure metaphysics...instead looking for how the study of nature was applied to affect knowledge of God.”²⁴ He thus limits himself to one specific type of natural theology, excusing this by noting, “In any case, it is a mistake to get too preoccupied with the particular phrase: the underlying doctrine and its interactions with other areas of theological and philosophical thought is the important thing.”²⁵ But what is the “underlying doctrine” of natural theology, and how can one understand its connections to other

²² Thomas Woolford, “Natural Theology and Natural Philosophy in the Late Renaissance” (PhD Dissertation, Cambridge, Trinity College, University of Cambridge, 2011).

²³ Woolford, iii.

²⁴ Woolford, 3.

²⁵ Woolford, 3.

areas of theology and philosophy by examining only one area of it? My dissertation is distinct from Woolford's and from other historical studies – not only because it examines natural theology in a particular sociocultural setting (Spain), nor because it examines the changing parameters of natural theology over a longer period of time (early modern, including the late-Renaissance), but precisely because it has not restricted its consideration of natural theology to “natural-theology-meaning-X”.

Woolford jests that he has heeded Francis Bacon's advice to limit natural theology in order to escape the “strangely commixed and confused” skein of “a certain Rapsodie of Naturall Theologie, and of divers parts of Logicke: And of that part of Naturall Philosophie...”²⁶ I have ignored Bacon's suggestion: my dissertation explains the theological connective tissues which allowed for natural theology to be applied to, on the one hand, Suárez's metaphysical and scholastic disputations, and on the other, the study of the natural world. I study natural theology in its entirety firstly because the partitioning of it is ahistorical, and secondly because I seek to understand what essence of natural theology grants it this polymorphism. Examining any one particular application of natural theology can tell us much about, for example, the relationship between religion and the development of the natural sciences or changing ideas about the validity of the ontological argument; examining the entire, vast, ‘rhapsodic’ mess *en masse*, however, reveals to us the contours of the most fundamental ideas which undergirded natural theological endeavors and formed the foundations for the early modern mind. These ideas form the most basic questions which are raised in each chapter of this book: How can we know God from natural sources? What constitutes a “natural source” of knowledge? By what rational standards

²⁶ Woolford, 3; Francis Bacon, *The Advancement of Learning*, ed. Michael Kiernan, Electronic Resource (Oxford: Oxford University Press [Clarendon], 2000), 76, <https://ezproxy-prd.bodleian.ox.ac.uk:2475/view/10.1093/actrade/9780198123484.book.1/actrade-9780198123484-book-1>.

do we apprehend and make sense of this knowledge? Ultimately, what does this knowledge tell us or do for us in relation to God?

The Counterfactual Potential of Spanish Natural Theology

This dissertation focuses on the history of natural theology in early modern Spain to correct all of the aforementioned historiographical oversights. Its first contribution, therefore, is to the historical study of theology, philosophy, and science during the early modern period. Not only do I revise a narrative which has excluded Spanish contributions to natural theology, I challenge historians of this period to reconceptualize the way they view the interaction between metaphysics and physics during the early modern period by seeing these fields through the lens of natural theology. The second major contribution of this research is that it questions the contemporary “revival of natural theology” which has emerged among theologians and philosophers in the last forty years. It offers to this discussion a revised historical narrative, grounds this work with historical precedents and examples, clarifies mistakes in terminology, and even more importantly, poses possible interpretations and potential uses of natural theology that have been marginalized because the Ray-Paley-Darwin dynasty has been so persuasive in defining the parameters of our modern-day understanding of the meaning and purpose of natural theology. Early modern Spain offers a chance to rewrite the story, to play counterfactual history and imagine a land of might-have-been natural theologies – a world where our understanding of what constitutes nature, reason, and the divine is different from that of our narrowly defined post-Enlightenment evidentialism.²⁷ As Harrison has noted about the possibilities of studying

²⁷ Nicholas Wolterstorff, “The Migration of the Theistic Arguments: From Natural Theology to Evidentialist Apologetics,” in *Rationality, Religious Belief, and Moral Commitment*, ed. William Wainwright and Robert Audi (Ithaca: Cornell University Press, 1986), 38–81; Alister E. McGrath, *The Territories of Human Reason: Science and Theology in an Age of Multiple Rationalities*, Ian Ramsey Centre Studies in Science and Religion (Oxford: Oxford University Press, 2019).

the history of science and religion, the study of the past “...offers some intriguing intimations of how things might have been, and might yet be, rather different.”²⁸

Key Themes for Understanding Natural Theology in Early Modern Spain

Natural theologies, therefore, take many different forms depending on the time and place. McGrath has described natural theology as “...conceptually fluid, resistant to precise definition...”²⁹ If we are to speak meaningfully about natural theology, we must regularly return to clarify each of the three realms encountered in all projects of natural theology. Like pathfinders from Pittsburgh to the Pacific, we need to know from where we are starting (what constitutes nature), where we are going (what constitutes the knowledge of God), and how we are going to get there (what methods for establishing knowledge are acceptable). The concepts of these three realms – Nature, Rationality, and the Knowledge of God – serve as the themes which unite the various case studies presented in the first four chapters of this dissertation. Thinking conceptually about each of these three categories helps to create a core set of questions and assumptions shared between even the most seemingly disparate sets of natural theologies. As they will be discussed in more detail as they are introduced and applied to the historical examples throughout the dissertation, they are briefly summarized here.

The First Realm: Nature³⁰

As McGrath has argued, “‘Nature’ is an Indeterminate Concept.”³¹ Questions arise from the concept of ‘nature’ in early modern Spain, for to say that natural theology is predicated on

²⁸ Harrison, *Territories*, 198.

²⁹ McGrath, *Open Secret*, 3.

³⁰ Peter Remien, *The Concept of Nature in Early Modern English Literature* (Cambridge: Cambridge University Press, 2019); Lorraine Daston, “The Nature of Nature in Early Modern Europe,” *Configurations* 6, no. 2 (Spring 1998): 149–72; R.G. Collingwood, *The Idea of Nature* (Oxford: Clarendon Press, 1945); James A. Weisheipl, O.P., *Nature and Motion in the Middle Ages*, ed. William E. Carroll, *Studies in Philosophy and the History of Philosophy* 11 (Washington, D.C.: The Catholic University of America Press, 1985).

³¹ McGrath, *Open Secret*, 7.

natural sources necessarily demands clarification as to which sources qualify as natural. A cursory examination of the varied uses of the term indicate the difficulty in determining what is meant by nature and what can therefore be rightly called ‘natural.’ The *Diccionario de los Autoridades*, published by the *Real Academia Española* in 1727, contained no less than twelve different definitions for “nature” (*naturaleza*), including the “essence...of each thing,” the “aggregate...of all the entities that compose the universe,” to be “...independent of artifice...,” and “the propensity or inclination of things,” among others.³² Many scholars have undertaken to study the shifting definition of nature in medieval and early modern Europe, particularly scholars in the history and philosophy of science, literary studies, and the history of knowledge.³³ By examining natural theology, my research adds to the understanding of how early modern individuals thought about nature, and how nature could form a nexus for theological, philosophical, and natural philosophical inquiry. Was nature understood to mean the external, physical, observable world? Were the interior, rational, and cognitive powers of the human soul part of nature? How did different theological or philosophical presuppositions shape the way that individuals conceived of, viewed, and engaged the natural world? Key among these discussions are: the influence of the metaphor of the “book of nature” in the Christian tradition for framing discussion, the distinction between nature and creation, the division between the macrocosm and microcosm of nature, variant cultural constructions of what constitutes “the natural”, and the doctrine of general revelation in shaping ideas about nature.

³² Real Academia Española, *Diccionario de La Lengua Castellana, En Que Se Explica El Verdadero Sentido de Las Voces, Su Naturaleza y Calidad, Con Las Phrases o Modos de Hablar, Los Proverbios o Refranes, y Otras Cosas Convenientes al Uso de La Lengua*, vol. IV (G-Ñ), VI vols. (Madrid: Francisco del Hierro, 1734), <http://web.frl.es/DA.html>.

³³ See, for example, chapter two in C. S. Lewis, *Studies in Words*, Second Edition (Cambridge: Cambridge University Press, 1990); Daston, “The Nature of Nature”; Remien, *The Concept of Nature*.

Works of natural theology espoused different conceptions of what nature meant and included over the early modern period. This can often be seen in the metaphors or frameworks authors employed for approaching nature. One way in which nature is often encountered in historical works of theology is through reference to the metaphor of the “Book of Nature.” For a Christian trope that can be easily found in theological works from the Patristic authors through the enlightenment, the idea of the “two books” – a “Book of Scripture” and a “Book of Nature” – has received shockingly little analytical treatment by religious and intellectual historians. Indeed, the presence of this metaphor is usually presented as an established fact that requires little explanation. In fact, the “book of nature” as a metaphor was mutable. Giuseppe Tanzella-Nitti highlights that the metaphor of a book conveys that nature is similarly a vessel of information, but that the specific connotations of books also directly relates to *logoi* theology of creation.³⁴ This analogy was frequently employed in works of natural theology in early modern Spain, but in most cases this term requires additional definitions as to its meaning. What is included in the “book of nature” or in the meaning of “nature” is often also divided in Spanish early modern natural theology by conceiving of a microcosm-macrocosm of nature. Many Spanish authors sought to negotiate the tension between the externally, observable natural world and humanity’s role in it as part of natural creation. Accordingly, different ways of either dividing between a macrocosmic conception of nature (i.e. all of the outside natural world) and a microcosmic conception (what may be discerned by studying the rationality, sense, and experience of humanity) is often presented. Lastly, it is important to note that in Spanish natural

³⁴ Giuseppe Tanzella-Nitti, “Book of Nature, Origin and Development of the Metaphor,” in *Interdisciplinary Encyclopedia of Religion & Science*, 2019, inters.org/book-of-nature; see also: G. [Giuseppe] Tanzella-Nitti, “The Two Books Prior to the Scientific Revolution,” *Perspectives on Science and Christian Faith* 57, no. 3 (September 2005): 235–48.

theology, there was a close association between nature and creation – indeed, the idea of a “natural world” for study was almost inextricably linked with Christian doctrines of creation.

The Second Realm: Reason

The second realm describes how nature is interrogated and observed, how human cognition encounters it, classifies and organizes, and creates arguments or analogies by which knowledge is generated – simply put, it concerns the patterns of reason and notions of rationality. The examples of natural theology presented in this dissertation followed various ways of making sense and meaning from the observation of nature. Some, for example, wrote that nature had to be encountered like a “cypher” or a “painting”, where the elements of the world were studied for allegorical or emblematic meaning.³⁵ Others argued that the path from nature to God did not involve the exercise of reason at all, but rather passive acceptance of a divinely-given knowledge. Many others relied upon the use of natural philosophy and the natural sciences to examine and interpret the external, natural world – but even here, differences existed between Aristotelian natural philosophy and the “new philosophies” of science which arose in the late-seventeenth and eighteenth centuries. As will be demonstrated, ‘observing nature’ and ‘creating good arguments and justifications’ were not universal ideas, but evolved over time and responded to scientific, theological, and philosophical influences. All of these examples reinforce the notion that reason, like nature, is also specific to the particular horizon of a given historical context.³⁶ Moreover, the plurality of natural theologies offer alternative strategies for meaning-making.

³⁵ Juan Eusebio Nieremberg, *Curiosa, y Oculta Filosofia. Primera, y Segunda Parte de La Maravillas de La Naturaleza, Examinadas En Varias Questiones Naturales.*, Third edition, added to by the same author (Alcalá: Imprenta de Maria Fernandez, 1649), 330.

³⁶ McGrath, *Territories of Human Reason*.

Key discussions on reason which arise in the story of early modern Spanish natural theology include the universality or naturality of human reason and the limitations of human reason, particularly in light of Christian theological assumptions of the Fall and the cognitive effects of sin and grace in a postlapsarian world. Many of the authors of Spanish natural theology invoke a notion of reason or specifically describe rationality as following a set of rules which are universally agreed upon; the scholastic Francisco Suárez, for example, assumed that his notions of rational argument, informed by Aristotle and Aquinas, functioned like universal laws. Suárez argued that the evidence of God was self-evident based on this notion of natural reason; this is a common position which will be seen in many of the works of Spanish natural theology. McGrath has argued that although “this philosophical understanding of natural theology accentuates its independence of any religious tradition... envisag[ing] human reason operating autonomously,” it does not recognize the “cultural variance” of reason and the media through which shapeshifting ‘nature’ is observed and rationalized by human agents.³⁷ This conversation becomes even more important in the eighteenth century, when natural theology was reframed by Spanish theologians to defend Christianity by arguing against skeptics using a “common” or universally-agreed upon language of reason. Many Spanish theologians indicated that all humans shared the experience of having “natural reason,” but whether this translated to a shared way of expressing this reason is debatable.

Additionally, Spanish natural theologies often contended with the idea that the “natural reason” which all humanity had was limited or imperfect. For many, this was the result of the Adamic Fall, in which the progenitors of humanity sinned in disobedience, and through this original sin, introduced “fallenness” and the negative effects of sin to all future generations.

³⁷ McGrath, *Re-Imagining*, 26.

Many of the works of natural theology examined in this dissertation ponder what, if any, impairments original sin had on the ability of humans to exercise natural reason, as well as how these negative effects might be ameliorated or erased by grace through the sacraments, prayer, and communion with God.

The Third Realm: Knowing God

The final realm involves God, or as I have classified it in this dissertation, the *knowledge of God*. As evidenced by the comparison of many contemporary definitions of natural theology (Fig. ii), natural theology is a heuristic endeavor meant to produce some sort of meaning or knowledge. For many, natural theology establishes the *existence* of God and nothing more, for others, natural theology is able to speak about a basic set of attributes of God. Many scholars are quick to draw differences between a limited set of theological information granted by natural theology and the more replete knowledge available through fundamental or revealed theology. Similar discussions on each of these points existed in early modern Spain, and then, just as now, authors of natural theology did not agree as to what type of knowledge or how much knowledge could be gained through practicing natural theology.

The most basic assumption about the knowledge of God available in early modern Spanish natural theology was the fact of the existence of a divine being, a point that is shared with every major work presented in this dissertation. Most of the natural theologies argue that more extensive knowledge is available. For example, many mystical works of the sixteenth and seventeenth centuries argued through an analogy of being in a process labeled “affirmative speculation” by which one could learn attributes about God’s goodness, beauty, highness,

sweetness, purity, and excellence.³⁸ The medieval theologian Ramón Sibiuda even contended that natural theology could teach advanced doctrines of Christianity, proving or suggesting such mysteries as the triune nature of God. Sibiuda's claims introduced an important question in early modern Spanish natural theology – that is, whether natural theology could produce salvific knowledge of God. Still, most natural theologies of early modern Spain imposed some sort of limitations on the quality of information which natural theology could produce.

It is also important to consider the purpose of generating knowledge of God. For some authors of natural theology in Spain, natural theology was meant to act as a *praeambula fidei* – a preamble to the faith – which merely called an individual to a basic awareness of God. In this interpretation, natural theology was auxiliary to the “real” faith of Christianity, paving the way and making it possible for one to proceed to learning about God through sources of special revelation. For others, however, natural theology was a practice to be cultivated by practicing Christians as a means of intensifying spiritual devotion and experiencing God; many authors argued that the knowledge of God created by natural theology was relational knowledge, and that “knowing God” meant establishing a communing relationship with a divine being. For others, the knowledge of God was meant to strengthen justifications for beliefs and to equip Christians with the ability to defend the faith, converting natural theology into a form of apologetics. In most of the cases of early modern Spain, the purpose for natural theology and the type of knowledge which natural theology could generate existed in a mutually-influential relationship.

Chapter Overview and Structure of the Dissertation

³⁸ Bernardino Planes, *Concordancia Mistica, en la qual se trata de las tres vias, purgativa, iluminativa, i unitiva; i se declara, i concuerda entre si la doctrina de la Santa Madre Teresa de Iesus* (Barcelona: Antonio Lacavalleria, 1667), 80–82.

The chapters of this dissertation follow natural theology diachronically through early modern Spain (1436-1825); each chapter is dedicated to highlighting one or two particular works of natural theology in Spain for a given period (one chapter for each century, with an additional comparative chapter), and the themes of natural theology described above knit the chapters together. The first chapter, “The Medieval Legacy of Natural Theology in Spain,” examines the medieval foundation of natural theology in Spain. It focuses on the ‘first’ known work of natural theology in Spain, the *Liber Creaturarum* of Ramón Sibiuda (c. 1380 – 1434), a Catalan theologian and philosopher. Sibiuda, strongly influenced by Franciscan theologians of the late-medieval period, argued that the study and reflection of man and the natural world as created beings could bring individuals to a deeper and more meaningful relationship with God by revealing an obligation to love the creator. Although his book was not published in Spain, adaptations of it abounded, making it fundamental to understanding the subsequent traditions of natural theology in Iberia. Most importantly, Sibiuda’s development of the “ladder of nature” (*scala naturae*) and his association between the contemplation of created things, of the rational powers of man, and of the term “natural theology” would, to a great extent, set the parameters for much of the discourse of natural theology in early modern Spain.

This Sibiudan understanding of natural theology is further developed in the second chapter, “Knowing Nature, Self, and God in Renaissance Spain.” Here, two key developments occurred during the Spanish Renaissance (c. 1499-1583) which would have lasting ramifications on natural theology in the subsequent centuries. First, the connection between the contemplation of the created world and the discipline of natural philosophy was made explicit, linking disciplines which would eventually be termed ‘science’ with the search for evidence or suggestions of the existence and attribute of God. To demonstrate this connection, I examine the

work of the humanist Alejo de Venegas del Busto (1498-1562), the *Primera parte de las diferencias de libros que hay en el universo* (Toledo, 1540). This work explicitly linked the contemplation of created things and the methodological, regulated study of nature through Aristotelian physics. The work also evinces the second main development of natural theology in Renaissance Spain: the use of the contemplation of created things, including both the external world and the interior world of human reason, as part of the first steps in devotional practices and mystical spirituality. I show how creaturely contemplation could be found in a wealth of spiritual treatises during the Spanish Golden Age of mysticism, and I suggest that the association of many of these treatises with heterodox forms of mysticism caused this form of natural theology to be mistrusted. I demonstrate this by arguing that Venegas intentionally separated nature into the macrocosm of the world and the microcosm of the rational soul in order to distance his work from suspicions of heresy.

Chapter three, “Between Metaphysics and Mysticism: Three Visions of Natural Theology in Baroque Spain (1563-1720)” is divided into three subsections, each offering a different view of natural theology in seventeenth-century Spain. The first section analyses how natural theology became more closely aligned with Thomism in the schools of second scholasticism. In this way, natural theology was properly understood as a purely metaphysical exercise, more appropriate to the philosopher than the natural philosopher. I examine in detail the *Disputationes Metaphysicae* (1598) of Francisco Suárez, SJ, (1548-1617) as an example of this form of natural theology. Two other Baroque visions for natural theology are considered, both continuations of natural theologies from the previous centuries. An invigorated proto-physico-theology, armed with developments from natural history and cosmological studies, is presented in the works of Juan Eusebio Nieremberg, S.J. (1595-1658) and Salvador Ardevines Isla. The final option in the

seventeenth-century was the persistent association of the contemplation of created things as part of ascetical devotion and mystical meditation in spiritual treatises.

In the fourth chapter, “Repurposing and Expanding Natural Theology in Enlightenment Spain,” I assess the dramatic increase of natural theologies in eighteenth-century Spain. I offer two explanations for this. First, I demonstrate how the growth of natural philosophy in the Iberian empire was connected to the development of physico-theology; secondly, I argue that increasing concerns over atheism, skepticism, and deism prompted Spanish intellectuals and theologians to mount a defence of the faith which used natural theology as an apologetic discourse. While new physico-theologies were popular and novel forms of natural theology, I establish the connections that eighteenth-century natural theology had with those works which came before them and which distinguish them from natural theologies from England during this period. These differences are considered in the fifth and final chapter of this dissertation, “Accounting for Differences,” which contrasts the development of natural theology in Spain with examples from early modern England and France. Having seen the development of varying natural theologies over the early modern period in Spain, I examine alternative historical explanations for why these natural theologies were formed. I interrogate the more widely known narrative of English, Protestant, natural theologies (EPNT), and I compare historiographical explanations for the rise of EPNT to the historical context of Spain. I also consider ways in which Spanish natural theology was influenced by and influenced foreign works of natural theology.

Finally, I conclude the dissertation by summarizing the historiographical challenges and significant impact which this research makes, both to the history of natural theology and to the history and historical theology of early modern Spain. I also note that emphasizing the

historically-contingent nature of natural theology challenges contemporary discussions among theologians and philosophers of religion. It highlights the revival of “new natural theologies,” suggesting that these natural theologies are not new, but rather have precedents in the hitherto unstudied and unknown natural theologies of early modern Spain. The dissertation not only challenges the existing historiography on natural theology, the intellectual history of religion, and the history of science, therefore, but it bears significantly on the future of natural theologies by creating new partners in dialogue.

Qualifications and Conclusion

Two terms which are related to natural theology, but which are not directly discussed by this dissertation merit attention. “Natural religion” is a term which is often introduced in literature on natural theology, often interchangeably, to signify a religion which is premised on natural sources of information.³⁹ The term is particularly useful in the Anglophone world, where “natural religion” was used historically (e.g. David Hume’s *Dialogues Concerning Natural Religion*, 1779) and especially in connection with the goals of deists in the late-seventeenth and eighteenth centuries, who desired to see a system of religion that was predicated upon natural theologies and reason alone and which spurned what they viewed as supernatural superstitions and unnecessary authoritarian impositions.⁴⁰ A distinction, however, is worth establishing

³⁹ Just as “natural theology” can be separated from a “theology of nature,” “natural religion” should be separated from “religions of nature” which worship nature as ultimacy. See: Chignell and Pereboom, “Natural Theology and Natural Religion.”

⁴⁰ Katherine Calloway, *Natural Theology in the Scientific Revolution: God’s Scientists* (London: Routledge, 2015), 6; Alister E. McGrath, *A Scientific Theology*, vol. 1: Nature (Grand Rapids: William B. Eerdmans Publishing Company, 2001), 244; Walter H. Conser, Jr., “Natural Religion,” in *The Bloomsbury Encyclopedia of the American Enlightenment*, ed. Mark G. Spencer (New York: Bloomsbury Academic, 2015); John Wilkins, *Of the Principles and Duties of Natural Religion: Two Books. By the Right Reverend Father in God, John Late Lord Bishop of Chester. To Which Is Added, A Sermon Preached at His Funerals, by William Lloyd, D.D. Dean of Bangor, and Chaplain in Ordinary to His Majesty*. (London: Printed by A. Maxwell, 1675); David Hume, *Dialogues Concerning Natural Religion*, ed. Martin Bell, Penguin Books Edition (London: Penguin Books, 1990); S.J. Barnett, *The Enlightenment and Religion: The Myths of Modernity* (Manchester: Manchester University Press, 2004).

between a *theology* which relies upon natural foundations and a *religion* which is built upon natural sources – indeed, this distinction is precisely what is at stake in the eighteenth century in Spain. Spanish thinkers did not believe that validating the sphere of natural theology necessarily entailed that it could be the only source of theological knowledge, nor did they consider natural religion to be the logical consequence of natural theology. This dissertation shows how natural theology related to revealed religion in early modern Spain; and very rarely was any position put forward that did not emphasize the primacy and necessity of revealed theology. For these reasons the term “natural religion” is used less frequently to refer to “natural theology” in early modern Spain, and it usually meant instead eighteenth-century deism and atheism.

Natural law, or the notion that all humanity is governed by a core set of transcultural moral principles, was an immensely fruitful field of theological activity in early modern Spain.⁴¹ To the extent that early modern theories of natural law rest upon the idea of morality as part of nature, natural law may be seen as part of natural theology or a particular line of argument within natural theology. However, because of the extent of this tradition in the Spanish world, particularly in discussions relating to the encounter of non-Judeo-Christian societies and religions in Latin America, I have judged the category of natural law to merit its own monograph; it is therefore only referenced tangentially in the present study.

Lastly, this dissertation has as its focus those works by Spanish writers who were for the most part published and read in Spain. The assumption, defended in chapter five (“Accounting for Differences”), is that early modern Spain constituted a unique and definable or discernible sociocultural milieu to study historically in order to place parameters around the otherwise unruly term of natural theology. Occasionally, works by Spanish authors that were published

⁴¹ Not to be confused with “laws of nature” – however, just as laws of nature govern the physical operations of all of the objects everywhere in the world, natural law governs the moral impulses of all humans, everywhere.

outside of Spain are examined, and one source is written by a Portuguese author who lived and wrote in Spain. The importation of foreign works, while significant in the development of Spanish theology, is not the subject of this dissertation and receives only marginal attention in the footnotes of this study.

This work is the first full-scale study of natural theology in Spain. Some recent studies have addressed elements of natural theology in Spain (both early modern and modern).⁴² In 2019, Maria Portuondo authored *The Spanish Disquiet*, the first monograph to include attention to the concept of natural theology or of a “biblical natural philosophy” in Spain by examining the works of Benito Arias Montano.⁴³ This work, however, is limited in its scope to a particular form of natural theology expressed in the work of this sixteenth-century individual. In the wider scholarship on natural theology and on early modern science and religion, examples from Spain remain curiously absent.⁴⁴ This dissertation revises our understanding of natural theology in the early modern period by opening new windows into an unstudied, yet rich theological tradition which persisted in Spain for centuries. Doing so not only challenges the historiography of science and religion in early modernity, but adds to contemporary conversations about how natural theology is defined and used today.

⁴² Francisco Blázquez Paniagua, “A Dios Por La Ciencia. Teología Natural en el Franquismo,” *Asclepio: Revista de Historia de La Medicina y de La Ciencia* 58, no. 2 (2011): 453–76; Francisco Sánchez-Blanco, “La crisis de la físico-teología en la ilustración española: Antonio José Rodríguez,” *Minerva Baeticae. Boletín de La Real Academia Sevillana de Buenas Letras*, 2, 45 (2017): 255–95.

⁴³ Portuondo, *The Spanish Disquiet*.

⁴⁴ See, for example, the recent publication: Ann Blair and Kaspar von Greyerz, eds., *Physico-Theology: Religion and Science in Europe, 1650-1750*, Medicine, Science, and Religion in Historical Context (Baltimore: Johns Hopkins University Press, 2020).

**Chapter I. The Origins of Natural Theology in Late-Medieval and Early Modern Spain:
Ramón Sibiuda and the Legacy of the *Liber Creaturarum*, 1436-1616**

“With Sibiuda being the major Spanish philosopher of the fifteenth century, he has not been read and enjoyed in Spain as he has in France, nor studied with the learned persistence with which he has been in Germany. This explains why there has not been revived among us a single doctrinal movement of depth around the *Book of the Creatures*, with a corresponding consequence to national thought.”

-Tomás Carreras y Artau, *Historia de la filosofía española*⁴⁵

“Two facts which may be called without absurdity accidental have given [Sibiuda] a prominence in the histories of Natural Theology which on his own account he scarcely deserves: the fact that he gave to his book the title of *Theologia Naturalis*, and the fact that Montaigne...used it afterwards as a peg on which to hang the longest of his immortal essays.”

-C.C.J. Webb, *Studies in the History of Natural Theology*⁴⁶

Ramón Sibiuda: The Unknown Founder of Spanish Natural Theology?

In 1854, nearly 425 years after it was written, *The Book of Created Things* by Ramón Sibiuda was translated anonymously into vernacular Spanish in Sibiuda's hometown of Barcelona and disseminated across his native Spain. Over the course of four centuries, this work had been translated into multiple languages (“all the languages of Europe,” boasted the 1854 edition), had been abridged, revised, and published under a variety of names, had formed the basis of theological enterprises for Catholics and Protestants alike, and very notably, had been banned by both the Papal Index of Prohibited Books as well as that issued by the Holy Office of the Inquisition in the kingdoms of Spain.⁴⁷ Now, however, it was marketed as a theological publication of particular use for instruction in the faith to children. It received highest praise from the censure, José Jacinto Clotet, a Dominican Master of Sacred Theology who wrote that

⁴⁵ Carreras Artau, *Historia de la filosofía*, 105-107, cited in I.S. Révah, *Une Source de la Spiritualité Péninsulaire au XVIème Siècle: La “Théologie Naturelle” de Raymond Sebond* (Lisboa: Academia das Ciências de Lisboa, 1953), 7.

⁴⁶ Clement Charles Julian Webb, *Studies in the History of Natural Theology* (Oxford: Clarendon Press, 1915), 293.

⁴⁷ Raimundo Sabunde, *Las Criaturas: Grandioso tratado del hombre, escrito por Raimundo Sabunde, filósofo del siglo XV, Refundido y adaptado para la juventud del siglo XIX por un sacerdote de la Compañía de Jesús*, trans. s.n. (Barcelona: Imprenta de Pablo Ribera, 1854), 8. Spellings of names and words have been maintained to reflect how they are presented in the original sources, including authorial mistakes and variative spellings of last names of authors and titles; however, the characters employed for variative letter usage (v/u, etc.) have been modified.

the work was notable for its “...erudition, amenity of style, subtlety of thoughts, and strength of reasoning...” and that “having found in it no contrary things to our sacred dogmas and good customs, I judge it very worth being given to the public light.”⁴⁸ The introduction continued with a biographical summary of Sibiuda, in which the translator praised Sibiuda as “a living and penetrating genius” of the Scriptures and of theology and credited his writings with “a special celebrity,” yet admitted that “the news is scarce which has reached us regarding the circumstances of the life of the illuminated writer...”⁴⁹ This presents striking contradictions – Sibiuda, in nineteenth-century Spain, was an unknown genius who authored a work of celebrity status, a work which had once been banned for heterodoxy but which was now recommended for Spanish children to learn the Catholic faith.

The explanation for these incongruities lies in the convoluted history of Sibiuda’s most famous work, *The Book of Created Things*, or as it was first titled in Latin, the *Liber Creaturarum*.⁵⁰ This chapter examines the *Liber* and its publication and reception history in Spain in order to understand Sibiuda’s unique enterprise of natural theology and its intellectual impact and legacy to Spanish theology in the early modern period. To do so, this chapter is divided into three sections. First, it provides an overview of Sibiudan historiography, surveying the biographical and bibliographical studies of Sibiuda to present the publication history and dissemination of the *Liber* and subsequent versions in Spain. Secondly, it examines the basic structure of the *Liber* and several key themes presented in Sibiuda’s natural theology. It highlights Sibiuda’s primary theological aims and motivations for writing the *Liber*, analyses some of the influences on Sibiuda’s way of thinking, and contextualizes Sibiuda’s work within

⁴⁸ Sabunde, *Las Criaturas*.

⁴⁹ Sabunde, 7.

⁵⁰ Hereafter, *Liber*.

the intellectual and theological climate of early fifteenth-century Catalonia. It concludes by summarizing the main themes of the *Liber* which would have a lasting impact on the formation of religious thought and natural theology in Spain, particularly during the Spanish Renaissance (continued in chapter two).

I argue that although the *Liber* had a minimal presence in Spain in its unadulterated form, it yet achieved a significant theological impact through the presence of its many edited versions in the sixteenth century – versions which anonymized the work and detached Sibiuda as the author, leaving him to suffer relative obscurity. Among the most important themes which Sibiuda contributed to Spanish natural theology are its dual use as both devotion and apologetics, a reification of the “two books” theory and the scale of nature, the prominence of reason and experience as modes of perception, and an emphasis on the heuristic importance of love and the human will which was likely inherited from and important to the Franciscan intellectual tradition in Spain. Critically, the *Liber* forms the groundwork for studying the tradition of natural theology in the Spanish empire, and Ramón Sibiuda is the unknown founder – or at least the first recordable propagator – of many of the themes which later theologians developed in the early modern period. This chapter, therefore, provides a necessary introduction to natural theology in Spanish thought and establishes many of the ideas which are addressed in subsequent chapters.

Studies on Sibiuda: Biographical and Bibliographical

Many scholars of natural theology reference as one of the foundations of the genre Sibiuda’s *Liber*, because this work has the curious distinction of being the first recorded instance of the use of the term *theologia naturalis* (natural theology) in the title – although this was a posthumous editorial decision which elevated this term over the *Liber*. Very little scholarly attention was given to Sibiuda unless it occurred through scholars of Michel de Montaigne, the

well-known French humanist who translated the *Liber* into French (1559) and who dedicated the longest of his *Essais* to the subject. José María Gómez-Heras notes that the first wave of Sibiudan studies occurred in the 1870s with the work of Gabriel Compayré and Menéndez Pelayo, among others.⁵¹ These works formed the foundation for research in the twentieth century, especially compounded with the authoritatively critical edition of the *Liber* published by Friedrich Stegmüller in 1966.⁵² Subsequent studies have done much to revitalize the importance of Sibiuda's natural theology to the intellectual and religious traditions of early modern Europe, although much of this work remains lamentably restricted to Spanish and Catalan and is largely unknown in Anglophone scholarship.⁵³

Despite recent scholarship, little is concretely known of Sibiuda, and he remains, as a biographer in 1875 dubbed him, “an unknown celebrity.”⁵⁴ Almost every biographical point is uncertain or debatable – his name (of which there are at least thirteen variations), his date and place of birth, his academic specialties, and his extant writings.⁵⁵ It seems probable that Ramón Sibiuda (alternatively, Raimundo Sabundo/us, Raymond Sebonde, Sabunde, Sabeiude,

⁵¹ José María García Gómez-Heras, “El ‘Liber Creaturarum’ de R. Sabunde: Estudio bibliográfico,” *Cuadernos salmantinos de filosofía*, no. 3 (1976): 239; Gabriel Compayré, *De Raimundo Sabundo Ac de Theologia Naturalis Libro* (Paris: Thorin, 1873); Marcelino Menéndez y Pelayo, *Obras Completas: Historia de las ideas estéticas en España*, vol. 1, 3 vols. (Santander: Ediciones de la Universidad de Cantabria, 2017), see chapter four, sec. “La teología natural de Raimundo Sabunde.”

⁵² Ramón Sabunde, *Theologia Naturalis Seu Liber Creaturarum: [Autore] Raimundus Sabundus. Mit Literargeschichtlicher Einführung Und Kritischer Edition Des Prologs Und Des Titulus I von Friedrich Stegmüller*, ed. Friedrich Stegmüller (Stuttgart, Bad Cannstatt: Frommann, 1966).

⁵³ J.M. de Bujanda, “L’influence de Sebond en Espagne au XVI^e siècle,” *Renaissance and Reformation* 10, no. 2 (1974): 78–84; Jaume de Puig, *La Filosofía de Ramon Sibiuda* (Barcelona: Institut d’Estudis Catalans, 1997); Jaume de Puig, *Les sources de la pensée philosophique de Raimond Sebond (Ramon Sibiuda)*, Etudes montaignistes. 17 (Paris: Honoré Champion, 1994); Jaume de Puig i Oliver, “Valoració crítica del pensament de Sibiuda al llarg del temps,” *Arxiu de textos catalans antics* 9 (1990): 275–368–368; Révah, *Une source*; Tomás Carreras y Artau, “Orígenes de la Filosofía de Raimundo Sibiuda (Sabunde),” *Butlletí de la Reial Acadèmia de Bones Lletres de Barcelona* 13, no. 94–95 (1927): 1927 (January–June); Tomás Carreras y Artau and Joaquín Carreras y Artau, *Historia de la filosofía española: filosofía cristiana de los siglos xiii al xv*, vol. II (Madrid: Real academia de ciencias exactas, físicas y naturales, 1943); Michaël Batllori, “De Raimundo Sabundo atque Ignatio de Loyola,” *Archivum Historicum Societatis Iesu* 38 (1969): 454–63.

⁵⁴ D. Reulet, *Un Inconnu Célèbre: Recherches Historiques & Critiques Sur Raymond de Sebonde* (Paris: Victor Palmé, 1875).

⁵⁵ Bujanda, “L’influence,” 78.

Sabeydem, etc.) was born somewhere in Catalonia (scholars have suggested Barcelona and nearby Girona) at the end of the fourteenth century.⁵⁶ He was likely trained in medicine, philosophy, and theology and was contracted to teach at the University of Paris; however, he stopped instead at the University of Toulouse (neither of the universities at Girona and Barcelona existed until 1446 and 1450, respectively), where he served as rector from 1428- 1435 and a professor from 1434-1436.⁵⁷ From comments made by Sibiuda and from scribes upon the earliest known manuscript copy of the *Liber*, housed in the library of Toulouse, it is believed that Sibiuda completed the *Liber* between February 11-13, 1436, and died shortly afterwards on April 29, leaving behind his most important manuscript with an uncertain future.⁵⁸ This manuscript was entitled *Scientia libri creaturarum seu naturae et de homine* (*The Knowledge of the Book of Created Things, or, Of Nature and of Man*).⁵⁹ There is little in textual evidence to support any one of these positions over another – at various times, scholars have debated the “true name” of Sibiuda and his place of birth, but most of the biographical knowledge of this philosopher and theologian is an aggregate of historiographical conjecture that has mistakenly been reproduced in studies as fact. The early biographer D. Reulet, for example, blamed Pierre Bayle (1647-1706) for inventing Sibiuda’s connection to Barcelona in his *Dictionnaire historique et critique* (1697).⁶⁰ Bayle, in turn, attributed to Philippe Jacques de Maussac (1590-1650) the fabrication

⁵⁶ David Rothio [Roth], *Dissertatio de Raymundo de Sabunde* (Turici [Zurich]: Caroli Koehleri, 1846), 1–16.

⁵⁷ Bujanda, “L’influence,” 78; José Ferrater Mora, *Diccionario De Filosofía*, 5th Edition [?], vol. Tomo II: L-Z (Buenos Aires: Editorial Sudamericana, 1965), 125; Luis Vidart, *La Filosofía Española: Indicaciones Bibliográficas* (Madrid: Imprenta Europea, 1866), 55; Webb, *Studies*, 293.

⁵⁸ The first instance of a scholar utilizing the Toulouse Manuscript is Reulet, *Un Inconnu Célèbre*, 16–26; Sabunde, *Theologia Naturalis* [Stegmüller 1966]; Bujanda, “L’influence”; Mario Méndez Bejarano, *Historia de la filosofía en España hasta el siglo XX* (Madrid: Renacimiento, 1929), 113, <http://www.filosofia.org/aut/mmb/hfe1603.htm>.

Sibiuda is also believed to have authored a work titled *Quaestiones disputabiles super quartum librum sententiarum*.

⁵⁹ Bujanda, “L’influence,” 78.

⁶⁰ Reulet, *Un Inconnu Célèbre*, 45; Pierre Bayle, *Dictionnaire Historique et Critique de Pierre Bayle*, New edition, augmented with notes extracted from Chaupepié, Joly, La Monnoie, Leduchat, L.-J. Leclerc, Marchand, etc., vol. 13 (Paris: Desoer, 1820), 216.

of the theory that Sibiuda was a converted Jew – a thesis which was subsequently abandoned due to a complete lack of evidence.⁶¹ Given this paucity of certain knowledge, any number of such suppositions exist for Sibiuda in the historiographical and biographical literature.

Some have belabored the question of his *patria* – that is, whether it is accurate to describe him as a Barcelonés, a Spaniard, or a Catalan. Of these, the third is most acceptable. The evidence suggests that Sibiuda was born in Catalonia but lacks any greater specificity that connects him exclusively to the city of Barcelona. The description of Sibiuda as a Spaniard is anachronistic and a projection of sixteenth-century commentators. The amalgamated composite monarchy of Spain did not yet exist during Catalonia in the fourteenth-century; rather, the region of Catalonia was under the control of the Crown of Aragón. The Catalonia into which Sibiuda was born was an unstable, volatile setting.⁶² Plague, war, and natural disasters had drastically reduced the population – Stanley Payne notes that at a time when other cities in Spain were growing, the population of Barcelona shrank from 50,000 to 20,000 inhabitants by 1477.⁶³ Although Catalonia had been reconquered early, the memory and cultural influence of the *convivencia* was still present – the Neoaristotelian revival and the school of the Latin Averroists had a clear influence on religious thought, and Jews were not forced from Barcelona until 1401.⁶⁴ Many scholars have noted the growth of mysticism and heterodox Catholicism in a time

⁶¹ The referenced work by Maussac is the *Prolegomena in Pugionem Fidei Fr. Raymundi Martini, Ord. Praed.*, which appears to be lost. Bayle wrote that “I have just gone through all of this “Apologie de Sebonde”, in order to see if it represented as a Jew who has become a Christian – I have not had the pleasure of finding any vestige of it.” Bayle, *Dictionnaire Historique*, 13:217; Juan Antonio Pellicer y Saforcada, *Ensayo de una bibliotheca de traductores españoles: donde se da noticia de las traducciones que hay en castellano de la Sagrada Escritura, Santos Padres, Filosofos, Historiadores, Medicos, Oradores, Poetas, asi Griegos como Latinos; y de otros autores que han florecido antes de la invencion de la imprenta* (Madrid, 1778), 15; Ramón Sibiuda, *Tratado del amor de las criaturas*, ed. Ana Martínez Alarcón, vol. 85, *Grandes Obras del Pensamiento* (Barcelona: Ediciones Altaya, S.A., 1995), 12.

⁶² Puig, *La filosofía*, 49.

⁶³ Sibiuda, *Tratado del amor*, 85:11.

⁶⁴ Angus MacKay, *Spain in the Middle Ages: From Frontier to Empire, 1000-1500* (London: The MacMillan Press Ltd, 1977), 85–87; Sibiuda, *Tratado del amor*, 85:12; Stanley G. Payne, *A History of Spain and Portugal*, vol. 1 (Madison: University of Wisconsin Press, 1973), 160; Hunt estimates that at the time of the unification of the

when faith in the institutional Church had been challenged by the papal schism and the general moral laxity of the clergy, both secular and regular.⁶⁵ Joseph F. O’Callaghan outlined three main philosophical and theological camps: the Lullists, the Scholastics (which he further divides into followers of Aquinas, Scotus, and Ockham), and the Humanists.⁶⁶ Ultimately, while this context is insufficient to understand Sibiuda’s work, all of these historical factors suggest possible explanations for the motive and method of Sibiuda’s natural theology later explored in this chapter.

A Bibliographical Overview: The Manuscript and Book History of the *Liber Creaturarum*

The general decline of Catalonia during Sibiuda’s lifetime may help to explain his initial limited reception in Spain; even more so, however, the convoluted path of the *Liber*’s publication and dissemination explains why Sibiuda’s work was muted in the subsequent centuries. Several studies have painstakingly traced the history of the various translations and editions of the *Liber* and its various iterations during the fifteenth and sixteenth centuries.⁶⁷ To appreciate the foundation that it laid for Hispanic natural theology in the early modern period, however, it is essential to understand the dissemination of Sibiuda’s only surviving work. The *Liber*, having been completed by Sibiuda shortly before his death in 1436, was copied in manuscript form throughout the fifteenth-century (at least fifteen different versions exist), and the introduction of

crowns of Spain, up to a third of Aragon’s population may have been non-Christian. See: Jocelyn Hunt, *Spain, 1474-1598, Questions and Analysis in History* (Abingdon: Routledge, 2001), 7.

⁶⁵ Joseph F. O’Callaghan, *A History of Medieval Spain* (Ithaca: Cornell University Press, 1975), <http://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3138541>, chapter 25, “Religion and Culture, 1369-1479”; Hunt argues that the Aragonese Church was less impacted by reformed orders than that of Castile. See: Hunt, *Spain, 1474-1598*, 6.

⁶⁶ O’Callaghan, *A History of Medieval Spain*, 635.

⁶⁷ Gómez-Heras, “El ‘*Liber Creaturarum*’”; Bujanda, “L’influence”; Puig, *La filosofía*; Puig, *Les sources*; Sabunde, *Theologia Naturalis* [Stegmüller 1966]; F. Altés Escribá, *Raimundo Sibiuda (+ 1436) y Su Sistema Apologético* (Barcelona: Imprenta Altés, 1939).

the printing press allowed for its wider dissemination as incunabulum.⁶⁸ Lack of standardization resulted in titular variations – most famously, some notary or publisher promoted the work as *theologia naturalis* (a term which had existed as early as St. Augustine, but which was not in common use), resulting in the often repeated title of *Theologia Naturalis sive Liber Creaturarum* (*Natural Theology, or, The Book of Created Things*) which Webb claimed has given Sibiuda an “accidental...prominence” in history.⁶⁹ The first printed edition may have occurred in Deventer as early as 1484-5, at the time part of the Spanish Netherlands under the control of the Hapsburgs.⁷⁰ The popularity of the work is evinced by its widespread appeal and publishing history. Stegmüller and Puig i Oliver have updated the lists of all existing copies of the printed *Liber* (most often appearing as *Theologia Naturalis sive...*) – the number varies but is around twenty different versions and editions by the mid-sixteenth century, including translations. A French copy of the *Liber* first occurred in Lyon in 1519 (fifty years prior to Montaigne’s famous translation), and a German version was printed in Tübingen in 1550.⁷¹

Variations on the Liber

⁶⁸ Bujanda, “L’influence,” 78; Sabunde, *Theologia Naturalis* [Stegmüller1966]; Puig has more than doubled this number to a compiled thirty-five manuscript copies. See: Puig, *La filosofía*, 33.

⁶⁹ Webb, *Studies*, 293; Vidart, *La Filosofía Española*, 56; Many works translate *creaturarum* as “creatures;” for example: s.n., “NATURALL THEOLOGIE, or the Book of Creatures” (January 31, 1602), The British Library; Raimondo Sabunde, *Le Creature: Ampio libro dell Uomo. Opera di Raimondo Sabunde filosofo del Secolo XV. Rifusa ed Accomodata agli studi della gioventu’ del secolo XIX. Da un Sacerdote della Compagnia di Gesu’*, trans. s.n., [2nd?] [Expanded] in this new addition with addition[s], vol. 1, 3 vols. (Faenza: Tipografia Conti, 1819); Sabunde, *Las Criaturas*; Sibiuda, *Tratado del amor*. Sibiuda’s use of the term, however, is more inclusive than simply living creatures and extends to all of creation or all created things.”

⁷⁰ Bujanda, “L’influence,” 78; Sabunde, *Theologia Naturalis* [Stegmüller 1966]; Rothio [Roth], *Dissertatio*, 22; Alternatively, Vidart argues that the Strasbourg 1496 edition was the first. See: Vidart, *La Filosofía Española*, 56.

⁷¹ Rothio [Roth], *Dissertatio*, 24; No printed English edition exists; the only English translation is one manuscript believed to be the work of John, Lord Lumley (1533-1609), completed on January 31, 1602 and currently housed in the British Library. See: s.n., “Naturall Theologie”; Peterfreund notes this in footnote 22 in Stuart Peterfreund, *Turning Points in Natural Theology from Bacon to Darwin: The Way of the Argument from Design* (New York: Palgrave MacMillan, 2012); Anthony Alcock and Sears Reynolds Jayne, eds., *The Lumley Library; the Catalogue of 1609*, British Museum Bicentenary Publications (London: Trustees of the British Museum, 1956); D.G. Selwyn, “The Lumley Library: A Supplementary Checklist,” *The British Library Journal*, 1981, 136–48.

By the early seventeenth century, the *Liber* had appeared either in Latin or in vernacular translation in publishing cities across Europe such as Deventer, Amsterdam, and Antwerp in the Low Countries, Frankfurt, Cologne, Strasburg, Nuremburg, and Tübingen in the Holy Roman Empire, Tournon, Lyon, Paris, and Rouen in France, and Milan and Venice in present-day Italy.⁷² Noticeably absent from this list is any location within Iberia. While Stegmüller has connected two of the seventeen manuscript codices of the *Liber* to Spain (codex “A” to Barcelona and codex “F” to Madrid), there is no evidence that the *Liber* was ever printed within Spain.⁷³ Rather, Sibiuda’s works were mediated through a variety of abridgements and devotional glosses which appeared under titles which were unrelated to the *Liber* and which often contained little or no reference to the original work or author. The “first generation” of Sibiudan variations – that is, those works which were direct translations, abridgements, and revisions of the *Liber* – were: *Viola animae* (Cologne, 1499), *Violeta del anima* (Valladolid, 1549), *Despertador del alma* (Seville, 1544), *Oculus Fidei* (Amsterdam, 1661), and the *Dialogos de la naturaleza* (Madrid, 1614). To these could be added a second generation of revisions of the first wave of glosses, including sixteenth-century devotional treatises such as Juan de Cazalla’s *Lumbre del alma* (Valladolid, 1528, and Seville, 1542), Diego de Estella’s *Meditaciones devotissimas del Amor de Dios* (Salamanca, 1576), and Juan de los Angeles’s *Diálogos de la conquista del reino de Dios* (Madrid, 1595) and *La lucha del alma* (Madrid, 1600).⁷⁴ While Isaac Révah has convincingly demonstrated that these works are inheritors of the

⁷² Rothio [Roth], *Dissertatio*; Puig, *La filosofía*; Sabunde, *Theologia Naturalis* [Stegmüller 1966]; Bujanda, “L’influence,” 78–84; Gómez-Heras, “El ‘Liber Creaturarum,’” 240.

⁷³ Sabunde, *Theologia Naturalis* (Stegmüller 1966), cit. in Batllori, “De Raimundo...atque Ignatio,” 454–55.

⁷⁴ Juan de Cazalla, *Lumbre del alma*, vol. 22, Serie A--Textos (Madrid: Universidad Pontificia de Salamanca, 1974); Diego de Estella, *Meditaciones devotissimas del amor de Dios* (Salamanca: Alfonso de Terranova y Neyla, 1578); José García Oro, OFM, “Diego de San Cristóbal Ballesteros Cruzat,” Real Academia de la Historia: Diccionario Biográfico Español, accessed March 17, 2021, <http://dbe.rah.es/biografias/9092/diego-de-san-cristobal-ballesteros-cruzat>; Juan de los Ángeles, *Diálogos de la conquista del Reino de Dios*, ed. Ángel González Palencia (Madrid: Imp. de S. Aguirre, 1946); Juan de los Angeles, *The Loving Struggle between God and the Soul: In Which the*

Sibiudan legacy and closely connected to his conception of the form and use of natural theology, such works are yet further removed from Sibiuda's original theology and merit their own study; accordingly, they are considered more closely in the following chapter on sixteenth-century developments to natural theology within Renaissance spirituality in Spain.⁷⁵ This chapter, on the other hand, presents the "first generation" of works as concomitant with Sibiuda's impact in Spain through the ideas presented first in the *Liber*.

The Viola, Violeta, and the Dialogos (1499/1549/1614-1616)

Perhaps the greatest dissemination of Sibiudan thought was through the 1499 publication of the *Viola Animae* (the *Violet of the Soul*) by the Flemish Carthusian Peter Dorland (Petrus Dorlandus), which was printed in Toledo in 1500.⁷⁶ Vernacular translations appeared as the *Violette de l'ame* in French (Paris, 1551) and as the *Violeta del anima* in Castellano (Valladolid, 1549).⁷⁷ This abridgement of the *Liber* was immensely successful; Edgar Morales Flores has asserted that over forty-eight editions of the *Viola* existed in Europe.⁷⁸ In Spain, Révah has credited its popularity to the work of Cardinal Francisco Ximénez de Cisneros (1436-1517), the Franciscan confessor of Queen Isabella, the Grand Inquisitor of the Holy Office of the Inquisition in Spain, and the archbishop of Toledo where the *Viola* first appeared in Spain.⁷⁹ The

Triumphs and Greatness of Love Are Treated and by Which Is Taught the Most Excellent Way for the Affections, trans. Eladia Gómez-Posthill (London: The Saint Austin Press, 2001).

⁷⁵ Révah, *Une Source*. Puig i Oliver, citing the work of Bujanda, considers the *Lumbre* to be a direct "rapiarium" - that is, a hodge-podge of quotations and excerpts annotated for devotional purposes and commonly found in the tradition of the Brethren of the Common Life - of the theology set forward in the *Viola animae*; Puig, *La filosofía*, 46.

⁷⁶ Edgar Morales Flores, "Ramón Sibiuda: Amor y Conocimiento en la Cataluña del Siglo XV," *Revista Digital Universitaria* 9, no. 12 (December 10, 2008): 5; Dorlandus may have been the same individual as Peter van Diest. See: A. I. Doyle, "A Manuscript of Petrus Dorlandus of Diest's *Viola Animae*," in *Studies in Carthusian Monasticism in the Late Middle Ages*, vol. 14, Medieval Church Studies 14 (Turnhout: Brepols Publishers, 2009), 155-62, <https://www.brepolsonline.net/doi/abs/10.1484/M.MCS-EB.3.797>.

⁷⁷ Bujanda, "L'influence," 79; Puig, *La filosofía*, 44-45.

⁷⁸ Morales Flores, "Ramón Sibiuda," 5; there is evidence that the *Viola* could be found in England. See: John Martyn[?], *A Catalogue of the Libraries of That Learned Antiquarian Nathaniel Booth, Esq; and Others, Purchased since the Harleian Collection* (London: T. Osborne, s.a.), 155.

⁷⁹ Révah, *Une Source*, 17-19.

work is structured as a series of seven dialogues between Sibiuda and a Dominican friar or priest.⁸⁰ These seven dialogues more or less collapsed the three hundred and thirty chapters of the *Liber* and retained the overall order of thoughts that Sibiuda constructed, moving from the contemplation of the scale of nature, to the obligation of man to God, the unique and transformative qualities of Divine love, the fall of Man and the redemptory plan of God, Sacramental theology, and the Passion of Christ. The *Viola* may have been popular due to its increased readability – many scholars have noted that while the Latin of the *Liber* is unrefined and at times difficult to read, the prose of the *Viola* was graced with a greater concinnity.⁸¹ The *Viola* was also shorter – only eighty-six chapters (and usually less than half the length in pages). The dialogical form was linked to didactic and catechetical use and was likely more palatable to a popular audience.⁸² In Spain, the *Viola* was more influential than its vernacular version; Révah, citing the earlier work of Marcel Bataillon, notes that the anonymously-translated *Violeta* had a limited impact in Spain due to the fact that it was condemned ten years after its publication on the Valdés Index of 1559.⁸³

⁸⁰ María Casas del Álamo, “Viola Animae: Itinerario y Particularidades Tipográficas de Una Edición Pinciana Del Siglo Xvi,” in *El Texto Infinito: Tradición y Reescritura En La Edad Media y El Renacimiento* (Salamanca: Seminario de Estudios Medievales y Renacentistas, 2014), 359–68; Petrus Dorlandus, *Viola animae, recens castigata, nec non nouis super veteres annotatiu[n]culis, margini adiectis locupletata; cum indicibus tu[m] dialogorum, tum capitum, operi præfixis* (s.u. [Antwerp?]: Martinus Cæsar [Merten de Keyser], 1533); Leopoldine van Hogendorp Prosperetti, “Viola Animae: The Art of Jan Brueghel the Elder and the Tradition of Devout Naturalism,” no. 179–182 (2009): 107–21; the genre of dialogues witnessed a growth in popularity in both Latin and vernacular writings during the Renaissance. See: Peter Burke, “The Renaissance Dialogue,” *Renaissance Studies* 3, no. 1 (March 1, 1989): 2–3.

⁸¹ Morales Flores, “Ramón Sibiuda,” 5; Révah, *Une Source*, 18; Montaigne insulted Sibiuda's Latin as *baragouiné*, “gibberish” or as Screech has translated the term, “pidgin.” See: Michel de Montaigne, *The Complete Essays*, ed. M.A. Screech (London: Penguin Books Ltd., 2003), 491; while Montaigne believed this was a Spanish-Latin hybrid, Reulet has argued that it is the result of Sibiuda's use of French syntax. See: Reulet, *Un Inconnu Célèbre*, 73–74.

⁸² Burke, “The Renaissance Dialogue,” 3.

⁸³ Révah, *Une Source*, 33–34; the translator of the *Violeta* may have been Diego Gracián de Aldrete. See: María Casas del Álamo, “La imprenta en Valladolid: repertorio tipobibliográfico (1501-1560 tipografía gótica)” (Madrid, Universidad Complutense de Madrid, 2018), 585, <https://eprints.ucm.es/id/eprint/46858/>.

Another variant of the *Viola* was the theological publication titled *Dialogos de la Naturaleza del Hombre, de su principio, y su fin* (*Dialogues on the Nature of Man: Of His Beginning, and of His End*) by Fr. Antonio Arés, a preacher and retired lecturer of Moral Theology at the Minim monastery of Nuestra Señora de la Victoria in Madrid.⁸⁴ The work appeared in 1614, with a slightly-altered version ‘re-released’ in 1616.⁸⁵ Arés advertised the work as a translation of the theology of Sabunde, writing that the *Dialogos* were “translated from...the very learned and pious Master *Remundo Sebunde*. ”⁸⁶ The eighteenth-century bibliographer Juan Antonio Pellicer y Saforcada qualified this in two ways: first, that the dialogues “were more than a translation, [they were] paraphrase,” and secondly, that the original title was the *Viola animae* or *Violeta del alma* – perhaps suggesting that the source which Arés consulted was not the original *Liber*, but a free-floating copy of the *Viola* or *Violeta* which had survived the Index in Spain.⁸⁷ While Pellicer was right to note that the *Dialogos* were more than a mere translation, it is possible that Arés’s work combined both the *Viola* and the *Liber*. In his prologue, Arés wrote that “this [material] is said by the book that this author first took [it from], which was entitled *Natural Theology, or The Book of the Creatures*. ”⁸⁸ Additionally, although the work is structured in nearly the exact same dialogues as the *Viola* and *Violeta*, the *Diálogos*, at 830 pages, is nearly four times the length of the *Viola* and almost twice the length of the *Violeta*.⁸⁹

⁸⁴ Pellicer y Saforcada, *Ensayo de Una Bibliotheca*, 13; Remundo [Ramón] Sebunde [Sibiuda], *Dialogos de La Naturaleza Del Hombre, de Su Principio, y Su Fin. En Los Quales Se Le Da Por Admirable Estilo El Necesario, y Verdadero Conocimiento Assi de Iesu Christo Nuestro Dios, y Señor Como de Si Mismo.*, trans. Fray Antonio Ares (Madrid: Iuan de la Cuesta, 1616).

⁸⁵ Pellicer y Saforcada, II.14.

⁸⁶ Sebunde [Sabunde], *Dialogos* [Madrid, 1616], titlepage.

⁸⁷ Pellicer y Saforcada, II.14–15.

⁸⁸ Sebunde [Sibiuda], *Dialogos*, 7. Italics added.

⁸⁹ Sebunde [Sibiuda], 2. Arés divides the seventh dialogue of the *Viola* into two individual dialogues for a total of eight.

The initial compression of the chapters to dialogues was a major editorial act, but the subsequent variations of the *Viola* dialogical-format remained consistent through 1616. This can be clearly seen by comparing the translations of chapter titles and their place in the structures of each work. For example, the translation of the second chapter of the *Liber* on the comparison between man and lesser created beings became the ninth chapter, but the first of the second dialogues in the *Viola* and remained in this position for both the *Violeta* and *Dialogos*.⁹⁰ There are minor lexical changes, but the greater differences lie in the compression and restructuring of Sibiuda's arguments and changes made to Sibiuda's actual theological claims (changes which are more manifest in the *Oculus* and in Montaigne's *Théologie Naturelle*). For these reasons, the *Viola-Violeta-Diálogos* family of revisions are more closely related to the *Liber* than the *Oculus Fidei* or even than some translations of Sibiuda (for example, Montaigne's *Théologie naturelle*). On this point, Ana Martínez Alarcón described the Spanish reception of Sibiuda as "sufficiently more faithful readers than Montaigne, and far less critical of [Sibiuda]."⁹¹

Despertador del alma (c. 1544)

Around the time of the *Violeta*, the *Despertador del alma* (*The Awakening of the Soul*) was published in Spain, self-described as a "a very useful doctrine...to awaken the soul" and dedicated to Joana Folc de Cardona i Manrique de Lara (c. 1500-1564), the Duchess of Cardona.⁹² There is some question as to the origins of the work; the bibliographer Alexander S. Wilkinson records three different early versions dating to Seville, 1542, Zamora, 1552, and a

⁹⁰ Raimundo de Sabunde, *Theologia naturalis, sive Liber creaturarum. Auctore ... Raymundo de Sebunde...* (Ep. ded. P. Compagnon Petro Seguíer) (Lyon: Sumptibus Petri Compagnon, via Mercatoria, 1648), 7; Dorlandus, *Viola Animae* [Antwerp 1533], 23r; s.n., *Violeta del anima que es suma de la Theologia natural a manera d[e] dialogo que tracta del hombre, por causa del qual las otras criaturas son hechas: Por el conocimiento d[e] las q[ue] las se alu[m]bra el ho[m]bre p[ar]a conocerse assi y a Dios y a las otras criaturas* (Valladolid: Francisco Fernández de Córdoba, 1549), xxxi; Sebunde [Sibiuda], *Dialogos*, 64.

⁹¹ Sibiuda, *Tratado del amor*, 85:50–51.

⁹² Montserrat Sanmarti Roset, "Joana Folc de Cardona I Manrique de Lara," *Diccionari biogràfic de dones*, September 30, 2010, http://dbd.cat/fitxa_biografies.php?id=4081.

third without date or location.⁹³ Added to this is another Sevillano edition from 1544 and another published by Juan de Ayala in Toledo, 1552.⁹⁴

Oculus fidei (1661) and Theological ‘Scrubbing’

According to Bejarano, the *Oculus Fidei* (*The Eye of Faith*), together with the *Viola*, composed the two main translations of Sibiuda’s original *Liber*.⁹⁵ Although the *Oculus Fidei* was never prominent in early modern Spain, it is nonetheless important, therefore, to consider it in a review of para-Sibiudan publications. It demonstrates the ability of the *Liber* to be repurposed, its broad appeal across confessional divides, and the way in which adaptations of the *Liber* were often edited so that the work would conform to certain theological parameters. Furthermore, the *Oculus Fidei* highlights the role that Spanish natural theology had in shaping and influencing the development of natural theology in early modern Europe. The *Oculus Fidei* was the work of Johann Amos Comenius (1592-1670), the heterodox Moravian philosopher and theologian, published late in 1661 in Amsterdam. Comenius was a student of Johann Heinrich Alstead (1588-1638), a Calvinist who wrote his own *Theologia Naturalis* in 1615.⁹⁶ The Alstead-Comenius link constitutes a distinct crossover of Sibiudan natural theology into

⁹³ Alexander S. Wilkinson, *Iberian Books / Libros ibéricos (IB): Books Published in Spanish or Portuguese or on the Iberian Peninsula before 1601 / Libros publicados en español o portugués o en la Península Ibérica antes de 1601* (Leiden: Brill, 2010), 168.

⁹⁴ Fermín de los Reyes Gómez, “La Imprenta en Toledo: Estado de la Cuestión,” *Revista General de Información y Documentación* 10, no. 2 (2000): 28; Jacqueline Ferreras, *Los diálogos humanísticos del siglo XVI en lengua castellana* (Murcia: Universidad de Murcia, Servicio de Publicaciones, 2003), 28; s.n., *Despertador Del Alma [Texto Impreso]: En El Qual Se Tracta Por via de Colloquio Vna Doctrina Muy Vtil, y Prouechosa Para Despertar El Alma Q̄ Esta Adormida En Vicios y Se Muestra Como Deue Biuir Qualquier Christiano* (Seville: [s.n.], 1544); Linda Báez Rubí, “Lullism in New Spain,” in *A Companion to Ramon Llull and Llullism*, ed. Amy M. Austin and Mark D. Johnston, trans. Amy M. Austin, Alexander Ibarz, and Mark D. Johnston (Leiden: Brill, 2018), 517.

⁹⁵ Bejarano, *Historia de la filosofía*, 113.

⁹⁶ Richard A. Muller, “Was It Really Viral? Natural Theology in the Early Modern Reformed Tradition,” in *Crossing Traditions: Essays on the Reformation and Intellectual History: In Honour of Irena Backus*, ed. Maria-Cristina Pitassi, Daniela Solfaroli Camillocci, and Arthur Huiban (Leiden: Brill, 2018), 507–31; Jan van de Kamp, “Networks and Translation within the Republic of Letters: The Case of Theodore Haak (1605-1690),” in *Translating Early Modern Science*, ed. Sietske Fransen, Niall Hodson, and Karl A. E. Enenkel (Leiden: Brill, 2017), 64; Wallace W. Marshall, *Puritanism and Natural Theology* (Eugene: Pickwick Publications, 2016), 1; Amedeo Molnár, “Comenius’ *Theologia Naturalis*,” *Communio Viatorum* 8, no. 1 (1965): 53.

Protestantism and offers a promising source of inter-faith dialogue found in the ecumenicism of natural theology. Comenius's theological platform in the *Oculus* was structured around the balance between faith and reason which he considered crucial to Christianity and which he believed could be found in the natural theology presented by Sibiuda.

The *Oculus* is, for the most part, a translation of the *Liber*, however, substantial changes are made throughout the text by Comenius. As a result, it should not be understood as an unadulterated transmission of Sibiudan thought. The *Oculus* shows evidence of theological “scrubbing” in accordance with the Protestantism of Comenius, who was a bishop within the Moravian Brethren in the present-day Czech Republic. This can be seen, for example, in the opening laudatory sentence of Sibiuda's prologue, in which Comenius subtly omitted any praise of the Virgin Mary and elevated the role of Scripture.⁹⁷ In addition to the inclusion of the prohibited prologue, these revisions were substantial enough to win the entire *Oculus* a position on both the Papal and Spanish indices. Theological scrubbing was employed in both directions; that is, although Comenius edited the *Liber* to conform to his Protestant theology and audience, Arés employed a similarly liberal use of revisions in order to make some passages of the *Liber* more theologically palatable in post-Tridentine Spain in his *Dialogos*.

Avoiding the Apologie: Montaigne, Mediator of Sibiuda

Sibiuda's dissemination across wider Europe was markedly different, therefore, than his reception within Spain. Moreover, the ways in which Sibiuda was adapted into translations meant that these variations became associated with Sibiudan thought. This can be seen in

⁹⁷ See, for example, the difference between these opening sentences in Sabunde, *Theologia Naturalis* [Lyon 1488], 10 (f. 1) and Ramón Sabunde, (*Oculus Fidei*) *Theologia Naturalis; sive Liber Creaturarum. specialiter De Homine & Natura ejus, in quantum Homo est, & de his quæ illi necessaria sunt ad cognoscendum Deum & Seipsum, omniáque Deo, Proximo, Sibi, obligatur ad Salutem*, ed. [Jan Amos] Comeni[us] (Amsterdam: Petrum van den Berge, 1661), 1.

perhaps the most popular of all the treatments of Sibiuda came at the hands of Michel de Montaigne (1533-1592), the French humanist and author of the *Essais*, published in two volumes in 1580. The longest entry among these collected essays is Montaigne's "Apologie de Raimond Sebond" (Vol. II, Essay 12), which had been preceded for over a decade by the Parisian publication of Montaigne's translation of the *Liber*, *La Théologie naturelle de Raymond Sebon* (Paris, 1569, with subsequent editions in 1581 and 1611, and in Rouen, 1641).⁹⁸ This translation was undertaken, as Montaigne reports in the *Apologie*, at the request of Montaigne's father, Pierre Eyquem, who had received a copy of the *Liber* from Pierre Brunel, a visiting scholar and acquaintance at the family estate.⁹⁹ The incredible popularity of both Montaigne's *La Théologie naturelle* and *Essais* was and is one of the primary ways in which Sibiuda's work is known at all.¹⁰⁰ Due to this popularity, particularly outside of Spain, Montaigne's contribution to Sibiudan studies must be mentioned.

In an analysis of Sibiuda, it is important to reference Montaigne's work; like Comenius's *Oculus*, it was one of the main ways that Sibiuda and his natural theology entered the intellectual sphere of early modern Europe. These works may also have impacted the fate of Sibiuda within Spain, as the Index of Prohibited Books monitored heretical publications (discussed in the following section). However, this chapter avoids discussing Sibiuda's impact as mediated by Montaigne for three reasons: first, studies of Montaigne, and particularly of his *Apologie*, are

⁹⁸ Ramón Sabunde, *La Théologie Naturelle de Raymond Sebond*, trans. Michel de Montaigne (Paris: Chez Guillaume Chaudiere, 1581), http://xtf.bvh.univ-tours.fr/xtf/view?docId=tei/XCollPriv_JC_01/XCollPriv_JC_01_tei.xml; Ramón Sabunde, *La theologie naturelle de Raymond Sebon*, trans. Michel de Montaigne (Rouen: Chez Jean de La Mare, 1641).

⁹⁹ Montaigne, *Essays*, II:12:490. The Château de Montaigne, located near Bordeaux, is approximately 200 kilometers northwest of the University of Toulouse, where Sibiuda was a professor and rector.

¹⁰⁰ Warren Boutcher, *The School of Montaigne in Early Modern Europe*, First edition, II vols. (Oxford: Oxford University Press, 2017); Jean Balsamo, "Publishing History of the Essays," in *The Oxford Handbook of Montaigne*, ed. Philippe Desan, trans. Carl T. Frayne (Oxford: Oxford University Press, 2016), 160–61. While Balsamo does not provide figures, he does suggest that the translation of *La Théologie Naturelle* enjoyed a popularity even before the publication of the *Essais*.

readily available and abundant; secondly, Montaigne's translation had a relatively unimportant influence on the development of natural theology within Spain; and lastly and most importantly, Montaigne's translation of the *Liber* and his accompanying *Apologie* are not faithful representations of Sibiudan thought. These latter two points deserve further attention. While Montaigne's *Essais* were known to certain courtly circles of readers within Spain, it is not immediately discernible that his translation of Sibiuda's work had any particular impact among the broader Spanish readership.¹⁰¹ On the last point, many scholars of Montaigne have rightly noted that not only is Montaigne's *Apologie* a work entirely independent from Sibiuda's original thesis, but even his 'translation' of Sibiuda's *Liber* is a hybridization of Montaigne's renaissance humanism with Sibiudan theology.¹⁰² Montaigne's "apology" for Sibiuda is a titular bluff, for he offers no justification or defence of Sibiuda's theological program, but rather advocates a fideist skepticism which delineates man's inability to ascertain any true knowledge by the exercise of reason and his necessary reliance, therefore, on faith as the mode of knowing God.¹⁰³

¹⁰¹ Jeremy Robbins, *Arts of Perception: The Epistemological Mentality of the Spanish Baroque, 1580-1720* (Abingdon: Routledge, 2007), 34–35; Juan Marichal, "Montaigne en España," *Nueva Revista de Filología Hispánica (NRFH)* 7, no. 1/2 (January 1, 1953): 259–78.

¹⁰² On this point, see especially Mireille Habert, "Montaigne, Translator of Raymond Sebond," in *The Oxford Handbook of Montaigne*, ed. Philippe Desan, trans. Manuela Galan (Oxford: Oxford University Press, 2016), 78–96; or in greater detail, see: Mireille Habert, *Montaigne traducteur de la Théologie naturelle: plaisantes et saintes imaginations*, Etudes montaignistes ; 57 (Paris: Classiques Garnier, 2010).

¹⁰³ I use the term "fideist skepticism" to describe Montaigne's mitigated skepticism in the *Apologie* by his assertion that faith is a necessary way of knowing God. That is, all truth was to be held in skeptical disbelief except those truths which came as revealed, divine authority and which needed to be assented to in faith. Jan Miernowski notes that there are different ways of interpreting Montaigne's skepticism, including "fideist skepticism," in which religious beliefs provided a framework for Montaigne to adopt a skeptical stance. Richard Popkin writes similarly of "Catholic Pyrrhonism." Jan Miernowski, "Montaigne on Truth and Skepticism," in *The Oxford Handbook of Montaigne*, ed. Philippe Desan (New York: Oxford University Press, 2016), 556; Richard H. Popkin, *The History of Scepticism : From Savonarola to Bayle*, Revised and Expanded Edition (Oxford: Oxford University Press, 2003), 47, <https://ebookcentral.proquest.com/lib/oxford/reader.action?docID=4701841#>; Christopher Edelman, "Montaigne, Michel De," Internet Encyclopedia of Philosophy, accessed February 4, 2019, <https://www.iep.utm.edu/>; Zbigniew Gierczynski, *Le "Que sais-je?" de Montaigne: interprétation de l'Apologie de Raimond Sebond*. (Lubin: Towarzystwo Naukowe Katolickiego Uniwersytetu Lubelskiego, 1970); Robbins, *Arts of Perception*, 2007.

Although Montaigne's position of fideist skepticism was made clear in the *Apologie*, it is also evident in the less-than-faithful translation of the *Liber* in 1569 and 1581. Mireille Habert and Michael Andrew Screech have both pointed to the understated language used in Montaigne's translation of the prologue as evidence of his editorializing, rather than translating, activity.¹⁰⁴ They cite, for example, Montaigne's edited version of the initial claims of the epistemic promise of the *Liber* in the first paragraph of the prologue.¹⁰⁵

Screech highlights phrases such as “as far as it is possible...” for natural reason to know God and that this knowledge “...gives great access to the intelligent of that which is prescribed and commanded by the Holy Scriptures...”, describing such activity as Montaigne's efforts to “tone down” the potentiality of natural theology.¹⁰ Habert also notes smaller changes, such as to Sibiuda's promise that his natural theology could be learned in under a month to Montaigne's extended “just a few months.”¹⁰⁶ To this could also be added, for example, Montaigne's scrupulous avoidance of “all” as a qualifier where Sibiuda describes the comprehensiveness of the knowledge gained from the Book of Nature.¹⁰⁷ These editorial changes reflect Montaigne's criticism of Sibiuda which he expounds in his *Apologie*, a criticism shared by many of Sibiuda's readers even to the present day. Given Montaigne's prominence, he may be responsible for perpetuating the stereotype of Sibiuda's position as one of hyper-rationalism. This portrayal is a straw man – as will be demonstrated later in this chapter, it is unlikely that Sibiuda believed or practiced any form of hyper-rationalism as depicted by Montaigne. It is important,

¹⁰⁴ Habert, *Montaigne traducteur [Fr.]*; Habert, “Montaigne, Translator [Eng.]”; Montaigne, *Essays*.

¹⁰⁵ Habert, “Montaigne, Translator [Eng.],” 86; Montaigne, *Essays*, xxiv.

¹⁰⁶ Habert, “Montaigne, Translator [Eng.],” 86.

¹⁰⁷ Sibiuda, *Tratado del amor*, 85:65; see also: Sabunde, *Theologia Naturalis [Lyon 1488]*, 28–29.

Translation by Screech available in Montaigne, *Essays*, lv-lvi; see also: Sabunde, *La theologie naturelle [Rouen 1641]*, 6–7.

therefore, when analyzing Sibiuda's natural theology, to clearly distinguish between the theology originally set forward in the *Liber* and those variant strains which were invented by commentators and translators in subsequent editions. This is not only true for foreign variations of Sibiuda such as the works of Comenius and Montaigne, but also true for para-Sibiudan publications within Spain.

The Index Librorum Prohibitorum and Sibiuda's Impact in Spain

A key historiographical debate is whether Sibiuda was a well-known and influential figure in the production of Spanish religious thought during the early modern period or not. Many scholars have demonstrated the success which Sibiuda's work found outside of the Iberian peninsula – the number of continental versions of the *Liber* and of the *Viola* attest to this success. Some scholars such as Tomás de Carreras Artau and Michaël Batllori have argued that Sibiuda's impact in Spain was minimal, while others, including Révah and Bujanda, have worked recently to connect Sibiuda to the nascent mysticism which would later flourish in Golden Age Spain.¹⁰⁸ This chapter supports this revisionism – Sibiuda, while not always recognized as the source, laid a clear foundation for the program of natural theology in early modern Spain. The dissemination of Sibiuda's writing in Spain occurred under the guise of numerous translations, glosses, abridgements, and adaptations – some forthrightly listing Sibiuda as their source, and others obscuring their connection to the *Liber*. The reason for this, as well as for the diminished recognition of Sibiuda in Spain, is often attributed to the censorial work of the Indices of Prohibited Books (*Index Librorum Prohibitorum*) issued both in Rome and in Spain at various times throughout the early modern period. Prior to the 1559 Index, there is good reason to believe that these books were read and sold regularly. Some indication of use can be

¹⁰⁸ Carreras y Artau, "Orígenes"; Carreras y Artau and Carreras y Artau, *Historia de la filosofía*; Batllori, "De Raimundo...atque Ignatio"; Révah, *Une Source*; Bujanda, "L'influence," 79.

reconstructed by the inventories of booksellers in Spain – for example, Juan de Junta’s successful bookstore in Burgos, the inventory of which was compiled in 1557 (immediately before the 1559 Index, as well as a royal proclamation limiting Spanish presses issued on September 7, 1558), as well as that of bookseller and printer Juan de Ayala in Toledo, 1556.¹⁰⁹ In 1557, Juan de Junta had in his Burgos bookstore three copies of the *Despertador* in quarto (thirty maravedís each), ten copies of the *Despertador* in octavo (twenty-five maravedís each), eight copies of the *Violetta* [sic] (thirty-four maravedís each), one hundred and two copies of various volumes and editions of Osuna’s *Abecedario Spiritual* (eighty-five maravedís each), one copy of Venegas’s *Differentias* [sic] (102 maravedís), and five copies of the *Lumbre del alma* in quarto and octavo (only ten maravedís each).¹¹⁰ For reference, Sara T. Nalle has placed the per diem wages of a laborer in Toledo in 1556 at forty maravedís, the base unit of currency in sixteenth-century Castile.¹¹¹ For the better part of a day’s wages, therefore, one could purchase a Sibiudan work in Burgos. The prices were even cheaper at Ayala’s Toledano bookstore, where fifty copies of the *Despertador* were on sale for twelve maravedís each, with another eight copies (presumably of a different version or quality) for twenty-five apiece.¹¹²

Many scholars have noted that Sibiuda’s work was placed on both the Papal and Spanish Indices, although the explanations for why this occurred vary and the nuanced history of its

¹⁰⁹ William A. Pettas, *A Sixteenth-century Spanish Bookstore: The Inventory of Juan de Junta*, vol. 85.1, Transactions of the American Philosophical Society (American Philosophical Society, 1995), 18; Antonio Blanco Sánchez, “Inventario de Juan de Ayala, gran impresor toledano (1556),” *Boletín de la Real Academia Española* 67, no. 241 (1987): 207–50.

¹¹⁰ Pettas, *A Sixteenth-century Spanish Bookstore*, 85.1:117, 127, 148.

¹¹¹ Sara T. Nalle, “Printing and Reading Popular Religious Texts in Sixteenth-Century Spain,” in *Culture and the State in Spain: 1550-1850*, ed. Tom Lewis and Francisco J. Sánchez (New York: Garland Publishing, Inc., 1999), 131; Elvira Vilches, “Coins, Value, and Trust: The Problematics of Vellón in Seventeenth-Century Spanish Culture,” in *Signs of Power in Habsburg Spain and the New World*, ed. Jason McCloskey and Ignacio López Alemán (Lewisburg: Bucknell University Press, 2013), 97; for a general introduction, see: Sara T. Nalle, “Literacy and Culture in Early Modern Castile,” *Past & Present*, no. 125 (1989): 65–96.

¹¹² Sánchez, “Inventario,” 222, 229. It is possible that Ayala also carried at least one copy of Venegas’s *Diferencias*, but the references to this work in Blanco Sánchez’s reproduced inventory is unclear.

censure has largely been overlooked.¹¹³ José Ferrater Mora writes that “the Council of Trent condemned the prologue of the *Theologia Naturalis* for its excessive naturalism to the detriment of revelation.”¹¹⁴ Similarly, Morales Flores attributes the prohibition to Sibiuda’s “excessive addiction to reason,” and more seriously, because of the unorthodox hierarchy of the persons of the Trinity indicated by Sibiuda’s description of the chain of creation.¹¹⁵ C.C.J. Webb incorrectly stated that Sibiuda’s *Liber* was placed on the Index in 1595 and remained on the Index through Leo XIII’s revision in 1896, finally disappearing from the catalogue in 1900.¹¹⁶ Peter J. Hess, repeating Webb’s mistake, attributed this prohibition to “the frigid ideological climate of the Counter Reformation” and Sibiuda’s “incautious exaltation” of natural theological knowledge.¹¹⁷ Sibiuda’s work was, in fact, condemned far earlier than 1595. The first prohibition of the *Liber* appeared on the 1559 Index published under Paul IV and banned the entire publication – not just the prologue.¹¹⁸ There is sufficient reason, however, to believe that

¹¹³ For the most thorough compilations of the various indices, consult the eleven volumes of the *Index des livres interdits* of Jesús Martínez de Bujanda, Marcella Richter, and Université de Sherbrooke Centre d’études de la Renaissance, *Index des livres interdits*, 11 vols. (Montréal: Médiaspaul, 1984); see also: Virgilio Pinto, “Los Índices de libros prohibidos,” *Hispania Sacra* 35, no. 71 (1983): 161–91; Virgilio Pinto Crespo, “El proceso de configuración y elaboración del Índice y Expurgatorio de 1583-84 en relación con otros Índices del s. XVI,” *Hispania Sacra* 30, no. 59 (1977): 201–54; Jesús Martínez de Bujanda, “El primer ‘Índice de libros prohibidos,’” *Scripta theologica: revista de la Facultad de Teología de la Universidad de Navarra* 16, no. 1–2 (1984): 443–50; Cesc Esteve, *Las Razones Del Censor: Control Ideológico y Censura de Libros En La Primera Edad Moderna* (Bellaterra: Servei de Publicacions de la Universitat Autònoma de Barcelona, 2013); Miguel De La Pinta Llorente, “Aportaciones para la historia externa de los Indices expurgatorios españoles,” *Hispania* 12, no. 47 (1952): 253; Ricardo García Cárcel and Javier Burgos Rincón, “Los Criterios Inquisitoriales En La Censura de Libros En Los Siglos XVI y XVII,” *Historia Social*, no. 14 (1992): 97–109; J. de Bujanda, “La Censure Littéraire en Espagne au XVIe Siècle,” *Canadian Journal of History/Annales Canadiennes d’Histoire* 7, no. 1 (1972): 1–15; Francis Sales Betten, *The Roman Index of Forbidden Books: Briefly Explained for Catholic Booklovers and Students*, 5th [Original, 1909] (St. Louis: B. Herder Book Co., 1920).

¹¹⁴ Ferrater Mora, *Diccionario (II)*, Tomo II: L-Z:605.

¹¹⁵ Morales Flores, “Ramón Sibiuda,” 5, 7.

¹¹⁶ Webb, *Studies*, 296.

¹¹⁷ Peter J. Hess, “‘God’s Two Books’: Revelation, Theology, and Natural Science in the Christian West,” in *Interdisciplinary Perspectives on Cosmology and Biological Evolution*, ed. Hilary D. Regan and Mark William Worthing (Hindmarsh: Australian Theological Forum, 2002), 28.

¹¹⁸ s.n., *Index Auctorum [Bologna 1559]*; Pettas, *A Sixteenth-century Spanish Bookstore*, 85.1:148; Bujanda suggests that the limited censorship of the prologue in later Indices may have been the result of the influence of Jesuits in Rome, who Batllori has argued had a particular affinity for Sibiuda’s work. See: Bujanda, “L’influence,” 79; Batllori, “De Raimundo...atque Ignatio.”

the prologue was the source of theological offense, as the 1564 “Tridentine” Index restricted the prohibition to the prologue alone (*prologus in theologiam naturalem*).¹¹⁹ Batllori has argued that this diminution of the original prohibition was largely due to the concerted lobbying by Jesuit readers of Sibiuda present in Rome, who found a close connection between the interior focus of Sibiudan theology and their own Ignatian spirituality.¹²⁰

As the explicit reasons for the prohibition of works was never included alongside the entries to the various catalogues, the explanation for *why* Sabunde was placed on the Index is ultimately speculative. Webb noted that the *Liber* was banned because it “...[made] the written Word superfluous.”¹²¹ He argued that Sibiuda’s work was:

...an assertion of the pre-eminent importance of natural knowledge...only Raymond is thinking rather of what lies open to every attentive sense...quite out of keeping with the spirit of the Thomistic tradition, which had become authoritative in the Roman Church by the time at which Raymond’s Prologue was placed, no doubt for this very reason, upon the Index.¹²²

Webb thus attributes the prohibition not to any denigration by Sibiuda against Scripture, but rather about the self-sufficiency of Nature. Peterfreund similarly attributes Sibiuda’s status “on theological thin ice” because of “his views on the Book of Nature.”¹²³ While Sibiuda’s emphasis on the sufficiency of reason and the Book of Nature could certainly have caused alarm among the curia, this should be placed in contrast to not only to Scripture, but to tradition and magisterial authority. This interpretation is supported by Alexander W. Hall, who argues that the placement of the *Liber* on the Index was likely due to the fact that “the *Theology* by and large

¹¹⁹ s.n., *Index librorum prohibitorum, cum regulis confectis per patres a Tridentina Synodo delectos, auctoritate sanctiss. d. n. Pij 4., pont. max. comprobatus*. (Venice: s.n. [Paolo Manuzio?], 1564), 30; Peterfreund, *Turning*, 142.

¹²⁰ Batllori, “De Raimundo...atque Ignatio”; Morales Flores, “Ramón Sibiuda,” 5; Bujanda, “L’influence,” 79; the commentary on Romans by Alfonso Salmerón, S.J. (1515-1585) does not show any Sibiudan reference. See: Salmerón, *Comentarii...Epistolas B. Pauli* [Salmerón, 1602], Vol. 1 and 13, in order: 427.

¹²¹ Webb, *Studies*, 294.

¹²² Webb, 296.

¹²³ Peterfreund, *Turning*, 142.

dispenses with religious authorities.”¹²⁴ The subsequent section of this chapter analyses Sibiuda’s treatment of this theme – the self-sufficiency of the Book of Nature – more closely. In considering the prohibition of Sibiuda’s prologue in Spain, some crucial historical points are worth noting. First, as has been noted above, it seems plausible to assume that the most offensive passages to both the Spanish and Papal censors must have rested in the prologue, rather than the body of the text. Secondly, the occurrence of the Indices in 1559 and 1564 indicate that there was likely a connection of these offending passages to heterodox ideas particularly associated with Protestantism – although this connection may be overstated. The *Liber* was not prohibited by earlier lists of forbidden works, including an index by the Faculty of Theology at the University of Paris (1551)¹²⁵ and an index created by the University of Louvain and reprinted by the Inquisitor General Fernando de Valdéz in Toledo in 1551, although the presence of numerous Reformation works (including Calvin, Luther, Erasmus, and Zwingli) on the list indicate that this index, just as those created in 1559 and 1564, were concerned to stem the tide of Protestant theology.¹²⁶

Still, the historical explanation for the prohibition of the work in 1559 and of the prologue in 1564 most likely rests in the reforming efforts of Tridentine Catholicism, Pope Paul IV and the formation of the original papal *Index*, and the reforming, anti-Erasmian efforts of the

¹²⁴ Alexander W. Hall, “Natural Theology in the Middle Ages,” in *The Oxford Handbook of Natural Theology*, ed. Russell Re Manning (Oxford: Oxford University Press, 2013), 69.

¹²⁵ s.n., *Catalogue des Livres examines et censures par la faculté de Theologie de l’ Université de Paris* (Paris: Iehan Dallier, 1551); see also: s.n., *Censura Generalis Contra Errores Quib[Us] Recentes Haeretici Sacram Scripturam Asperserunt* / (Valladolid: Ex officina Francis. Ferdinan. Corduben., 1554).

¹²⁶ s.n., *Catalogus Librorum Reprobatorum ex Iudicio Academiae Lovaniensis cum Edicto Caesareae Maiestatis Euulgatus; Extravagans Sanctissimi Domini nostri D. Iulii pape tertii contra tenentes seu legentes libros prohibitos vel reprobatos; alius catalogus librorum auctoritate illustrissimi ac reverendissimi domini D. Ferdinandi de Valdes archiepiscopi Hispanen. inquisitoris generalis; & dominorum de consilio sanctae generalis inquisitionis iam pridem reprobatorum, cim edicto dominorum inquisitorum aposto licorum in civitate Toletan. refidestium quorum censura nonulli alii libri novissime reprobati: prioribus adiunguntur*, Reprinted Facsimille for A. M. Huntington by De Vinne Press, New York (Toledo: Ex Officina Ioa. de Aiala, 1551).

Inquisitor General Fernando Valdés-Salas in Spain (1547-1566).¹²⁷ Whether the Protestant connection was due to excessive rationality or the advocacy of a decidedly different methodology from *de rigueur* Thomism in Spain, however, is less than clear. Likely reasons include the *Liber*'s connection to interior spirituality – a theological theme which, as has been noted, was later developed and refined by Spanish mysticism as well as Carthusian piety and Ignatian spirituality. This same interior spiritualism, however, could also easily be connected with the *alumbrado* heresy of Spain.¹²⁸ The following chapter discusses the connection between natural theology and devotional and mystical spirituality in Spain, and particularly with the *alumbrado* heresy in sixteenth-century Toledo, in greater detail.

In any case, although historians may attribute the lack of Sibiudan influence to the Index, this fails to account for the absence of the *Liber* in the seventy-five years between its publication in Deventer (1484-1485) and its appearance on the Valdes Index (1559).¹²⁹ It is also important that the placement of the prologue of the *Liber* on the Indices is an insufficient explanation for denying Sibiuda any influence in Spanish theology, because Sibiuda was mostly scattered across Spain under the various devotional incarnations previously described. These works were

¹²⁷ Bujanda, “El primer ‘Índice...’”; J.M. de Bujanda, “Literary Censorship in Sixteenth-Century Spain,” *CCHA Study Sessions* 38 (1971): 51–63; Max Lenard, “On the Origin, Development and Demise of the Index Librorum Prohibitorum,” *Journal of Access Services* 3, no. 4 (July 26, 2006): 51–63; Valentín R. Vázquez de Prada, “La Inquisición y los libros sospechosos en la época de Valdés-Salas (1547-1566),” in *Simposio Valdés-Salas: Commemorativo del IVo centenario de la muerte de su fundador D. Fernando de Valdés (1483-1568) : su personalidad, su obra, su tiempo* (Oviedo: Universidad de Oviedo, 1970), 147–56; José Luis González Novalín, *El inquisidor general Fernando de Valdés (1483-1568): su vida y su obra* (Oviedo: Universidad de Oviedo, 1968); Manuel Antonio Arias, “Fernando Valdés y Salas,” *Boletín del Instituto de Estudios Asturianos* 12, no. 35 (1958): 383–92; Richard Viladesau, *The Triumph of the Cross: The Passion of Christ in Theology and the Arts from the Renaissance to the Counter-Reformation* (Oxford: Oxford University Press, 2008), 223.

¹²⁸ Horacio Santiago Otero, “En torno a los alumbrados del reino de Toledo,” *Salmanticensis* 2, no. 3 (1955): 614–54; Pedro Santonja, “Las doctrinas de los alumbrados españoles y sus posibles fuentes medievales,” *DICENDA. Cuadernos de Filología Hispánica* 18 (n.d.): 353–92; Francisco Sánchez-Blanco, “Ambivalencia de las referencias a San Agustín en la reprobación de los Alumbrados por Juan Francisco de Villava,” *CRITICÓN* 118 (2013): 113–35; Álvaro Castro Sánchez, “Construcción del discurso místico y plebeyización de la santidad en Lumbre Del Alma de Juan de Cazalla,” *Cahiers d'Études Des Cultures Ibériques et Latino-Américaines* 3 (2017): 45–58.

¹²⁹ s.n., *Catalogus librorū, qui prohibētur mandato Illustrissimi & Reverend. D.D. Ferdinandi de Valdes Hispaleñ. Archiepi, Inquisitoris Generalis Hispaniae* (Valladolid: Sebastianus Martinez, 1559).

inconsistently prohibited by the Index – indeed there is good reason to think that the republication and repackaging of Sibiuda’s work in some of these forms was a calculated ploy by publishers to circumvent the restrictions of the censors. Although this is clearly not the case with the *Viola* (1499), whose publication date precedes its appearance on any index by more than half a century, this was a proven method in the early modern Spanish book trade.¹³⁰ Lastly, the presence of Sibiuda’s prologue on the Index, as well as the intermittent appearances made by the para-Sibiudan treatises, does not necessarily correlate to lowered readership. Morales Flores suggests that the Index’s prohibition of Sibiuda may have functioned as an enticement to some readers, while others would likely have ignored the prohibition altogether.¹³¹

Juan Antonio Pellicer y Saforcada (1738-1806), a literary scholarly and antiquarian librarian for the Royal Library in Madrid at the end of the eighteenth century, helps to indicate the awareness of Sibiuda and of Sibiudan scholarship and criticism that existed in early modern Spain, as well as the level to which these were influenced by the Inquisition.¹³² Pellicer, in a 1778 essay on translations of works which predated the printing press, gave an extensive summary of writers who had discussed, been inspired, or repudiated Sibiuda’s theology.¹³³ Whether this is representative of a robust awareness of Sibiuda is unclear. Hispanist Ian Michael asserts that Pellicer’s research on Sibiuda was part of the “eighteenth-century recovery of early Spanish literature” which was “forgotten for the most part...”¹³⁴ Still, Pellicer, who was

¹³⁰ Martin A. Nesvig, “The Index of Prohibited Books in Sixteenth Century Mexico: Theological Conservatism and Adaptive Responses to Censorship,” *Journal of Religious and Theological Information* 10, no. 3–4 (2011): 103–24; see also: Patricia W. Manning, *Voicing Dissent in Seventeenth-Century Spain: Inquisition, Social Criticism and Theology in the Case of El Criticón* (Leiden: Brill, 2009).

¹³¹ Morales Flores, “Ramón Sibiuda,” 5.

¹³² José Montero Reguera, “Juan Antonio Pellicer Saforcada,” Real Academia de la Historia: Diccionario Biográfico Español, accessed January 18, 2019, www.rah.es.

¹³³ Pellicer y Saforcada, *Ensayo de una bibliotheca*.

¹³⁴ Ian Michael, “Juan Antonio Pellicer and the Eighteenth-Century Recovery of Early Spanish Literature,” in *Spain and Its Literature: Essays in Memory of E. Allison Peers*, ed. Ann L. Mackenzie (Liverpool: Liverpool University Press, 1997), 211.

analyzing the *Dialogos*, connected this work to the *Viola*, which he incorrectly attributed as the direct work of Sibiuda.¹³⁵ Pellicer established Sibiuda as an influential figure of late-medieval and early modern theology and cited fourteen notable critics and devotees of his work, including Bayle, Montaigne, Johann Christoph Wolff, Johannes Trithemius, Théophile Reynaud, and Thomas Crenius.¹³⁶

Pellicer admitted that Sibiuda's *Theologia Natural* was banned by the Roman Index in 1559, but that after the Council of Trent "no memory of this prohibition was made," and the prohibition was restricted to the prologue alone.¹³⁷ This restricted prohibition, Pellicer noted, was kept by latter indices compiled by Quiroga (1584), Sandoval y Rojas (1611), Zapata (1630), Sotomayor (1640), Sarmiento y Vallardes and Marin (1707), and Pope Benedict XIV (1758).¹³⁸ The 1707 Marin Index, as Pellicer explained, banned the entirety of Sibiuda's work as it had been published by the heterodox theologian Comenius.¹³⁹ Because this prohibition specified the Comenius edition, which would elsewhere be reprinted as the *Oculus*, and because Pellicer, not possessing a copy of this prohibited version, could not be sure as to how substantially Comenius had altered Sibiuda's original work, he judged the 'true' body of the *Theologia/Liber* to be free of censure, a fact which he thought confirmed by Benedict XIV's 1758 Index, which returned to banning the prologue alone.¹⁴⁰ Finally, Pellicer noted that the Valdés Index (1559):

...prohibited a Castellano work entitled *Violeta del Anima*. As the Index does not avail itself of more explanation, nor have we had the work to hand, we cannot verify the suspicion, if perhaps this book is some old translation made of the original made by the aforementioned Fr. Pedro Aurato, which, according to

¹³⁵ Pellicer y Saforcada, *Ensayo de una bibliotheca*, II.16.

¹³⁶ Pellicer y Saforcada, II.15–16.

¹³⁷ Pellicer y Saforcada, II.17.

¹³⁸ Pellicer y Saforcada, II.17–18.

¹³⁹ Pellicer y Saforcada, II.18.

¹⁴⁰ Pellicer y Saforcada, II.18–19.

Andres Faxandro, is the same work as the *Dialogues* translated by Fr. Antonio Ar[é]s.¹⁴¹

It seems that the prohibitions made by both the Spanish and Papal indices forbidding the reading of Sibiuda's prologue and para-Sibiudan works were ineffective. Pellicer's comment reveals several important points about readership responses to the Index. Publishers and readers were aware that such sleight-of-hand translations and glosses regularly occurred, and this allowed for loose interpretation of the Index's prohibitions. For example, Pellicer knew that the *Dialogos* were almost identical the *Viola*, but failed to acknowledge that the *Viola* had been banned by the Sixtus V Index of 1590 and acquitted himself by acknowledging that the errors which condemned books could rest in individual translations (as was the case with Comenius's *Oculus*).¹⁴² Additionally, Pellicer suggested that the omission of a work from a later list could be interpreted by readers to mean that it was now permissible to read it.¹⁴³ Between the competing compilations of the Papal and Spanish indices, it is possible that omissions on one could be used as leverage against the other. For example, while both the 1583/4 Quiroga Index and the 1628 Sandoval y Roxas Index banned Sibiuda's *Prologus in Theologiam naturalem*, the anonymous *Despertador*, the *Violeta*, and the unknown *Tesoro de los Angeles*, neither of these indices banned the *Viola*, despite its presence on coterminous papal indices (a point which Pellicer exploited).¹⁴⁴

¹⁴¹ Pellicer y Saforcada, II.19.

¹⁴² Fr. Heinrich Reusch, *Die Indices librorum prohibitorum des sechzehnten Jahrhunderts* (Tubingen: Litterarischer Verein in Stuttgart, 1886), 521.

¹⁴³ Censorship was particularly ineffective in peripheral areas far from the jurisdictional power of the Inquisition. Writing on New Spain, Martin Nesvig notes that there was "virtually no regulation of the book trade through Veracruz before 1571," and that it was often expressed by colonists that "inquisitorial censure was useful only to wipe their asses..." see Martin Austin Nesvig, "'Heretical Plagues' and Censorship Cordons: Colonial Mexico and the Transatlantic Book Trade," *Church History* 75, no. 1 (March 2006): 4, 24; Otis Green and Irving Leonard, "On the Mexican Booktrade in 1600: A Chapter in Cultural History," *Hispanic Review* 9, no. 1 (1941): 1-40.

¹⁴⁴ Gaspar de Quiroga, *Index et catalogus Librorum prohibitorum, mandato Illustriss. ac Reuere[n]diss. D.D. Gasparis a Quiroga, Cardinalis Archiepiscopi Toletani, ac in regnis Hispaniarum Generalis Inquisitoris, denuò editus. Cum consilio Supremi Senatus Sanctae Generalis Inquisitionis* (Madrid: Alphonsus Gomezium, 1583), 55r,

Moreover, Pellicer's compilation of authors who commented on Sibiuda demonstrates that Sibiudan thought, principally diffused through the *Liber* and *Viola*, continued to exercise influence over continental writers – writers who, in turn, maintained a presence in Spanish thought during the early modern period. Montaigne's *Essais* (1580), which included his "Apology for Raymond Sebonde," was not placed on the Index until 1676.¹⁴⁵ Even those works authored by non-Catholic authors or which were suspect could have an impact – Bayle's *Dictionnaire historique et critique* (1697), for example, remained an influential work, despite its own prohibition by the Index.¹⁴⁶ Pellicer's list was not exhaustive; to it can be added the work of Puig i Oliver, who has compiled thirty-eight references to Sibiuda in critical literature from the fifteenth to the eighteenth centuries (and an additional 115 references in the nineteenth and twentieth centuries, perhaps a response to Menéndez Pelayo's lament that Sibiuda was neglected in Spanish intellectual history).¹⁴⁷ While Sibiuda may not have been a household name in early modern Spain, he was not as forgotten as some scholars have claimed. Particularly in the fifteenth and sixteenth centuries, Sibiuda had a particular prominence in the formation of natural theology and corresponding mystical, devotional, and spiritual literature in Spain.

The Liber: A Structural Overview

Having presented the publication history of Sibiuda's *Liber* and its many revisions, this chapter now analyses the overall structure of Sibiuda's natural theology, highlighting several of

64r, 70r, 71v, <http://archive.org/details/ARes125061>; Bernardo de Sandoval y Rojas, *Index librorum prohibitorum et expurgatorum* (Madrid: Io. Baptist Maringo, 1628), 31, 70r, 78, 86, 88, <http://archive.org/details/A295132>.

¹⁴⁵ This seems to be an oversight of the Index; as George Caspar Homans has noted, "I do not understand why it did not get the *Essays* on the Papal Index of prohibited books in less time than it took to read them..." George Caspar Homans, "The Relevance of Montaigne to the Modern World," *Proceedings of the Massachusetts Historical Society* 96 (1984): 8.

¹⁴⁶ Tommaso Agostino Ricchini and Catholic Church. Pope Benedict XIV), *Index librorum prohibitorum SS̃mi D.N. Benedicti XIV. pontifis maximi jussu recognitus, atque editus*. (Rome: ex typographia reverendæ Camerae apostolicæ, 1758), 26.

¹⁴⁷ Puig i Oliver, "Valoració."

the key themes and topics in the Liber, suggesting some of the sources which may have influence Sibiuda's writing, and connecting Sibiuda's work to the historical context of late-medieval and early modern Spain. In its earliest form, the Liber contained no chapter titles or marginal notations, only ordinal numbers placed in front of each subsection.¹⁴⁸ As the work was reproduced, especially during the incunabula phase, editors added subdivisions, chapter titles, and marginal notes, including references (mostly biblical) to aid the reader in navigating the otherwise weighty compendium of theology in the book. Most commonly, the work may be divided into five sections composed of three hundred and thirty chapters in total.¹⁴⁹ The topics presented in the work go well beyond natural theology, and the presentation of so many diverse themes within the same volume has led some scholars to divide the work rather haphazardly. This provides the temptation to view the Liber as a jumbled assortment of theological topics without any order; the result is that many studies have isolated sections of the work, focusing on particular elements within Sibiuda's thought without connecting those ideas to the rest of the work. While this chapter focuses on Sibiuda's natural theology, it connects this theology to the rest of the Liber in an effort to remedy this. As Puig i Oliver has rightly argued, the Liber has "...a lineal structure. The questions are linked together following an internal logic that wants to be rigorous and well-fixed."¹⁵⁰ Pointing to a crucial turning point in chapter 223, in which Sibiuda describes the Fall of man, Puig i Oliver divides the work neatly into two halves.¹⁵¹ The first half, according to Puig i Oliver, considers man *de jure*, that is to say, man as part of creation (*opus creationis*) and the necessary entailments of this fact; the second half describes man *de*

¹⁴⁸ Puig, *La filosofía*, 87.

¹⁴⁹ Gómez-Heras, "El 'Liber Creaturarum,'" 238; These sections are sometimes referred to as "books;" however, as "book" becomes an important term within Sibiudan theology, this chapter employs the term "section" to describe these units. See: Sibiuda, *Tratado del amor*, 85:71.

¹⁵⁰ Puig, *La filosofía*, 87.

¹⁵¹ Puig, 89.

facto – that is, the reality of his situation in relation to the Fall, redemption, and the end of time.¹⁵² More particularly, however, the *Liber* is structured around a series of topics; it starts with sections on the contemplation of God through Nature, but it also contains lengthy sections on how this knowledge compels an awareness of service to God, on Scripture, on the Fall, on redemption, on the Sacraments, and on the Church.¹⁵³ The dialogical revisions of the *Liber* consolidated these topics into seven (or eight) dialogues – much of the finer points of Sibiuda's natural theology, particularly chapters 68-108, are effaced in this process; additionally, the eighth dialogue present in Arés's *Dialogos* which recounts a conversation between the Virgin Mary, Jesus Christ, and a member of the regular clergy is entirely novel (and highly questionable) material.¹⁵⁴

A study of the structure of the *Liber* demonstrates therefore that Sibiuda's work is indeed bound together in an orderly, lineal progression; understanding this order of thoughts helps to comprehend Sibiuda's particular theories on the forms and uses of natural theology. This order is expressed in eight points:

1. Man begins with natural theology, starting with no revelatory knowledge, but only the gift of natural reason and an awareness of his existence amidst the rest of creation.
2. From this rational contemplation of nature, man discerns truths about the Creator; Sibiuda believes that even more advanced elements of the faith may be gleaned from meditating on the degrees and differences of nature.
3. This faith teaches and compels man to recognize that he, as a created being, owes love, fear, honor, and service to God the Creator.
4. These truths can be found in the Scriptures, which God gave to elucidate, instruct, and confirm his truths; the two books of Scripture and Nature are in complete accord, both being authored by God.
5. Although man has an obligation to God, he regularly fails to fulfill this obligation. This is because of the Fall; sin has marred man and condemned him to death.

¹⁵² Puig, 90.

¹⁵³ Gómez-Heras, "El 'Liber Creaturarum,'" 239.

¹⁵⁴ Sebunde [Sibiuda], *Dialogos*, 2.

6. Yet God has instituted a plan of redemption in order to rescue Man; this was achieved by sending God's son, Jesus Christ, to suffer and die for mankind.
7. Jesus Christ ordained and God has provided sacraments that continue to extend God's redeeming grace to man in the present day.
8. The Church safeguards this sacramental ministry and awaits the day of judgment, when God will bring all to a just end.

Sibiuda's natural theology forms the initial 108 chapters of the *Liber*, or the first four points of the progression. It is in this natural theology that Sibiuda contributed a unique corpus of ideas, particularly in his depiction of man's relation to the order of creation, his description of the universal faculty of reason and its potential to uncover truth, and his representation of the relationship between the two books of Nature and Scripture.

Sibiuda's Motivation and Main Goal in the Liber

Deciphering Sibiuda's principal aim for writing the *Liber* is difficult. Several scholars have asserted that Sibiuda's objective was to demonstrate the fundamental unity of knowledge by illustrating the harmony between the books of Nature and Scripture. Emidio Campi wrote that "The overarching goal of this work...is precisely to show that the books of divine revelation, the book of creatures (*liber creaturarum*) and the book of Scripture (*liber Scripturae*), do not contradict but supplement each other."¹⁵⁵ This unity between Scripture and Nature could be abstracted to signify the symbiotic relationship that theology or religion had with philosophical knowledge more broadly. Thus, Campi's sentiment is somewhat echoed by the anonymous translator of the 1854 edition of the work into Spanish, who wrote that "...Religion and Philosophy, far from being opposed to each other, each takes the other by the hand; and that therefore [just] as Religion is the true Philosophy, Philosophy without Religion is a true imposter."¹⁵⁶ Others have asserted that it is not the fundamental harmony of the two books

¹⁵⁵ Emidio Campi, *Shifting Patterns of Reformed Tradition* (Göttingen: Vandenhoeck & Ruprecht, 2014), 272.

¹⁵⁶ Sabunde, *Las Criaturas*, 8.

which is the primary goal, but rather the promising potential of the Book of Nature to discover the fundamental truths of the Christian faith. Ferrater Mora wrote that “the principal philosophical idea contained in the work is the doctrine that it is possible by means of the contemplation of Nature to arrive at the acquisition and comprehension of the fundamental truths included in the Sacred Scriptures.”¹⁵⁷ This, he noted, is achieved by the “conciliation” (*conciliar*) of faith and reason (another variation of the two books).¹⁵⁸ Similarly, Bujanda argued that Sibiuda’s fundamental aim was “To teach the root, the origin and the foundation of all the sciences and of all truth... By apprehending this science [Sibiuda] proposes a method founded on infallible and irrefutable arguments taken from experience, from creatures, and from the nature of man.”¹⁵⁹ Likewise, Révah wrote that Sibiuda provided, “...from a study of human nature, to prove the truth of Christian doctrine. Or, to give to man the exact sentiment of his nature, he must be show his place in the order of the universe in which [Sibiuda] calls it the scale of Nature.”¹⁶⁰ To some scholars, this reliance on arguments apart from Scripture and authority has signified that Sibiuda’s ultimate motivation for writing the *Liber* was therefore apologetic in nature. Pellicer y Saforcada, writing in the eighteenth century, described Sibiuda’s intent “...to demonstrate the truths and mysteries of our Religion against the impious with arguments derived from human reason, lifting from the knowledge of created things [*cosas criadas*] to divine things.”¹⁶¹ Alain Guy has echoed this, describing the “apologetic project” of the *Liber* and writing that “Sibiuda has as his goal the defense of the faith, not especially against Muslims (as Llull), but rather, more broadly, against all of the incredulous, and in particular, against the Latin

¹⁵⁷ Ferrater Mora, *Diccionario (II)*, Tomo II: L-Z:605.

¹⁵⁸ Ferrater Mora, Tomo II: L-Z:605.

¹⁵⁹ Bujanda, “L’influence,” 78.

¹⁶⁰ Révah, *Une Source*, 8.

¹⁶¹ Pellicer y Saforcada, II.16. Note that different terms for “knowledge” exist in Spanish; I differentiate most often between *conocimiento* (used here, “knowledge”), *entendimiento* (“understanding”), and *ciencia* (“science”).

Averroists, the Nominalists, and the Skeptics. In this sense, Sibiuda proscribed all arguments from authority.”¹⁶² Still, arguably the best explanation of Sibiuda’s goal comes from the unknown translator of the *Liber* into English, a manuscript which remains the only such copy in the world. In it, the mysterious editor of Sibiuda detailed that “the Argument and Subject of this work” was the explanation of man’s “bounden duty, both to God and to his neighbour,” noting that “the profitable use and end thereof” was the motivation of the soul to love.¹⁶³ Each of these claims has some merit; by analyzing Sibiuda’s prologue, in particular, as well as the introductory passages to the dialogical para-Sibiudan revisions, this chapter affirms that Sibiuda’s purpose in writing the *Liber* was both didactic and apologetic, but that his fundamental aim was the utilization of this knowledge for the salvation of souls and the increase of spiritual devotion.

It is certain that Sibiuda’s purpose was instructional. Sibiuda purported that his book would teach a method for the acquisition of knowledge. He wrote that he sought “the Science of the book of Created things, or the book of nature, and the Science of man.”¹⁶⁴ The prologue is laden with epistemic vocabulary: “that [the readers] will be able to know...,” “this science teaches to all men to know...,” “...and by this science man knows...,” “...and by this science [the reader] will know...,” “furthermore, by this science it is easy to understand...”¹⁶⁵ Sibiuda described the subject of his work as a body of knowledge (*scientia, ciencia*), a knowledge which he knew the method for understanding and was eager to educate his readers. As this knowledge was directed at learning about God, most broadly, and about the Catholic faith in particular, this aim may also be described as catechetical. Sibiuda described that the *Liber* would teach “all of the truths that man needs to know, both about man as [well as] about God...,” “...all that is

¹⁶² Alain Guy, *Historia de la Filosofía Española* (Barcelona: Anthropos Editorial del Hombre, 1985), 43–44.

¹⁶³ s.n., “Naturall Theologie,” 2.

¹⁶⁴ Sibiuda, *Tratado del amor*, 85:63.

¹⁶⁵ Sibiuda, 85:63–65.

contained in the Sacred Scriptures, and all that is said and announced in the Sacred Scriptures can be known with this science...,” and furthermore “...all the [H]oly [D]octors.”¹⁶⁶ Thus, Sibiuda advertised that “if you want to be consolidated, founded, firm and certain [in this knowledge], learn first this science.”¹⁶⁷ Sibiuda sought, therefore, to instruct readers in the faith – this is seen, moreover, in the extensive amount of material which he devotes to presenting basic tenets of Catholicism. Chapters 68-81 are a straightforward affirmation of creedal statements, including, for example, “On the Incarnation of God,” (LXXIV) and “On the Immortality of the Soul” (LXXIX). Likewise, Sibiuda’s care to delineate each of the seven sacraments suggests his desire to clearly teach all of the most important elements of the Catholic faith to his audience.

Yet there is also clearly an apologetic aim in Sibiuda’s work. In a crucial passage in the prologue, Sibiuda wrote:

...in this science and thanks to it one can give an answer to all of the questions that one can form, both about God and about man, and thus without any difficulty. Also one will be warned with the greatest clarity [about] all the errors of the ancient philosophers, pagans, and infidels. And by this science, one will now infallibly and be able to prove that the Catholic faith is true. And one will know and will prove infallibly that all the sects that are against the Catholic faith are false and erroneous...against the impugnors of the faith, and that no one should be induced to error...¹⁶⁸

In later translations, Sibiuda’s work would be used as a refutation of Protestantism – this is almost certainly the case for Montaigne’s translation. In 1436, however, it is more likely that the errors and impugnors of the faith that he had in mind were both Jews and Muslims, and as Guy

¹⁶⁶ Sibiuda, 85:63–65.

¹⁶⁷ Sibiuda, 85:65.

¹⁶⁸ Sibiuda, *Tratado del amor*, 85:64–65; see similar passage in Sabunde, *Oculus*, 2.

noted, heterodox Catholics, particularly the Latin Averroists who were influential in late-medieval France and Catalonia.

At its heart, however, the *Liber* is a work which sets out to strengthen Catholics in their beliefs, to arm and to defend them by increasing their knowledge of the faith through the science of the Book of Created things. The increase of this knowledge motivates people to praise, love, and serve God, and through this praise and love, to be saved to eternal life. Sibiuda's fundamental aim is to inspire this devotional spirituality in his readers. He described his hope that the work would not simply achieve the acquisition of knowledge. Rather, he desired that "...not only does [this science] serve to illuminate the road to knowledge, but that this science moves the will and excites it so that with gladness and spontaneity it should desire, act, and work by love."¹⁶⁹ Sibiuda believed his natural theology "...teaches also how man can be restored, and what things are necessary for his restoration;" this was, in other words, the "life [of] wisdom, that which leads to eternal life..."¹⁷⁰ Morales Flores rightly titled his study of Sibiuda "Amor y Conocimiento" ("Love and Knowledge"); because any study which emphasizes the natural theology of the *Liber* or Sibiuda's exaltation of reason and nature without connecting it to the prescribed *telos* of human salvation and the glorification of God loses the endgame of Sibiuda's work.¹⁷¹ Sibiuda devotes nearly one-third of his entire writing (chapters 109-210) to showing how the knowledge produced by natural theology compels belief and adoration of God expressed through love, honor, service, and fear. He dedicates the final third to demonstrating man's sin-stricken inability to do so and God's gracious supply of redemption through Christ and through the sacraments (chapters 211-321). The 1854 translation of the *Liber*, which took many editorial

¹⁶⁹ Sibiuda, *Tratado del amor*, 85:63; Sabunde, *Oculus*, 1.

¹⁷⁰ Sibiuda, *Tratado del amor*, 85:66, 70.

¹⁷¹ Morales Flores, "Ramón Sibiuda."

liberties in its effort to convert the work into a book suitable for youth, summarized this salvific intent of natural theology by proclaiming as its final lines:

What an admirable thing! God has prefixed in mankind as the principal end of [human] life to praise Him, to honor Him, and to serve Him, and by this manner to be saved...[therefore] our ultimate end must be the invariable rule of our actions and desires.¹⁷²

According to Sibiuda, it is by the knowledge of natural theology that these desires for God are known, and by these desires that man is enticed and driven to serve God.

Morales Flores describes the “seduction of happiness” in Sibiuda’s *Liber*, and asserts that “In sum, the Sibiudan ethic is an ethic of happiness, of concord, of spiritual hedonism and of the mystical divinization through love.”¹⁷³ Works which have incorrectly studied only Sibiuda’s prohibited prologue have largely missed this point, resulting in the Montaignesque caricature of Sibiuda’s goal of establishing a new source of knowledge by ratiocination and the contemplation of the scale of nature. Inversely, Révah rightly labeled the *Liber* a “source of peninsular spirituality,” and it comes as little surprise that the work was translated into several devotional works and had a significant impact on the development of interior spirituality and mysticism both in the Low Countries and in early modern Iberia.¹⁷⁴

¹⁷² Sabunde, *Las Criaturas*, 416.

¹⁷³ Morales Flores, “Ramón Sibiuda,” 8–9.

¹⁷⁴ Révah, *Une Source*; Prospereretti, “Viola Animae”; Cazalla, *Lumbre*; Castro Sánchez, “Construcción”; it has already been noted that Sibiudan theology influenced various spiritual and mystical movements in Spain, including sixteenth-century *alumbradismo* (explored in the following chapter). It was likely also directly responsible for some of the practices of the Brethren of the Common Life in Deventer, where the *Liber* was first printed. Further analysis may reveal connections between the *Liber* and that most famous of all late-medieval devotions, the *Contemptus Mundi* or *Imitatio Christi* of Thomas á Kempis. The connection to Deventer circles poses an intriguing possibility. It is commonly thought by scholars that one of the potential sources for the interior spirituality and pietism which marked Spanish mysticism in the sixteenth century was the *devotia moderna* associated with the Low Countries and the German lands of the Holy Roman Empire during the fifteenth century. If, however, Sibiuda’s work was responsible for influencing the *devotia moderna*, then it is possible that the treatment of nature and reason in Spanish mysticism is, in fact, an unrecognized descendent of medieval Catalan spirituality. See: Rafael M. Pérez García, “Communitas Christiana: The Sources of Christian Tradition in the Construction of Early Castilian Spiritual

Key Themes in Sibiuda's Natural Theology:

Having explored the Sibiudan historiography, publication history, structure, and the main theological aims of the *Liber*, this chapter now analyses four of the most important themes presented in Sibiuda's natural theology. These themes represent topics which were not only central to Sibiuda but also ideas which remained highly influential to subsequent developments within the genre of natural theology in sixteenth- and seventeenth-century Spain. This includes the use of the trope of the "ladder of nature" (*scala naturae*) paired with an emphasis on the heuristic importance of restorative and transformative love and the human will, Sibiuda's description of the two books of Nature and Scripture and his modal definition of these areas of knowledge, the dual use of natural theology for both devotional reflection and for apologetics, the sufficiency of nature and the prominence of reason and experience as modes of perception, and the role of the Fall and the limits of a postlapsarian human intellect. The *Liber* represents a novel synthesis of medieval and patristic positions – a synthesis which, in turn, provided Spain with a unique intellectual and theological legacy. The following sections explore each of these key themes in turn, analyzing Sibiuda's treatment of the topic and connecting Sibiuda's *Liber* to likely influences of his theology.

Key Theme 1: Climbing the Ladder of Nature in Knowledge and Love

One central theme which Sibiuda developed and which would hold great sway over Spanish natural theology was his description of humanity's place in and relation to the *scala naturae* – the ladder of nature, or as historians have often described it, the "great chain of

Literature, ca. 1400-1540," in *Books in the Catholic World during the Early Modern Period*, ed. Natalia Maillard Álvarez (Leiden: Brill, 2013), 73; Colin Thompson, "A. L. Cilveti, 'Introducción a La Mística Española' (Book Review)," *Bulletin of Hispanic Studies (Liverpool)*; *Liverpool* 54, no. 1 (January 1, 1977): 48–49; Doyle, "A Manuscript of...Dorlandus," 155–62.

being.”¹⁷⁵ The conception of a ladder or scale of knowledge is not unique to Sibiuda; scholars have noted Sibiuda’s connection to both Franciscan thought, in which St. Bonaventure employed language of an “ascent” of the mind up to God and of Ramón Llull’s use of “intellectual ladders” in his works.¹⁷⁶ In fact the “ladder of nature” is not the only ladder in Sibiuda’s work – but one of two ladders, the other being the “ladder of grace.”¹⁷⁷ The “ladder of grace” is explicitly defined, shown to be a metaphor for “the holy Sacraments...”¹⁷⁸ How then, should Sibiuda’s “ladder of nature” be interpreted? The ladder is a metaphor for order and hierarchy in creation. Sibiuda imagined all of nature as rungs or steps on a ladder, ordered from lowest to highest based on their complexity.¹⁷⁹ At the lowest level were those parts of nature which simply existed – rocks and minerals, for example. At the next level were natural elements such as plants which had life, but no “feeling” (*sentir*). Next were living things (animals) which felt, but lacked cognition and understanding (*entender*). Then came humanity at the next step, capable of not only living and feeling, but thinking, understanding, and loving. Above this were other created entities – angels, for example, and above all, God, the creator. The *scala naturae* was already a longstanding idea in the western tradition; Arthur Lovejoy, for example, has traced the genealogy of these ideas to Greek philosophy through the eighteenth-century in his famous work, *The Great Chain of Being*.¹⁸⁰ Sibiuda, however, was able to effectively use this conception to help articulate and justify his theories of natural theology. For Sibiuda, humanity’s place as a

¹⁷⁵ Arthur O. Lovejoy, *The Great Chain of Being [Electronic Resource]: A Study of the History of an Idea*, William James Lectures (Cambridge, Mass.: Harvard University Press, 2001), <https://ezproxy-prd.bodleian.ox.ac.uk/login?url=http://hdl.handle.net/2027/heb.05488>; Edward P. Mahoney, “Lovejoy and the Hierarchy of Being,” *Journal of the History of Ideas* 48, no. 2 (1987): 211–30; William F. Bynum, “The Great Chain of Being after Forty Years: An Appraisal,” *History of Science* 13, no. 1 (1975): 1–28; Sean Nee, “The Great Chain of Being,” *Nature* 435 (May 26, 2005): 429.

¹⁷⁶ Morales Flores, “Ramón Sibiuda,” 4; Guy, *Historia de la filosofía [Sp.]*, 36.

¹⁷⁷ Sebunde [Sabunde], *Dialogos [Madrid, 1616]*, 11, 482.

¹⁷⁸ Sebunde [Sibiuda], 482.

¹⁷⁹ Morales Flores, “Ramón Sibiuda,” 7.

¹⁸⁰ Lovejoy, *The Great Chain of Being*.

step within this self-evident order of nature necessarily meant that there were inherent connections and a logical structure of progression built into natural things. The observable order of nature, to Sibiuda, demanded to be followed. The way to do this was to fully realize that element which set humanity apart from the next classification of beings – that is, the human capacity to know, to understand, and from this understanding, to love.

The importance of these two actions – knowing and loving – form the heart of Sibiuda's approach to natural theology. For Sibiuda, the contemplation of nature always has these two actions as its aim, even more so, they are the defining features of humanity. As Morales Flores has summarized of Sibiuda's teaching, "...true knowledge points to [the] existential significance of love, because the eternal destiny of [a] soul depends upon it."¹⁸¹ Indeed, Morales Flores has suggested that love and happiness act as motives for the human will in the theology of Sibiuda.¹⁸² This is because love and happiness, in Sibiuda's theology, are properly rooted in the God who can be known by following the ladder of creaturely contemplation upward. In the para-Sibiudan *Diálogos*, for example, the author writes:

...here you will learn which science you have the obligation to know better than [any] other, which is that of your own self-knowledge...Here you will learn to praise your Author, and to love, honor, fear, and revere your Creator, and together to disesteem yourself and your own self-love, and to have very little [esteem for] whatever human honor, praise, and favor...and here finally you will learn what you can desire of humility, obedience, goodness, justice, charity, and truth.¹⁸³

Knowledge, desire, and love formed the motives and goals of Sibiudan natural theology, they were both the impetus for climbing the ladder of nature and the expected aim. The will to know is motivated by love, and knowledge gained increases the ability to love better and more clearly.

¹⁸¹ Morales Flores, "Ramón Sibiuda," 3.

¹⁸² Morales Flores, 8.

¹⁸³ Sebunde [Sibiuda], *Dialogos*, 2–3.

Ultimately, Sibiuda's "science of the book of nature" was meant to allow the practitioner to know the God who, in the 1854 translation of Sibiuda's work, is described as a Trinity bound in love: "Coeternal love one to the other...infinite love...love of loves!"¹⁸⁴ Sibiuda's description of love's epistemic impact would become influential in subsequent natural theologies in Spain, especially those dedicated for devotional and spiritual purposes.

Key Theme 2: Two Books, Two Modes: Probative Nature and Authoritative Scripture

Sibiuda built his natural theology upon a dramatic and fundamental distinction between the two books of knowledge which he asserted that God has created. In his prologue, he stated that "Thus, there are two books that God has entrusted to us, to wit, the book of the ensemble of the created things, or that is, the book of nature, and the book of Sacred Scripture."¹⁸⁵ What Sibiuda meant precisely by this conception requires careful theological unpacking. Sibiuda used the term "nature" (*natura*) to mean every created thing in existence, or all of creation.¹⁸⁶ The titular creatures and created things are, according to Sibiuda, "works of God [which] manifest His divine name."¹⁸⁷ Yet Sibiuda also used "nature" to signify a rule or law which was ingrained in the very fact that all things had been created. Sibiuda wrote concerning "the Rule of Nature", and spoke of the knowledge of things which occurred "naturally."¹⁸⁸ The "Book of Nature," for Sibiuda, must be inextricably linked with the idea of creation. Thus, in some senses, it is misleading to distinguish the two books of Nature and Scripture by describing the first as "natural" knowledge and the other as revealed knowledge, for even the "natural" knowledge is, fundamentally divinely revealed by the act of creation. Still, Sibiuda used the term "naturally"

¹⁸⁴ Sabunde, *Las Criaturas*, 52.

¹⁸⁵ Sibiuda, *Tratado del amor*, 85:67–68; Ramón Sabunde, *Theologia naturalis, sive liber creaturarum* (Deventer: Richardus Paffraet, 1480), 26, <http://archive.org/details/ned-kbn-all-00002056-001>.

¹⁸⁶ Seen, for example, in the title. Sabunde, *Oculus*, 1.

¹⁸⁷ Sabunde [Sibiuda], *Dialogos*, 247.

¹⁸⁸ Sabunde, *Oculus Fidei* [Amsterdam 1661], 1; Sibiuda, *Tratado del amor*, 85:63; for a nuanced discussion of *natura*, see: Lewis, *Studies in Words*, 24–74.

(“*por naturaleza*”) to describe that knowledge which is gleaned from the created world without the added imposition of any additional, revealed knowledge. Peter Harrison has noted that the early modern period witnessed the conversion of the nature from a world of emblematic meaning and symbols towards a view where “...the order of the natural world and remarkable contrivances it contained became premises from which certain basic characteristics of God could be inferred. As a consequence, the boundary between natural and revealed theology became much sharper.”¹⁸⁹ Interestingly, Harrison cited Sibiuda as a particular case in which this sharpening occurred. Sibiuda, according to Harrison, believed that the Book of Nature “was sufficient for salvation” and that “all the doctrines of revealed theology were evident in the natural world...”¹⁹⁰ This last point is dubious at best, but Harrison’s description of a clear divide between natural and revealed (and well ahead of the developments which Harrison traced in early modern science) is accurate.

The most basic definition which Sibiuda supplied for the two books relies upon the drawing a distinction between two different modes of perception. The key passage occurs in chapter 212, separated from the usually-studied statements in the prologue. Sibiuda, having completed his presentation of natural theology, introduced the role of the Scriptures and described “the differences between the book of created things and the book of the Bible.”¹⁹¹

Sibiuda defined the fundamental harmony and differences between the books, writing:

Thus appears the greatest concordance, the greatest consonance, and the greatest convenience between the book of Sacred Scripture and the book of created things, and that the book of created things serves and attends the book of Sacred Scripture, as an order, a mandate, and a command; and it appears that they differ

¹⁸⁹ Peter Harrison, “Miracles, Early Modern Science, and Rational Religion” 75, no. 3 (September 2006): 500.

¹⁹⁰ Harrison, 500.

¹⁹¹ Ramon Sabunde, *Theologia naturalis Raymundi de Sabunde Hispani uiri subtilissimi: seu verius Thesaurus diuinarum considerationum ex naturae fontibus haustarum...* (Venice: Franciscum Zilettum, 1581), 200.

only in the manner of speaking and talking; For one speaks by the method of probation and the other by the method of commanding and authority.¹⁹²

Many theologians before Sibiuda had affirmed the first point regarding the consilience between Nature and Scripture – that is, because God was the author of both books, neither could contradict the other. As Sibiuda wrote, “Both books coincide [with each other], because the same God created the created things and revealed the Sacred Scripture; and because of this they agree and converge, and one does not contradict the other.”¹⁹³ Sibiuda, however, extended this idea beyond mere complementarity – the two books were the same story, just told differently. According to Sibiuda, both books conveyed the same knowledge – the only significant difference was in the manner in which this information was learned. For the book of Nature, the knowledge had to be gained *per modum probationis* – by testing, proving, and experimenting. The book of Scripture, on the other hand, taught *per modum praecepti* – by command and by authority. Later editors of the *Liber* connected this to two passages emphasizing God’s commands in Deuteronomy 1 and Matthew 22.¹⁹⁴

Sibiuda upheld both modes of knowing (experience and authority) as equally valid – in fact, Sibiuda emphasized that the probative book of Nature “served” the book of Scripture. He wrote that “Two things are made manifest to us, that we [truly] have of God in this world: namely, [H]is creation, and [H]is word. But these two are not equal, because the word of God is over man and over all of creation.”¹⁹⁵ This also reinforces the connection between “nature,” “created things,” and “creation.” The idea that these books are defined by mode of perception is further demonstrated by the point that Sibiuda did not fundamentally distinguish between their

¹⁹² Sabunde, 202.

¹⁹³ Sibiuda, *Tratado del amor*, 85:69.

¹⁹⁴ Sabunde, *Theologia naturalis* [Venice 1581], 201. This is likely a mistake – it seems more probable that the editor intended the passage to be the Shema (שמע) in Deuteronomy 6:4.

¹⁹⁵ Sabunde, 207.

subject matter. That is, the science of the Book of Nature, according to Sibiuda, could teach both what is in the Scriptures, as well as the theology to be found in the Doctors of the Church. At three points in the prologue, Sibiuda wrote statements such as that it teaches “all that is contained in the Sacred Scriptures.”¹⁹⁶ Later, Sibiuda modifies this claim to say that Nature only “...confirms the Sacred Scripture, and by it man believes Sacred Scripture more firmly...”¹⁹⁷ Sibiuda similarly promised that “by this science it easy to understand all the Holy Doctors...”¹⁹⁸ What Sibiuda meant by “all” is a point of contestation, but it is important to understand that Sibiuda saw Nature and Scripture as more than complementary but consonant – they were both authored by God, and both proclaimed and echoed the same message: God’s necessary worship. Sibiuda importantly summarized the distinction between Nature and Scripture, writing:

Hence by the book of created things it is proved how a man must love God first and above everything, with all his heart, and all his mind, and all his soul...But the Holy Bible says the same thing, but differently which is by way of mandate and commandment, and not by way of testing...Similarly, the book of created things, or of nature, proves that God is first to be feared above everything, to be praised, honored, and glorified, and that all men must fear God, praise Him, and honor Him, and glorify Him, and Him alone serve, believe, obey, and in him only to confide. And the book of the Bible says the same thing similarly, but differently, which is not by way of proving, but by way of teaching, and commanding, and exhorting. ...Wherefore it says, “fear God, honor God, serve God, honor him and praise God, etc.” And the book of created things says and proves, “This is what I ought to do;” and the book of the Bible commands, “Do this.”¹⁹⁹

Both Scripture and Nature pointed to the fact of God’s existence and man’s need to serve him; as Sibiuda emphasized twice in the passage above, the two books “said the same thing, but differently.”²⁰⁰ Sibiuda’s unique contribution to the “two books” theory is his definition by

¹⁹⁶ Sibiuda, *Tratado del amor*, 85:64.

¹⁹⁷ Sibiuda, 85:67.

¹⁹⁸ Sibiuda, 85:65.

¹⁹⁹ Sabunde, *Theologia naturalis* [Venice 1581], 202r-v.

²⁰⁰ Sabunde, 202.

modes, and in particular, his description of the acquisition of knowledge from the “science of the book of Nature.”²⁰¹

The science of the book of nature was gained by *probatio* – by testing, experimenting, proving – and by reason. Sibiuda placed great confidence in the human ability to exercise experience and reason to gain knowledge about God. In one of the most important claims of his prologue, Sibiuda established that the science of the Book of Nature allowed one “...to know really, infallibly, without difficulty or labor,” repeating a second time that one could “know without difficulty and infallibly” through his teaching.²⁰² Sibiuda’s science of nature was therefore distinguished by its ubiquity, perspicuity, and infallibility. The book of created things necessarily included all of creation – it was commonly shared and available to all. Sibiuda wrote that it was “...common to all, while the book of Scripture is not common to all, because only the priests know how to read it.”²⁰³ Romans 1:19-20, the scriptural cornerstone of natural revelation, reinforced this ubiquity which would become foundational for the establishment of natural law and which would prove highly influential in the Spanish encounter with colonial religions of the New World in the sixteenth century. Not only was Nature (both the world and reason) universally accessible, it was readily perceptible and easy to apprehend. Sibiuda claimed that the science he set forth was learned “without difficulty or labor[.]”²⁰⁴ Sibiuda claimed that by following his method, one could “learn more in less than a month than by studying other learned things for a hundred years.”²⁰⁵ Perhaps for the sake of maintaining this ease-of-access, the *Liber*

²⁰¹ Sabunde, 201; Sabunde, *Oculus Fidei* [Amsterdam 1661], prologue.

²⁰² Sabunde, *Theologia Naturalis* [Lyon 1488], 28; Sibiuda, *Tratado del amor*, 85:63–64.

²⁰³ Sibiuda, *Tratado del amor*, 85:68.

²⁰⁴ Sabunde, *Theologia Naturalis* [Lyon 1488], 28; Sibiuda, *Tratado del amor*, 85:63–64.

²⁰⁵ Sibiuda, *Tratado del amor*, 85:67.

noticeably lacks the highly-technical language of medieval Scholasticism that made coterminous theological treatises restricted to a small readership of trained and learned clergy.

In addition to its ubiquity and its perspicuity, Sibiuda's science was infallible, teaching knowledge with complete surety and certainty. Puig i Oliver has rightly underscored the themes of "*certitudo-probatio, certus-manifestus-indubitatus-verus, certissimum-evidentissimum-manifestissimum*" which resound throughout the *Liber*, suggesting that Sibiuda's training in law may be connected to this search for certainty.²⁰⁶ This certainty came partly from the self-evident nature of experience and reason, and partly from the weight of the concordance of multiple witnesses.

The strength, however, of proof, and the cause of all certainty arises from the certainty and strength of the testimonies and witnesses on whom it depends and cause all [of the] certainty. Wherein, the more witnesses are certain, manifest, and indubitable, and truthful, the more it is certain this is proved from[/by] them. And if the witnesses [are thus] certain and manifest, and their testimony is thus manifest, then in no way can it be doubted...²⁰⁷

These multiple witnesses are twofold: the scale of nature presented in creation and the knowledge that man has of himself. Sibiuda viewed the human ability to apprehend the testimony of nature as a direct and "manifest" process. Indeed, he distinguished this knowledge as "*really knowing*."²⁰⁸ Because one learned the Book of Nature through the perspicuous, ubiquitous, and infallible methods of self-evident experience and common reason, it could not be falsified. The Book of Scripture, on the other hand, could suffer misconceptions. "...the Scriptures, however holy they may be," wrote Sibiuda, "can easily be twisted from their true and perfect sense, human malice interpreting them sinisterly and impiously."²⁰⁹ "However," he

²⁰⁶ Puig, *La filosofía*, 114.

²⁰⁷ Sabunde, *Theologia naturalis* [Venice 1581], 1r.

²⁰⁸ Sabunde, *Theologia Naturalis* [Lyon 1488], 28; Sibiuda, *Tratado del amor*, 85:63. Emphasis added.

²⁰⁹ Sabunde [Sibiuda], *Dialogos*, 5.

continued, “there is no Heretic of any sect so detestable that he can falsify the book of Nature.”²¹⁰ Because the Book of Nature had to be learned by experience and natural reason (*per modum probationis*), and because experience was shared, verified, and repeated by everyone, the Book of Nature was safeguarded from radical, lone interpreters. Sibiuda explained that “...Whatever eyes see it, they cannot argue to the contrary, because experience shows it most clearly.”²¹¹ Clarity, reality, and certainty were all hallmarks of experiential knowledge to Sibiuda. The direct apprehension of experience granted it a self-evident status, and the fact that it could be verified and shared by every human being (the multiple witnesses) made it indubitable. Sibiuda described the certainty of evidence by writing:

Furthermore, this science demonstrates with infallible arguments that nobody can contradict, because it demonstrates by things [of which] any man can be certified by true experience, or as it may be, by all the created things and by his own human nature. Because all that is proved by man in himself and by the things that the man knows in itself, [is proved] with absolute certainty, by experience. Therefore, in truth, no knowledge is more certain than that which is acquired by experience, [and] above all by the experience which each has in himself.²¹²

There was, according to Sibiuda, an embedded and trustworthy sense-making apparatus involved in the experience of all created things, both in the world and within man.

Sibiuda, following the established vocabulary of Aquinas, Bonaventure, Duns Scotus, and Ockham, described this as processes which issued from the “office of the intellect [*intellectus*].”²¹³ Moreover, when this intellect directed inquiry about the nature of man, it provided knowledge which was patently, experientially, and intuitively known. Arés

²¹⁰ Sebunde [Sibiuda], 5.

²¹¹ Sebunde [Sibiuda], 5.

²¹² Sibiuda, *Tratado del amor*, 85:66.

²¹³ Sabunde, *Theologia naturalis* [Venice 1581], 58. Cap. LXV.

labeled self-knowledge in the *Dialogos* as “...the best witness, and most sufficient to be certified in one’s self the truth of all that one is taught in this book.”²¹⁴

Sibiuda introduced the point of nonfalsifiable nature and falsifiable Scripture in his prologue, writing that, “the first item cannot be erased nor depraved by false interpretation...but the second can be falsified...”²¹⁵ In subsequent centuries, following the revival of academic skepticism and the work of many philosophers on the general distrust of sensory experience in the early modern sciences and the doubt introduced into the powers of human reason, this point would be highly contested.²¹⁶ In the *Oculus*, Comenius openly questioned Sibiuda on this point, writing “Why is it that the first book of Nature cannot be falsified?”²¹⁷ By the end of the seventeenth century in Spain, academic skepticism would cast similar doubts upon direct proof or experiential evidence (*probatio*).²¹⁸ For Sibiuda, however, experience and reason were wholly reliable sources of knowledge.²¹⁹ Reason was “natural reason” because, by the creative act of God, it was present ipso facto in every human. Again, this shared naturality of reason made it an invaluable source of knowledge. “Natural reason,” proclaimed the *Dialogos*, “cannot suffer sinister interpretation.”²²⁰ Puig i Oliver has noted that “there is not the smallest shadow of skepticism nor idealism in the Sibiudan attitude,” contrasting Sibiuda and Descartes.²²¹ His

²¹⁴ Sebunde [Sibiuda], *Dialogos*, 810.

²¹⁵ Sabunde, *Oculus*, 7.

²¹⁶ For studies on the revival of skepticism, see: José R. Maia Neto, “Academic Skepticism in Early Modern Philosophy,” *Journal of the History of Ideas* 58, no. 2 (1997): 199–220; Popkin, *The History of Scepticism*; Richard H. Popkin, “For a Revised History of Skepticism,” in *The Return of Scepticism: From Hobbes and Descartes to Bayle*, Archives Internationales d’Histoire Des Idées 184 (New York: Springer Science + Business Media, 2003), xxi–xxviii; Richard H. Popkin, *The High Road to Pyrrhonism*, ed. Richard A. Watson and James E. Force (Indianapolis: Hackett Publishing Company, 1993).

²¹⁷ Sabunde, *Oculus*, 10.

²¹⁸ For studies on the influence of Academic Skepticism and Pyrrhonism in Spain, see: Jeremy Robbins, “The Arts of Perception,” *Bulletin of Spanish Studies* 82, no. 8 (2005): 1–19; Jeremy Robbins, “The Rediscovery of Pyrrhonism,” *Bulletin of Spanish Studies* 82, no. 08 (2005): 21–37.

²¹⁹ Sibiuda, *Tratado del amor*, 85:64.

²²⁰ Sebunde [Sibiuda], *Dialogos*, 5.

²²¹ Puig, *La filosofía*, 116.

work argues that that while Sibiuda moved confidently from the world outside man, full of lesser created things (*res inferiores*) to gain certain knowledge of himself, Descartes built upon interior doubt and moved outward to the world of experience. Over the course of the early modern period, changing notions about the reliability of experience and reason would impact the status of the certainty of natural theology. Even in Sibiuda's own work, he presented contrasting views about the human capacity for reason after the fall and the corresponding necessary role of Scripture, views which are discussed in the following section.

Sibiuda described Nature as "first" and Scripture as "second." This was true for both the temporal establishment of the two books, as well as their corresponding order in the process of knowing God. Sibiuda wrote that the knowledge gained by the Book of Nature "...from our point of view, precedes that of Sacred Scripture."²²² Sibiuda called Nature "the *first* book" and Scripture "the *second* book," because creation preceded the delivery of the Holy Scriptures in time.²²³ "The first book," he wrote, "was entrusted to man from the beginning, when the totality of all created things was created...the second book, that of Scripture, was entrusted to man in the second place, because of the insufficiency [*falta*] of the first book, that man did not know how to read it because he was blind."²²⁴ That sin had an impact on humanity's ability to read the book of Nature is a critical point which is later explored; still, Sibiuda is clear that the science of the book of Nature ought to be the first steps toward the knowledge of God. This progression can likewise be seen in the structure of the *Liber*, in which Sibiuda does not present the testimony of Scripture until the 211th chapter. He compared learning the science of the book of Nature to learning the alphabet – the starting point to understanding any book was learning the primary

²²² Sibiuda, *Tratado del amor*, 85:67.

²²³ Sibiuda, 85:68. Emphasis added.

²²⁴ Sibiuda, 85:68.

letters which formed the words of meaning sentences.²²⁵ Sibiuda reinforced this point, instructing his readers to “learn first this science,” and explaining that it formed “the root, the origin, and the foundation of all the sciences that man needs in order to be saved.” Thus, Sibiuda presented the Book of Nature as the first step on the path to truth.

Puig i Oliver has commented, “In the end, Sibiuda does not invent a thing.”²²⁶ The trope of “two books” had existed long before Sibiuda. Giuseppe Tanzella-Nitti has demonstrated that use of the term “book of nature” or descriptions of nature as a book can be found in the early Church Fathers, including St. Anthony, St. Augustine, and St. John Chrysostom, among others.²²⁷ He notes that Basil of Caesarea described creatures “as if they were letters and words,” although it was Augustine who secured the term a lasting legacy in Catholic theology. Tanzella-Nitti quotes Augustine, who wrote, “...there is a great book: the very appearance of created things. Look above and below, note, read. God whom you want to discover, did not make the letters with ink; he put in front of your eyes the very things that he made.”²²⁸ In the period immediately preceding Sibiuda’s work, medieval theologians including Hugh of St. Victor (1096-1141), Bonaventure (1217-1274), and Thomas Aquinas (1224-1274) all utilized the “book of nature” theme.²²⁹

Key Theme 3: The (Qualified) Sufficiency of the Book of Nature

Although the science of the book of Nature was first to be created as well as first on the path to knowledge, it was second in importance. Sibiuda wrote that both the contents and the

²²⁵ Sibiuda, 85:65.

²²⁶ Puig, *La filosofia*, 116. “...no inventa res.” Puig i Oliver’s wordplay uses the fact that “res” in Catalan means anything/nothing; Sibiuda’s method also relies on a different conception of “res” as those exterior things of creation.

²²⁷ Tanzella-Nitti, “The Two Books,” 237-238.

²²⁸ Augustine, *Sermones* 68§6, trans. and cited in Tanzella-Nitti, 237.

²²⁹ Bonaventure, *Collationes in in Hexäameron*, XIII, 12, trans. and cited in Tanzella-Nitti, 239–40; see also: McGrath, *Re-Imagining*, 69–100; John Hedley Brooke, *Science and Religion: Some Historical Perspectives*, 2014 (Reprint of 1991) (Cambridge: Cambridge University Press, 2014), 102–3.

mode of the book of Scripture were “higher” and more estimable than that of Nature. When distinguishing between the authority by which Scripture taught and commanded knowledge and the probationary method of exploring the book of Nature, Sibiuda wrote:

...this mode [of commanding and teaching] is higher, and greater – that is, it is greater to command than to prove. And in this it shows that the book of the Bible, which speaks by manner of authority and command is so greater and higher and superior than the book of Created things, [for] how much greater it is to command and to correct or to order than to prove as much.²³⁰

Similarly, Sibiuda spoke of some areas of knowledge as more estimable than others. Self-knowledge and the knowledge of God was considered superior, while the experiential knowledge of the created world was foundational, basic, “inferior” and “humble.”²³¹ At first glance, this seems to belie Sibiuda’s assertion that the books of Nature and Scripture contained the same truths. Sibiuda, however, did not restrict higher knowledge to Scripture and lower knowledge to Nature, but rather insisted that although the science of the book of nature began with lower knowledge of “inferior things,” it would, if followed, lead to the knowledge of one’s self and, ultimately, to the knowledge of God. “Thus,” he wrote, “although this science seems at first inferior and of no value, because it starts with the small things which everyone disesteems, in the end, however, it achieves an infinite fruit...as much as it starts by humble things, it even more ascends to the more elevated and difficult [things.]”²³² The science of the book of nature, therefore, encompassed all of knowledge – both the lower and higher truths. As noted, many historians have attributed the prohibition of the prologue and other variations of the *Liber* to Sibiuda’s claims of the sufficiency of the book of Nature, arguing that Sibiuda’s belief on this subject was contrary to Tridentine Catholicism, that it came at the expense of Scripture and

²³⁰ Sabunde, *Theologia naturalis* [Venice 1581], 201.

²³¹ Sibiuda, *Tratado del amor*, 85:67.

²³² Sibiuda, 85:67.

authority, and that it therefore promoted an individualistic, unmediated, and heterodox natural religion. This interpretation, however, must be balanced against Sibiuda's statements on the role of Scripture and the use of natural knowledge, inviting a closer reading of Sibiuda's promises in the *Liber*, and especially in the prologue (where he stakes most of his epistemic claims).

Sibiuda clearly championed, at face value, the self-sufficiency of the knowledge generated by the Book of Nature. He wrote that the science which it taught "...needs no other science or any other art. It does not presuppose grammar, nor logic, nor any of the seven liberal arts, nor physics, nor metaphysics, because it is the first and the only necessary to man."²³³ This affirmed the accessibility and perspicuity of the knowledge found in the Book of Nature. Moreover, because the Books of Nature and Scripture taught the exact same body of knowledge, Nature did not need "the help" of Scriptural statements or the teaching and exposition of religious authorities.²³⁴ To deny the sufficiency of nature would, because of the equivalency of the books, be tantamount to denying the sufficiency of Scripture. This constitutes a significant difference between Sibiuda's natural theology and those natural theologies developed both before and after him. Webb, for example, described this "quixotic confidence...establishing by the help of the book of Nature all the articles of the Christian faith" as a key feature which sharply distinguishes Sibiuda from Aquinas's *quinque viae* written 165 years before the *Liber*.²³⁵ Similarly, readers of Sibiuda during subsequent centuries clearly were ill at ease with this conjecture. For example, Arés inserted passages into the *Dialogos* affirming that there existed theological mysteries which could only be learned through Scripture. "...In the holy book of the Bible," Arés wrote,

²³³ Sibiuda, 85:65.

²³⁴ Sibiuda, 85:67.

²³⁵ Webb, *Studies*, 300.

are written things so mysterious and so high that they can never be accommodated [*caber*] in the thought of some created understanding, and if God did not reveal them to those that wrote them, in order that they could be put into this book in [H]is name, no one, no matter how high a genius he had, could imagine...²³⁶

These mysteries included the Trinity, the Incarnation, and the Sacraments. This is clearly an editorial insertion – Sibiuda, for his part, believed that the Trinity could be deduced from the science of the Book of Nature. In little less than six pages, Sibiuda argue that Nature disclosed, for example, the fullness and freely generous nature of God, and from this overflowing fullness one could posit the production of God’s own self in a second person, and the presence of the Holy Spirit from the fellowship of these first two.²³⁷ This knowledge is presented less like an argument than a series of assertions, built upon earlier axioms which Sibiuda found patently demonstrable in nature, such as God’s good nature and his propensity to give and produce.

If Sibiuda believed that the knowledge obtained from the book of the Nature was wholly sufficient and capable of leading one to important matters of the faith and to knowledge about God, what role did Scripture have in his religious epistemology? Structurally, only a small part of the *Liber* discusses the Scriptures; Sibiuda devotes approximately six of the 330 chapters to the subject. Furthermore, most of these chapters involve establishing the reliability of the Bible as an authoritative text by offering assurances and reasons to believe that God is the author of the Bible (chapters 211-214).²³⁸ Chapters 215-216 compare and contrast Scripture and Nature and the way that man relates to both. Scriptural references which exist in later editions of the *Liber* and in the para-Sibiudan revisions were editorial additions not located in the original work. Given the small place that Scripture has in the *Liber*, it is unsurprising that many historians have suggested that Sibiuda derogated the epistemic jurisdiction of Scripture, although such a

²³⁶ Sebunde [Sibiuda], *Dialogos*, 274.

²³⁷ Sabunde, *Theologia naturalis* [Venice 1581], 37r–39v. See especially chapters L and LI.

²³⁸ Sabunde, 202v. e.g. Cap. CCXIII.

conclusion is inaccurate. Sibiuda, despite enlarging the responsibilities of natural theology, maintained a high view of the importance of Scripture. One answer to this apparent problem in the *Liber* may be first to temper Sibiuda's description of "all truth" which gave Montaigne such editorial unease. Firstly, Sibiuda himself qualified on multiple occasions that his science of natural theology could teach all the truths *necessary for salvation*. He wrote, for example, that the *Liber* would teach "all the truths that man needs to know...and all that is necessary for his salvation and for his perfection, in order that he may reach eternal life."²³⁹

Secondly, Sibiuda also mitigated the epistemic claims of his science by explaining that they taught "all truth" because, like learning the letters of the alphabet, they taught fundamental points needed in order to learn knowledge. Morales Flores has argued that Sibiuda "guarantees the knowledge of all the truths...by an axiomatic system that permits the deducibility and the inheritance of the truth. It is not necessary, Ramón Sibiuda tells us, that all the truths are learned, it is enough only to know the beginnings of these..."²⁴⁰ Sibiuda's promise to unlock "all truths" is more properly understood, according to Morales Flores, as the promise of the foundations of all truth – not all truth, per se. For example, Sibiuda argued in chapter 238 of the *Liber* that one could deduce, without Scripture, that a woman was "more culpable" than a man in the act which resulted in original sin.²⁴¹ Having established by previous arguments the entrance of sin by a pair of common, ancestral parents which plagued all subsequent humans, both male and female, Sibiuda maintained that "wherein we see by experience almost twice the misery and pain in women as respect to man," one could conclude that the original female was at greater fault than

²³⁹ Sibiuda, *Tratado del amor*, 85:63; Sabunde, *Theologia Naturalis* [Lyon 1488], 28.

²⁴⁰ Morales Flores, "Ramón Sibiuda," 5.

²⁴¹ This is Montaigne's chapter title, found in Sabunde, *La theologie naturelle* [Rouen 1641], 532. Cap. CCXXXVIII.

the original male.²⁴² Sibiuda gives no direct references to the Biblical account of the Fall in Genesis 3, nor does he name the parents as Adam and Eve. The act causing the Fall is described as a disobedience to God exercised by free will – but the details of the Garden of Eden, the serpent, and the fruit of the tree of the knowledge of good and evil are all absent. It may be inferred that Sibiuda omitted these points because this knowledge is Scripturally-dependent. This demonstrates, therefore, the scope of Sibiuda's science of the Book of Nature. While Sibiuda still allowed for an incredible amount of rational and experiential power, asserting, for example, that the central points of the Fall and the Trinity could be learned through his method, these remained only the central, foundational truths – not the totality of truth.

Even restricting Sibiuda's claims about the science of the Book of Nature to the foundational knowledge necessary for salvation, Sibiuda's position would subsequently become problematic in Spain. Sibiuda's assertions may be contrasted, for example, with the introductory passage to the preface of the so-called "Roman Catechism" of 1566. This catechism was an initiative of the Catholic Reformation, led by Cardinal Carlo Borromeo (1538-1584) at the Council of Trent's eighteenth session on February 26, 1562, in order to provide Catholics with an authoritative catechesis that rivaled Protestant confessions of faith. The resulting catechism, the *Catechismus ex decreto Concilii Tridentini* (*The Catechism from the Decree of the Council of Trent*) appeared in Rome, 1566, although it was not translated into Castilian until 1781.²⁴³ Here, it taught that:

Such is the nature of the human mind, so limited are its intellectual powers, that, although by means of diligent and laborious inquiry it has been enabled to itself to investigate and discover many divine truths; yet guided solely by its own lights it could never know or comprehend most of those things by which eternal salvation,

²⁴² Sabunde, *Theologia naturalis* [Venice 1581], 248.

²⁴³ This late translation date may indicate that the catechism had a more select readership in early modern Spain, as it is doubtful that many laypersons regularly consulted the Latin version of the work.

the principal end of man's creation and formation to the image and likeness of God, is attained.²⁴⁴

Thus, while Sibiuda believed that natural theology – the science of the Book of Nature – explained man's purpose and provided the knowledge of those doctrines of the faith necessary for salvation, this position would later be discarded as incorrect. Even so, Sibiuda's position may yet be further accommodated to the statement of orthodoxy in the Roman Catechism by the emphasis which Sibiuda placed on sin and the fallenness of the human intellect.

Key Theme 4: Fallen, Blinded Intellects: Sibiuda's Postlapsarian Theology

According to Sibiuda, Scripture was needed – more than this, it was given by God because of the fallenness of man. Sibiuda contended that “the Second book, that of the Scriptures, was given to man in the second place, [because of] the insufficiency of the first book, that man did not know how to read it because he was blind.”²⁴⁵ It was not an inherent deficiency in the knowledge of the Book of Nature that made it an insufficient route to knowing God, but rather it was a defect in the human ability to read this Book clearly. The limits of fallen human reason and experience to construct theological knowledge was a central theme which Sibiuda raised in his *Liber*, and it was one which would become one of the most foundational aspects of natural theology in Spain. As noted, Puig i Oliver has suggested that the *Liber* concerns two points: the *opere conditionis* and the *opere redemptionis*.²⁴⁶ This is based in Sibiuda's own assertion at the beginning of chapter 223 that the “whole preceding part of the book” concerned the obligatory desire of man by the nature of creation; the entire subsequent third discussed

²⁴⁴ Pius V, *The Catechism of the Council of Trent*, trans. J. Donovan (Baltimore: James Myres, 1833), 13; See also in Latin and Castilian: Pius V, *Catechismus ex decreto concilii Tridentini ad parochos* (Rome: Paulus Manutius, 1566), 1; Pius V, *Catecismo del Santo Concilio de Trento para los párrocos: ordenado por disposicion de San Pio V*, Second edition (Valencia: Benito Monfort, 1782), 1.

²⁴⁵ Sibiuda, *Tratado del amor*, 85:68.

²⁴⁶ Puig, *La filosofia*, 90.

man's failure to follow these desires and his need for God's assistance in setting these desires aright. To Sibiuda, man's relationship to the ladder of nature and to the Creator, including his ability to perceive and apprehend knowledge through the book of Nature and Scripture, was hamartologically dependent. The effects of the Fall through original sin and concupiscence, as well as the effects of grace (especially mediated through the sacraments of baptism and penance) had a direct impact on a person's epistemic status.

By answering the question of how the Fall impacted man's intellectual and cognitive abilities, Sibiuda was taking part in a longstanding discussion that was not limited to Spanish natural theology in the late-medieval and early modern period. Most notably, Harrison has studied the role that theological conceptions of the Fall had in constructing systems of epistemology in early modern Europe, particularly as it related to natural philosophy and the development of experimental science. He has argued that "...differences between competing strategies for the advancement of knowledge put forward during the sixteenth and seventeenth centuries can be accounted for largely in terms of different assessments of the Fall and of its impact on the human mind."²⁴⁷ Harrison asserts that in the early modern period, there were several different opinions regarding the state of Adamic knowledge before the Fall, the postlapsarian effects of original sin, and the relationship between senses, the natural world, and sin.²⁴⁸ Broadly summarizing, Harrison demonstrates that while the earliest Patristic sources "tended to be hesitant about elevating the original abilities of Adam to too high a degree, and

²⁴⁷ Peter Harrison, *The Fall of Man and the Foundations of Science [Electronic Resource]*, Ebook Central (Cambridge: Cambridge University Press, 2007), 3, <https://ezproxy-prd.bodleian.ox.ac.uk/login?url=http://ebookcentral.proquest.com/lib/oxford/detail.action?docID=803104>.

²⁴⁸ See the introduction in Harrison.

were equally restrained in their assessments of the damage wrought as a consequence of his fall[;]” this position subsequently changed seen especially in the work of St. Augustine.²⁴⁹

It was Augustine, according to Harrison, who was key in emphasizing that the Fall resulted not only in moral concupiscence but in a reduced capacity for knowledge, casting humanity into “ignorance and difficulty.”²⁵⁰ As Harrison describes the Augustinian position,

the fall of the mind meant not only that the human sciences were radically compromised, but also that the very quest for natural knowledge, in particular knowledge of the sensory world, exemplified the corruption of human nature...Natural philosophy, then, was best left well alone.²⁵¹

This Augustinian position was reversed by the introduction of Aristotelian texts in the high middle ages, the “twelfth-century discovery of nature,” and by the great Christianization of Aristotelian philosophy by Aquinas in the thirteenth century.²⁵² Aquinas, building on the primacy of the sensory world in Aristotle as well as Aristotle’s “anthropology,” maintained an ‘optimistic’ view of human capacities for reason and sensory knowledge, as well as for the ordered construction and perceptibility of the natural world.²⁵³ Accordingly, Aquinas shifted human reason from the realm of supernatural gifts lost in the Fall to natural gifts inherent to the soul, an inextricable part of the *imago Dei* maintained after Eden.²⁵⁴ This Thomist position, in turn, was critiqued by Franciscan theologians in the thirteenth century; Harrison particularly points to the work of John Pecham, Robert Grosseteste, St. Bonaventure, and John Duns Scotus in curtailing Neo-Aristotelian and Thomist theories of the Fall and its epistemic influences.²⁵⁵

Key among the Franciscan rebuttals was the revived Augustinian notion of divine illumination –

²⁴⁹ Harrison, 31.

²⁵⁰ Harrison, 32.

²⁵¹ Harrison, 36.

²⁵² Harrison, 44.

²⁵³ Harrison, 43.

²⁵⁴ Harrison, 43.

²⁵⁵ Harrison, 46–48.

that is, that it was only by supernatural grace that man could know anything.²⁵⁶ The mind of man was thus divinely illuminated, not illuminating.²⁵⁷

Sibiuda's own theology of the Fall is a hybrid of these perspectives. In the *Liber*, Sibiuda asserted that: 1) man was originally in complete accordance with God, a relationship status that included full knowledge; 2) that by an act which was the consequence of free will, both (some of) the angels and mankind "fell;" 3) the consequence of the Fall, original sin, though enacted by one pair of parents, is passed to every single human being because of his bodily connection to these parents; 4) that this original sin prevents humans from properly relating to creation and to the Creator, and from reading the book of Nature accurately; the Fall, in, in other words, has significantly marred man's desires and the orientation of his love, and consequently, his natural abilities; 5) yet the postlapsarian man retains some abilities and the *imago Dei* is not destroyed or abrogated by the Fall; 6) Divine assistance in the form of grace, especially extended through the sacraments of Baptism and Penance and Reconciliation, removes the effects of original sin, although concupiscence and inclination to sin remains. The baptized and sacramental person, therefore, has an ameliorated epistemological framework.

Tanzella-Nitti has further demonstrated that medieval conceptions of the book of nature emphasized the need for a redemptory hermeneutic; that is, that man was so marred by sin that in order to read the book of nature, he needed divine assistance (although whether this divine assistance came in the form of Scripture, the "book of the Cross," or the ministry of the Holy Spirit varied depending on the theologian).²⁵⁸ Tanzella-Nitti particularly points to the works of

²⁵⁶ Harrison, 40.

²⁵⁷ Harrison, 40.

²⁵⁸ Tanzella-Nitti, "The Two Books," 239.

Hugh of St. Victor and St. Bonaventure in this respect.²⁵⁹ Hugh of St. Victor argued that although the book of Nature was open to all, there were some who would not be able to read it.²⁶⁰ St. Bonaventure linked this to the Fall, writing that:

Before sin, man had the knowledge of created things and through their images he was led to know God, to praise, to worship and to love him. The purpose for which living beings exist, is to lead us to God. When human beings fell because of sin, they lost such knowledge and so there was no one who could bring all things back to God. Thus this book, that is the world, seemed dead and destroyed. Therefore, there was a need for another book through which the previous book had to be enlightened, in order to acknowledge the true meaning of things. This book is nothing but Sacred Scripture...²⁶¹

Sibiuda too, argued that God's grace was necessary to accurately read the book of Nature. He wrote that "...nobody can see this wisdom [of the book of Nature] nor read it by himself in this always-open book if before he has not been illuminated by God and cleansed of original sin."²⁶²

Thus, Sibiuda's supported previous interpretations by Hugh of St. Victor and St. Bonaventure for the need for divine illumination. This had a direct influence on the way in which theologians viewed the activity and findings of the 'pagan' philosophers.

Peter Harrison has asserted that the corresponding epistemologies of Catholic and Protestant countries varied because of different theological views of the Fall. He writes that "“Those who took a more positive view of human nature were more inclined to assert the reliability of human reason, the possibility of a priori knowledge, and the perfectibility of the sciences. To a degree, then, the methodological prescriptions offered by philosophers in the seventeenth century mirror their confessional allegiances.”²⁶³ These divisions were not always

²⁵⁹ Hugh of St. Victor, *De tribus diebus*, trans. and cited in Harrison, *The Bible, Protestantism...*, 1; see also the discussion in: McGrath, *Re-Imagining Nature*, 79–80.

²⁶⁰ Tanzella-Nitti, "The Two Books," 239.

²⁶¹ Trans. loc. in Tanzella-Nitti, "The Two Books," 238–239.

²⁶² Sibiuda, *Tratado del amor*, 85:69.

²⁶³ Harrison, *The Fall of Man*, 7.

so firmly delineated – Harrison points, for example, to “Protestant scholasticism” and the resurgence of Augustinian theology in varieties of Catholicism such as Jansenism as cases where the confessional epistemological lines are blurred.²⁶⁴ Even within Catholicism, however, Sibiuda’s postlapsarian theology and corresponding epistemology does not fit neatly into the previous camps of Franciscan-Augustinian vs. Thomist-Aristotelian which Harrison has described in *The Fall of Man*. Indeed, most of Harrison’s historical studies have focused exclusively on theological commentaries on the Fall and the development of experimental science in early modern England, with a few notable exceptions (Descartes, Malebranche, and Leibniz, principally). This is an objection which, admittedly, Harrison foresaw, suggesting that “...a uniformly Catholic nation with an important experimental tradition...” could argue against the extension of his work.²⁶⁵ Sibiuda’s theology is a fusion of the Augustinian and Thomist perspectives and therefore represents a theologically-informed epistemology that is unexplored by Harrison.

In the *Liber*, Sibiuda upheld a depiction of the Fall as something that left humanity marred.²⁶⁶ He, like Augustine, placed all of the responsibility for the Fall on human will, exercised contrary to the divine ordinance after an angelic fall which similarly was the result of free will, and he, like Augustine, supported the role of divine illumination in cognition.²⁶⁷ The lack of any concrete references in the *Liber* makes clearly establishing Sibiuda’s bibliographical sources nearly impossible. It seems almost certain that Sibiuda, as a university-trained professor and theologian, would have been well-acquainted with Augustine’s theology of the Creation,

²⁶⁴ Harrison, 7.

²⁶⁵ Harrison, 251.

²⁶⁶ See Harrison’s study of Augustine’s description of this point in Harrison, 31.

²⁶⁷ Sibiuda, *Tratado del amor*, 85:69.

Fall, and original sin, a term which Augustine himself invented.²⁶⁸ Additionally, as was demonstrated in Sibiuda's use of the concept of the concatenated ladder of nature, it is likewise practically indubitable that Sibiuda had read or known the work of St. Anselm and the Franciscans St. Bonaventure (especially through the *Itinerarium Mentis in Deum*) and Duns Scotus, or otherwise had been exposed to Franciscan theology through an intermediary – for example, Ramón Llull and the Llullist schools of Catalonia and Mallorca.²⁶⁹ Sibiuda's theology of the Creation and the Fall borrow clear elements from Augustine and the Franciscan intellectual tradition.

Yet at the same time, Sibiuda's views on the perfect state of Adamic knowledge before the Fall, his insistence that the intellect is the natural imprint of the soul derived from the *imago Dei*, his belief in the inherent order and intelligibility of nature, and the immense range of activity which he allows as possible for the human intellect to conduct, both before and after baptism, all reinforce the “optimistic” epistemology and anthropology of Thomas Aquinas. In fact, when Montaigne sought information regarding Sibiuda during his translation of the *Liber*, his acquaintance, the French academic Adrian Turnebus (1512-1565) informed him that “it was a quintessence distilled from St Thomas Aquinas, only a wit like Thomas's, full of infinite learning and staggering subtlety, being capable of such concepts.”²⁷⁰ Webb rejected Turnebus's theory of

²⁶⁸ Harrison, *The Fall of Man*, 31; John O'Meara, “Saint Augustine's Understanding of the Creation and Fall,” *The Maynooth Review / Revieú Mhá Nuad* 10 (1984): 52–62; Saint Augustine, *On Genesis [Electronic Resource]: Two Books : On Genesis against the Manichees ; and, On the Literal Interpretation of Genesis : An Unfinished Book*, trans. Roland J. Teske, vol. 84, Fathers of the Church (Washington, D.C.: Catholic University of America Press, 2001), <https://ezproxy-prd.bodleian.ox.ac.uk/login?url=http://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3134826>.

²⁶⁹ Bonaventure, *Itinerarium mentis in Deum*, ed. Werner Höver, vol. 8, Kleine deutsche Prosadenkmäler des Mittelalters (München: Fink, 1970); Alexander W. Hall, *Thomas Aquinas and John Duns Scotus: Natural Theology in the High Middle Ages* (London: Continuum, 2007); Mary Beth Ingham and Mechthild Dreyer, *The Philosophical Vision of John Duns Scotus: An Introduction* (Washington, D.C.: The Catholic University of America Press, 2004), 117–45, see especially “The Perfection of a Rational Nature.”

²⁷⁰ Montaigne, *Essays*, 491.

any Thomistic influence on the *Liber*, arguing that the powers which Sibiuda granted human reason outstripped Aquinas's position, and that in particular "there is no trace in the [*Liber*] of Thomas's characteristic line of demarcation between the spheres of Natural and Revealed Theology."²⁷¹ It is true that Sibiuda's position on the duplicated books of Scripture and Nature is different from Aquinas's, yet in his approach to the application of reason and experience to the natural world, Sibiuda exhibits clear Aristotelian and Thomist influences.

What becomes clear after analyzing Sibiuda's theology is that it constituted a new synthesis of perspectives on postlapsarian intellectual capacities. This means, in turn, that if Harrison is correct in asserting that theological perspectives on the Fall were directly influential in the production of epistemology and particularly in the development of scientific and experimental practices in natural philosophy, one may expect that the theories of knowledge which governed rational inquiry and encouraged the practice of natural philosophy in early modern Spain were radically different from any other contemporary contexts in early modern Europe.

Conclusion: Sibiuda's Legacy in Sixteenth-Century Spain and Beyond

Sibiuda's work was, in many ways, a watershed moment for natural theology. It represented the synthesis of several different strands of medieval thought and spirituality; its influences included Hugh of St. Victor, Franciscan spirituality and Bonaventure, Augustine and the Church Fathers, and even classical authors and Platonist philosophy. Perhaps most significantly, it coalesced together in one text a distinct vision of the natural world (the *scala naturae* and the Book of Nature) and attempted to reconcile this with the Christian view of reality and creation. It raised the central question of natural theology from a distinctively

²⁷¹ Webb, *Studies*, 300.

Christian starting point; that is, if the world is the created act of God, what should a Christian expect to be able to learn from it? Sibiuda had as his focus the very concept of general revelation, and his methods and terms for discussing this (including “natural theology”) became part of the standard vocabulary of works of natural theology in Spain and in early modern Europe. On the other hand, Sibiuda’s work was condemned to be forgotten from almost the beginning. Published posthumously and in edited versions and banned in Spain, the original text disappeared in the Iberian world until the mid-nineteenth century, only surviving in para-Sibiudan forms. The impact of these works, derived and inspired from Sibiuda, is taken up in the next chapter, tracing natural theology in Renaissance Spain.

Chapter Two: Knowing Nature, Self, and God in Renaissance Spain: Natural Theology and the Separation of Man and Nature

Introduction

Writing in 1540, the Toledano humanist Alejo de Venegas del Busto (c. 1498-1562) compared the two initial ways that Christians could come to know and experience God without relying upon the explicit teaching of sacred scriptures or of the Church's magisterial authority. The first was by contemplating the world around them – a method which was truly universal in subject and in scope, open to every human, everywhere, always. Venegas described created things as “town-criers of this truth” of God's existence and creative act.²⁷² The second way was similarly open to everyone but was an even better path to knowing God. It required the contemplation of the most special part of the created order: the individual human being. In other words, this second method involved studying what Venegas called “the rational” powers of mankind to think, to remember, to will, and to love. Of this second way, Venegas wrote “...that although men come to some notice of God by the knowledge of creatures, it is much better [that] they know him by the knowledge that men would have of themselves.”²⁷³ By using resources and methods other than divinely-inspired sources to generate knowledge about God, Venegas was engaging natural theology, although this was not a term he used. He was also, however, discussing a topic which, by 1540, had become a subject of great theological debate.

As shown in the previous chapter, Sibiuda's works were spread across Spain in the sixteenth century through a variety of repackaged glosses as devotional and contemplative spiritual literature. The *Viola Animae*, revised by Dorlandus, appeared in Toledo in 1500, and

²⁷² Alexio [Alejo] Vanegas [Venegas], *Primera Parte de Las Diferencias de Libros Que [h]Ay En El [u]Niverso*, Now newly emended and corrected (Madrid: Alonso Gomez, 1569), 35r, <http://hdl.handle.net/2027/ucm.532501417x>.

²⁷³ Vanegas [Venegas], 119.

the anonymous Spanish translation of this work, the *Violeta del anima*, was published in Valladolid in 1549.²⁷⁴ Between these two works, however, other important works which addressed or advocated methods for practicing natural theology emerged in Spain. This period, the start of the Spanish “Renaissance” or the Spanish “Golden Age,” was marked by pronounced religious and theological challenges. The first half of the sixteenth century, in particular, witnessed Catholic reform movements (especially within the Franciscan order), the rise of Spanish humanism and Erasmianism, the growth of an interior, spiritual heterodoxy known as *alumbradismo*, the challenge of Lutheranism and the Protestant movement, Inquisitorial activity, the establishment of the Society of Jesus, and the impact of the burgeoning book trade with the establishment of presses across the peninsula.²⁷⁵

In the midst of these movements, Venegas, a trained scholar and prominent member of the ecclesiastical community in Toledo, the very heart of religious thought and change in early sixteenth-century Spain, authored his contribution to the tradition of natural theology: the *Primera parte de las diferencias de libros que hay en el universo* (*First part of the differences of the books that there are in the universe*), published in Toledo, 1540.²⁷⁶ Like Sibiuda, Venegas advanced a natural theology and described the existence of “the book of nature” – however, Venegas’s description of what this book contained and how it was read was critically different from Sibiuda’s. Where Sibiuda described two books, Venegas expounded upon four: the divine,

²⁷⁴ Wilkinson, *Iberian Books*, 183, 764.

²⁷⁵ For a historiographical and terminological discussion of the “Spanish Renaissance,” see: Hilaire Kallendorf, “A Renaissance for the ‘Spanish Renaissance’?,” in *A Companion to the Spanish Renaissance*, ed. Hilaire Kallendorf (Leiden: Brill, 2018), 1–27.

²⁷⁶ Alexo [Alejo] Vanegas [Venegas], *Primera parte de las diferencias de libros q[ue] [h]ay en el universo* (Toledo: s.n. [Juan de Ayala], 1540); Jerónimo López Ayala y Álvarez de Toledo, *Toledo en el siglo xvi despues del vencimiento de las comunidades* (Madrid: Imprenta de los Hijos de M.G. Hernández, 1901); Eisenberg labels it a “...major Castilian city...” in Daniel Eisenberg, “An Early Censor: Alejo Venegas,” in *Medieval, Renaissance and Folklore Studies in Honor of John Esten Keller*, ed. Joseph R. Jones (Newark, Delaware: Juan de la Cuesta, 1980), 232.

natural, rational, and revelatory. Venegas's primary goal in this work was to provide a sketch of the different ways which God had gifted to humanity and which allowed people to recognize and know God. Venegas's work on nature and reason as epistemological methods set forth a project of natural theology: the ways in which humanity could, and indeed must, come to a knowledge of God's existence and attributes without the use of revelation.

Although both Sibiuda's *Liber* and Venegas's *Diferencias* included ideas which can be classified as natural theology, there is a pronounced difference between their articulations and methods. Most importantly, the relationship between inner, self-knowledge and external knowledge of the created world was one of close connection in Sibiuda's *Liber* but became separated in Venegas's *Diferencias*. This separation is a process which I assert may have occurred because of the abridgement and interpretation of Sibiuda's *Liber* in other devotional works and its subsequent association with heterodox movements of interior spirituality and mysticism during the 1520s and 30s, namely, *alumbradismo*. To restate this difference more specifically: Sibiuda's natural theology involved moving from the contemplation of the entire created order of nature, to man's position among creation, to man's self-knowledge of his own rational abilities and powers. Subsequent variant presentations of Sibiuda's work in Spain (the *Viola* and the *Lumbre del alma*) focused on man's self-knowledge to the almost complete exclusion of the rest of creation. This theology built on interior self-knowledge was closely connected with practices of interior spirituality in late-medieval and early modern Spain, primarily known as *dejamiento* and *recogimiento*. These practices were adopted by certain individuals and groups who were later judged to hold heretical ideas. This connection may have influenced Venegas's development of natural theology, in which natural knowledge is

considered an entirely separate domain from rational knowledge, and mystical experiences are still further segmented as a form of divine revelation.

This chapter explores the convoluted trajectory of natural theology in Spain at the turn of the fifteenth century. After briefly explaining the importance of situating natural theology within the existing scholarship on religion in Renaissance Spain, this chapter establishes three points. First, it highlights the relationship between natural theology and interior spirituality by summarizing the impact that the *Liber* had in developing spiritual practices in early sixteenth-century Spain. It then explores the way in which Venegas's reconceptualized natural theology, noting several key differences with Sibiudan natural theology. Three differences are explored in some detail: (a) Venegas's Aristotelian natural philosophy as opposed to Sibiuda's 'symbolic' approach, (b) Venegas's emphasis on the necessity of natural theology as self-evident knowledge, and (c) Venegas's separation between the macrocosm of the created world and the microcosm of man as part of that creation. Finally, this chapter accounts for this final change by highlighting the role that interior spirituality, and particularly heterodox expressions of this spirituality, had in shaping Venegas's 1540 reconceptualization of natural theology.

Religion in Renaissance Spain: Is there room for Natural Theology?

In 2009, Lu Ann Homza described the historiographical changes in the study of Spanish religion since the overturning of the "triumphalist" accounts began in the 1970s.²⁷⁷ Even the last decade since that masterful summary has witnessed a windfall of studies challenging and reconceptualizing what was perhaps the most dynamic period of religious and theological change in Spain. Among other topics, these publications on early-sixteenth century Spain have sought to

²⁷⁷ Lu Ann Homza, "The Merits of Disruption and Tumult: New Scholarship on Religion and Spirituality in Spain during the Sixteenth Century," *Archiv Für Reformationsgeschichte* 100, no. 1 (2009): 218–34.

establish a connection between *dejamiento* and *recogimiento* and various Spanish devotional works²⁷⁸, to connect these Spanish devotional works to continental practices (such as the *devotio moderno* of the Brethren of the Common Life) and European publications,²⁷⁹ to draw or imply links between mysticism and Franciscan spirituality,²⁸⁰ between mysticism and *alumbradismo*, between *alumbradismo* and Franciscan²⁸¹ or Ignatian spirituality,²⁸² to compare all of these to any number of theological and methodological camps including Lutheranism, Humanism, Erasmianism, and pre-Tridentine reformism,²⁸³ to establish an intellectual lineage between the spiritual movements of the early-sixteenth century and later forms of mysticism and spirituality (ranging from Golden Age mystics such as Teresa of Ávila and Juan de la Cruz to Quietists, Molinists, and Jansenists), to examine and re-examine the testimony of Inquisition cases interrogating and establishing parameters for heterodoxy,²⁸⁴ and to connect spiritual practices within Catholicism to the broader multifaith panorama of sixteenth-century Spain, including *converso*, *morisco*, and *mudéjar* religiosity.²⁸⁵

None of these works, however, has examined the relationship between “natural theology” and interior spirituality in Renaissance Spain – very few even reference the category of natural

²⁷⁸ Paul Whitehill, “At the Origins of Spanish Golden Age Mysticism: ‘Recogimiento’ in the ‘Tercer Abecedario Espiritual’ of Francisco de Osuna” (Rutgers, the State University of New Jersey, 2005), <http://search.proquest.com/docview/305427295/?pq-origsite=primo>.

²⁷⁹ María Gómez Navarro, “‘Y cómo caminan las almas’: panorama religioso en tiempos del Emperador, entre España y Europa,” *Cuadernos de Historia Moderna* 43, no. 2 (2018): 365–93.

²⁸⁰ Melquíades Andrés Martín, “La espiritualidad franciscana en España en tiempos de las observancias (1380-1517),” *Studia historica. Historia moderna*, no. 6 (1988): 465–79.

²⁸¹ Á. Castro Sánchez et al., eds., *Franciscanos, Místicos, Herejes y Alumbrados* (Córdoba: Servicio de Publicaciones de la Universidad de Córdoba - Séneca Editorial, 2010).

²⁸² Luis Fernández, “Íñigo de Loyola y los alumbrados,” *Hispania Sacra* 35, no. 72 (1983): 585.

²⁸³ Manuel De Paz Sánchez, Rafael Padrón Fernández, and Francisco Salas Salgado, “Erasmus en el refectorio: La biblioteca franciscana de Garachico,” *Anuario de estudios atlánticos*, no. 54 (2008): 85–118.

²⁸⁴ Jessica J. Fowler, “Questioning the 1623 Edict of Grace: Differentiating Between Orthodox and Heterodox Interiority,” *Culture & History Digital Journal* 6, no. 2 (2017): 1–13; Jessica Fowler, “Illuminating the Empire: The Dissemination of the Spanish Inquisition and the Heresy of Alumbradismo, 1525-1600” (University of California, Davis, 2015), <http://search.proquest.com/docview/1775393470/?pq-origsite=primo>.

²⁸⁵ Alfonso Ropero Berzosa, “Judeoconversos y espiritualidad heterodoxa en tiempos de Carlos V,” *Cuadernos de Historia Moderna* 43, no. 2 (2018): 485–504.

theology as a potential field of study.²⁸⁶ In his magisterial summary of historical theology, for example, Andrés Martín included dogmatic theology, polemical theology (apologetics), moral theology, spiritual theology, and biblical studies, but omitted natural theology as a genre.²⁸⁷ This phantom presence of natural theology is understandable – the term is notoriously polysemic and resists stable definitions; furthermore, *teología natural* was never popularly used in Spain, and certainly not with any reliability during the fifteenth and sixteenth centuries.²⁸⁸ Natural theology was not a belief system or a clear corpus of religious ideas that were grouped thematically. Rather, like the designation of “Scholastic” theology, natural theology should be thought of as ideas which came about by a certain group of methods or shared epistemological values. Most importantly, this included the reliance on creation and nature and the use of observation, experience, and reason. In this way, natural theology crossed theological boundaries, uniting elements from dogmatic, polemical and spiritual theology. By emphasizing natural theology’s methodological and epistemological claims, scholars of religion and spirituality in early modern Spain may discover new ways of understanding how specific religious ideas or practices came to light during pre-reformation Catholicism.

It is not the aim of this chapter, therefore, to force works or ideas of Renaissance Spanish theology into a classificatory scheme which designates them as examples of “natural theology” or not, but rather to suggest a new (and very old) way of understanding how Spanish spirituality and theology developed. If, as scholars such as Homza and Stefania Pastore have asserted,

²⁸⁶ Excepting Portuondo, *The Spanish Disquiet*.

²⁸⁷ Andrés Martín, *La teología española*.

²⁸⁸ The term is used in eighteenth-century theological treatises, but even there it is not abundantly common. The historiographical fervor which insists upon locating the “origin” of the genre of natural theology with Sibiuda’s *Liber* is, in many ways, mistaken excitement over a posthumous editorial decision to exalt the words *theologia naturalis* in the title. See: Webb, *Studies*, 293.

religious identity and spirituality during this period were flexible, mutable concepts, then natural theology provides one more component for understanding their complexity.²⁸⁹

Creaturely Contemplation in Spiritual Literature of the Spanish Renaissance

Recogimiento, Interior Spirituality, and Creaturely Contemplation

In the first half of the sixteenth century, before the regulating influence of the Council of Trent, Spain experienced several different currents of Christian spirituality and piety, many of which were associated with the reform movements of various religious orders. In Spain, for example, the Franciscan order underwent reform movements stretching to the late medieval period.²⁹⁰ William A. Christian, Jr., specifically highlight the success of Franciscans at establishing monasteries in rural areas, estimating that “a quarter of all monasteries of male religious were Franciscan...In towns of fewer than fifteen hundred households...twenty-one out of thirty-five monasteries of male religious were Franciscan, either Observant or Discalced.”²⁹¹ The establishment of religious centres and monasteries allowed for new attention to be given to ways of encouraging piety and spiritual devotion. It was in such settings that works dedicated to describing spiritual methods for devotion emerged, including Christian mystical theology. Andrés Martín describes that “The *recolatorios* of diverse observant and reform [groups] are the home of Spanish mysticism in the Golden Age. There lived a decided spirituality...”²⁹² Key among these were two “schools” of interior spirituality which invoked elements of natural theology or may have been influenced by the Sibiudan legacy: *recogimiento* and *dejamiento*.

²⁸⁹ Lu Ann Homza, *Religious Authority in the Spanish Renaissance* (Baltimore: Johns Hopkins University Press, 2000); Stefania Pastore, *Un'Eresia Spagnola: Spiritualità Conversa, Alumbadismo e Inquisizione (1449-1559)* (Florence: Leo S. Olschki, 2004).

²⁹⁰ Andrés Martín, “La espiritualidad franciscana.”

²⁹¹ William A. Christian, Jr., *Local Religion in Sixteenth-Century Spain* (Princeton: Princeton University Press, 1981), 15–16.

²⁹² Andrés Martín, *La teología española*, 1:111.

The first practice, *recogimiento* (recollection), associated particularly with the Franciscan order, described the soul's efforts to recollect or remember itself in order to know God.²⁹³

In *recogimiento*, one followed a three-fold path to knowledge inherited from mystics of the early Church, divided into three stages: the *via purgativa*, or the purgative route, by which one sought to become empty, the *via illuminativa*, or the illuminative route, of meditation, and the *via unitiva*, or unitative route, by which one joined in union with God.²⁹⁴ *Recogimiento* represented an approach which, when practiced, was supposed to conduct the Christian believer to a closer knowledge of God.²⁹⁵ Many scholars, including Paul Whitehill, point to the *Tercer abecedario espiritual* (Third Spiritual Alphabet, 1527) of Franciscan Francisco de Osuna, OFM, (1497-1542) as being the fundamental work for establishing the practice of *recogimiento* in Spain.²⁹⁶ It became, as one scholar describes it, a “uniquely Spanish...tradition.”²⁹⁷ Importantly, the first step of the tradition, the *via purgativa*, included as a means of emptying one's self the contemplation of the created world, thus invoking a form of natural theology as a first step on this spiritual path.

Examples of creaturely contemplation in works of *recogimiento* abound in sixteenth-century Spain. In the *Third Spiritual Alphabet*, for example, Osuna claimed that flowers and rivers preached the virtue of gratitude, writing:

²⁹³ Carlos Eire, *The Life of Saint Teresa of Avila: A Biography* (Princeton: Princeton University Press, 2019), 70–71.

²⁹⁴ Melquíades Andrés Martín, “La via espiritual del recogimiento,” *Salmanticensis* 20, no. 3 (1973): 655–65; Whitehill, “At the Origins,” 3.

²⁹⁵ Andrés Martín, “La via espiritual,” 655.

²⁹⁶ Whitehill, “At the Origins,” 3–5; Francisco de Osuna, *The Third Spiritual Alphabet*, trans. Mary E. Giles, Classics of Western Spirituality (London: SPCK, 1981); Hermenegildo Zamora Jambrina, OFM, “Francisco de Osuna,” Real Academia de la Historia: Diccionario Biográfico Español, accessed March 17, 2021, <http://dbe.rah.es/biografias/7581/francisco-de-osuna>.

²⁹⁷ Jessica A. Boon, *The Mystical Science of the Soul: Medieval Cognition in Bernardino de Laredo's Recollection Method [Electronic Resource]*, Toronto Iberic (Toronto: University of Toronto Press, 2012), 3–4, <https://ezproxy-prd.bodleian.ox.ac.uk/login?url=https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4673030>.

The giving of thanks...is a thing of such excellence and goodness...we shall find this virtue naturally implanted in almost all creatures. For even if they cannot speak, by their deeds they show more gratitude to their benefactors than men do by word, for we see that the earth, visited by heaven with rain and fine weather, immediately, as if to render thanks, begins to bud forth and send up its plants and flowers...All the rivers run swiftly to the sea to thank it for producing them...²⁹⁸

Another Franciscan, Diego de Estella (Diego de San Cristóbal Ballesteros Cruzat) OFM (1524-1578) contemplated the message of creation, writing that:²⁹⁹

The beauty of the heavens, the brightness of the sun and moon, the shining of the stars...Everything I see invites me to your love and reproves me when I do not love you. I cannot open my eyes without seeing preachers of your highest wisdom...for all you have made, Lord, tells me who you are. All created things first show us the love of the Creator before they tell us of his gift.”³⁰⁰

Estella’s language is most similar to Sibiuda’s natural theology, emphasizing that contemplation of the natural world leads to a knowledge that, rightly considered, produces love towards the Creator. Still another example of creaturely contemplation in Franciscan *recogimiento* might be found in Juan de los Angeles (Juan Martínez) (1548-1609) who compared the knowledge gained by creatures as knowledge gained by looking into a mirror (perhaps an image borrowed from Bonaventure).³⁰¹ He wrote:

Knowledge through a mirror is that which may be learnt about the Bridegroom through creatures, for in a certain sense, their composition, harmony, order, beauty and grandeur, present, as it were, to the eyes of our intellect species of divine things, just as the mirror, when I look at myself in it, shows me and represents my face and figure. This is what St. Paul said: ‘For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made. His eternal power also and divinity.’³⁰²

²⁹⁸ Translations by Pond for all quotes from this source. See: Kathleen Pond, *The Spirit of the Spanish Mystics: An Anthology of Spanish Religious Prose from the Fifteenth to the Seventeenth Century* (London: Burns & Oates, 1958), 39.

²⁹⁹ Pond, 94; Garcia Oro, OFM, “Diego de San Cristóbal Ballesteros Cruzat.”

³⁰⁰ Pond, *The Spirit of the Spanish Mystics*, 94.

³⁰¹ Eduardo Torres Corominas, “Juan Martínez,” Real Academia de la Historia: Diccionario Biográfico Español, accessed March 17, 2021, <http://dbe.rah.es/biografias/17636/juan-martinez>; Pond, *The Spirit of the Spanish Mystics*, 110–11.

³⁰² Pond, *The Spirit of the Spanish Mystics*, 110–11.

Nor was this association of creaturely contemplation and *recogimiento* limited to Franciscan spirituality. Perhaps the most successful work to pair natural theology with interior spirituality was the Dominican Fray Luis de Granada's (1504-1588) *Introducción del símbolo de la fe* (*Introduction to the Symbol of the Faith*), first appearing in 1583.³⁰³ Granada's work, published over four volumes, was popular both in Spain and abroad. Within the first five years, the treatise was republished multiple times in French, Italian, and Latin.³⁰⁴ Nor was the dissemination of Granada's work limited to Catholic Europe; Alexandra Walsham has suggested that Luis de Granada's devotional works may have had more success with Protestant readers than they enjoyed in Spain.³⁰⁵

It is clear that Granada was aware of the use of natural theology with practices of "spiritual ascent"; by the time that he wrote the *Símbolo*, he had already anonymously translated John Climacus's *The Ladder of Divine Ascent* in 1562.³⁰⁶ Granada described, for example, two fundamental ways by which Christians ought to know God – reason and faith – writing, "The Lord has given two lights to all Christians in order that they should know him: the first is reason, and the other is Faith; the first is natural, and the other supernatural..."³⁰⁷ Granada further subordinated reason's power to teach under faith, and implied that reason is best paired with faith. Granada included the contemplation of the works of creation as the first chapters of his

³⁰³ Álvaro Huerga Teruelo, OP, "Fray Luis de Granada," Real Academia de la Historia, Diccionario Biográfico Español, accessed March 17, 2021, <http://dbe.rah.es/biografias/11233/fray-luis-de-granada>.

³⁰⁴ González, "Algunas notas," 138–39.

³⁰⁵ Alexandra Walsham, "Luis de Granada's Mission to Protestant England: Translating the Devotional Literature of the Spanish Counter-Reformation," in *Publishing Subversive Texts in Elizabethan England and the Polish-Lithuanian Commonwealth*, ed. Teresa Bela, Clarinda Calma, and Jolanta Rzegocka (Leiden: Brill, 2016), 130.

³⁰⁶ Armando Pego Puigbó, *El renacimiento espiritual: introducción literaria los tratados de oración españoles (1520-1566)* (Madrid: Consejo Superior de Investigaciones Científicas, Instituto de la Lengua Española, 2004), 171; for a translation of Climacus, see: John Climacus, *The Ladder of Divine Ascent*, trans. Colm Luibheid and Norman Russell (Mahwah: Paulist Press, 1982).

³⁰⁷ Luis de Granada, *Quarta Parte de La Introduccion Del Symbolo de La Fè*, vol. 6 (Madrid: En la Oficina de Manuel Fernandez, 1730), 1–2. *Symbol* IV.1.

Símbolo, including “on the fruit that is taken from the consideration of the works of nature,” and a guide for “devoted meditation” on the “created things” (*criaturas*).³⁰⁸ Granada wrote, for example:

The university of the created things also helps us...Lord, what is this visible world but a mirror that you have put before our eyes so that in it we may contemplate your beauty?...In this way, beautiful created things preach your beauty, strong things your strength, great things your greatness, skillfully-wrought things your wisdom, resplendent things your clarity, sweet things your gentleness, well-ordered and provided things your marvelous providence. Oh, testified by so many and so faithful witnesses!³⁰⁹

This ability to learn about God from created things was possible, Granada noted, because of a “consonance in the works of nature and grace;” furthermore, Granada cited many scriptural passages which suggested that the endeavor was encouraged for Christians to practice, including Job 38, Psalms 18, 91, 103, 133, 146, and 147.³¹⁰ Additionally, the language of ascent or motion (similar to the metaphor of a “ladder of nature” or of a spiritual *via*) can be seen in Granada’s counsel that Christians, when contemplating the created world, must continue until they recognize and honor the Creator. “This spiritual happiness is received,” Granada explained, “when the man seeing the beauty of the creatures does not stop in them, but rather climbs by them to the knowledge of the beauty, of the goodness, and of the love of God...”³¹¹ This was, for Granada, the mistake which non-Christian philosophers such as Pliny had made, and which was critiqued by Paul in Romans 1. The contemplation of the creatures in Granada’s description carries with it the idea that it is only the access point to reaching the true goal, which is knowing God; this is similar to its role as the first step of *recogimiento*.

³⁰⁸ Luis de Granada, *Obras Del V.P.M. Fray Luis de Granada*, vol. 1 [1856], Biblioteca de Autores Españoles, Desde La Formacion de Lenguaje Hasta Nuestros Dias (Madrid: M. Rivadeneyra, 1856), 182–85.

³⁰⁹ Granada, 1 [1856]:186. *Symbol* I.2.

³¹⁰ Granada, 1 [1856]:183–84.

³¹¹ Granada, 1 [1856]:184.

The work of Granada and the practice of *recogimiento* which is recorded in many spiritual works suggests that, although not explicitly labeled or described as “natural theology”, the contemplation of the natural world and the exercise of natural reason formed an important part of a strong tradition of personal devotion. This is quite distinct from contemporary conceptions of natural theology which largely describe the endeavor as a process based on forming arguments for the justification of the faith, used as apologetics to defend Christianity or as forays into religious knowledge for beginners. These spiritual works suggest an alternative use of natural theology in which the contemplation of nature is undertaken to deepen and expand a Christian’s ability to see knowledge about God embedded in reality. It is also important to note that this natural theology is often predicated upon a Christian worldview – it has Christian theological assumptions already in place before the act of contemplation begins, rather than starting from some “neutral” realm of nature. Indeed, the end goal of “knowing God” through union with him makes it clear that the destination of the path (*via*) is already an agreed-upon goal. Nature, in this conception, is in fact often described, like Sibiuda, as “created things” or “creatures.” Osuna, for example, writes about the “secret manner that God has in the work of his created things.”³¹²

Dejamiento, Alumbradismo, and the Lumbre del Alma

However, a second tradition of interior spirituality labeled *dejamiento* also existed during this time, and the two spiritual movements – *dejamiento* and *recogimiento* – were closely associated with one another. Scholars distinguish the two mainly on the notion of passivity. While *recogimiento* involved a set of meditative strategies and techniques which would allow the practitioner to ‘collect’ one’s self and focus entirely on God, *dejamiento* (literally, “leaving”)

³¹² s.n. [Francisco de Osuna], *Tercera Parte Del Libro Llamado Abecedario Spiritual Agora Nuevamente: Impresso y Coregido y Añadido La Tabla de Los Tratados y Capítulos Que Cōntienē* (s.u.: s.n., 1544), 172v.

encouraged a complete abandonment and passivity. Andrés Martín writes that it involved “passivity and inaction”, and Mary Giles similarly describes that “Recollection typically differs from abandon in that it requires mental concentration and active directing of the mind.”³¹³ Unfortunately, the same works could encourage both practices, and followers of *recogimiento* were sometimes accused of following *dejamiento* instead.

This was problematic, because practitioners of *dejamiento* became associated with a “pre-quietist” heresy in sixteenth-century Spain known as *alumbradismo* (“illumination”).³¹⁴ Its followers, *alumbrados* (“illuminated ones”) or *perfectos* (“perfect ones”) were called thus for adhering to a cluster of beliefs charged to be heretical, including the ability of attaining perfection through the abandonment of self to God and of scorning the rules, teaching, institutions, and ordinances (including the Eucharist) of the Church.³¹⁵ Constructing a core set of beliefs of *alumbradismo* is, as many scholars have pointed out, a frustrating endeavor. Some have attempted to describe the heresy by studying documents such as the 1525 Edict of Faith (which contained 48 propositions about the *alumbrados*) or from Inquisition trials where individuals were accused of the heresy of *alumbradismo*.³¹⁶

Drawing an explicit connection between the nascent genre of natural theology in Spain and the *alumbradismo* movement in early sixteenth-century Toledo is impossible; however, some link may exist between natural theology, practices of interior spirituality and devotion, and the reform movements of that period. This is especially true considering that one of the key

³¹³ Andrés Martín, *La teología española*, 1:655; Osuna, *The Third Spiritual Alphabet*, 5.

³¹⁴ Moshe Sluhovsky, *Believe Not Every Spirit: Possession, Mysticism, and Discernment in Early Modern Catholicism* (Chicago: University of Chicago Press, 2007), 99–100.

³¹⁵ Eire, *The Life of Saint Teresa*, 70; Osuna, *The Third Spiritual Alphabet*, 4; Fowler, “Questioning,” 5; Homza, *Religious Authority*, 7.

³¹⁶ Homza, “The Merits of Disruption,” 231; Fowler shows that these ideas were mutable. See: Fowler, “Illuminating.” See especially Appendix 1a (p. 61-70) in which Fowler provides an English translation of the 1525 Edict.

works which was associated with both *recogimiento*, *dejamiento*, and *alumbradismo* was a work which was an adaptation of the para-Sibiudan *Viola*: Juan de Cazalla's *Lumbre del alma* (*Light of the Soul*, Valladolid, 1528, republished in Seville, 1542). Cazalla was a close associate and chaplain of Cardinal Francisco Jiménez de Cisneros and is considered part of his circle devoted to reform efforts in early sixteenth-century Spain. The *Lumbre* has been thoroughly studied as a work of spiritual devotion, a primer on introducing techniques of *recogimiento* essential to the development of mysticism, and even as a work which may have been closely connected to *alumbradismo*.³¹⁷ Juan's sister, Maria de Cazalla, was a celebrated and persecuted *beata* in the first wave of Inquisitorial activity in Toledo – she was apprehended, tortured, and released *de abjure* in the early 1530s, and, as Alasdair Hamilton describes it, Juan de Cazalla “was fortunate enough to die before being brought to trial himself” in 1530 (at which time, material was already moving towards a trial against him).³¹⁸

Moreover, the *Lumbre* has a clear provenance which connects it to Sibiuda's *Liber*; the *Lumbre* was a gloss of the *Viola*, which in turn was an abridgement of the *Liber*.³¹⁹ This was the connection made by Révah in his study of the influence which Sibiuda had on spiritual practices in Golden Age Spain.³²⁰ Révah challenged the assertions of previous historians, including Carreras y Artau, who relegated Sibiuda as a figure who, although brilliant in his theology, was unappreciated and unread in his native Spain.³²¹ Révah's thesis was further strengthened by the work of his student, J. Martínez de Bujanda, who, both through an examination of Inquisition

³¹⁷ Stefania Pastore and Josep Monter, “Mujeres, Lecturas y Alumbradismo Radical: Petronila de Lucena y Juan Del Castillo,” *Historia Social* 57 (2007): 63.

³¹⁸ Alastair Hamilton, *Heresy and Mysticism in Sixteenth-Century Spain: The Alumbrados* (Cambridge: James Clarke & Co. Ltd, 1992), 46, 86.

³¹⁹ Rubí argues, for example, that “The *Viola* in turn was recast in the work *Lumbre del alma*...by the *alumbrado* Juan de Cazalla.” Báez Rubí, “Lullism in New Spain,” 517.

³²⁰ Révah, *Une source*.

³²¹ Carreras y Artau, “Orígenes”; Carreras y Artau and Carreras y Artau, *Historia de la filosofía*; Révah, *Une source*, 7.

indices and through his close analysis of Cazalla's *Lumbre* offered reasons to show why Sibiuda was an uncredited influence on the development of 'peninsular spirituality' as seen in Cazalla.³²² Cazalla's work, as both Révah and Bujanda unquestionably prove, was a direct reworking of portions of the *Viola*.

Révah and Bujanda connected Sibiuda to the movements of interior spirituality which included Dorlandus and Cazalla. Unfortunately, Sibiuda's contributions were through a work which, in turn, carried with it loose associations with a heresy. I argue that Cazalla's work represented a significant departure from the Sibiudan tradition of natural theology. By emphasizing the interiority of natural theology, the *Viola* and the *Lumbre* helped to associate these forms of devotional natural theology with interior spirituality, mysticism, and for some, heretical *alumbradismo*. This, in turn, may have encouraged the way in which Venegas's reconceptualized natural theology in 1540, separating natural theology into a "book of nature" and a "book of reason." Moshe Sluhovsky writes that,

By the end...all interior "spiritual movements" were viewed with suspicion and were scrutinized excessively, and practitioners of all the new variants of the new spirituality – and not only promoters of passivity – interiorized the anxiety and doubted the sources of their own inspiration.³²³

I assert that a similar nervousness about the association between interior spirituality, *recogimiento*, the para-Sibiudan *Viola*, and other spiritual treatises of this time may have been a key motivating factor in the way in which Venegas restructured and presented a new natural theology in 1540.

Knowing the Created World: Alejo de Venegas's *Diferencias* (1540)

Venegas Biography and the *Diferencias*: Publication History and Structure

³²² Bujanda, "L'influence"; Cazalla, *Lumbre*.

³²³ Sluhovsky, *Believe Not*, 99.

Alejo de Venegas del Busto (c. 1498 – 3-8 August 1562), was born into a *hidalgo* family (the lowest level of nobility), likely in Camarena, near Toledo.³²⁴ He was educated at the local Colegio de Santa Catalina in Toledo – this institution would become in 1520, thanks to the endorsement of Pope Leo X, the Real Universidad de Toledo, one of the earliest institutions in Spain – where, apparently, he received training in classical languages sufficient enough to enable him to teach Latin in Toledo.³²⁵ It is possible that at the University of Toledo, he may have come into contact with Sibiuda's *Liber* or para-Sibiudian literature. The library at that University, when indexed in 1576, contained a copy of the *Viola*.³²⁶ He later received a *magisterio* (masters) from Alonso Cedillo and taught in Ocaña and Alcalá de Henares, before moving to Madrid in 1544 to teach grammar as a chair at the Estudio de Gramática de la Villa, a position he held until his retirement of the post in 1560. Before publishing the *Diferencias* in 1540, Venegas had previously published two other works: an orthographical study of Greek and Latin and an immensely popular treatise on death, dying, and Christian spirituality entitled *Agonia del transito de la muerte* (*Agony of the Transit of Death*, Toledo, 1537, with eleven editions in the sixteenth century alone).³²⁷

³²⁴ Many biographical details are lacking or are the result of historical inferences; Germán Bleiberg, Maureen Ihrle, and Janet Pérez, eds., *Dictionary of the Literature of the Iberian Peninsula: L-Z*, vol. 2 (Westport, Connecticut: Greenwood Publishing Group, 1993), 1684; Marc Zuili, "Algunas observaciones acerca de un moralista toledano del siglo xvi: Alejo Venegas de Busto," *Criticón* 65 (1995): 19, 22, who supplies Camarena as the likely home; Juan Bautista Avallé-Arce, "Los testamentos de Alejo Venegas," in *Anuario de Letras*, vol. VI, 1966, 135–62; Eisenberg, "An Early Censor," 232, describing Venegas's ancestry as "a noble, but undistinguished Toledan" family; Gonzalo Díaz Díaz, *Hombres y documentos de la filosofía española*, vol. VII: S-Z (Editorial CSIC - CSIC Press, 2003), 814, who describes the Venegas family as "hidalgas"; for information on *hidalgos* in early modern Spain, see: Teofilo F. Ruiz, *Spanish Society, 1400-1600* (London: Routledge, 2014), 68.

³²⁵ Luis Lorente, *La Real y Pontificia Universidad de Toledo: Siglos XVI-XIX*, Toledo (Cuenca: Universidad de Castilla-La Mancha, 1999); José Carlos Vizuete Mendoza, "Universidad de Toledo: Historiografía, fuentes documentales, y líneas de investigación," in *Universidades Hispánicas. Modelos territoriales en la Edad Moderna (I): Santiago, Toledo, Sevilla, Barcelona y Huesca*, ed. Luis Enrique Rodríguez San Pedro Bezares and Juan Luis Polo Rodríguez (Salamanca: Universidad de Salamanca, 2018), 67–68.

³²⁶ Pedro M. Cátedra, "La Biblioteca de La Universidad de Toledo (Siglo XVI)," *Bulletin of Spanish Studies* 81, no. 7–8 (November 1, 2004): 947.

³²⁷ Nicolás Antonio Hispalensi, *Bibliotheca hispana Nova: sive Hispanorum scriptorum qui ab anno md. ad mdclxxxiv Floruere notitia*, vol. 1 (Madrid: Apud Joachimum de Ibarra, 1783), 8–9; Wilkinson, *Iberian Books*, 743; Zuili, "Algunas observaciones," 17, 22; Manuel Alvar Ezquerro, "Venegas de Busto, Alejo (1498 o 1499-1562),"

At the special commission of the Cardinal Archbishop of Toledo, Venegas undertook to write the *Diferencias*, first published in Toledo by the printer Juan de Ayala on 28 February 1540.³²⁸ The book was subsequently reprinted at least four more times during the sixteenth century in cities across Spain, including in Madrid (1569) and a revised edition in Salamanca (1572).³²⁹ The purpose of the work, as set forward in the prologue, is to advise readers on the different sources of knowledge that there are, or, as Venegas classifies them, the “different [types] of books that there are in the universe.”³³⁰ Venegas’s goal was epistemological: to describe four different realms of knowledge by which man can know, and know God especially. Maria Portuonodo describes Venegas’s thesis as “...that all there was to know about humanity’s place in the universe had been written by God in four “books.”³³¹ In this regard, Venegas’s book promised to fulfill what Peter Harrison has described as one of the foremost hopes of natural

Biblioteca Virtual de la Filología Española, accessed June 3, 2019, <https://www.bvfe.es/component/mtree/autor/10847-venegas-de-busto-alejo.html>; Alejo Venegas, *Tractado de Orthographia y Acce[n]Tos En Las Tres Lenguas Principales Aora Nueuamente Co[m]Puesto Por El Bachiller Alexo Vanegas* (Toledo: en casa de Lazaro Salvago Ginoves, 1531); Alexio [Alejo] Vanegas [Venegas], *Agonia del transito de la muerte, con los auisos y consuelos que acerca della son prouechosos. En esta vltima impression emendada de muchos errores que en las impresiones passadas tenia* (Madrid: en casa de Alonso Gomez impressor de su magestad, 1571); Marc Zuili, “Péché et ultimes tentations du diable dans la Agonía del tránsito de la muerte (1537) du moraliste tolédan Alejo Venegas,” *Bulletin Hispanique* 105, no. 2 (2003): 321–31.

³²⁸ The dates given by the approbations and censures indicate that the work was finished, or nearly complete, at least as early as the beginning of October 1539. Felipe Picatoste y Rodríguez, *Apuntes para una biblioteca científica española del siglo XVI* (Madrid: Manuel Tello, 1891), 328; Jesús Romero Valiente has noted that Venegas had a longstanding relationship with Ayala, having previously published the *Agonía* with him in 1537; this relationship may have been complicated by the fact that Venegas worked in a censorial capacity for the Inquisition. See: Álgar Gómez de Ciudad Real, *La Orden de Caballeros Del Príncipe de Borgoña*, ed. Jesús Romero Valiente, vol. 1, Palmyrenvs: Colección de Textos y Estudios Humanísticos (Madrid: Ediciones de Laberinto, S.L. (Instituto de Estudios Humanísticos), 2003).

³²⁹ Given the rarity of extant copies, there is some question as to the actual date, place and existence of some of these versions: Toledo 1540, Toledo 1545/6, [Toledo 1553?], Madrid 1569, [Toledo 1569?], Salamanca 1572, Valladolid 1583. See the bibliographies compiled in: Bartolomé José Gallardo, *Ensayo de Una Biblioteca Española de Libros Raros y Curiosos*, vol. IV (Madrid: Manuel Tello, 1889), 1010–12; Díaz, *Hombres y documentos VII: S-Z*, VII: S-Z:815–16; Wilkinson, *Iberian Books*, 743–45; Picatoste y Rodríguez, *Apuntes para una biblioteca*, 328–29.

³³⁰ One of the genres which Venegas specifically had in mind were the “fábulas milesias” (Milesian tales), of which Venegas wrote “of the vanities that these treat,” and that the church had issued a warning against “the notable harm that the reading of these results in...” Venegas [Venegas], *Diferencias [Madrid 1569]*, 1v; on Venegas’s work against these, see: Donatella Gagliardi, “Malos libros en la España del XVI: la fábula milesia de Vives a Venegas,” *Studia Aurea: Revista de Literatura Española y Teoría Literaria del Renacimiento y Siglo de Oro*, no. 2 (2008).

³³¹ Portuondo, *The Spanish Disquiet*, 37.

philosophy in the early modern period: “to understand one’s place in the world, and to live rightly within it.”³³²

It is little wonder that Venegas saw books as the most useful metaphor for the various realms of knowledge – not only was the trope of the book of nature already an established theological tradition (as previously seen in Sibiuda’s *Liber*), but Venegas’s entire life had revolved around the written word. He was a respected scholar of Latin and Greek orthography and the author of multiple books. Beatrice Schmid has placed him as one of the earliest individuals to continue the work of Antonio de Nebrija’s (c. 1444-1522) 1492 *Gramática castellana* and other scholars have connected his work with that of Juan Luis Vives (1492-1540).³³³ Additionally, Venegas worked in some capacity as a censor – likely for the Inquisition in Toledo rather than for the archdiocese - but the exact nature of his responsibilities is uncertain.³³⁴ What is clear from the censures which he has authored, however, was that his role included reading, evaluating, and approving books that appeared in the city of Toledo.³³⁵ Daniel Eisenberg has studied Venegas’s work through the scant evidence left behind – his approbations, and the writings of others about him – and, while demonstrating that there was certainly censorial activity present in Spain prior to the 1559 Valdés Index or Tridentine reforms, argues that Venegas’s own position may have been more along the lines of an *asesor literario* (or literary assessor), rather than one who performed inspections (*visitas*) on bookstores and printing

³³² Harrison, *Territories*, 56.

³³³ Beatrice Schmid, “‘Es cosa dura hazer novedad’ Nebrija y la ortografía castellana,” in *Colloquium Zu Ehren von Germán Colón. Acta - Atti - Actes - Actas - Actes (14 February 1997)*, ed. M.A. Terzoli (Basel, 1998), 59–67; Manuel Breva-Claramonte, *La didáctica de las lenguas en el Renacimiento: Juan Luis Vives y Pedro Simón Abril: con selección de textos* (Bilbao: Universidad de Deusto, 1994), 27–28.

³³⁴ Zuili, “Algunas observaciones,” 20. Zuili notes that this position was offered to him by the Inquisitor General Alonso Manrique de Lara, who was archbishop of Seville (not Toledo).

³³⁵ Eisenberg, “An Early Censor,” 236–38.

presses.³³⁶ This seems all the more likely, according to Eisenberg, when Venegas's education and affinity for languages is considered, and the fact that he continued his censorial work after he moved to Madrid (still within the Toledano archbishopric in the sixteenth century).³³⁷ Whatever his responsibilities as a "visitor of books" (*visitador del libros*), the experience seems to have made a significant impression upon Venegas's metaphorical conception of books of knowledge. In his prologue, he referenced that, in addition to the four books of knowledge created by God, there were other books – dangerous books – which had been invented by other agents, further still, there were alterations to the core, four texts which had crept into use by those opposed to God's will. Just as Venegas had to sift literary chaff from wheat and to emend texts for the better instruction of the people of Toledo, so too was this the case in the books of knowledge.³³⁸ Venegas likely drew comparisons between misinformation and some of the texts which he had to edit and censor lest they should deceive the Toledano public and "...that from the lesson of those harmful books they insensibly stick to rough souls."³³⁹

Although Venegas was reported to have had pecuniary difficulties, these troubles do not appear to have damaged his professional reputation and importance.³⁴⁰ Likely due to his university connections, his recognized status as a teacher, and an inquisitorial "visitor of books," Venegas had close connections with some of the leading ecclesiastical authorities of his day,

³³⁶ Eisenberg, 237–38; Robin Vose, "Introduction to Inquisition Censorship Documents," Hesburgh Libraries of Notre Dame, Department of Rare Books and Special Collections, University of Notre Dame, 2010, <http://www.library.nd.edu/rarebooks/digital_projects/inquisition/collections/RBSC-INQ:COLLECTION/essays/RBSC-INQ:ESSAY_Censorship>.

³³⁷ Eisenberg, "An Early Censor," 236–38.

³³⁸ Venegas [Venegas], *Diferencias [Madrid 1569]*, 1.

³³⁹ Venegas [Venegas], 2r; Eisenberg correctly judges that Venegas's censorial work "may reflect some personal observation of a link between improper reading and un-Christian, dissolute living" and to his didactic mission as an educator Eisenberg, "An Early Censor," 238–39.

³⁴⁰ Eisenberg, "An Early Censor," 233; Zuili, "Algunas observaciones," 21. Zuili suggests that Venegas may have accepted the burden of censorial work in order to augment his income; for an analysis of Venegas's last will and testament, which included instructions for paying several outstanding debts, see: Avallé-Arce, "Los testamentos."

particularly in Toledo. The clerical circle in which Venegas moved is reflected in the approbations in support of his work which appear at the start of the text. All were educated theologians and would subsequently all become bishops – moreover, they would occupy powerful positions in Spanish governance and in the church – including a cardinal, a representative at the Council of Trent, and a viceroy and high-ranking official of the Inquisition. These individuals included the Cardinal Bishop of Coria, Francisco Cardinal Mendoza y Bobadilla (1508-1566)³⁴¹, the bishop of Utica, Pedro del Campo (d.1551)³⁴², the *comisario general* for the Inquisition, Bishop of Alghero, and sometime viceroy of Sicily, Pedro Vaguer (s. xvi)³⁴³, a leading local Franciscan theologian, Fray Antonio de la Cruz, OFM (d. 1545/7?)³⁴⁴,

³⁴¹ Arturo Llin Cháfer, “Francisco de Mendoza y Bobadilla,” Real Academia de la Historia, Diccionario Biográfico electrónico, accessed October 11, 2019, <http://dbe.rah.es/biografias/33103/francisco-de-mendoza-y-bobadilla>; José M. Fernández Pomar, “Libros y Manuscritos Procedentes de Plasencia: Historia de Una Colección,” *Hispania Sacra* 18, no. 35 (January 1, 1965): 33–70.

³⁴² Ángel Fernández Collado, “Pedro Del Campo,” Real Academia de la Historia, Diccionario Biográfico electrónico, accessed October 11, 2019, <http://dbe.rah.es/biografias/33122/pedro-del-campo>.

³⁴³ Esther Jiménez Pablo, “Pedro Vaguer,” Real Academia de la Historia, Diccionario Biográfico electrónico, accessed October 11, 2019, <http://dbe.rah.es/biografias/41710/pedro-vaguer>; Sara T. Nalle, “Inquisitors, Priests, and the People during the Catholic Reformation in Spain,” *The Sixteenth Century Journal* 18, no. 4 (1987): 557–87. Nalle, supplies the translation of “auditor” and describes the role of the *comisario* as a “legal extension of the inquisitor himself,” responsible for collecting denunciations, and much like a solicitor, organized this information for review and trial. (559) As Nalle states, “...the comisario had to be a well educated and prudent man who was respected and powerful in his community.” (560) The role may have developed differently in colonial Latin America, see: Richard E. Greenleaf, “The Inquisition and the Indians of New Spain: A Study in Jurisdictional Confusion,” *The Americas* 22, no. 2 (October 1965): 138–66; Pedro Miranda Ojeda, “Las Comisarias Inquisitoriales En La Provincia de Yucatán (Ss. Xvi-Xix),” *Astrolabio* 11 (2013): 43–59. See also: Homza, *Religious Authority*, chapter 1, “The Trial of Juan Vergara,” (1-48), where Homza describes Vaguer as an inquisitor.

³⁴⁴ Diego Álvarez (O.F.M.), *Memorial ilustre de los famosos hijos del real, grave y religioso convento de Sta. Maria de Jesus (vulgo San Diego de Alcala) primado Monasterio de esta ilustrísima ciudad, paladion seraphico, que produjo tantos varones sabios: cuyas brillantes luces, en cuna, virtudes, y letras, hicieron gloriosa su fundacion* (Alcalá: en la Imprenta de Doña María García Briones, 1753), 80–88; Hubert Jedin, *A History of the Council of Trent*, trans. Dom Ernest Graf, OSB, vol. Volume II: The First Sessions at Trent 1545-1547 (London: Thomas Nelson and Sons, Ltd., 1958), 251.

Bishop of Calahorra, Dr. Juan Bernal Díaz de Luco (1495/1500?-1556)³⁴⁵, and his esteemed former teacher, Alonso Cedillo (1484-1565).³⁴⁶

At one point or another, all of these men were connected to Toledo – unsurprising, given that this city (the Primate of Spain) was arguably the seat of religious power and authority within sixteenth-century Spain. Cardinal Mendoza had been an archdeacon at the Cathedral there, while del Campo was a canon and magistral for the Cathedral, as well as previously serving as a parish preacher within the Toledan archdiocese, Vaguer had worked for the Inquisition in Toledo, and de la Cruz was twice in charge of the Franciscan monastery in the city. The individuals were also connected by their education: Cardinal Mendoza (who was several years younger than Venegas) had studied at Alcalá (where Venegas had taught) and at Salamanca, as had Pedro del Campo (and specifically at the Colegio de San Ildefonso within Alcalá). Venegas’s contacts reveal some of the most powerful and influential religious clerics and reformers. Most importantly, the work appears to have been commissioned by Cardinal Tavera (1472-1545), Archbishop of Toledo (and therefore Primate of Spain) and Inquisitor General of the Holy Office of the Inquisition for both Castilla y León and Aragón.³⁴⁷ Taken together, Venegas’s education, position as an examiner of books for the Inquisition within the archdiocese of Toledo, connections to leading religious authorities, and commission by Cardinal Tavera to

³⁴⁵ Venegas dedicated the *Diferencias* to Luco, calling him his “patron.” See: Venegas [Venegas], *Diferencias [Toledo 1540]*, titlepage; Ignasi Fernández Terricabras, “Juan Bernal Díaz de Luco,” Real Academia de la Historia, Diccionario Biográfico electrónico, accessed October 11, 2019, <http://dbe.rah.es/biografias/16678/juan-bernal-diaz-de-luco>; Vicente Beltrán de Heredia, OP, *Cartulario de la universidad de Salamanca (1218-1600)*, vol. III: La Universidad en el Siglo de Oro (Salamanca: Universidad de Salamanca, 1971), 315.

³⁴⁶ Cedillo described Venegas as “one of the most well-known students that I have had...” and wrote an epithet in verse praising him and the work. M.a del Carmen Vaquero Serrano, “El Maestro Alonso Cedillo (1484-1565): Escritos, Testamento e Inventario: Su Biblioteca,” *Lemir* 21 (2017): 33, 54–55; Venegas [Venegas], *Diferencias [Toledo 1540]*, 2.

³⁴⁷ Ignacio Javier Ezquerro Revilla, “Juan Pardo de Tavera,” Real Academia de la Historia, Diccionario Biográfico electrónico, accessed October 11, 2019, <http://dbe.rah.es/biografias/8545/juan-pardo-de-tavera>; Venegas [Venegas], *Diferencias [Toledo 1540]*, frontispiece (1). It is curious that this commission is not further described in any documents, nor did Cardenal Tavera provide any endorsement.

write this work indicate that Venegas's natural theology represented an officially-sanctioned and important part of Catholic reform movements occurring in Toledo and Spain at that time.

The Division and Source of Knowledge and the Space for Natural Theology

Like Sibiuda, Venegas recognized a fundamental division between all knowledge; but unlike Sibiuda, Venegas did not view this division as the difference between revelatory and experienced – rather, he established that the “...primary [or first] division of the books...” was between knowledge that was inaccessibly divine and that which was given to man to learn and know.³⁴⁸ Into the former category, Venegas included the first book of “archetypal” knowledge; to the second category, he included the remaining three – natural, rational, and revelatory – which he described as “metagraphic” (*metagrapho*, “beyond writing”).³⁴⁹

The first book, which Venegas alternatively described as “original/first” (*original*), “divine,” “increate” (*increado*), and “archetypal” (*archetypo*) refers cryptically to the divine book – the book in which is written the names of the saints and angels, which will be opened only by “the Lamb” on the last day of judgement, and which is inaccessible to man.³⁵⁰ Some scholars have described this book as the concordance between divine foreknowledge, predestination, and free will; more properly, however, Venegas argues that this lesson of the perfect agreement between the two, can be inferred or teased out from the binding of the divine book – the divine book remaining closed.³⁵¹ “It’s a common refrain from both the Greeks as well as the Latins,” wrote Venegas, “that by the size of the claw one knows the greatness of the whole lion. Thus we shall say here that by the binding of the divine book we will take, or better

³⁴⁸ Venegas [Venegas], *Diferencias* [Madrid 1569], 6r.

³⁴⁹ Venegas [Venegas], 6r.

³⁵⁰ Venegas [Venegas], 6r-v.

³⁵¹ Venegas [Venegas], 11r, cp. iiiii; see also 18r, cp. viii.

still to say that we will suspect [*barruntaremos*] what the book should be...’’³⁵² At times, Venegas described the divine book as the very grounds and origins of all knowledge, or as if the contents of the divine book are the attributes of God.

Given the inaccessibility of such knowledge, Venegas did not devote a large amount of text to describing this first division of knowledge, and most of the twenty chapters which are found there quickly devolve into descriptions of the metagraphic books.³⁵³ The majority of Venegas’s attention is devoted to the second book on the natural, with the second largest section being that of the rational.³⁵⁴ Within the schema of Venegas’s four books of knowledge, therefore, the middle two formed the path of natural theology: the second volume, “natural, which treats of philosophy,” and the third, “...which is the book of reason.”³⁵⁵

Venegas’s Natural Philosophy and Theology

This division between archetypal and metagraphic books is unique to Venegas. Venegas demonstrated in his work a keen sense of the previous literature on the book of nature, both in the Christian tradition and from the ancient authorities, and yet he created new ways of conceptualizing the division of knowledge. Even the term “metagraphic” is distinctive, likely the result of Venegas’s familiarity with Latin and Greek.³⁵⁶ Following Venegas’s descriptions, the metagraphic are those books which go beyond writing – as if the knowledge given by God had been transcribed and transfigured into creation (including humanity), so that the whole world and everything in it was, for those with eyes to see it, forms of divine writ. In this regard,

³⁵² Venegas [Venegas], 9r.

³⁵³ Venegas’s use of the word ‘archetype’ resembles the Platonic notion of form. Alternatively, the inaccessibility of the divine book also allowed Venegas to safeguard the idea that there is divine truth which is inaccessible to reason. See a similar point in Thomas Aquinas, “Summa Contra Gentiles,” Library of Latin Texts - Series A, accessed October 17, 2019, <http://ezproxy-prd.bodleian.ox.ac.uk:2361/lta/pages/Toc.aspx?ctx=3642338>, I.3.

³⁵⁴ The 1569 edition, for example, has four divisions of 20 (5r-34v), 40 (34v-118v), 50 (119r-182r), and 23 pages (182r-241r), with the second book amounting to almost a third of the pages of the volume.

³⁵⁵ Venegas [Venegas], *Diferencias* [Madrid 1569], 34v, 119r.

³⁵⁶ Eisenberg, “An Early Censor,” 234.

Venegas was accessing the theological tradition of thinking of nature as a book,³⁵⁷ while challenging his readers to think of all sources of accessible knowledge as being bound in the fact that they shared their origin in the meaning and word of God. In this contemplation of metagraphic knowledge, the first step was the apprehension of natural knowledge through the method which Venegas referred to in shorthand as “philosophy” (in Renaissance Spain, “natural philosophy”). Many of the same points which Sibiuda argued for in his *Liber* are continued in Venegas’s work, particularly in this second “book.” Whereas as Sibiuda described this book as “created things,” Venegas titled it the “Natural” book, “...which treats of philosophy, in which it is declared how the omnipotence, wisdom, and goodness of God is read in created things.”³⁵⁸ These three characteristics of God – his omnipotence, wisdom, and goodness – formed for Venegas the central part of the knowledge about the divine which can be gleaned from the natural world. Like Sibiuda, Venegas believed a moral imperative followed from this knowledge.

Writing about natural philosophy in the late medieval and early modern periods, Harrison describes that two prominent theories existed about the way in which the natural world was meaning-laden: by signs and by causes.³⁵⁹ In this framework, the created world contained “signs” – allegorical symbols which acted as reminders of divine truths. Harrison points to Hugh of St. Victor’s notion that “each particular creature is somewhat like a figure,” and Bonaventure’s notion of creatures as divine footprints (*vestigia*); he gives as an example the contemplation which enabled medieval natural philosophers to see Christ’s sacrifice on the cross

³⁵⁷ Venegas referenced the story in which Saint Anthony, when asked how he could live in the wilderness, answered that “...the book of nature was his whole library, in which he had so many volumes...as much as the book written by the hands of God exceeds the books written by the hands of men.” Venegas [Venegas], *Diferencias* [Madrid 1569], 35r.

³⁵⁸ Venegas [Venegas], 34v.

³⁵⁹ Harrison, *The Territories of Science and Religion*, “Chapter 3: Signs and Causes,” 55–81.

in the pelican which struck its own breast, sustaining its young with its own blood.³⁶⁰ In this way, natural philosophy provided tools for individuals to seek out the signs of divinity embedded throughout all of creation. Such signatory contemplation is certainly to be found in Venegas's use of natural philosophy for theological purposes. Portuondo rightly emphasizes Venegas's penchant for astronomical contemplation (chapters 36–41, including “On the number, order, and movement of the heavens,” “On the eclipses of the sun and the moon,” and “On the growing and diminishing of days”).³⁶¹ Here, Portuondo describes that “[humanity] should imagine themselves as orbiting planets. When at the most distant point of the cycle we should be reminded of our lowly nature; as we cycle west we should think about our sins...”³⁶² In this way, says Portuondo of Venegas, “the very motions of the sun and moon also delivered different lessons.”³⁶³ Such examples, usually reinforcing the “omnipotence, wisdom, and goodness of God,” were simply mapped onto the observance and contemplation of nature. Such is the case, for example, in the thirty-first chapter, “On the impressions of air, fog, dew, manna, honey, freshness, clouds, snow, water, hail, thunder stones, and flashes and bolts of lightning.”³⁶⁴ All of these natural phenomena were, to Venegas, self-explanatory

...marvels of [G]od, so that by them we come in wonder of omnipotent [G]od, maker of all things, and from wonder to knowledge, and from knowledge to estimation, and from estimation to obedience, and from obedience to humility, and from humility to faith, and from there we come to the hope and rest in charity, with which we love [G]od through/by [G]od and [love] us in him and with him and through him.³⁶⁵

³⁶⁰ Harrison, 60–66.

³⁶¹ Portuondo, *The Spanish Disquiet*, 40; Venegas [Venegas], *Diferencias [Madrid 1569]*, table of contents.

³⁶² Portuondo, *The Spanish Disquiet*, 40.

³⁶³ Portuondo, 40.

³⁶⁴ Venegas [Venegas], *Diferencias [Madrid 1569]*, 81r, cp. xxxi.

³⁶⁵ Venegas [Venegas], 86r; see Romans 11:36.

The self-evident features of nature which function as signs may be why, as Portuondo has noticed of Venegas's work, "often lengthy explanations about natural phenomena...go by without a religious lesson attached."³⁶⁶ For Venegas, such "emblematic" natural phenomena need no discussion – it is also likely the reason why Venegas relied so heavily upon Pliny's *Natural History* throughout the second book (by far, the most cited reference for the section); the ancient's catalogue of the natural world required no filtering or laborious hermeneutics.³⁶⁷ Signatory elements of the natural world are, as Venegas described them towards the start of the second book, "town-criers of the truth."³⁶⁸

But for Venegas, the truth which he referenced when describing creatures as "town-criers" was not an emblematic or signatory truth, but a causal truth. Harrison's second description of the search for meaning by natural philosophers in the medieval world relates to the "order of causes" – the notion, brought about mostly by the revival of Aristotelian natural philosophy, that "creatures provide a way to understanding God as the causal source of their being, since to some degree effects resemble their causes."³⁶⁹ In rigorously studying the causes and effects of the natural world, natural philosophers were therefore able to induce their way to the root and guarantor of all causes – the *prima causa*, God. Venegas writes of the "induction of the creatures" and of the "trail of the creatures" – or causal chain – that from the study of nature "we can be induced to fear God, for reason of his immense power, to believe him, for reason of

³⁶⁶ Portuondo, *The Spanish Disquiet*, 40.

³⁶⁷ Brian W. Ogilvie, *The Science of Describing: Natural History in Renaissance Europe* (Chicago: University of Chicago Press, 2008); William B. Ashworth, Jr., "Emblematic Natural History of the Renaissance," in *Cultures of Natural History*, ed. N. Jardine, J. A. Secord, and E. C. Spary (Cambridge: Cambridge University Press, 1996), 17–37; Andrew D. Berns, *The Bible and Natural Philosophy in Renaissance Italy: Jewish and Christian Physicians in Search of Truth* (Cambridge: Cambridge University Press, 2015), especially chapter 2, "Pliny, Papyrus, and the Bible" (71–108); María de la Luz Ayala, "La Historia Natural En El Siglo XVI: Oviedo, Acosta y Hernández," *Estudios Del Hombre*, 2005, 19–37.

³⁶⁸ Vanegas [Venegas], *Diferencias* [Madrid 1569], 35r.

³⁶⁹ Harrison, *Territories*, 68.

his infinite knowledge...to love him, for his immense goodness.”³⁷⁰ Not only did nature have emblematic truth, but in its order and regulation, pried open by the tools of natural philosophy, it disclosed information about the giver of order and cause. It is in this context that Venegas described creatures as:

...town-criers of the truth: that is, to confess one God [as the] first cause of all the second causes. In order to arrive at this truth that there is one first cause, of whom all the other causes depend...the invisible things of God, by the trail of the creatures, are known from the creation of the world. [Rom. 1] This is what David said[,] that [G]od stretches the sky like a hide [Ps. 103]...This also is what [W]isdom says: *Hoc quod continet omnia, scientiam habet vocis*...[Wisdom 1] [In] all created things, science has a voice, as if it speaks. This heaven, which covers all that one can see, although it seems as though it makes its course silently, science and time have a voice, because [even] in only moving along, it goes along speaking and proclaiming that there is [a] God by whose virtue it so ordinarily moves...*C[o]eli enarrant gloriam Dei*. [Ps. 18/19:1] The heavens proclaim the magnificence of God, and the firmament that is the eighth heaven, where there are all the fixed stars, gives testimony of the marvelous works of God.³⁷¹

In this passage, Venegas clearly outlined his project of natural theology, establishing with multiple passages biblical support for the notion that natural philosophy, or *science*, spoke and proclaimed in the causes and effects of the natural world (the movement of the heavens), and that this message led reliably to the acknowledgment of God. Venegas used the word *sciencia* rather than *conoscimiento* or *entendimiento*, both of which refer generically to knowledge, and both which he used frequently throughout the *Diferencias*. Venegas’s metagraphic knowledge encompassed both types of meaning-making employed by natural philosophy: he sought in his second book of “nature” to show both the emblematic signs which corresponded to divine truth, and to investigate the causes and effects, the order, movement, and rules of governance of nature

³⁷⁰ Venegas [Venegas], *Diferencias* [Madrid 1569], 35r-v.

³⁷¹ Venegas [Venegas], 35v–36r. Italics added.

which inevitably guided one to God. “Venegas,” according to Portuondo, “found a place for the explanatory power of natural philosophy within the natural theological scheme.”³⁷²

The type of natural philosophy which Venegas had in mind may broadly be considered to be representative of Aristotelian natural philosophy taught at the universities of Spain at that time. Venegas draws upon an eclectic range of sources, from Biblical passages, Church Fathers (Augustine more than any other), ancient philosophers (Pliny, Seneca, and Cicero, most often), and Aristotle, whom he labeled an “inquisitor [*inquisidor*] of nature” (the use of that term would, for Venegas, most certainly not have been neutral).³⁷³ Particularly revealing is Venegas’s attention to defining particular nature, matter, and form, and the relationship between matter and form – in which Venegas supplied what is essentially a brief summary of statements taken from Aristotle’s *Physics*.³⁷⁴ Yet much of the second book of the *Diferencias* also presents a natural history, more than a natural philosophy, in the style of Pliny. Writing on Venegas, Portuondo describes his work on the natural book as “a course on Aristotelian physics with a good dose of Ptolemaic astronomy and Plinian natural history.”³⁷⁵ And yet, as Portuondo has rightly noted, Venegas also critiqued these sources and evinced an awareness of contemporary inquiries into natural philosophy. Also notable is the attention which Venegas gives to providing astronomical diagrams in his work, bolstering its ability to serve as a useful tool of instruction for neophytes in the study of nature.

This may be seen, for example, in Venegas’s continued example of discerning the existence of God from the *movement* of the heavens. While others may have studied the pulchritudinous glory or mere existence of the heavenly bodies as ways to know God, Venegas

³⁷² Portuondo, *The Spanish Disquiet*, 40.

³⁷³ Vanegas [Venegas], *Diferencias* [Madrid 1569], 75v.

³⁷⁴ Vanegas [Venegas], 38r–45r, see especially cps. v–viii.

³⁷⁵ Portuondo, *The Spanish Disquiet*, 38.

was interested in the motion of these bodies. In quoting Ovid, for example, Venegas wrote that “...thus, God gave a man an upturned face so that he could look at the heavens and consider the movement of the stars...”³⁷⁶ Ovid’s original quote, however, taken from the introduction of the *Metamorphoses* in which the poet describes the creation of the cosmos, only mentions that God bestowed an upturned face in order to “turn his eyes to heaven.”³⁷⁷ Venegas added movement to sideral consideration, an editorial decision which he repeated in his exegesis of Wisdom 1 and Psalm 18/19. Although the latter reference does mention the course of the sun (v. 5), Venegas references only the first verse of the psalm; it is his own interpretation that the “speech” that is “proclaimed” by the heavens and the “voice” of science is to be found, as he wrote, “...[even] *in only moving along*, [the sky] goes along speaking and proclaiming that there is a god, *by whose virtue it so ordinarily moves*...”³⁷⁸

The Aristotelian argument from motion was, for Venegas, the simplest way for people to know God by the contemplation of the created things. He described “the easiness of having the knowledge of God by the knowledge of the creatures” by the philosophical notions of the ‘first cause’ and the ‘unmoved mover’ (“*causa...que movia sin ser movida*”), citing Aristotle’s work, both the *Physics* and *Metaphysics*, specifically.³⁷⁹ He wrote:

...it is certain that there is no one who [uses] reason, that by the knowledge of the creatures does not arrive later in the knowledge of the author of these that is [G]od: whom the philosophers called the first cause[,] in the knowledge of whom the ancients arrived by the knowledge of second causes, by a universal rule of philosophy that says[:] All that is moved, by some other virtue it is moved...the

³⁷⁶ Vanegas [Venegas], *Diferencias* [Toledo 1540], 51r.

³⁷⁷ Ovid, *Metamorphoses* [Electronic Resource], trans. G.P. Goold and Frank Justus Miller, New ed./Revised by G.P. Goold, Loeb Classical Library 42–43 (Cambridge, MA: Harvard University Press, 2014), I.85–86.

³⁷⁸ Emphasis added. Vanegas [Venegas], *Diferencias* [Madrid 1569], 35v.

³⁷⁹ Vanegas [Venegas], 52; Aristotle, *Oxford World’s Classics: Aristotle: Physics*, ed. Robin Waterfield and David Bostock, Oxford Scholarly Editions Online, Oxford World’s Classics (s.u. [Oxford]: Oxford University Press, 2020), <https://ezproxy-prd.bodleian.ox.ac.uk:2475/view/10.1093/actrade/9780199540280.book.1/actrade-9780199540280-book-1>.

philosophers argued that there was a last stop of causes, in which all the causes by means or without means stopped.³⁸⁰

Venegas affirmed that the ancient philosophers had established a ‘first cause’ by examining secondary causes, most of all through the rule that “everything that is moved is moved by the virtue of another.”³⁸¹ Venegas quoted this maxim almost directly from Book VII of Aristotle’s *Physics*, which he cited.³⁸² From this principle of motion, Venegas argued, philosophers deduced the need for an unmoved mover in order to avoid an infinite regress, and from this, “one God, the cause and maker of all things.”³⁸³ Venegas conflated “cause,” “motion,” and “maker,” collapsing the first three cosmological arguments of Aquinas’s five ways. At the time, Aquinas’s *Summa Theologiae* had not yet achieved the primacy which it would in Spanish universities. In this passage, Venegas did not cite Aquinas; both his style and his argument reflects an Aristotelian influence, rather than any nascent Thomism.

The Aristotelian argument from motion required the student of natural theology to examine nature for cause and effect. Harrison, in his analysis of natural philosophy, urges scholars to recognize both activities – the search for signs and causes – not excluding one at the expense of the other, and recognizing that “appropriators of Aristotle [were] less interested in using his “science” to support theological propositions than they [were] in seeing the whole exercise as prompting particular kinds of virtues...a kind of mental training that prepares the mind for the acknowledgement of certain truths.”³⁸⁴ For Venegas, the “whole exercise” of natural philosophy was the first step – only the second of four volumes – which helped to prepare individuals for the exercise of reason and the study of revelation, each of which gave

³⁸⁰ Vanegas [Venegas], *Diferencias* [Madrid 1569], 36r-v.

³⁸¹ Vanegas [Venegas], 52.

³⁸² Vanegas [Venegas], 36v; Aristotle, *Oxford World’s Classics: Aristotle: Physics*, VII.1.

³⁸³ Vanegas [Venegas], *Diferencias* [Madrid 1569], 52.

³⁸⁴ Harrison, *Territories*, 69.

increasingly more powerful and life-altering truth about God. Natural philosophy, framed by natural theology, was the entry into knowing God; for Venegas, because it was the entry, it was accessible to every human individual (or perhaps, because it was accessible to every human individual, it was the entry).

The Necessity of Knowing: Affected Ignorance, Manifest Creation, and Natural Philosophy

Like Sibiuda before him, Venegas emphasized the perspicuity of the natural world and of philosophy (natural philosophy) as the means of acquiring this knowledge of the natural world. Uniquely, however, Venegas specifically connected the comprehensibility of divine attributes in nature to the inexcusable necessity of knowing God – or at least, of knowing that a omnipotent, wise, and good Creator exists. Venegas described that “...the university of creatures is a book so common to all, that it does not excuse those who may not want to read it by negligence who could have so clear and so open a lesson.”³⁸⁵ He connected, therefore, the facility of gaining natural knowledge with the moral imperative that all men must recognize God, outlined in Romans 1:18-20. For Venegas, there was a tight logical concatenation between the manifest work of God in creation, the knowledge of God and his divine attributes, and the obligation to seek and serve God because of this knowledge.

Thus, Venegas began his section on natural philosophy by outlining three classifications of ignorance recognized by Catholic theologians at the time: invincible (*invincible*), vincible (*crassa*, literally, “coarse,” “gross,” or “stupid,”), and affected (*affectata*). Venegas was referencing an established, albeit informal, theological vocabulary used to describe the relationship between ignorance, culpability, and sin.³⁸⁶ According to this thought, at the most

³⁸⁵ Vanegas [Venegas], *Diferencias* [Madrid 1569], 35r. The term “university” (*universidad*) is ambiguous – the term could mean either an educational institution, or the entirety or universality of creation.

³⁸⁶ From citations, especially in Aquinas, it is clear that Augustine, Ambrose, and Hugh of St. Victor all wrote concerning the relationship between ignorance and sin.

basic level, ignorance could be divided into invincible ignorance (ignorance which, because there was no way to overcome it, excuses the guilt of sin) and vincible ignorance (ignorance which could have been avoided or overcome, and therefore can either partly diminish the culpability, or, in some cases, exacerbate the magnitude of sin).³⁸⁷ Aquinas, for example, defined in the *Summa Theologiae* invincible ignorance as that which “cannot be overcome by study” and states that such ignorance, being involuntary, is not sinful; conversely, “vincible ignorance is a sin, if it be about matters one is bound to know; but not, if it be about things one is not bound to know.”³⁸⁸ Aquinas further nuanced these definitions in his *De Malo (On Evil)*, where he discussed the role of volition, intellect, and will in determining the exact type of ignorance. Steven Jensen notes that for Aquinas, voluntary ignorance must be ignorance of knowledge that not only can be known, but ought to be known.³⁸⁹ Beyond the culpability associated with voluntary ignorance is that of affected ignorance (so-called “directly voluntary” ignorance), which, according to Jensen, is linked by Aquinas to malice because “the person would have sinned from his evil will with or without the ignorance.”³⁹⁰ Gregory Doolan has analysed Aquinas’s description of affected knowledge in *De Malo*, in which he presents voluntary

³⁸⁷ Marco Toste, “Invincible Ignorance and the Americas: Why and How the Salamancan Theologians Made Use of a Medieval Notion,” *Zeitschrift Des Max-Planck-Instituts Für Europäische Rechtsgeschichte* 26 (2018): 284–85; Toste suggests that the medieval tradition of ignorance was to be found mostly in commentaries on Peter Ableard's *Sentences*; to this should be added Aquinas *ST I-II.Q76* and *De Malo Q3.a10-14*. Much of the initial response in *De Malo* is the same as Aquinas's answers in the *Summa* - the exact order in which these were written is unknown. Toste rightly notes that the categories were refined in second scholastic thought. This can be seen, for example, in Punctum II, “Quid requiratur ut aliqua ignorantia sit invincibilis: & an omnino excuset a peccato?” in Sebastianum Sancto Ioachim, *Collegii Salamanticensis FF Disalceatorum B. Mariae de Monte Carmeli Primitivae Observantiae, Cursus Theologiae Moralis*, First, vol. 5 (Madrid: Josephum Rodriguez de Escobar, Sanctae Cruciatæ, & Hispanicae Academiae, 1714), 105–7; Francisco Sobrino, *Sobrino aumentado, o nuevo diccionario de las lenguas Española, Francesa y Latina, con un diccionario abreviado de geographia, en donde se hallan los nombres de los Reynos, de las Ciudades, de los Mares y Rios del Mundo*, New edition, added with a supplement..., vol. 1 (A-E) (Lyon: J.B. Delamolliere, 1791), 83.

³⁸⁸ Thomas Aquinas, *The Summa Theologica*, trans. Fathers of the English Dominican Province (Benziger Bros., 1947), <https://aquinas101.thomisticinstitute.org/st-index>. *ST I-II.Q76.a2.co*.

³⁸⁹ Steven J. Jensen, *Sin: A Thomistic Psychology* (Washington, D.C.: Catholic University of America Press, 2018), 187.

³⁹⁰ Jensen, 189. Jensen notes Aquinas’s work on this subject in *De malo* (see ff. 11).

ignorance as the effort of an individual to remain “ignorant so that he may have an excuse to sin,” which compounds the guilt of the sin: that is, not only did the individual willfully sin, but they willfully deprived themselves of knowledge in order to continue sinning.³⁹¹

Very importantly, Venegas considered the refusal to see the omnipotence, wisdom, and goodness of God manifested in creation as vincible ignorance – and not only vincible, but affected ignorance – the grossest distortion in which a person willfully denies and refuses knowledge which is proffered to them or feigns ignorance of a patent truth.³⁹² It was, as Aquinas defined directly voluntary ignorance, “when persons directly will to be ignorant so that knowledge does not draw them away from sin...out of love of sinning...”³⁹³ Such a voluntary commitment to avoid the truth magnified the weight of culpability. Venegas likened affected ignorance to that state which is described in Psalm 35, in which “...the ignorant sinner [does] not want to understand that which he is obligated to know because he does not want to be in obligation to put into work that which the command of his reason gives him.”³⁹⁴ Similarly, and more importantly for the implications of natural theology, Venegas also considered affected ignorance to be the universal state of unbelievers in Romans 1. Commenting on this passage, he wrote that:

With this desired ignorance, all men have sinned, that in the law of nature they ignored the obligation that they had to believe in one god only, as the first cause and cause of all causes, and later of having known him by the trail of the creatures they had an obligation to honor him and glorify him as [the] god deserving to be honored by his creatures. And thus the apostle [Paul] says that those who by creatures have come to knowledge of [G]od and have not made the vassalage and

³⁹¹ Gregory Doolan, “The Relation of Culture and Ignorance to Culpability in Thomas Aquinas,” *The Thomist: A Speculative Quarterly Review* 63, no. 1 (January 1999): 107.

³⁹² Michele M. Moody-Adams defines affected ignorance as “...choosing not to know what one can and should know...” Michele M. Moody-Adams, “Culture, Responsibility, and Affected Ignorance,” *Ethics* 104, no. 2 (1994): 296.

³⁹³ Trans. by Reagan in Thomas Aquinas, *On Evil*, ed. Brian Davies, trans. Richard Regan (Oxford: Oxford University Press, 2003), 167, <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=422808>. Note also that Aquinas separates ignorance (deprivation of knowledge) from nescience (lack of knowledge).

³⁹⁴ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 35v. See also Ps. 35/36, “dixit iniustus ut delinquat...”

recognition that [G]od is owed [by] the creation of the world are inexcusable [Rom. 1:18-20]. From here it is inferred that if men in the law of nature were not obligated to come to knowledge of God by the induction of the creatures, that together with that they would not be obligated to the second [obligation] that was to glorify him as god, because this second obligation depends on the first, according to the rule of St. Augustine[:] [N]othing [requires] the will without first understanding the knowledge.³⁹⁵

For Venegas, the obligation that mankind has to honor God (which requires volition) rests upon the obligation that mankind has to know God through “the trail of creatures” (which requires intellect) – for without the understanding, the will to honor God could not be demanded. And although Venegas, in commenting on Romans 1, could be misinterpreted as stating that this knowledge might only be available to some individuals (“...those who by creatures come to knowledge...”, he preceded this statement by noting that “all men have sinned.”³⁹⁶ Furthermore, the fact that Venegas classified the refusal of natural knowledge as affected ignorance (*affectata*) means that he considered that natural knowledge to be material which every individual person could and should know; otherwise, the ignorance of such knowledge could not be affected.

Harrison, writing about an epistemic turn in the philosophy of science in seventeenth-century England, argues that, through the efforts of individuals such as Francis Bacon, curiosity was transformed from a useless endeavor (*vana curiositas*) into an admirable quality for those who conducted natural philosophy. Importantly, Harrison connects the “rehabilitation of curiosity” with the rise of scientific methodology, as opposed to an *ad hominem* evaluation of the virtue of the individual natural philosopher.³⁹⁷ By positing Aquinas’s teaching on invincible ignorance against the amelioration of curiosity in early seventeenth-century England, Harrison notes that Aquinas’s and scholastic teaching on the status of invincible ignorance was an

³⁹⁵ Vanegas [Venegas], 35v.

³⁹⁶ Vanegas [Venegas], 35v.

³⁹⁷ Peter Harrison, “Curiosity, Forbidden Knowledge, and the Reformation of Natural Philosophy in Early Modern England,” *Isis* 92, no. 2 (June 2001): 265.

altogether different position from that of Protestant England.³⁹⁸ Venegas's writing on ignorance show that this is true, but for precisely the opposite reason which Harrison suggests. The theological category of invincible ignorance did not allow individuals to avoid the curious investigation of nature; rather, the notion of affected ignorance made it clear that there was a moral imperative to know that which was manifestly made known in creation; refusing to do so, or turning a blind eye to the wonders in the natural world made one culpable of affected ignorance and most certainly guilty of failing to recognize and subsequently honor God.³⁹⁹

For Venegas, natural philosophy was therefore not an activity which was only to be cultivated by an elite group of educated practitioners. Rather, natural philosophy (or, as Venegas wrote, simply "philosophy") was a description of the methods of natural inquiry which, at the most basic level, every man could and should avail himself. Venegas wrote that everyone "...must read..." the books of nature, reason, and revelation "...because they were written for us..."; the first book (whether epistemically or simply in order of presentation is uncertain) was "...the university of the creatures..."⁴⁰⁰ It follows, therefore, that Venegas emphasized both the clarity of signs of God in the natural world and the ease with which natural philosophy could be

³⁹⁸ Harrison, 272–73; Walter Charleton, *The Darknes of Atheism Dispelled by the Light of Nature a Physico-Theologicall Treatise* (London: J.F., 1652), 238, <https://quod.lib.umich.edu/e/eebo/A69728.0001.001/1:8.7.3?rgn=div3;view=toc>; for a new reading of Charleton, see: Scott Mandelbrote, "What Was Physico-Theology For?," in *Physico-Theology: Religion and Science in Europe, 1650-1750*, ed. Ann Blair and Kaspar von Greyerz, *Medicine, Science, and Religion in Historical Context* (Baltimore: Johns Hopkins University Press, 2020), 67–77; this point can also be seen in the biblical commentary of Matthew Henry (1662-1714), see: Matthew Henry, *An Exposition of the Old and New Testament in Six Volumes*, vol. 6 (Edinburgh: Bell and Bradfute, J. Dickson, and J. McCliesh, 1791), 584–85. Henry's use of affected ignorance is not connected to Romans 1, but rather Ephesians 4:18.

³⁹⁹ This is contrary to what some have argued by stating that invincible ignorance may be used to excuse individuals who do not know God because of environmental factors. "Invincible Ignorance," *The Oxford Dictionary of the Christian Church* (3 revised edition), (Print), 2009 (Online 2005, <https://ezproxy-prd.bodleian.ox.ac.uk:10012/view/10.1093/acref/9780192802903.001.0001/acref-9780192802903-e-3557>; for a contemporary expression, see: Catholic Church, *Catechism of the Catholic Church: The CTS Definitive & Complete Edition* (London: Catholic Truth Society, 2016) §1859-1860, which writes that "Feigned ignorance and hardness of heart do not diminish, but rather increase, the voluntary character of a sin."

⁴⁰⁰ Venegas [Venegas], *Diferencias* [Madrid 1569], 35r.

exercised by all men to apprehend and understand these signs. Describing both the explicitness and comprehensibility, Venegas argued that “...this same [book of nature] is so open, that the man who in it [if he were] not knowing how to read would not have [need of] the use of reason. Because it is so clear and legible, that if with attention he would read it he could read without an exterior teacher for to teach him.”⁴⁰¹ Again, the ease of comprehending natural knowledge from this book is stressed – Venegas, a professional educator himself, admits that no instruction is necessary to gain lessons from creation. That the study of this natural world would not require reason (which Venegas considered a separate ‘book’ or realm of knowledge) is even more revealing and communicates how Venegas may have viewed the discipline of natural philosophy as a radically and fundamentally populist activity. It is perhaps for this reason that Venegas wrote in a deliberately accessible style and in the vernacular – the difference between his work and what one scholar has called the “awkward Sibiuda” in this regard is pronounced.⁴⁰²

Venegas applied this responsibility to know God by the “induction of the creatures” to all – importantly, this included both the ancient pagans whom Venegas, with his extensive and humanist training, respected and knew well, as well as the indigenous peoples whom the Spanish explorers had recently encountered in the New World. Venegas underscored the intelligibility and easy comprehensibility of nature by noting that “it is not necessary to go to great studies, because (as the ingenious poet says) [Ovid] for this God gave to man an upturned face, in order that he should look towards the heavens and consider the movement of the stars, and if from this knowledge men could not arrive at the knowledge of God, the apostle [Paul] would not leave it [at that].”⁴⁰³ Ovid, according to Venegas, knew that men had a natural posture *ad sideria*. The

⁴⁰¹ Venegas [Venegas], 35r.

⁴⁰² Cátedra, “La Biblioteca,” 937.

⁴⁰³ Venegas [Venegas], *Diferencias* [Madrid 1569], 35v.

fact was guaranteed by Paul's pronouncement in Romans – the ancients would not be held to a standard of culpability if they had not been given the same ability to recognize God in nature. Furthermore, Venegas had as a reference Cicero, in which "...Marcus Tullius proved, he argued the truth of one first, omnipotent cause, which ordered all the causes....that there has not yet been the person who can close his ears to the truth."⁴⁰⁴ And for Venegas, this rule, "on the facility of the knowledge that one has of God by the knowledge of the creatures," held true for all of humanity.⁴⁰⁵

It is magistral rule of theologians that nothing is obligated [which is] impossible. From this rule it follows that men that in the law of nature are condemned, and those [who] now are condemned among the Indies, where the evangelical law has not been preached, that they were condemned and they are condemned by their own faults, for lack of not having made that which they were obligated [by] punishment of eternal death. Because no-one is condemned to the penalty of [the] fire of hell by the fault of another, but rather by his own. We place the case of a gentile, or an Indian, who also lived in the law of nature: [who] did not commit mortal sin, and they died in this state in the years of discretion: this [person] by [the] omissive negligence sinned in not having made recognition of himself and of his things to his first cause, to whom by the natural law of right is owed.⁴⁰⁶

Here, Venegas specifically applied the theological ramifications of his conception of natural theology to the Spanish Indies of the New World. This was a full decade before the subject would reach its highest attention in the debates held at Valladolid between Bartolomé de las Casas (1474-1566) and Juan Ginés de Sepúlveda (1490-1573) from 1550-1551.⁴⁰⁷ The

⁴⁰⁴ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 10r. Christina Hoenig notes that there is a fair amount of "thematic overlap" between Cicero's *De Natura Deorum* and Cicero's *De universitate*, and G.O. Hutchinson notes a "close connection" between the works, also noting that the translation of Plato may have occurred after the composition of the *De natura deorum*. Venegas had read both, quoting *De universitate* as well as *De natura deorum*. Christina Hoenig, *Plato's Timaeus and the Latin Tradition* (Cambridge: Cambridge University Press, 2018), 54; G. O. Hutchinson, *Greek to Latin: Frameworks and Contexts for Intertextuality* (Oxford: Oxford University Press, 2013), 197.

⁴⁰⁵ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 36r.

⁴⁰⁶ Vanegas [Venegas], 36r.

⁴⁰⁷ For studies of the Valladolid debate, 1550-1551, see: Daniel R. Brunstetter and Dana Zartner, "Just War against Barbarians: Revisiting the Valladolid Debates between Sepúlveda and Las Casas," *Political Studies* 59, no. 3 (October 2011): 733–52; Alfonso Maestre Sánchez, "'Todas las gentes del mundo son hombres' El gran debate entre Fray Bartolomé de las Casas (1474-1566) y Juan Ginés de Sepúlveda (1490-1573)," *Anales del Seminario de Historia de la Filosofía* 21 (2004): 91–134; see also the argument in: Juan Ginés de Sepúlveda, "Democrates

connection between studies of natural theology and natural law, and its particular application to the Spanish colonies, is beyond the remit of this dissertation, but merits additional attention. Venegas's work has been found in inventories in Peru and Mexico.⁴⁰⁸ Irving Leonard, examining a 1583 requisition order from Peruvian bookseller Juan Jiménez del Río, included Venegas's *Diferencias* as one of the "best sellers of the Lima Book Trade."⁴⁰⁹ There is additional historical evidence which suggests that it was sold and circulated in Mexico during the sixteenth century.⁴¹⁰ Within half a century of its publication, therefore, Venegas's *Difference* had disseminated and found appeal across the Spanish world. It is interesting to note that Venegas's notion that the inhabitants of the Indies were culpable of breaking natural law and of holding affected ignorance of God, has been labeled by Henry Méchoulán on a study of Sepúlveda to be "antihumanism."⁴¹¹ Venegas's application of natural law is inflexible, but in extending it to the indigenous peoples of the Spanish colonies, he firmly established that they were capable of the same rational and human powers as such respected ancient philosophers as Cicero and Aristotle. Venegas accorded the same inductive abilities to both parties, and because of this, held both capable of being guilty of affected knowledge, whether or not they had ever received the "evangelical law."

Separating Nature and Reason: *Alumbradismo*'s Threat and Venegas's Response

Secundus Sive De Iustis Belli Causis (Democrates Alter)," Library of Latin Texts - Series B, accessed October 17, 2019, <http://ezproxy-prd.bodleian.ox.ac.uk:2361/lltb/pages/Toc.aspx?ctx=1890658>.

⁴⁰⁸ Juan de Junta, in Burgos 1557, had a copy of Venegas "*Differentias* [sic] de Vanegas in 4^{to} libro primo," available for 102 maravedís. Pettas, *A Sixteenth-century Spanish Bookstore*, 85.1:117; likewise found in the Toledano bookstore attached to the publisher of the work (1556). See: Sánchez, "Inventario," 242.

⁴⁰⁹ Irving A. Leonard, "Best Sellers of the Lima Book Trade, 1583," *The Hispanic American Historical Review* 22, no. 1 (February 1942): 12, 31.

⁴¹⁰ Green and Leonard, "On the Mexican Booktrade in 1600," 39.

⁴¹¹ Henry Méchoulán, *L'antihumanisme de J.G. de Sepúlveda: étude critique de Democrates primus* (Paris: Mouton, 1973).

It is clear, therefore, that natural theology became one theological method among many that became implicated with the revival of mysticism and new expressions of Christian spirituality in Spain during the sixteenth century. A review of spiritual treatises from this time, especially from Franciscans, shows the contemplation of created things as the first part of the purgative path in the way of Christian perfection. Many of the works by Franciscans repeated Bonaventurian language regarding the vestigial truths of the created world. At least one of these works, Cazalla's *Lumbre*, was formed by paraphrasing the Sibiudan tradition of natural theology. Furthermore, because many of these mystical treatises were associated with the heresy of *alumbradismo*, especially Cazalla's work, there is also good reason to suggest that this Sibiudan-influenced natural theology carried the association of suspicion of heresy during this time. Even without the specific charge of *alumbradismo*, any relationship which the methods of natural theology had with forms of interiorized spirituality could be seen by religious authorities as threatening. Sluhovsky has asserted that:

...new directions in Franciscan and Dominican spirituality...created a climate in which individual believers sought more interiorized and passive routes...but interiorized spirituality was a dangerous practice. It revived old unresolved theological issues: What is more important – sacred doctrine or experience (*cognitio dei experimentalis*)? Affection or scholastic reasoning? Learning from books or learning through love?⁴¹²

Natural theology, incorporated in these new directions, could be misconstrued, therefore, as a method which exalted experiential, affective, and radically individual forms of knowing God at the expense of revealed theology and doctrine.

This relationship between natural theology and interior spirituality helps to account for why Venegas may have structured his own natural theology so distinctly – namely, why Venegas

⁴¹² Sluhovsky, *Believe Not*, 98.

emphasized a distinction between the knowledge gained by the observation of the external, natural world (through natural philosophy) and the knowledge gained by the internal exercise of human reason. This argument is further strengthened by several points within the text of the *Diferencias* and from Venegas's life which suggest that Venegas was keenly aware of the dangers of interior spirituality as represented by *alumbrados* and Protestantism, and that he was eager to curb the growth of heresy in Toledo. Venegas, in this manner, was indicative of a wider trend in Spanish natural theology which separated the vast notion of 'nature' into two smaller understandings of what it meant to be "natural" – the macrocosm of the external world, and the microcosm of the human mind and soul.

Many of Venegas's statements seem deliberately written to counter notions associated with heretical movements, including ideas associated with *luteranismo* (the catch-all term for Protestantism) and *alumbradismo*.⁴¹³ Both heresies were accused of negating the importance of works in the life of the Christian – Protestants as a result of solafideism, and *alumbrados* as a result of the complete reliance and abandonment to the performative grace of God. Venegas affirmed the importance of works to the faith as a critical part of the working process of salvation. He wrote that by an overestimation of the finality of predestination, "...the unlearned, or the curious would neglect to do good works..."⁴¹⁴ In explicitly supporting the importance of works and by relating them to misunderstandings of free will and predestination, Venegas could likely have been echoing accusations made against the *alumbrados* in the 1525 Edict of Faith pronounced against them. These denunciations included that "They should do nothing, but leave it all to God, because by the sheer desire to perform works, they make themselves

⁴¹³ There are even suggestive comments made, possibly, against *conversos* and crypto-Judaism in Toledo. Venegas writes that the "inquisitions" of those previously accused of "professing the deadly law" and who yet "did not want to leave the service [of it]" were insufficient in their aim. Vanegas [Venegas], *Diferencias* [Madrid 1569], 149v.

⁴¹⁴ Vanegas [Venegas], 24v.

incapable of the works of this love...this proposition appears to presuppose that all acts that proceed from free will are mortal sins...” and “After someone abandoned himself to God...he had no need to fast or perform works of mercy.”⁴¹⁵ Venegas further upheld the importance of works of charity, dedicating a sizeable portion of the work to explaining the obligations which Christians have for caring for the poor, often specifically connected to Toledo, which seems otherwise disjunctive to Venegas’s study. “It’s a common refrain,” wrote Venegas, “that actions speak louder words.”⁴¹⁶ He continued, linking the Christian obligation to perform works of mercy and charity to admonishments found in the epistles of the New Testament, in the law of the Old Testament, and reaffirmed by Christ in the gospels.⁴¹⁷ For Venegas, “the communication of favor has to rest in works,” a clear distinction against those who maligned the merit of works (whether through *luteranismo* or *alumbradismo*).

Additionally, based on a letter from the prominent Thomist theologian Melchor Cano, OP (c. 1507-9 - 1560) to, it is assumed, Venegas on March 28, 1556, it is clear that Venegas shared concerns regarding the influence of *alumbradismo* on Catholic spirituality.⁴¹⁸ Cano answered questions which Venegas raised about the practices of the Jesuits, writing:

What [you] asked me [was]: how do I feel about that Family [the Society of Jesus]? It is a very serious thing, and even more to put [it] in a letter. ...for my advice, any Christian will be alert...I also have heard talk of that [which] you [mentioned] – that they followed *Juan Thaulero* and *Henrique Herp*; and [in] the past days [followed] after *Fray Baptista de Crema*...they condemned in Rome [these] doctrine[s], as that [they were] *alumbrado* or *dejado*. ...their [Thaulero

⁴¹⁵ Translated by Homza from Antonio Márquez’s presentation of the document. Lu Ann Homza, ed., *The Spanish Inquisition, 1478-1614* (Indianapolis: Hackett Publishing Company, Inc., 2006), 84–85.

⁴¹⁶ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 179r.

⁴¹⁷ Vanegas [Venegas], 179r-v.

⁴¹⁸ Fernández-Largo, OP, Antonio Osuno, “Melchor Cano,” Real Academia de la Historia, accessed November 5, 2019, <http://dbe.rah.es/biografias/10448/melchor-cano>; Although the letter has been reprinted in multiple works, no attention has been given to explaining the identity of the recipient, save for M. Andrés Martín, who equates “M. Venegas” with Alejo de Venegas. See: Melquiades Andrés Martín, *Historia de la mística de la Edad de Oro en España y América*, Biblioteca de autores cristianos 44 (Madrid: Biblioteca de Autores Cristianos, 1994), 361. Andrés Martín does not provide any evidence for the assertion that the “M. Venegas” in Cano’s letter is Alejo de Venegas. It is a probable but unverifiable assumption.

and Henrique's] doctrine discontents me...It is clear that it is a great madness [of] new and doubtful things, [in which] men arrange themselves to approve and sanctify themselves, abandoning the plain and safe roads that the Church has kept for fifteen hundred years...[may the Lord] keep you (particularly in these times) from many and dangerous nets that are cast.⁴¹⁹

It would be another few years before Cano elucidated his views against *alumbradismo* in his famous accusations against Cardinal Bartolomé Carranza, OP (c. 1503-1576).⁴²⁰ He had at this point, however, already authored a censure against the Jesuits between 1551 and 1556 and had advocated these ideas in some letters.⁴²¹ For the purposes of this article, Cano's reference to the "sect of *Alumbrados* and *dejados*," paired with the sense of urgency in describing the "great madness" (*gran locura*) and "dangerous nets" of "these times," are phrases which indicate that Venegas would likely have shared such ideas about the serious difficulties which orthodox Catholicism faced in Toledo during this time.

Still, it is most compelling that in a century in which elements of natural theology were so closely associated with spiritual treatises, Venegas's church-sanctioned work does not contain a single element of anything that can be construed as *recogimiento*, let alone as *dejamiento*. The language of interiority and of self is almost entirely excised from his study of the natural world and his use of reason in order to know God. It seems clear that this is an intentional part of his project, and it is largely achieved, I argue, by distinguishing between the *macrocosm* of nature, i.e. the created world and cosmos, and the *microcosm* of nature, i.e. the individual human being. This idea of conceiving of man as a "small world" which reflected the "larger world" of which it

⁴¹⁹ For the full text, see: Fermín Caballero, *Conquenses ilustres. II. Melchor Cano* (Madrid: Colegio Nacional de Sordo-Mudos y de Ciegos, 1871), 500, n. 33. Cano's use of terms such as "abandoning" (*dexando*) and "freedom" (*libertad*) may be calculated reproofs of the misuse of these terms in *alumbradismo*.

⁴²⁰ José Ignacio Tellechea Idígoras, "Bartolomé Carranza de Miranda," Real Academia de la Historia, accessed November 5, 2019, <http://dbe.rah.es/biografias/10859/bartolome-carranza-de-miranda>; Ignacio Tellechea Idígoras, "Melchor Cano y Bartolomé Carranza, dos dominicos frente a frente," *Hispania Sacra* 15, no. 29 (1962): 5–93.

⁴²¹ Terence O'Reilly, "Melchor Cano and the Spirituality of St. Ignatius Loyola: The Censura y Parecer Contra El Insituto de Los Padres Jesuitas," *Journal of Jesuit Studies* 4, no. 3 (June 1, 2017): 367.

was a part was already an established theological idea.⁴²² Rudolf Allers describes that in this conception, a human was “...not simply subjected to the universal laws, because he is part of the universe, but he is himself, as it were, these laws, and he may become aware of them by looking into himself.”⁴²³ The idea is also closely connected to Sibiuda’s conception of a *scala*, in which man is part of a larger created order, and yet is able to discern elements concerning the entirety of the ladder simply by thinking on his own rational abilities.

By creating a division between the “book of nature” as the study of the externally created world and a “book of reason”; both of which Venegas asserted were God-given ways of gaining knowledge, I contend that Venegas forced a division between the coherence seen between the microcosm and the macrocosm. In effect, by splitting the work of natural theology into two books, Venegas separated nature, dividing “natural world” from “natural reason”, and allowing for space in which two separate conversations could exist, both claiming to be “natural” theology, without engaging one another. The first, natural theologies based on the natural world, focused on the physico-theological arguments described above to be found when Venegas contemplates, for example, the movement of the planets. The second, natural theologies based on natural reason, continued those metaphysical demonstrations exemplified by theologians such as Aquinas and which would become a cornerstone of the second scholastic movement in late-sixteenth and seventeenth century Spain (described in the following chapter).

Conclusion

⁴²² Lydia Schumacher, *Early Franciscan Theology: Between Authority and Innovation [Electronic Resource]*, Cambridge Core (Cambridge, United Kingdom ; New York: Cambridge University Press, 2019), 232, <https://ezproxy-prd.bodleian.ox.ac.uk/login?url=https://doi.org/10.1017/9781108595087>.

⁴²³ Rudolf Allers, “Microcosmus: From Anaximandros to Paracelsus,” *Traditio* 2 (1944): 322.

Venegas's *Diferencias*, therefore, both continued the natural theology of Sibiuda's *Liber*, yet, unlike para-Sibiudan works, constituted an entirely new and original form of presenting natural theology. Venegas's work was not dialogical, nor did it present the same structure or arguments found in the *Liber*. Instead, responding to the commissioned request of the reforming ecclesiastics of Toledo, Venegas sought to set out an entire map for the realms of human knowledge which, when properly exercised, would lead the individual to the study and knowledge of God. Although the work was entitled the "first part" of a study on different books of knowledge, Venegas died in 1562 without having ever authored any subsequent study of this topic, although by that point, the work had already enjoyed at least one reprinting. There is no historical evidence to show that Venegas had attempted to continue the work, and it may well be that he viewed the *Diferencias*, although incomplete, as sufficient to provide the knowledge which he described.

Venegas's *Diferencias*, although the main focus of this chapter, was not the only work addressing natural theology to be authored during this critical period of the Spanish Renaissance. The republication of para-Sibiudan works spanned the century and that these works were closely associated with the development of *alumbrado* spirituality. Additionally, one of the great humanists of early sixteenth-century Spain, Juan Luis Vives (1492-1540), lived and wrote during the same period as Venegas. Vives authored several works which referenced the subject of natural theology, including *De veritate fidei Christianae* (On the Truth of the Christian Faith, 1543), and *Introducción y camino para la sabiduría* (Introduction and Road to Wisdom, c. 1524). These works, which deserve additional attention, offer a different way in which natural theology began to be used during Golden Age Spain as apologetics for the defence of the faith.

Venegas's contributions to the project of natural theology in Spain were many. His conception of the division of human knowledge into two types (archetypal and metagraphic), and within these two types, four "books" (divine, natural, rational, and revelatory) were a novel outlook on the existing "two books" trope of Scripture and Nature. The terms themselves may have been of Venegas's own invention, and although "metagraphic" fails to be subsequently developed in the literature of Spanish natural theology, Venegas's positioning of natural knowledge as distinct from the exercise of pure reason may indicate the development of empirical and sensory-based study of nature. Also important in Venegas's natural theology is his willingness to depart from the previously traveled path of cosmological or ontological arguments – while referencing arguments for first causes, Venegas does not, for example, quote or represent the *quinque viae* of Aquinas, nor does he rely upon early Franciscans such as Bonaventure in the same manner that Sibiuda did when describing emblematic nature. Furthermore, Venegas's connection of the knowledge of natural philosophy and the knowledge of natural law, as well as his argument for the necessity of natural theology due to the universality of knowledge and the obligation to know God, are developed in a hitherto unseen fashion. In short, Venegas's *Diferencias*, while cognizant of the existing traditions of natural theology that came before it, was a wholly innovative work. The influences of Venegas's approach to natural theology as well as the contemplation of created things found in the spiritual literature continued into the seventeenth century in Spain, discussed in the following chapter.

Chapter III. Between Metaphysics and Mysticism: Three Visions of Natural Theology in Baroque Spain (1563-1720)

Introduction

Thus far, this dissertation has described the medieval legacy of natural theology found in Ramón Sibiuda and the development and alterations to natural theology which occurred in Renaissance Spain (c. 1498-1590). This chapter concerns the fortunes of natural theology during a period which is alternatively described as “Baroque,” “Tridentine,” or “second scholastic,” (1563-1720).⁴²⁴ What was natural theology like in Baroque Spain? How did individuals in Baroque Spain envision the generation of knowledge of God from ‘natural’ (non-revelatory) sources? During the long-seventeenth century, as in the century before, it is best to envision a spectrum of possible natural theologies that offered alternative visions for how someone could naturally know God. Moreover, the cumulative weight of the category of natural theology increases over time; natural theology in Spain can be seen as the deposit of cumulative layers of theological traditions – very rarely was an idea from a previous work entirely disregarded or abandoned by subsequent writers; the enduring influence of certain authors or works is evident from records of publications. The collected works of Luis de Granada, for example, went through twelve editions in the seventeenth century (and as will be shown, exerted an influence on

⁴²⁴ I give as the parameters for this period the end of the Council of Trent (1563), whose importance in establishing the confessionalization of Catholicism marked a new theological paradigm, and at the end, 1720, by which time the introduction of *novatore* and enlightenment thought had significantly altered philosophical, theological, and scientific conversations in Spain. It is beyond the remit of this dissertation to offer a defence of employing the “Baroque” (or “Spanish Baroque” or “Baroque Catholicism”) as a historiographical concept. The Baroque has specific meanings to those engaged in literary or cultural studies of the seventeenth century; I am, instead, interested in its usefulness as a way of describing interrelated movements in Catholic spirituality and reform and philosophical (and scientific) thought. Interested readers should consult: John D. Lyons, ed., *The Oxford Handbook of the Baroque* (Oxford: Oxford University Press, 2019), which demonstrates the range of the “Baroque”; the landmark work of the Spanish Baroque is: Maravall, José Antonio, *La Cultura Del Barroco: Análisis de Una Estructura Histórica* (Barcelona: Ariel, 1975); available in translation as: José Antonio Maravall, *Culture of the Baroque: Analysis of a Historical Structure*, trans. Terry Cochran, Theory and History of Literature, Volume 25 (Manchester: Manchester University Press, 1986); of greatest applicability to this study are: José Pereira and Robert Fastiggi, *The Mystical Theology of the Catholic Reformation* (Lanham: University Press of America, Inc., 2006); Jeremy Robbins, *Arts of Perception: The Epistemological Mentality of the Spanish Baroque, 1580-1720* (Routledge, 2013).

Baroque natural theology).⁴²⁵ Additionally, Sibiudan natural theology continued to be promulgated; it may be recalled that the seventeenth century witnessed the publication of Antonio Arés's *Diálogos de la naturaleza* (1614, 1616), which represented Sibiuda's work as mediated through the *Viola animae*. While the patterns of natural theology established in the sixteenth century continued into the seventeenth century, the Baroque period also demonstrates innovations to the practices and beliefs of natural theology.

This chapter considers three different 'visions' or types of natural theology that existed in seventeenth-century Spain, differentiating each especially by what constituted 'natural' sources and what type of knowledge of God was generated.⁴²⁶ The first 'vision' of natural theology gives attention to the Scholastic transformation of natural theology into the metaphysical demonstration of the existence of God. To show this, I examine in detail the work of Francisco Suárez as a paradigmatic example of this process, and I contextualize his work, the *Disputationes Metaphysicae* (1598) in the wider body of scholastic literature. The second 'vision' of Baroque natural theology examines the use of natural history and natural philosophy as ways of knowing and glorify God – a precursor, in many ways, to the physico-theology which would become popular in the following century. Here, I consider two examples: Salvador Ardevines Isla's *Fabrica universal del mundo* (1621) and Juan Eusebio Nieremberg's works in natural history (approximately 1629-1643). Finally, the third vision demonstrates the continued presence of natural theology in mystical and spiritual literature of the seventeenth century. By analyzing a spiritual treatise (Bernardino Planes's *Concordancia Mystica* (1667)), I show that the

⁴²⁵ This is nothing to compare to Granada's influence abroad; León Navarro notes that during the seventeenth century, there were at least sixty versions of his works published in France, and recent studies have examined Granada's importance to recusant spirituality and devotional literature in early modern England. Vicente León Navarro, "La lectura de Fr. Luis de Granada en el siglo XVIII," *Revista de Historia Moderna. Anales de La Universidad de Alicante* 4 (December 1984): 327; González, "Algunas notas"; Walsham, "Luis de Granada's Mission."

⁴²⁶ The first and third 'realms' of natural theology described in the introduction.

contemplation of nature first associated with Franciscan spirituality in the Spanish Renaissance continued to be a popular expression for natural theology during the Spanish Baroque.

Natural theologies during the Spanish Baroque fall within these three families: the ‘Second Scholastic’, which viewed natural theology as a philosophical and metaphysical enterprise; the ‘Applied’ version, which encouraged the study of the natural world in order to glean theological truth and used theology to shape a philosophy of nature; and the ‘Mystical’ form, which saw the contemplation of nature as the first step to higher, intuitive, and affective knowledge. The first two forms are of special interest in the way that they encouraged and informed the development of natural philosophy in early modern Spain. The chapter concludes by discussing how natural theology shaped the formation of natural philosophy in early modern Spain, the importance of analogical theories in creating natural theologies, and how natural theology revitalizes the understanding of the intellectual and scientific climate of the Spanish Baroque.

The First Baroque Vision: Natural Theology as Metaphysical Demonstration: Suárez and the *Disputationes Metaphysicae* (1597)

In the seventeenth century, a redefinition of the parameters of natural theology occurred yet again, this time renewed by the efforts of ‘second-scholastic’ theologians in Spain. These religious intellectuals, inspired by the revival of Thomistic studies, advocated an understanding of natural theology that more closely aligned with the demonstration of the existence of God found in medieval scholastic texts such as the *Summa Theologiae* and the *Summa Contra Gentiles*, leaving behind the emblematic contemplation of nature and the Bonaventurian understanding of man’s place in the *scala naturae*. Rather than chart a path from the observation and contemplation of nature to God, this understanding of natural theology relied upon the fundamentals of metaphysics and ontology. As Josiah Royce described this method, “It is the

Nature of Things, viewed in the light of the most critical examination of our reason...The problems at issue are, for this view, those of Aristotle's *Metaphysics*...the contemplation of Being as Being...the most fundamental metaphysical problems...the foundations of our faith, and of the means of our insight into the true nature of Reality."⁴²⁷ This method, however, received its greatest endorsement in the early modern period from the revival of Thomistic theology during the late-sixteenth and seventeenth centuries in Spain; it will be examined in this section by one the most representative writer for Spanish scholasticism in the seventeenth century, Francisco Suárez.

An Introduction to Francisco Suárez and the Disputationes Metaphysicae (1597)

Francisco Suárez, S.J., (1548-1617), is one of the most celebrated early modern Spanish theologians, and a key figure in the revival of scholastic theology in the sixteenth and seventeenth centuries commonly described as "second scholasticism."⁴²⁸ Suárez was born in Granada, educated at the Universidad de Salamanca, and became a Jesuit in 1564. After studying canon law and theology at Salamanca, he taught theology and philosophy at universities across Spain, including at Valladolid, Avila, Segovia, Alcalá, and Salamanca, as well as the Jesuit *Collegio Romano* in Rome. He eventually settled as the *prima catedra* of theology at the Universidade de Coimbra, in Portugal, where he retired in 1613 and died in 1617. Suárez was a leading figure in the revival of Thomistic theology in Spanish universities and took part in many polemical theological discussions of his day, including the *de auxiliis* controversy. His

⁴²⁷ Josiah Royce, *The World and the Individual*, First Series: The Four Historical Conceptions of Being (New York: The MacMillan Company, 1900), 4.

⁴²⁸ Despite Suárez's importance, it is curious that hardly any serious attention has been devoted to him or to the translation of his works in Anglophone scholarship (several works exist in Spanish and Italian), although this has been recently addressed by several new studies. One scholar notes that "Suárez seems to have slipped between the cracks in our historiographical taxonomy." (Hill, 2) As is argued in the introduction, this is more widely a systemic problem in the study of Spanish contributions to historical theology. Benjamin Hill, "Introduction," in *The Philosophy of Francisco Suárez*, ed. Benjamin Hill and Henrik Lagerlund (Oxford: Oxford University Press, 2012), 2.

intellectual prowess and personal holiness garnered him substantial fame throughout Spain during his lifetime. Pope Paul V famously lauded him as “*doctor eximius ac pius*” (“an excellent and pious doctor”) after Suárez authored a defence of papal power in 1607, which became an epithet for Suárez, and within sixty years of Suárez’s death, hagiographical biographies of him were published in Spain praising him and his “rays of wisdom and holiness which he scattered in all of his time.”⁴²⁹

Suárez discussed the definition and scope of natural theology in his most important work, the two-volume *Disputationes metaphysicae* (*Metaphysical Disputations*, 1597), written by Suárez while he was teaching at Salamanca; by the time the *Disputationes* were published, however, he had already relocated, at the royal behest of Felipe II, to Coimbra.⁴³⁰ Suárez wrote the *DM* as a means of reforming the way that metaphysical philosophy and theology was taught to students at Salamanca; doubtlessly inspired by his pedagogical reform of the *ratio studiorum* at the Jesuit college in Rome.⁴³¹ Suárez’s *DM* consists of fifty-four disputations on the subject of metaphysics, purportedly written to cover the topics of Aristotle’s *Metaphysics*, but whose structure is uniquely his own – although it relies heavily upon both Aristotle’s *Metaphysics* and on Aquinas’s *ST*, it is not a commentary of either work; indeed, Benjamin Hill has argued that Suárez was dissatisfied with the reiterative method of teaching metaphysics by following the

⁴²⁹ Francisco Suárez, *The Metaphysical Demonstration of the Existence of God: Metaphysical Disputations 28-29*, trans. John P. Doyle (South Bend, Indiana: St. Augustine’s Press, 2004), x. This work is Doyle’s translation of Suárez. See also: Antonio Ignacio Descamps, S.J., *Vida del Venerable Padre Francisco Suarez, de la Compañía de Jesus: Cathedrático de Theologia en Roma, Salamanca, y Alcalá, &c. y Finalmente, de Prima, Iubilado en la Insigne, y Real Universidad de Coimbra*, 2 vols. (Perpiñan: Iuan Figuerola, 1671); Bernardo Sartolo, *El Eximio Doctor, y Venerable Padre Francisco Suarez, de La Compañía de Jesus, En La Fiel Imagen de Sus Heroicas Virtudes* (Salamanca: Andres Garcia de Castro, 1693).

⁴³⁰ Hereafter, *DM*. For biographical overviews of Suárez, see: Sydney Penner, “Francisco Suárez (1548-1617),” Internet Encyclopedia of Philosophy, accessed August 3, 2020, <https://iep.utm.edu/suarez/#SH3e>; Sergio Rábade Romeo, “Francisco Suárez,” Real Academia de la Historia: Diccionario Biográfico Español, accessed August 3, 2020, <http://dbe.rah.es/biografias/8415/francisco-suarez>; Suárez, *Metaphysical Demonstration*, especially cp. 1.

⁴³¹ Hill, “Introduction,” 15–16.

order found in that work.⁴³² The *DM* were an influential publication, both within Spain and beyond; philosopher Bernardo Cantens notes that the *DM* had 17 editions within the first forty years of its publication.⁴³³ The disputations, roughly divided, discuss being, uncreated beings, and created beings, before concluding with beings of reason.⁴³⁴ For the purposes of this chapter, only two sections are examined in detail: the preface to the first disputation, in which Suárez defined natural theology and metaphysics, and the twenty-ninth disputation on the proof of the existence of an infinite being (God).

For purposes of scope, this chapter cannot provide an overview of Suárez's arguments; instead, it emphasizes three points concerning Suárez's impact on the trajectory of natural theology in Spain. First, that Suárez reconceptualized natural theology in Aristotelian and Thomist terms, and that this 'redefinition' of natural theology is reflective of a larger trend of second scholasticism in Spain during this time, as is evidenced by other authors. Secondly, that Suárez's 'natural theology' included several innovations to the inherited tradition of metaphysical arguments for the existence of God (particularly from Aquinas). Special attention is given to Suárez's treatment of the argument from design (the teleological argument). Lastly, I argue that Suárez's emphasis on the self-evidentiary nature of knowledge, combined with his definition of natural theology, emphasized the fundamental status that he attributed to the science of natural theology.

Suárez's Approach to Natural Theology: Definition and Structure

⁴³² Suárez discusses his motivation for writing the work and his reorganization of philosophical ideas at the beginning of the *DM*. Bernardo Cantens, "Ultimate Reality in the Metaphysics of Francisco Suárez," *Ultimate Reality and Meaning* 25, no. 2 (2002): 77; Penner, "Francisco Suárez (1548-1617)"; Several scholars have relied upon the work of Jesús Iturrioz on the citations and sources of the *DM*, noting that the six most referenced individuals are, in order: Aristotle (1,735 references), Aquinas (1,008), Suárez (971), Duns Scotus (363), Augustine (334), and Cajetan (299). See: Jesús Iturrioz, S.I., "Fuentes de La Metafísica de Suárez," *Pensamiento* 4 (1948): 40.

⁴³³ Cantens, "Ultimate Reality," 75.

⁴³⁴ Hill, "Introduction," 17.

Suárez conceptualized ‘natural theology’ with the philosophical activity of metaphysics. The title of Suárez’s work equates metaphysics with natural theology: *Metaphysicarum Disputationum, in quibus, et universa naturalis Theologia ordinatè traditur...* Suárez offered a provisional definition of natural theology in the preface to the first disputation, in a section on “the various names of metaphysics” (*varia metaphysicae nomina*). He wrote that metaphysics had received numerous names in previous works, including “wisdom” and “first philosophy.” Yet another name for metaphysics, according to Suárez, was *natural theology*. He wrote that: “...it [metaphysics] also may be called *natural theology*, taking it from Book VI of [Aristotle’s] *Metaphysics*, chapter 1, and of Book XI, chapter 6, because it studies God and divine things insofar as it is possible with natural light.”⁴³⁵ Likewise, in his twenty-ninth disputation, Suárez noted that:

Therefore, this *Disputation* comes appropriately in this place and in it we are briefly gathering all that natural theology teaches about God, leaving aside those things which are possessed or can be possessed only by Revelation. We will mention those things only insofar as will be necessary to pre-fix the boundary to which natural reason can come.⁴³⁶

These two references, excluding the title, are the only occasions in over two thousand pages of writing that Suárez used the term ‘natural theology,’ but this reluctance to employ the term may reflect its loaded history of which Suárez may have been aware. Despite not using natural theology commonly, Suárez viewed it as part of the purview of metaphysics. Since metaphysical speculation relied upon reason, which was natural, rather than revelatory, and insofar as the subject of its speculation discussed ultimate being, it participated in that activity which Suárez

⁴³⁵ DM.1.preface, Francisco Suárez, *Disputaciones Metafísicas*, ed. Sergio Rábade Romeo, Salvador Caballero Sánchez, and Antonio Puigserver Zanón (Madrid: Editorial Gredos, 1960), I.207. Please note that this edition includes both the Latin text and Rábade Romeo’s Spanish translation of Suárez.

⁴³⁶ DM.29.2, trans. by Doyle in Suárez, *The Metaphysical Demonstration*, 52.

termed ‘natural theology.’ ‘Natural reason’ (*ratione naturali*) and ‘natural light’ (*naturali lumine*), alternatively, are commonly found throughout the *Disputationes*. Metaphysics, according to Suárez, was the study of “being insofar as it is real being.”⁴³⁷ According to Cantens, Suarezian metaphysics “include[d] God, immaterial beings, finite and infinite substances, material beings, and accidents...it is what all of these have in common...that most universal and abstract concept...the common denominator of all real entities...that they are all beings (*ens*).”⁴³⁸ In this setting, Suárez placed natural theology as a subset of that metaphysical activity which, by using natural reason generated information about the singular, uncreated, infinite and necessary being known as God. It is suggestive that one of the two occasions to raise the term ‘natural theology’ occurs at the twenty-ninth disputation; the activity of metaphysics, according to Suárez, is not strictly synonymous with natural theology, but rather includes natural theology.⁴³⁹

Suárez articulates his natural theology in the twenty-ninth disputation, “About God, the First Being and Uncreated Substance, Insofar as He Can by Natural Reason be Known to Exist.”⁴⁴⁰ In this, Suárez’s natural theology was primarily concerned with proving, demonstrably, the existence of God philosophically, through the use of natural reason. Suárez’s natural theological arguments in *DM.29* may be condensed to four points:

- 1) The existence of an uncreated, necessary being is demonstrable by *a posteriori* metaphysical arguments, which can be coupled or augmented with *a posteriori* physical arguments; the latter, however, are insufficient by themselves.⁴⁴¹ The existence of an

⁴³⁷ John P. Doyle, “Suarez on the Analogy of Being,” *The Modern Schoolman* 46, no. 3 (March 1969): 219; Doyle’s reference is *DM.1.1* §26. Penner, however, has noted that Suárez’s definition of metaphysics is not without some controversy. See: Penner, “Francisco Suárez (1548-1617).”

⁴³⁸ Cantens, “Ultimate Reality,” 87.

⁴³⁹ Suárez, *Metaphysical Demonstration*, 51.

⁴⁴⁰ Trans. by Doyle in Suárez, 51.

⁴⁴¹ On this point, see Swinburne, who describes *a posteriori* arguments for the existence of God as those “...in which the premisses report what are (in some very general sense) features of human experience...the greatest theistic

uncreated, necessary being cannot be demonstrated by *a priori* arguments. In this point, Suárez largely agrees with Aquinas, although Suárez is critical of the persuasiveness of some of Aquinas's arguments.

- 2) *A posteriori* arguments suggest, but cannot demonstrate that there is only one uncreated, necessary being (as opposed to several beings). *A priori* arguments can demonstrate that there is only one, uncreated, necessary being (as opposed to several beings).
- 3) The existence of one, uncreated necessary being is therefore demonstrable through a combination of *a posteriori* and *a priori* arguments.
- 4) The existence of at least one, uncreated, necessary being is self-evident in itself, but not self-evident to us. The existence of only one, uncreated, necessary being is self-evident in itself, but is even less self-evident to us. Because these facts are self-evident in themselves but not to us, therefore, they require demonstration. They can be and are often misunderstood, and they are transmitted often through alternative means. Nevertheless, although these facts are not strictly self-evident to us, they are "consonant with natural reason", "can scarcely be unknown by anyone" and have "been naturally implanted in men."⁴⁴²

The difference between Suárez's conception of natural theology and those works which came before him (e.g. Sibiuda's *Liber*) are strikingly apparent. Suárez's language is technical and philosophical; he is concerned with establishing inductively valid arguments which establish the existence of God rather than his attributes, and he seeks to do so by arguing from metaphysical rather than physical propositions. Each of these conclusions merits further attention, particularly to highlight the ways in which Suárez's work introduced new ideas to the tradition of natural theology.

Suárez's Innovations to Metaphysical Natural Theology

While part of a broader revival of medieval scholasticism in Spain, Suárez's approach to natural theology was not merely a reassertion of the work of those before him. Theologian Robert Fastiggi has argued that Suárez's contributions are uniquely his own, calling him "a creative and independent metaphysician" who challenged and modified the arguments found in

philosophers of religion have on the whole rejected ontological arguments and relied on *a posteriori* ones." Richard Swinburne, *The Existence of God*, Second Edition (Oxford: Oxford University Press, 2004), 8–9.

⁴⁴² DM29.III§35, trans. by Doyle in Suárez, *The Metaphysical Demonstration*, 142.

Anselm, Aquinas, and Scotus.⁴⁴³ Fastiggi highlights Suárez's rejection of the argument from motion, his melding of the second and third arguments of the *quinque viae* (efficient causality and contingency) into one on created and uncreated beings, and his refutation of the validity of Anselm's ontological argument (and by doing so, disagreeing with Scotus).⁴⁴⁴ Each of these innovations represented a new way of conceiving about the territories of physics and metaphysics at the turn of the century in Spain.

First, because Suárez rejected the possibility that physical *a posteriori* arguments could demonstrate the existence of a necessary, uncreated being, he dismissed the argument from physical motion for the existence of God. Suárez specifically references the argument of motion found in Aristotle and commented on by Averroes (that everything that moves is moved by another thing), using as his main examples celestial movements and the operations of the rational soul; noticeably absent from this section of the disputation is any reference to Aquinas.⁴⁴⁵ For Suárez, the observations of physical motion can "suppose" but cannot prove or demonstrate the existence of a superior, uncreated, or immaterial being responsible for its motion. In this discussion, Suárez limited himself to a conception of physical, local motion – while many have discussed Aquinas's interpretation of Aristotelian motion to mean more abstractly all change from potentiality to actuality, Suárez discusses this "existential" interpretation as more properly labeled created-uncreated, necessary-contingent, and metaphysical.⁴⁴⁶ For Suárez, motion is

⁴⁴³ Robert Fastiggi, "Suárez in Relation to Anselm, Aquinas and Scotus on Proving God's Existence," in *Suárez's Metaphysics in Its Historical and Systematic Context*, ed. Lukáš Novák (Berlin: De Gruyter, 2014), 309.

⁴⁴⁴ Fastiggi, 311, 315.

⁴⁴⁵ DM.29§1.7,42, Suárez, *Metaphysical Demonstration*, 56, 81. Suárez references Aristotle's *Physics* (Lib. VIII) and *Metaphysics* (Lib. XII, 26) and Averroes's commentaries on both texts.

⁴⁴⁶ David B. Twetten, "Clearing a 'Way' for Aquinas: How the Proof from Motion Concludes to God," *Proceedings of the American Catholic Philosophical Association* 70 (1996): 259–78; Daniel Shields, "Everything in Motion Is Put in Motion by Another: A Principle in Aquinas's First Way," *American Catholic Philosophical Quarterly* 92, no. 4 (2018): 535–61; Simon Oliver, "Motion According to Aquinas and Newton," *Modern Theology* 17, no. 2 (April 2001): 163–99; Weisheipl, O.P., *Nature and Motion*.

merely an incomplete, physical instantiation of the more fundamental metaphysical point: causes and effects, necessity and contingency, and created and uncreated. Suárez's *a posteriori* metaphysical proofs, therefore, are a combination of the arguments from causality and contingency. As John Doyle summarizes:

Here Suárez gives the metaphysical argument that is based upon a broader and deeper principle than the physical one, "*Whatever is moved is moved by another.*" The metaphysical principle is "*Whatever is made or produced is made by another*" and the argument itself concludes to an unmade Maker.⁴⁴⁷

Suárez is clear to distinguish between what might be considered physical and metaphysical; he wrote, for example, "However, this now pertains to the metaphysician, as is evident from the terms themselves..."⁴⁴⁸ Later in his argument, he wrote, "However, this way also cannot serve to demonstrate anything about God, except by supposing something demonstrated in metaphysics and by always using metaphysical means and principles in order to ultimately conclude to the thing [in question]."⁴⁴⁹ For Suárez, one could not make the leap from created beings to the uncreated necessary first being without discussing the ontological and metaphysical common ground which undergirded the reality of natural philosophy. Suárez asserted that "...A demonstration properly belongs to that science to which the means of demonstration belongs." In this case, because metaphysical means were necessary to demonstrate the existence of God, the activity of natural theology was properly understood as part of the science of metaphysics. Portuondo and Hill have both suggested that Suárez's approach to natural philosophy was a

⁴⁴⁷ Trans. by Doyle in Suárez, *Metaphysical Demonstration*, xvi; in the 'typology' of cosmological arguments provided by Craig and summarized by Reichenbach, Suárez would be aligned with the rejection of an infinite causal regress associated with Aquinas; see Bruce Reichenbach, "Cosmological Argument," *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), Edward N. Zalta (ed.), Fall 2019, <<https://plato.stanford.edu/archives/fall2019/entries/cosmological-argument/>>; William L. Craig, *The Cosmological Argument from Plato to Leibniz* (Eugene: Wipf and Stock Publishers, 2001).

⁴⁴⁸ DM.29§1.13, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 61.

⁴⁴⁹ DM.29§1.19, trans. by Doyle in Suárez, 65.

reaction against incipient naturalism found in Renaissance Averroism; this may explain in part, why Suárez divided between the jurisdictions of metaphysics and physics in constructing natural philosophical investigations.⁴⁵⁰

Suárez was also well-aware of Anselm's ontological argument, but did not consider to be a valid demonstration of God's existence.⁴⁵¹ Suárez rejected Anselm's ontological proof on the grounds that there were many who did not accept the premises or terms of Anselm's argument, and secondly, because even if one acquiesced to the Anselmian definition of God as "something than which nothing greater can be thought[,]" is not necessarily self-evident in this term that it necessarily applies to "some true thing or is only something contrived or imagined by us."⁴⁵²

Gareth Matthews has argued that Aquinas's refutation of Anselm's argument leaves much unexplained; in this context, Suárez's refutation may be seen as expounding the unfinished work which Aquinas first raised in the *ST*.⁴⁵³ As Fastiggi rightly notes, Suárez most often mentions Anselm's argument when writing against the viability of *a priori* metaphysical demonstrations for God's existence.⁴⁵⁴ For Suárez, an *a priori* metaphysical demonstration would have to mean that the terms themselves conveyed a logical necessity (hence Anselm's argument); however,

⁴⁵⁰ Hill cit. in María M. Portuondo, "On Early Modern Science in Spain," in *The Early Modern Hispanic World: Transnational and Interdisciplinary Approaches*, ed. Kimberly Lynn and Erin Kathleen Rowe (Cambridge: Cambridge University Press, 2017), 207–8; Michael H. Shank, "Naturalist Tendencies in Medieval Science," in *Science Without God? Rethinking the History of Scientific Naturalism*, ed. Peter Harrison and Jon H. Roberts, Ian Ramsey Centre Studies in Science and Religion (Oxford: Oxford University Press, 2019), 37–57.

⁴⁵¹ Besides Fastiggi, Suárez's engagement with Anselm's ontological argument is not emphasized in the literature; see: Graham Oppy, "Ontological Arguments," The Stanford Encyclopedia of Philosophy (Spring 2020 Edition), Edward N. Zalta (ed.), March 10, 2020, <<https://plato.stanford.edu/archives/spr2020/entries/ontological-arguments/>>.

⁴⁵² See *Proslogion* cp. II. Anselm, *A New Interpretive Translation of St. Anselm's Monologion and Proslogion*, trans. Jasper Hopkins (Minneapolis, Minnesota: The Arthur J. Banning Press, 1986), 224–25; Suárez, *Metaphysical Demonstration*, 143–44; Fastiggi, "Suárez in Relation," 310–11; Clint I. Barrett, "A Careful Reading of St. Anselm's Ontological Argument," *Philosophy and Theology* 23, no. 2 (2011): 217–30; Norman Malcolm, "Anselm's Ontological Arguments," *The Philosophical Review* 69, no. 1 (January 1960): 41–62; Oppy, "Ontological Arguments."

⁴⁵³ Gareth B. Matthews, "Aquinas on Saying That God Doesn't Exist," *The Monist* 47, no. 3 (Religious Language and Philosophy) (Spring 1963): 472–77.

⁴⁵⁴ Fastiggi, "Suárez in Relation."

because the terms here are not universally understood or self-evident, *a priori* arguments are impossible. Indeed, Suárez also stated that because Anselm considered the existence of God to be self-evident in its own definition, Anselm considered that the existence of God was not a thing that could be demonstrated – a position which Suárez argued is “false.”⁴⁵⁵

Already then, Suárez’s natural theology had made substantial revisions of Aquinas’s *quinque viae*: the first way was discarded, and the second and third collapsed into one.⁴⁵⁶ Suárez did not directly address the henological argument of the fourth way (yet again demonstrating that he was working more from Aristotle than Aquinas), but he did examine the argument from design. As Fastiggi has noted, Suárez does not utilize the design argument as an *a posteriori* proof for the existence of God, but rather, as a qualifier which argues against a plurality of necessary beings (in this case, several rival gods).⁴⁵⁷ Suárez argued that both the Church Fathers and Scripture legitimated knowing about God by a study of the attributes of the creatures. He wrote that this way of knowing God was:

...consonant with Paul and Solomon in the places cited, and it is most especially indicated in those words of the Wiseman: “From the greatness of what appears and of the creature [*Wisdom*, Chapter 13, v. 5] that is, “From the greatness and the appearance or the beauty of creatures.” From these words we can in this way form an argument: for, although individual effects taken and considered by themselves do not show the maker of all to be one and the same, nevertheless, the beauty of the whole universe and the wonderful connection and order of all things in it do sufficiently declare that there is one first being, by whom all things are governed and from whom they drawn their origin.⁴⁵⁸

In addition to multiple biblical passages encouraging this way of establishing knowledge, Suárez found support for this approach in Aquinas (*SCG*), John Damascene, John Chrysostom, Pseudo-

⁴⁵⁵ DM.29§2.3, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 83–84. Suárez cites Anselm’s *Prosologion* and *Librum pro insipiente*.

⁴⁵⁶ César Félix Sánchez Martínez, “La aventura barroca del ser: en pos de las razones radicales de la metafísica de Francisco Suárez,” *Letras (Lima)* 89, no. 130 (2018): 37.

⁴⁵⁷ Fastiggi, “Suárez in Relation,” 312.

⁴⁵⁸ DM.29§2.7, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 87.

Dionysius, Augustine, and Eusebius of Caesarea, among others.⁴⁵⁹ Fundamentally, it relied upon emphasizing two aspects of the created things: their beauty and their greatness, understood by Suárez as the governance of all the disparate parts of nature in harmonious unity (“the wonderful connection and order of all things”).⁴⁶⁰ Suárez notes three primary objections to the argument from design: first, that the governor of the world may not necessarily be the creator of the world; secondly, that the governor of the world may be by consensus rather than by fiat; and lastly, that there could exist a separate universe with a separate uncreated being responsible for it. Suárez rejected the first objection by arguing that the government of nature has to be by its creator. He argued that “the universe can be governed only by him by whose counsel and power it has been created” (basing this argument that the form which governs the composite of nature is the design of the same power which created it).⁴⁶¹ Suárez rejects the second point, arguing that the aggregate of finite powers is finite, and therefore incapable of being the creative and governing force, as well as the common-sensical notion that good governance flows through one head (citing Plato, Aristotle, and Jerome, whom Suárez writes “shows that two men cannot take possession of a kingdom and that power does not suffer sharing.”).⁴⁶² The third objection, according to Suárez, is irrefutable, but inconsequential.⁴⁶³

⁴⁵⁹ DM.29§2.7, Suárez, 87.

⁴⁶⁰ DM.29§2.7, trans. by Doyle in Suárez, 87.

⁴⁶¹ DM.29§2.9, trans. by Doyle in Suárez, 89.

⁴⁶² DM.29§2.28, trans. by Doyle in Suárez, 99–104.

⁴⁶³ As Siniscalchi and others have argued in response to those who posit a theory of a “world ensemble” or multiverse, the existence of other worlds or universes does not settle the question of the intentionality or createdness of this world which is the focus of the discussion (and the only world which, at present, we are capable of observing and knowing). Glenn Siniscalchi, “Fine-Tuning, Atheist Criticism, and the Fifth Way,” *Theology and Science* 12 (February 12, 2014): 66–67; Mary-Jane Rubenstein, *Worlds without End: The Many Lives of the Multiverse...in Which Are Discussed Pre-, Early-, and Post-Modern Multiple-Worlds Cosmologies; the Sundry Arguments for and against Them; the Striking Peculiarities of Their Adherents and Detractors; the Shifting Boundaries of Science, Philosophy, and Religion; and the Stubbornly Persistent Question of Whether Creation Has Been “Designed”* (New York: Columbia University Press, 2014).

Suárez's arguments from design focus on the harmoniousness of the entire created order, made of so many countless constituent parts which yet work together. He did not often employ specific examples, but those that he does include the movement of the heavens. Suárez specifically highlights that much of the created world contains final causes that are anthropocentric. He wrote that "...almost all serve man, because of whom that they have been immediately created, as can be especially understood from those things themselves and their different qualities and various properties most fitted for the use of men..."⁴⁶⁴ Likewise, Suárez emphasized that the entire unity of nature worked as an interdependent system, almost irreducibly complex system. He wrote discussing the seamless interactions between the heavens and the sublunar, lower creation, noting that "the heavens by themselves alone can hardly do anything without the concurrence of the lower bodies. For they must first emit light or another influence proportioned to themselves and in order to achieve their effects they always require some cooperation of inferior causes."⁴⁶⁵ Suárez's example of this is that the sun cannot produce a harvest without the cooperative efforts of rain and earth – efficient causes from both are needed.⁴⁶⁶

The metaphorical language which Suárez uses to discuss God's ordering of creation in the argument from design is worth noting. He wrote of God as a creator and a maker and compared God and nature to a governor and a kingdom (DM29§2.8,12, 20), of the supreme being as a 'craftsman' (DM29§2.8,18), as an author (DM29§2.11,13,14, 20), and perhaps most

⁴⁶⁴ DM.29§2.14, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 93.

⁴⁶⁵ DM.29§2.19, trans. by Doyle in Suárez, 97.

⁴⁶⁶ Simon Friedrich, "Fine-Tuning," Stanford Encyclopedia of Philosophy, Winter Edition 2018, <https://plato.stanford.edu/entries/fine-tuning/>; Alister E. McGrath, *A Fine-Tuned Universe: The Quest for God in Science and Theology* (Louisville: Westminster John Knox Press, 2009); Siniscalchi, "Fine-Tuning, Atheist Criticism."

strikingly, described nature as “this most beautiful machine of the universe.” (DM29§2.14)⁴⁶⁷

This language of artifice, craftsmanship, and mechanization would be developed in the seventeenth century, as will be demonstrated in the case of Juan Eusebio Nieremberg’s natural theology.

A question remains on the evidentiary force of the design argument. If Suárez believed the argument from design (or in Suarencian terms, the argument from governance) was persuasive to modify the established idea of the existence of one or more uncreated, necessary beings, did it necessarily entail that the argument from governance was sufficient to argue (in one step) the existence of a singular uncreated being? Fastiggi argues that Suárez did not view the teleological argument “as an autonomous proof”, but rather as a qualifier.⁴⁶⁸ Because the argument from the design of creation did not “conclude absolutely about all beings, but only about those which can fall under human cognition by way of natural reasoning or philosophy”, it did not constitute, for Suárez, an infallible and valid demonstration of God’s existence.⁴⁶⁹ This, however, should not greatly diminish Suárez’s confidence in the persuasiveness, elegance, or strength of the design argument. Suárez believed that the combined arguments of design, subjected to manifold demonstrations, carried great epistemic weight and that this way of knowing as extremely patent and self-evident. He argued that this knowledge, although not necessarily “self-evident,” was the inexcusable knowledge which St. Paul asserted all men must know by creation; a point which will be discussed later.

The Role of Natural Philosophy in Suárez’s Natural Theology

⁴⁶⁷ Trans. by Doyle in Suárez, *Metaphysical Demonstration*, 93.

⁴⁶⁸ Fastiggi, “Suárez in Relation,” 312.

⁴⁶⁹ DM.29§2.37, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 113.

Recall that Suárez concluded that those who would prove God's existence through metaphysics alone are correct, although he allowed that a combined approach which integrated metaphysical and physical arguments might be defensible. Suárez's assumptions about the utility of *physics* – a term which he uses to refer to natural philosophical inquiry – for natural theology may be most clearly determined by his rejection of the physical argument from motion, for in his refutation of this argument, he delineates between physical and metaphysical conceptions of motion and describes what he views as the role of each in demonstrating the existence of God.⁴⁷⁰ Suárez's distinction between metaphysical and physical *a posteriori* demonstrations, couched in Aristotelian terminology, is slightly wooden. For Suárez, contemplating physical motion in the observable world – for example, the movement of the heavens – is a subject of physical study. But insofar as the observer is moved to contemplate the relationship between cause and effect in general and the meaning of causality, the “physicist” puts on the hat of a metaphysician. It is this middle step, from physics to metaphysics, which is required in order to be able to speak intelligibly about “unmoved movers,” and also the reason why Suárez concludes that only metaphysical demonstrations are sufficient to prove the existence of God. Thus, Suárez describes the role of natural philosophy, writing:

However, physics...in some manner prepares the way and disposes for constructing the demonstration in question. This is first because from motion and sensible effects we ascend to consider the nature of effect and cause themselves, and from dependence in motion [we ascend] to dependence in being and in origin, through which we come to the first uncreated being. Then second, because if not by a completely evident, at least by a most probable reasoning we come through a physical way to a move of heaven which is separate from it, from which quite easily a metaphysician reasons to investigate not then the first move of heaven but

⁴⁷⁰ Suárez contrasted physics/natural philosopher/philosophy against metaphysics/metaphysician, seen for example in DM29.1§3, Suárez, *Disputaciones*, 245; see also: Suárez, *Metaphysical Demonstration*, 52–54.

the first maker of things, applying proportional principles, which are more evident as they are more abstract, as we have sufficiently explained.⁴⁷¹

In this passage, Suárez makes several key points about how natural philosophy persuades. His description of it “prepar[ing] the way” by “dispos[ing] for constructing the demonstration” indicates both that it usually comes before metaphysical reflection; it is also reminiscent of Aquinas’s designation of rational proofs as ‘preambles’ (*preambulae fidei*). “Motion” and “sensible effects” are common and perceivable, and by them, the ‘second order’ metaphysical thinking on cause and effect can be postulated.

It could be argued that other writers, especially in the centuries to follow, collapsed this middle step in their articulations of “natural theology.” Where a physico-theological from the eighteenth-century treatise would assert, for example, that the study of motion and change in the natural world proved the existence of a unmoved, unchanging God, a Suarencian interpretation would insist that, more precisely, the study of motion and change in the natural world provided a readily-apparent and easily-understood occasion for recognizing the metaphysical concepts of motion and change, and grounded metaphysical truths in an evidentiary example; the *proving*, however, remained the purview of metaphysical activity. For natural theologians who, as a sort of theological shorthand, study the entire argument from motion from the first physical observance of motion to the final metaphysical conclusion of the existence of an unmoved mover, the technical, jurisdictional distinction is in many ways inconsequential to the broader question. In other words, when the Aristotelian distinction between metaphysics and physics is removed and the project is repackaged as one question, the concern over the argument’s validity remains. The difference, however, emphasizes the importance of establishing agreement upon

⁴⁷¹ See DM29.1§41, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 80–81.

metaphysical meanings and terms; moreover, it reminds us of the importance in clearly understanding what is meant by invoking “nature” and in applying the category of “the natural.”

Suárez’s metaphysical natural theology might be better understood by applying Wesley Wildman’s description of the mode of natural theology as that which seeks to “bridge the often noted gap between the conceptuality of science and the conceptuality of religious thought” by discussing ontology.⁴⁷² Wildman continues,

...natural theology presupposes the move from scientific theories of nature to philosophical interpretations of nature that disclose the ontological structures and processes that suffuse all of nature. It is at this point that natural theology proper takes over. Natural theology attempts to take the step from ontology of nature to a metaphysical theory of ultimacy.⁴⁷³

Scientific observations and theories require a philosophy which supposes an ontology of nature, and this ontology of nature suggests or is made plausible by a “metaphysical theory of ultimacy.” In this sense, Suárez may be seen as recognizing that to speak meaningfully about nature and natural philosophy is to rely upon a more fundamental ontology of nature and that this ontology is itself grounded in God. Everything that has being that is not God, according to Suárez, has that being contingently because of God’s creative act; in this sense, Maria Portuondo is right to argue that “the purpose of his metaphysics is to lay the foundation setting the relationship between being (*ente*) and creation.”⁴⁷⁴ To speak of nature in Suárez’s mentality is to speak of creation.

“Therefore,” Suárez concluded “from this physical means, [precisely] as it is physical, it cannot be demonstrated that there is one uncreated being.”⁴⁷⁵ What, therefore, was the role of

⁴⁷² Wesley J. Wildman, “Comparative Natural Theology,” *American Journal of Theology & Philosophy* 27, no. 2/3 (September 2006): 178.

⁴⁷³ Wildman, 179.

⁴⁷⁴ Ct. 36 of Portuondo, “On Early Modern Science,” 208.

⁴⁷⁵ DM.29§19, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 65.

physics and natural philosophy for Suárez's natural theology? Natural philosophy and the study of physical means could "prepare the way, offer an occasion, and also present effects, by which it may help to construct a demonstration of this kind..."⁴⁷⁶ In other words, Suárez had confirmed natural philosophy's ancillary position in natural theology – it was to be a teaching aid and assistant to proper metaphysical demonstration. Physical examples, furnished by the study of nature, helped to make plain otherwise difficult to understand metaphysical truths.

Suárez and the Self-Evidentiary Truth of God's Existence within Natural Theology

Whether the process of generating knowledge about God from natural sources is self-evident is a fundamental question for the key theme of "rationality" which unites the natural theologies of early modern Spain. Like Sibiuda and Venegas before him, Suárez had to contend with the question of whether the proof of the existence of God was 'self-evident' knowledge, and, more basically still, what it meant for knowledge to be 'self-evident'. Suárez's treatment of the subject is far more nuanced than Venegas's, and strikes a delicate balance which simultaneously defends the troublesome assertion of Rom. 1:20 while accounting for so many misunderstandings and refutations of God's existence and character in the world - by heretics, by pagans, and by atheists. Suárez concludes *DM.29* by stating that, contrary to Anselm's opinion that the existence of God is so self-evident that it cannot be rightly 'demonstrated', in Suárez's view, there must be "great consideration and speculation in order to efficaciously prove" the existence of God. "Therefore," Suárez asks, "how can this truth be thought to be self-evident?"⁴⁷⁷

⁴⁷⁶ *DM.29*§19, trans. by Doyle in Suárez, 65.

⁴⁷⁷ Trans. by Doyle in Suárez, 140.

Suárez answers his own question by citing Aquinas's discussion of this topic in the *ST* I.q2.a1.⁴⁷⁸ He presents and supports Aquinas's distinction between truths that are self-evident in and of themselves (such as the whole is greater than the parts) and truths that are self-evident "for us" – that is, truths that we know and recognize self-evidently.⁴⁷⁹ Suárez adds to Aquinas here, noting that the assurance that there is only *one* uncreated necessary being is even less self-evident than the existence of any number of uncreated necessary beings.⁴⁸⁰ Suárez notes that other theologians do not agree with Aquinas's distinctions of self-evidence, including Duns Scotus, Gabriel Biel, and William of Ockham; however, they nevertheless support Suárez's ultimate conclusion that the existence of God is a thing which can be and must be demonstrated.⁴⁸¹

For Suárez, Aquinas's distinction on self-evidentiary knowledge is useful for understanding the tension between the impulse to believe and the presence of vast unbelief. On the one hand, the fact that the truth of God's existence is not self-evident to us explains, according to Suárez, why many pagan cultures and even why certain individuals in Christian society have denied God's existence. Suárez wrote that: "Hence, many pagans have been in doubt about this truth [of God's existence] or have even denied it...And even some faithful and learned [persons] deny that truth to be evident."⁴⁸² In this regard, Suárez supports Aquinas's *sed contra* of ST.1.q2.a1, in which Aquinas asserts that the Biblical testimony that a fool can assert that God does not exist (*dixit stultis*, Ps. 52:1) is clear evidence that the truth is not self-evident

⁴⁷⁸ DM.29§33, Suárez, *Disputaciones*, 335.

⁴⁷⁹ Matthews, "Aquinas on Saying"; M.V. Dougherty, "Thomas Aquinas on the Manifold Senses of Self-Evidence," *The Review of Metaphysics* 59, no. 3 (March 2006): 601–30.

⁴⁸⁰ DM.29§33, Suárez, *Disputaciones*, 335.

⁴⁸¹ Van Hook, O.F.M., "Duns Scotus"; DM.29§34, Suárez, *Disputaciones*, 335.

⁴⁸² Trans. by Doyle in Suárez, *The Metaphysical Demonstration*, 140; this could seemingly conflict with Giles of Rome's assertion that "God's existence is self-evident to the learned", found in: Gossiaux, "Thomas Aquinas and Giles of Rome," 58.

for everyone. Furthermore, Suárez supports his position by similar statements made by earlier theologians, primarily “other Thomists.”⁴⁸³ Suárez further notes that the idea that some notions are simultaneously self-evident and yet unintelligible unless explained is one that common sense confirms by experience. “For who doubts that there are certain truths that are in themselves immediate [i.e. self-evident], which we can understand only through some medium?”⁴⁸⁴ Thus, Suárez makes sense of the reality of atheism by understanding that the existence of God is not self-evident for us. Indeed, Ángel Poncela contends that Suárez’s arguments should be understood as a defence against contemporary philosophical trends such as skepticism or atheism.⁴⁸⁵

On the other hand, the self-evident-in-itself-ness of God’s existence is not simply a technical theological point which validates Scriptural testimony or the universal fallenness of humanity. Rather, Suárez posits a correspondence between the self-evidentiary status of God’s existence and human experience, primarily through natural reason. The knowledge of God’s existence may not be technically evident to everyone according to Suárez’s burden of proof, but it is a thing that is well-known, widely-known, and consonant with both experience and reason. “Nevertheless,” wrote Suárez, “...although strictly it is not known as totally evident to us that God exists, it is however a truth which is so consonant with natural reason (*lumen*), and with the

⁴⁸³ Doyle suggests, for example, Cajetan, Ferrara, and Báñez. Suárez, *The Metaphysical Demonstration*, 141, DM.29§33.

⁴⁸⁴ The use of the term ‘immediate’ may indicate Suárez’s Aristotelian influence: DM.29§34, Trans. by Doyle in Suárez, 141–42; Aristotle, “Posterior Analytics,” trans. G.R.G. Mure, MIT Classics Online, accessed August 7, 2020, classics.mit.edu/Aristotle/posterior.html; see also the Aristotelian-informed definition of a self-evident proposition given by Aquinas in IV Metaphysics, cit. in: Dougherty, “Thomas Aquinas,” 605.

⁴⁸⁵ Ángel Poncela, “Las pruebas suarecianas de la existencia de Dios como demostración del carácter objetivo de las *Disputaciones Metafísicas*,” *Azafra: Revista de Filosofía* 18 (2016): 173; Neto, “Academic Skepticism”; Popkin, “For a Revised History”; Robbins, *Arts of Perception*, 2013.

consensus of all men, that it can scarcely be unknown by anyone.”⁴⁸⁶ The knowledge of the existence of God is harmoniously fitting for reason.

Suárez qualifies, however, that this knowledge of God’s existence, undemonstrated and not self-evident for us, takes two different forms. First, the “common and confused concept” of a vague god who “could help us or make us happy or something similar – which concept, although it would belong to the true God, could still be applied to false gods.”⁴⁸⁷ For Suárez, this explains the existence of widespread erroneous belief systems, for example, in pagan cultures; he cites Cicero’s *De Natura Deorum* as an example which supports the presence of this “common and confused concept.” Secondly, and more critically, however, this knowledge can also “be understood about the knowledge of the true God, through the concept of the supreme being, than whom there cannot be a greater being and who is the principle of the rest.”⁴⁸⁸ This knowledge, according to Suárez, refers to the true God; this knowledge is accessible by all people by using basic metaphysical principles. Suárez cites Augustine, who writes that “...to a rational creature which is now using its reason he cannot be completely and utterly hidden.”⁴⁸⁹ He also references Cyprian, who describes God as “...Him who cannot be unknown.”⁴⁹⁰ Again, Suárez described that other authors (especially the medieval Scholastics) had therefore spoken of the awareness and knowledge of God’s existence as “...naturally implanted in men...”⁴⁹¹

But for Suárez, precision was needed in speaking of this knowledge as being natural to mankind. Suárez’s natural theology was a demanding intellectual activity – it required a certain

⁴⁸⁶ DM.29§35, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 142. Suárez uses both *lumen* and *ratio* for reason alternatively; in this section, for example, he employed *lumen* while citing Augustine’s use of *ratio*. Rábade Romeo translates both in Spanish as “razón.” See: Suárez, *Disputaciones*, 336.

⁴⁸⁷ DM.29§35, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 143.

⁴⁸⁸ DM.29§35, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 143.

⁴⁸⁹ DM.29§35, trans. by Doyle in Suárez, 143.

⁴⁹⁰ DM.29§35, trans. by Doyle in Suárez, 143.

⁴⁹¹ DM.29§35, trans. by Doyle in Suárez, 143.

level of intelligence, education, and familiarity with metaphysics – and Suárez was aware that the demonstrations of natural theology were therefore beyond the grasp of many.⁴⁹² Nor did Suárez accede to the Anselmian notion that God’s existence is self-evident by the definition of the terms. Rather than describe the generalized knowledge of God that was found throughout society as “naturally implanted in men,” Suárez more precisely suggested two explanations. One explanation is that this is knowledge that is kept and disseminated through “tradition and education” and may therefore be said to be held “by way of human faith...rather than from the evidence of the matter.”⁴⁹³ The other, however, builds upon Suárez’s notion of a consonance between God’s existence and the nature of reality. He wrote,

“...the very great proportion which this truth has with the nature of man...it does by itself immediately appear to be consonant with reason...there are many things which immediately incline one to the acceptance of that truth. Many things (I say) not only metaphysical or physical, but also moral, not only external, but also internal.”⁴⁹⁴

To be clear, Suárez did not argue that this ‘consonance’ constituted the demonstrable proof of God’s existence that formal natural theology required.⁴⁹⁵ He did, however, believe that God’s existence was ‘proportional’ to the totality of human experience and reason. Everything, according to Suárez, by nature of its existence, was rationally-consonant with the truth of the God who gave and gives everything its existence – metaphysical and physical, things external to the human (the macrocosm) and things internal (especially for Suárez, the moral law). This consonance, which saturates all of human experience, is so readily available, so well-known and

⁴⁹² DM.29§36, Suárez wrote that “...not all are capable of...” metaphysics. Trans. by Doyle in Suárez, *Metaphysical Demonstration*, 143.

⁴⁹³ DM.29§37, trans. by Doyle in Suárez, 144.

⁴⁹⁴ DM.29§36, trans. by Doyle in Suárez, 144.

⁴⁹⁵ Fastiggi, “Suárez in Relation,” 310–11. Fastiggi seems to imply that Suárez rejects the Anselmian notion of *a priori* self-evident knowledge because of the experiential testimony of ‘common knowledge’; I would argue that this reverses Suárez’s thoughts.

recognized, kept by the traditions of faith and the educational structures of society, that it is functionally self-evident – for this, reason, Suárez concludes, “all things are easily understood which the [Scholastic] Doctors say about a naturally implanted knowledge of God.”⁴⁹⁶

Absent from Suárez’s discussion on the self-evidentiary status of natural theology, however, is any discussion about the reasons why humanity is unable to accurately and regularly produce true knowledge of God’s existence independently and by the exercise of natural reason alone, and the impact that sin and ignorance may have on filtering the accessibility of general revelation in the project of natural theology. Clues to Suárez’s position here must be gathered from other writings, namely, his *De vitiis et peccatis* (*On Vice and Sin*, a commentary on ST.I-II.Q.71-89) and his *De Legibus* (*On the Law* – especially, natural law). On the point of the natural law, which this dissertation omits from consideration, Suárez indicated that “it is not possible that one should in any way be ignorant of the primary principles of the natural law, much less invincibly ignorant of them; one may, however, be ignorant of the particular precepts, whether of those which are self-evident, or of those which are deduced with great ease from the self-evident precepts.”⁴⁹⁷ Following the expulsion of the Jesuits from Spain in 1767, religious polemic would misconstrue this point by Suárez.⁴⁹⁸

⁴⁹⁶ DM.29§37, trans. by Doyle in Suárez, *Metaphysical Demonstration*, 144.

⁴⁹⁷ Francisco Suárez, *Selections from Three Works: A Treatise on Laws and God the Lawgiver; A Defence of the Catholic and Apostolic Faith; A Work on the Three Theological Virtues: Faith, Hope, and Charity*. Edited and with an Introduction by Thomas Pink, ed. Thomas Pink (Indianapolis: Liberty Fund, 2015), 248, <<https://oll.libertyfund.org/titles/2740>>.

⁴⁹⁸ In the year following the expulsion, one anonymous critic (‘a celebrated theologian’, readers are assured) claimed that “...the third principle admitted in the Theology of the Jesuits is, that one can give invincible ignorance to the existence of God, and of his owed devotion, and of the first principles of the natural Law; and that all of these are subjects of this ignorance, and are not accused by some sin...which is the same doctrine of Molina, Vazquez, Suarez, ...and many other Jesuits...” (De un Celebre, 29-30) The author’s source for this information was the ironically-named Henri de Saint-Ignace, O.C. (1630-1719/20), a Belgium Carmelite Jansenist who authored several attacks against the Jesuits, including the colourfully-named *Artes Jesuiticae...* (1710) and *Tuba magna mirum clangens sonum...* (1712). Compare this to Suárez’s actual opinion found in *De vitiis et peccatis* (his commentary on ST.I-II.q76-78). De un Celebre Theologico [s.n.], *Plan Historico de La Theologia Moral de Los Jesuitas; y Dictamen* (Madrid: En la Oficina de la Viuda de Manuel Fernandez, 1768), 29–30; P.A. Fournet, “Henri de Saint-Ignace,” in *The Catholic Encyclopedia* (New York: Robert Appleton Company, 1910),

Suárez in Context: Second Scholasticism in Baroque Spain

Suárez's metaphysical argumentation for the existence of God constituted a paradigm shift in the way that theologians and philosophers conceived of the activity of natural theology; by claiming that the propositions and arguments of natural theology were fundamentally metaphysical, rather than physical, Suárez confirmed natural theology as a philosophical enterprise. Suárez's reliance on Aristotelian philosophy, furthermore, established parameters for thinking and engaging with the terms and arguments of natural theology. Suárez's prominence placed him as a key figure in the metaphysical reconceptualization of the project of natural theology. He is representative of a larger current of theological and philosophical thought and was not alone in promoting these ideas. To begin with, Suárez was influenced by many theologians of what has been termed the "second scholastic" movement in Spain. That is, from about 1525-1675, concurrent with the implementation of the reforms of the Council of Trent, the theology which was taught at major universities in Spain, including Salamanca, gradually substituted Aquinas's *Opera Omnia* (which was published in Rome, 1570) for Lombard's *Sentences*.⁴⁹⁹ Hill notes that Suárez "was clearly the product of the schools and produced properly Scholastic philosophy....Aristotelianism was his philosophical starting point...his philosophical method was in keeping with the Scholastics."⁵⁰⁰ Suárez learned his approach at Salamanca, the centre of second scholasticism, influencing his style and approach.⁵⁰¹ This is

<http://www.newadvent.org/cathen/07219a.htm>; Francisci [Francisco] Su[á]rez, *Ad Primam Secundae D. Thomae* (Lyon: Sumptibus Iacobi Cardon, 1628), 397ff.

⁴⁹⁹ For definitions of second scholasticism, see: Hill, "Introduction," 15; Roberto Hofmeister Pich, "An Index of 'Second Scholastic' Authors," in *Richt and Nature in the First and Second Scholasticism*, ed. Alfonso Santiago Culleton and Roberto Hofmeister Pich, *Recontres de Philosophie Médiévale* 16 (Turnhout: Brepols Publishers, 2014), ix–xvii; James A. Weisheipl, "Scholasticism," in *Encyclopedia of Religion*, ed. Lindsay Jones (Detroit, MI: Macmillan References USA, 2005), 8175.

⁵⁰⁰ Hill, "Introduction," 3.

⁵⁰¹ Rábade Romeo, "Francisco Suárez."

supported, for example, by Suárez's disputational style, his alignment with Aristotelian metaphysics and philosophy, and his awareness of and reference to Aquinas and the *ST*.

Constantino Esposito writes that Suárez's intellectual efforts should be seen within the concerns of the "Baroque matrix," including "the elaboration of a metaphysical discourse, that is, of an ontology and a natural theology that could serve as the foundations for a revealed theology..."⁵⁰² The revival of Aquinas in Spanish universities, and especially at Salamanca, where Suárez was educated, formed an important part of the historical backdrop or "baroque matrix" for the development of natural theology in seventeenth-century Spain. Suárez was not alone in associating *theologia naturalis* with metaphysical demonstration or specifically in commenting on Aquinas's five ways – this was, in fact, part of the established "Thomistic commentatorial tradition" that was to be found among the Dominican theologians at the University of Salamanca. Mauro Mantovani, SDB, has traced Dominican writings on the existence of God within the Second Spanish Scholastic school of thought found at Salamanca between 1561-1669, highlighting the works of Pedro de Sotomayor (1511-1564), Juan Mancio de Corpus Christi (1500-1576) (who taught Suárez for four years), Bartolomé de Medina (1527-1580), Juan Vicente de la Iglesia (1544-1595), Domingo Báñez (1528-1604), and Pedro de Godoy (1608-1677), and to which should be added Francisco de Vitoria (1483-1546), Melchor Cano (1509-1560), and Domingo de Soto (1495-1560).⁵⁰³ Although it is beyond the purview of

⁵⁰² Costantino Esposito, "Suárez and the Baroque Matrix of Modern Thought," in *A Companion to Francisco Suárez*, ed. Victor M. Salas and Robert L. Fastiggi (Leiden: Brill, 2015), 124–25.

⁵⁰³ Mauro Mantovani, "La Demostrabilidad de La Existencia de Dios: Francisco Suárez En El Contexto de Los Maestros Jesuitas de Teología y En La Lectura de Pedro de Godoy, OP," in *Entre El Renacimiento y La Modernidad: Francisco Suárez (1548-1617)*, ed. José Luis Fuertes Herreros et al. (Madrid: Editorial Sínderesis, 2019), 123–48; Mauro Mantovani, *An Deus Sit (Summa Theologiae I, q. 2): Los Comentarios de La "Primera Escuela" de Salamanca* (Salamanca: Editorial San Esteban, 2007); Mauro Mantovani, *La Discussione Sull'esistenza Di Dio Nei Teologi Domenicani a Salamanca Dal 1561 al 1669. Studio Sui Testi Di Sotomayor, Mancio, Medina, Astorga, Báñez e Godoy*, Nuova Biblioteca Di Scienze Religiose 29 (Rome/Salamanca: Angelicum University Press/Editorial San Esteban, 2011); a full list of Thomist commentaries is found in: A. Michelitsch, *Kommentatoren*

this chapter, this evidence of seventeenth-century metaphysical natural theology in Thomist commentaries could be further extended by considering biblical commentaries (for example, on Rom. 1:20, Ps. 18[19], Wis. 1, Isa. 40) as well as from catecheses and catechetical commentaries written during this period by Spanish scholastics.⁵⁰⁴

The association (or, in some ways, restriction) of the term “natural theology” to the metaphysical demonstration of the existence of God in the long-seventeenth century in Spain must be understood, therefore, in the context of the school of “Spanish second scholasticism” that defined the theological tradition and the curricula of theology and philosophy taught in universities across the Peninsula. Esposito argues that Suárez fundamentally ‘redefined’ the project of natural theology in his *DM*, noting that Suárez took “natural theology” as a term from Aristotle’s *Metaphysics*, and that it “...constitutes the linchpin around which the redefinition of this science turns: *naturalis theologia* “deals with God and divine things insofar as this is possible in the light of nature.”⁵⁰⁵ Suárez did, in fact, ‘redefine’ natural theology by describing it as part of metaphysics; but as we have seen, this was more than simply applying a new term. Suárez, illustrative of second scholasticism in Spain, reclaimed natural theology as a metaphysical and philosophical discipline. The speculations gained from physical observations

Zur Summa Theologiae Des HL. Thomas von Aquin (Styria: Graz und Wien, 1924); works are divided categorically in Pereira and Fastiggi, *Mystical Theology*.

⁵⁰⁴ For example: Domingo de [Fratrís Dominici Soto] Soto, *In Epistolam divi Pauli ad Romanos commentarii: eiusdem de Natura [et] Gratia, ad Sanctum Concilium Tridentinum libri III: cum apologia contra reuerendum Episcopum Catharinum* (Antwerp: in aedib[us?] Ioan [Johannes] Steelsi[us], 1550); Gasparis [Gaspar] Sanctii [Sánchez], S.J., *In Isaiam Prophetam Comentaríi Cum Paraphrasi* (Lugduni: Horatii Cardon, 1615); Ioannis [Juan] Maldonati [Maldonado], *Commentarii in Praecipuos Sacrae Scripturae Libros Veteris Testamenti* (Paris: Sumptibus Sebastiani Cramoisy, 1643); Bartolomé Carranza de Miranda, *Comentarios Del Reverendissimo Señor Frai Bartholome Carrança de Miranda, Arçobispo de Toledo, &c. Sobre El Catechismo Christiano, Divididos En Quatro Partes: Las Quales Contienen Todo Lo Que Professamos En El Sancto Baptismo, Como Se Vera En La Plana Siguiete* (Antwerp: En Casa de Martin Nucio, 1558); Tellechea Idígoras, “Bartolomé Carranza de Miranda”; Pedro Rodríguez, “El Catecismo de Carranza y El Catecismo Romano,” *Anuario de Historia de La Iglesia* 18 (2009): 137–65; Pius V, *Catechismus...Concilii Tridentini*; Pius V, *Catecismo del Santo Concilio de Trento*; Juan Eusebio Nieremberg, *Practica Del Catecismo Romano, y Doctrina Christiana* (Madrid: En la Imprenta de Juan de Zuñiga, 1734).

⁵⁰⁵ Esposito, “Suárez and the Baroque Matrix,” 130.

of the world or observations about the nature of mankind were helpful, but these were simply preliminary exercises to the real, formal, and philosophical activity of natural theology. While there is sufficient evidence to suggest that this coopting of natural theology by scholastic metaphysics was a persuasive theme during the Spanish Baroque, it is unfair to position the scholastic definitional shift of natural theology as the only contender in the seventeenth-century ring. There were alternative approaches to natural theology that were practiced and published in the seventeenth century; these forms of natural theology fit under Suárez's more vague description of "teaching about God" by "natural light" – but what they considered natural, how they studied it, and what knowledge this produced looked markedly different from Suárez's metaphysics. Two of these approaches merit reflection, as they help to understand the connection that this long period had both with the theological traditions which preceded it and those which followed in the eighteenth century.

The Second Baroque Vision: Natural Theology and the Wonder of Creation in Natural Philosophy and Natural History: Isla's *Fabrica* (1621) and Nieremberg's *Curiosa y Oculta Filosofía* (1643)

While Suárez allowed that natural philosophy could prepare the way for these metaphysical demonstrations and could generate a common or confused notion of the knowledge of God's existence or basic attributes, other writers had a far more optimistic and liberal interpretation regarding the way that the study of the natural world could lead to knowledge about God. Two such works are considered: first, an unstudied publication entitled *Fabrica universal del mundo* by Salvador Ardevines Isla, a medical doctor, and secondly, the well-known activity of Juan Eusebio Nieremberg, S.J. (1595-1658), a skilled theologian and chair of natural sciences at the *Colegio Imperial de Madrid*, who authored several publications on the theological lessons gained by the study of natural history. These works might be considered the

predecessors of “physical theology” or “physico-theology”, given their reliance on the physical study of the natural world, focused especially on elements of its design and governance (although occasionally coupled with cosmological arguments). These natural theologies also contained a thaumatic element which led to spiritual reflection and devotion and which was common to the mystical and interior tradition; contemplating the physical means of nature should lead to a sense of wonder which elevated the mind to consider God. In this way, the works of individuals like Nieremberg and Isla were between the metaphysical natural theology of Suárez and the scholastics and the mystical natural theology of religious like Bernardino Planes.

Salvador Ardevines Isla, *Fabrica universal* (1621)

An introduction to this form of natural theology is found in the *Fabrica universal y admirable de la composicion del mundo mayor* (*Universal and Admirable Fabric of the Composition of the Greater World*), a curious hodgepodge of physics, theology, and metaphysics by Salvador Ardevines Isla.⁵⁰⁶ Published in Madrid in 1621, the work has been almost entirely dismissed by Spanish historians, somewhat understandably – the text is poorly written with occasional errors and is a rambling narrative in places that suffers from a lack of any discernible restraint in subject matter. Nevertheless, it is crucial to establishing how natural theology may have been understood at the beginning of the seventeenth century in Spain, for in his preface and first chapter, Isla not only employs *teologo/ia natural* as a term (itself rare), but also gives a winding bibliography of the subject in which he establishes the key authors of natural theology

⁵⁰⁶ Salvador Ardevines Isla, *Fabrica Universal y Admirable de La Composicion Del Mundo Mayor, a Donde Se Trata Desde Dios, Hasta Nada, y Del Menor, Que Es El Hombre*. (Madrid: 1621, Diego Flamenco); I have found only one study of this work: Luis Sánchez Granjel, “La ‘Fabrica Universal’ (1621) de Ardevines,” *Boletín de La Sociedad Española de La Historia de Medicina* 15 (1975): 21–24. Note the continuation of macrocosmic-microcosmic language in the description of the *mundo mayor* of God’s work and the *mundo menor* of a human.

prior to the time of publication. Isla was a physician (*médico*), and besides Sibiuda, who may have been connected to the Franciscan order in some fashion, and Venegas, who had close affiliations with religious institutions, Isla was the first layperson to discuss the term *teologia natural*. In the *Fabrica*, he covers in five sections God, the Angels, Ancient Understandings of the World, the Heavens and Heavenly Bodies, and Animals.⁵⁰⁷ His work straddles the line between the study of physics and metaphysics, for example, when discussing theories on the eternity of the world held by ancient philosophers.

Part of Isla's work, as he introduces it to the reader, is that "...with only the world to speak of natural things, it arrives to give an account of its maker, first and universal cause of all things; and of the particular and secondary causes, their perfections and order considered..."⁵⁰⁸ Later, he describes this activity as natural theology, writing against critics who might argue "...that [a] Doctor cannot write about Theology, as though there I were not a Philosopher and Natural Theologian, and [as though] Aristotle, Plato, Virgil, and others had not written [works], and not only [about] natural [topics], but they said some things about revealed [topics]..."⁵⁰⁹ Isla upheld the Aristotelian notion of first principles – indemonstrable, axiomatic knowledge which formed the base of all other knowledge – arguing that "all the sciences walk gripped and linked," explaining that "...almost all the sciences agree in the first principles," and that "...[since] all the sciences are derived from one principle; there is one understanding that understands them, and created by God [there are] many understandings that have principles in order to know all the sciences that one can know."⁵¹⁰

⁵⁰⁷ Ardevines Isla, *Fabrica Universal*.

⁵⁰⁸ Ardevines Isla, i.

⁵⁰⁹ Ardevines Isla, ii.

⁵¹⁰ Ardevines Isla, iii-iv.

These first principles were, for Isla, the key to understanding all other areas of knowledge – and although he did not use the term “metaphysics,” his description is similar to Suárez’s in that it emphasizes the Aristotelian notion that the activity of natural sciences (such as the medicine which Isla practiced) were predicated on a still more fundamental area of knowledge which spoke about ideas such as being, causality, and motion. For Isla, these ‘first principles’ were the key to discovering the hallway unto which all of the various rooms of sciences opened – what he described as “a science that would have the principles for all of the other [sciences].”⁵¹¹ Isla does not directly equate this science with a term, but as previously shown, he argued that his work was not to be counted as the labor of a theologian, but as a philosopher or natural theologian, suggesting that these latter terms were both similar and apt descriptions of his inquiries.

Isla’s proposed method was to study the created order as a way of uncovering these first principles. “My intent is only to discover a spacious field,” he wrote, “where the understanding can extend and discuss all the things that are included in the ten categories [*generos*]...God, Angel, Man, Heaven, Beast, Plant, Element, Mixture, Matter, and Accident.”⁵¹² Isla believed that the study of these natural things was like the contemplation of a circle of grades which had its beginning and its end in God. Isla also demonstrated that the difficulty of separating the macrocosm and microcosm of nature was a problem which caused confusion in conversations of natural theology, although Isla used the term “world” (*mundo*) rather than “nature” (*naturaleza*).⁵¹³ Isla complained that “so many have written and so differently [that] there has been great confusion, both among the Philosophical Writers and the Natural Theologians, and

⁵¹¹ Ardevines Isla, iv.

⁵¹² Ardevines Isla, v.

⁵¹³ For example, Isla used the term *mundo* fifty-four times in seven pages; in that same passage, he used *naturaleza* twice. Ardevines Isla, 123r–26r.

among their interpreters...”⁵¹⁴ He provided, as an example, that “in the first book of Genesis, Alexander of Hales in his second volume, and St. Bonaventure, and Richard [of St. Victor]...sometimes they take [“world”] as whatever created thing, or whatever created nature, and sometimes as man himself, and sometimes as the present life, and other times as the vicious life of evildoers...”⁵¹⁵

As for Isla’s approach and definition of natural theology, it is largely a recitation of previously articulated positions, whom Isla cites freely. “That one can naturally prove that there is one efficient and final cause of all created things,” wrote Isla, was a point already established by Duns Scotus, Augustine, Aquinas, and Alexander of Hales, as well as “most Philosophers and Theologians.”⁵¹⁶ Indeed, Isla’s work suggests that an important part of natural theology was the historical testimony of religious expressions over time; in this sense, if nature was to be interpreted as “the entirety of human experience” external to divine, special revelation, then the natural history of religion or sociology and anthropology of religion (particularly of ancient societies and pagan cultures) also formed part of the analysis of the natural theologian. When Isla discussed the evidence of God’s oneness, for example, he provided an extensive genealogy of the idea as it was held by non-Christian thinkers: Sophocles, Plutarch, Alexander the Great, Pythagoras, Marcus Varro, among others, all had notions of this truth. “There are many reasons to know this truth,” wrote Isla, “and those who want to be excused from looking for them in Natural Theology can cling to the supernatural, divine, and revealed...”⁵¹⁷ In revealed doctrines, these same truths were revealed in a way “that exceed all the other manners of certainty.”⁵¹⁸

⁵¹⁴ Ardevines Isla, 121.

⁵¹⁵ Ardevines Isla, 123.

⁵¹⁶ Ardevines Isla, 6.

⁵¹⁷ Ardevines Isla, 8v.

⁵¹⁸ Ardevines Isla, 9r.

Isla's work has, over time, been forgotten, perhaps in part because of its unoriginality, its endorsement of natural philosophies which did not win out over the 'scientific revolution', and its rambling scope and style. Shortly after Isla published the *Fabrica*, however, a Jesuit in Madrid published a series of works promoting the study of natural history for theological instruction. The work of Juan Eusebio Nieremberg y Ottin, S.J. (1595-1658), which would have a much greater audience than Isla's work, constituted a similar approach to natural theology by encouraging the study of nature in order to discern theological truth.

Nieremberg: Biography and Introduction to Works

Nieremberg was born and raised in Madrid to parents who worked in the employ of María de Austria, Holy Roman Empress and sister to Felipe II, King of Spain.⁵¹⁹ Nieremberg joined the Society of Jesus at the age of nineteen, studied at Alcalá (and perhaps at Salamanca), and in 1629, distinguished himself by becoming the chair of the natural sciences (*cátedra de ciencias naturales*) at the *Colegio Imperial de Madrid*, a university administered by the Jesuits in the heart of the capitol.⁵²⁰ In 1625, the *Colegio Imperial* had been granted the privilege of teaching the "estudios reales" – an educational plan designed for children of Spanish nobles which included natural philosophy (where they read Aristotle's *De Generatione et Corruptione* and *De Coelo*), metaphysics (where they read, among other works, Aristotle's *De Anima* and *Metaphysicae*), and the "history of animals, birds and plants, and of nature and of rocks and

⁵¹⁹ For biographical information throughout, consult the following: Hug[u]es Didier, *Vida y Pensamiento de Juan E. Nieremberg*, trans. M. Navarro Carnicer (Madrid: Universidad Pontifica de Salamanca, Fundacion Universitaria Española, 1976); Hug[u]es Didier, "Juan Eusebio Nieremberg y Ottin," *Real Academia de la Historia: Diccionario Biográfico Español*, accessed August 8, 2020, <http://dbe.rah.es/biografias/6972/juan-eusebio-nieremberg-y-ottin>; D. Scott Hendrickson, *Jesuit Polymath of Madrid: The Literary Enterprise of Juan Eusebio Nieremberg (1595-1658)* (Leiden: Brill, 2015).

⁵²⁰ The biographical data is contradictory from sources; Didier emphasizes a lack of concrete information due to, among other things, an archival fire; José Simón Díaz, *Historia Del Colegio Imperial de Madrid* (Madrid: Consejo Superior de Investigaciones Científicas, Instituto de Estudios Madrileños, 1952), 562; Didier, "Juan Eusebio Nieremberg y Ottin."

minerals.”⁵²¹ Nieremberg lectured on natural history, and was famously praised in Lope de Vega’s *Isagoge* that “...they said...that when Eusebio Nieremberg was teaching that it was the same as [if] Aristotle [were] speaking.”⁵²² In 1633, he also became the chair of Sacred Scripture (*cátedra de Sagrada Escritura*), and as one bibliographer has noted, “the two [subjects] were similar in his mind...such that the visible world, like the Bible, was an enigmatic florilegia of symbols which God had given to mankind in order to raise up their faith.”⁵²³

Nieremberg authored four works related to natural philosophy and natural history; the *Curiosa filosofia* (1630) and *Oculto filosofia* (1633), which were developed from lectures and remarketed together, along with his *Prolusión a la doctrina y historia natural* (1629) in one volume in 1643.⁵²⁴ He also authored the *Historia Naturae* (1635), a natural history developed from the New World expedition of Francisco Hernández which introduced many of the new species of animals and plants to Europe, although one scholar has noted that this was “not a very original work.”⁵²⁵ Indeed, Nieremberg has earned a marginal status in the history of science – his quasi-hermeticism and alternative natural philosophy have largely left him out of a

⁵²¹ Simón Díaz, *Historia Del Colegio Imperial*, 67–68; Miranda argues that the place of Aristotle in the Jesuit curriculum established in the 1599 *Ratio Studiorum* shows the importance of studying nature within the broader Jesuit theology and that Aristotelian philosophy was the preferred method for this. See: Margarida Miranda, “Sequendvs Aristoteles. Da Ciência e Da Natureza Na Ratio Stvdiorvm (1599),” *Humanitas* LXI (2009): 179–90.

⁵²² Simón Díaz lists Nieremberg as the “Catedrático de Historia Animantium, Planxtarum, etc.” rather than “ciencias naturales.” This is my translation of Lope de Vega, as provided in Simón Díaz, *Historia Del Colegio Imperial*, 97, 108; similarly, see Hendrickson’s translation in Hendrickson, *Jesuit Polymath*, 87. To be fair, Lope de Vega praised all of the instructors extravagantly in this paean.

⁵²³ Didier, “Juan Eusebio Nieremberg y Otín.”

⁵²⁴ Nieremberg, *Curiosa, y Oculta*; s.n. [Nieremberg], *Prolusion a La Doctrina [Sic] y Historia Natural, Que Hizo El P. Juan Eusebio Nieremberg, de La Compañia de IESUS, El Primer Dia Que Leyò En Los Estudios Reales Del Colegio Imperial de La Misma Compañia, En Esta Corte* (Madrid: Andres de Parra, 1629); Ioannis Eusebii [Juan Eusebio] Nierembergii [Nieremberg], *Historia Naturae, Maxime Peregrinae, Libris XVI. Distincta* (Antwerp: Ex Officina Plantiniana Balthazaris Moreti, 1635), <https://www.biodiversitylibrary.org/item/148510#page/5/mode/1up>.

⁵²⁵ Francisco Hernandez, *De La Naturaleza, y Virtudes de Las Plantas, y Animales Que Estan Recevidos En El Uso de Medicina En La Nueva España, y La Methodo, y Correccion, y Preparacion, Que Para Administrallas Se Requiere Con Lo Que El Doctor Francisco Hernandez Escribio*, trans. Francisco Xim[é]nez (Mexico: Casa de la Viuda de Diego Lopez Davalos, 1615); Didier, *Vida y Pensamiento*, 34.

triumphalist historiography which sees linear progress through the scientific revolution of the seventeenth century.

One of Nieremberg's central tasks in all four of these works, as well as in other devotional literature which he authored, was to unpack a method for understanding nature and making use of the information that it holds; for Nieremberg, this meant understanding how the contemplation of the natural world would increase one's knowledge of and devotion to God, the creator of nature. D. Scott Hendrickson writes that "Nieremberg's aim is to provide readers with knowledge about the natural world, but his greater goal is for them to admire the beauty of nature and to revere its Creator."⁵²⁶ Similarly, Luis Millones Figueroa "...the study of nature was generally accepted as an object of investigation that would allow one to get closer to the creator. The metaphor of nature as a complementary book to the Bible, common currency in the culture of the Renaissance and of the Baroque, implied in the interpretation of many intellectuals that to study its pages was a valid and desirable exercise."⁵²⁷ Nieremberg's efforts, therefore, may be considered as part of the historical trajectory of natural theology in Spain – although, like many of the other authors surveyed in this dissertation, Nieremberg did not employ "natural theology" as a term in these works.⁵²⁸ I argue, however, that Nieremberg's work may be better understood by placing it in the wider stream of natural theology. Nieremberg articulated an approach to nature which believed that the existence, design, and governance of the natural world could produce knowledge about God; moreover, Nieremberg also demonstrated how Christian presuppositions influenced the formation of a natural philosophy.

⁵²⁶ Hendrickson, *Jesuit Polymath*, 88.

⁵²⁷ Luis Millones Figueroa, "La *Intelligentsia* Jesuita y La Naturaleza Del Nuevo Mundo En El Siglo Xvii," in *El Saber de Los Jesuitas, Historias Naturales y El Nuevo Mundo*, ed. Luis Millones Figueroa and Domingo Ledezma (Madrid: Iberoamericana, 2005), 36.

⁵²⁸ Interestingly, Nieremberg did use the term once in reference to Plato in a letter. s.n., *Cartas Del Venerable Padre Juan Eusebio Nieremberg, de La Compañia de Jesus* (Madrid: En la Imprenta de Agustin Fernandez, 1714), 187.

Nieremberg and the Artifice of Nature: The Ingenuity of Design

To demonstrate Nieremberg's natural theology, consider the second section of Nieremberg's *Oculto Filosofia*, dedicated to "the artifice of nature, and natural information of the world."⁵²⁹ Here, Nieremberg argued that a deeper understanding of the working of nature would demonstrate the most glorious aspects of its creative signature and compares the created world and God to an artifice and artificer. Nieremberg's choice of 'artifice' (*artificio*) meant less "artwork" than some crafted thing which has been made with expertise and artisanal skill. Sebastian Covarrubias defined 'artifice' (*artificio*) in his 1611 *Tesoro de la lengua castellana, o española* [*Treasury of the Castilian or Spanish Language*], as "the composure of some thing or affectation; the master of some art [makes] artifice; [that which is] artificial is that which has artifice, or the thing made with art."⁵³⁰ Nieremberg introduced the subject by noting that most people, when contemplating an artifice, only noticed the most superficial aspects of its beauty or detail and failed to understand that the truly ingenious elements of the artifice were those that were hidden designs made to make the object realistic and pleasing. He wrote:

Few know the skillfulness [*primor*] of things; many see an excellent work of rare artifice and some of them will lift their eyes to the colour it has; to those the ornate variety will be pleasing; still others will enjoy the excessive grandiosity. Open those who praise precious material, and hardly anyone will be found who enjoys – and even less who knows – whence this skillfulness and fantasy of art is, that often hides itself in a blot's darkness or carries itself [with] a good air, or dazzles with a touch of well-feigned affectation.⁵³¹

Nieremberg suggested that the most skillful features of an artifice were exactly those which were hidden and made to allow the artifice to appear as natural as possible.

⁵²⁹ My translation of Nieremberg, *Curiosa, y Oculta*, 299; similarly see: Hendrickson, *Jesuit Polymath*, 91–92. Hendrickson translates *artificio* as 'artistry', a decision which I believe misses the connection to the element of craftsmanship and skilled production; artifice is, I argue, closer to artefact than to artwork.

⁵³⁰ Sebastian de Cobarruias Orozco [Covarrubias], *Tesoro de La Lengua Castellana, o Española* (Madrid: Luis Sanchez, impressor del Rey N.S., 1611), 93r.

⁵³¹ Nieremberg, *Curiosa, y Oculta*, 299.

By extending this metaphor to the created world, Nieremberg played with the distinction between art and nature. “...[I]f art is counterfeit nature, [then] nature is natural or divine art...” wrote Nieremberg.⁵³² Art and artifice relied on skill to imitate the natural world; the natural word, therefore, was the expression of the skill of a divine craftsman. Artifice, by both Covarrubias and Nieremberg’s definitions, required an artificer. Nieremberg argued that just as an artifice has a maker, the natural world, as an artifice, points towards a Creator. Importantly, however, Nieremberg was not content with those who simply marveled at the beauty or the grandiosity of divine artifice – just as the contemplation of artifice is rewarded by truly understanding the ingenuity of its design, the truly valuable attribute of the natural world to understand was this element of design. Nieremberg argued, “What happens with artificial things happens in the admiration[/wonder] of nature that God made to show his arm and the ornate enamelwork of his wisdom.”⁵³³ But the strength (lit., arm) and wisdom of God, according to Nieremberg, could only be grasped if one understood the craft of the artifice of nature. “[T]herefore,” stated Nieremberg, “the most marvelous thing in the world is not the immensity of those Heavens, nor the number of its lights...but rather its ingenuity, its design, its framework, its order, its correspondences.”⁵³⁴ This divine skill is “the most elaborate...and the least respected.”⁵³⁵ Nieremberg’s natural theology, therefore, was to develop and convey the method for learning and understanding the ingenious design of the natural world in order to better appreciate and respect the wisdom and knowledge of the God who created it.

Hendrickson has rightly noted the important role that *ingenio* (‘wit’, ‘ingenuity’, ‘cleverness’) has as part of the “conceptual language” that Nieremberg employs in his approach

⁵³² Nieremberg, 300.

⁵³³ Nieremberg, 299. Nieremberg employed “fabricated” similar to how Isla described the “fabric” of the universe.

⁵³⁴ Nieremberg, 300.

⁵³⁵ Nieremberg, 300.

to nature.⁵³⁶ He writes that “[Nieremberg’s] principal aim is to show the *ingenio*, or “wit” of these things, such as “the wit of the lodestone,” and how they reveal the intelligible mark of their divine design.”⁵³⁷ Hendrickson interprets Nieremberg’s search for the *ingenio* of nature as those artful elements which require intellect to understand, but more to this discussion also relates it to “the excellence of their artistry” (*primor, artificio*).⁵³⁸ For Hendrickson, one of the key characteristics of *ingenio* is its hiddenness; to this point, Nieremberg often describes the ‘secret’, ‘hidden’, or buried nature of truths to be found in nature. It is in this sense that Nieremberg described his work as “occult” or “hidden.” This notion also connects to Nieremberg’s assessment that the most ingenious aspects of artifice are those processes which are not on superficially visible.

Nieremberg’s metaphor of artifice took place just ten years after Francis Bacon’s (1561-1626) *Advancement of Learning* was translated into Latin (1623).⁵³⁹ Historians such as Pamela Smith and Luis Corteguera have pointed to the rise of an “artisanal epistemology” in the early modern period, examining its impact on scientific and political ideas.⁵⁴⁰ Central in these ideas was the important role of “direct observation of nature and from hands-on experience” in the formation of knowledge.⁵⁴¹ As Smith writes, artisans “claimed that nature is the primary source of knowledge, that certain knowledge can be extracted by engaging with nature, and that this engagement takes place through a bodily encounter with nature.”⁵⁴² By portraying the natural

⁵³⁶ Hendrickson, *Jesuit Polymath*, 105.

⁵³⁷ Hendrickson, 105.

⁵³⁸ Hendrickson, 105.

⁵³⁹ Bacon, *Advancement*; Bacon employed “artificer” with a modern sense to connote “dissimulation” – this was also present in Spanish, but does not seem to have informed Nieremberg’s use. See Covarrubias’s entry on *carambola* and *embuste* (a deception). Cobarruias Orozco [Covarrubias], *Tesoro [Madrid 1611]*, 197r, 343v.

⁵⁴⁰ Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: University of Chicago Press, 2004), 59.

⁵⁴¹ Luis R. Corteguera, “Artisans and the New Science of Politics in Early Modern Europe,” *Journal of Medieval and Early Modern Studies* 43, no. 3 (Fall 2013): 612.

⁵⁴² Smith, *The Body of the Artisan*, 59.

world as artifice, Nieremberg underscores this epistemological connection: the way to study, understand, and know the God that made the natural world involves a similar process to studying, understanding, and knowing a craftsman's handiwork. Furthermore, the metaphor of artifice was instrumental in creating a conceptual space for understanding the world as a mechanism and the introduction of mechanical natural philosophy.⁵⁴³ The category of artifice included not only "arts" and compositions (such as motets), but mechanical arts and their productions such as clocks and waterwheels.⁵⁴⁴ Margaret Cook has argued, for example, that Robert Boyle's (1627-1691) notion of nature as artifice was fundamental to the development of a mechanical philosophy to replace the substantial forms of Aristotelianism. She writes of Boyle that "as products of the supreme craftsman, all things natural were truly artificial and, consequently, mechanical."⁵⁴⁵ Nieremberg also asserted that natural things also had an artifice – a divine artifice – which surpassed the artifice of human invention. "There is more Artifice in a Human Body than in a Clock;" wrote Nieremberg in his devotional treatise, *De lo temporal*, "and it's much more delicate; the Nerves are not of Steel, nor the Veins of Brass, nor the Entrails of Irons..."⁵⁴⁶

Nieremberg's understanding of the artifice of nature, however, is decidedly different from the mechanical interpretation of nature that would come to be the dominant natural philosophy of the late-seventeenth and eighteenth centuries. Perhaps, as has been noted, this has

⁵⁴³ Javier de Lorenzo has described artefact as "the root-metaphor" (*metáfora-raíz*) of mechanical philosophy. Javier de Lorenzo, *Ciencia y Artificio: El Hombre, Artefacto Entre Artefactos* (La Coruña: Netbiblio, S.L., 2009), 27.

⁵⁴⁴ Pamela H. Smith and Benjamin Schmidt, eds., *Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400-1800* (Chicago: University of Chicago Press, 2007); Cobarruias Orozco [Covarrubias], *Tesoro [Madrid 1611]*, 99r, 557v.

⁵⁴⁵ Margaret G. Cook, "Divine Artifice and Natural Mechanism: Robert Boyle's Mechanical Philosophy of Nature," *Osiris* 16 (Science in Theistic Contexts: Cognitive Dimensions) (2001): 134.

⁵⁴⁶ Translation for this quote alone by Taylor in the anonymous version printed in early modern England: [Nieremberg, Juan Eusebio], *Contemplations [London 1702]*, 55; see the original passage in: Nieremberg, *De La Diferencia [Madrid 1649]*, 109.

contributed to Nieremberg's omission from the standard narrative of the history of science. However, as Juan Pimentel writes of Nieremberg, "...his intellectual contribution [may be] useless in the eyes of today's science, but surely it makes a reading of his work more fruitful to the task of understanding the sciences of his day."⁵⁴⁷ Nieremberg was not a mechanicalist, but neither did he offer an authoritatively Aristotelian approach to the understanding of nature (despite the required reading assigned in the *estudios reales*). In fact, he differed from Aristotelian natural philosophy on several occasions. For example, countering the teaching of the *De Caelo* in the curriculum, Nieremberg did not uphold Aristotle's notions of celestial incorruptibility, the position of the Sun, or the position of comets (Nieremberg did not believe them to be sublunary), among other ideas.⁵⁴⁸ Nieremberg wrote, for example, "...that all the old heavens of metal have been ruined..." and that Aristotle's ideas about incorruptible heavens had been disproven.⁵⁴⁹

To Nieremberg, as to many others, the Aristotelian natural philosophy had grown stale by 1643, encumbered as it was by the many challenges laid to it throughout the sixteenth century (especially by cosmography and astronomy).⁵⁵⁰ Unlike the reinvigoration of Aristotelian methods found in the Thomist revival of second scholasticism, however, Nieremberg sought an

⁵⁴⁷ Juan Pimentel, "Baroque Natures: Juan E. Nieremberg, American Wonders, and Preterimperial Natural History," in *Science in the Spanish and Portuguese Empires, 1500-1800*, ed. Daniela Bleichmar et al. (Stanford: Stanford University Press, 2009), 97.

⁵⁴⁸ For the Aristotelian cosmological position, see: Aristotle, *On the Heavens*, trans. W.K.C. Guthrie, Loeb Classical Library, Aristotle VI (LCL 338) (Cambridge, Massachusetts: Harvard University Press, 1939); Tofigh Heidarzadeh, "Aristotle's Theory of Comets," in *A History of Physical Theories of Comets, From Aristotle to Whipple*, Archimedes: New Studies in the History and Philosophy of Science and Technology 19 (s.u. [Dordrecht?]: Springer, 2008), 1–19; Edward Grant, *Planets, Stars, and Orbs: The Medieval Cosmos, 1200-1687* (Cambridge: Cambridge University Press, 1996); Hendrickson, *Jesuit Polymath*, 103; as Hendrickson has noted, Nieremberg defended the findings of Tycho Brahe (Hendrickson 103). Nieremberg wrote that "...the diligent, pertinent study and judgment of Brahe is not less than that of the ancients..." (Nieremberg 152). See: Nieremberg, *Curiosa, y Oculta*, 152–53; Luís Tirapicos has recently shown that Brahe's work, despite being placed on the Spanish Index, was still read and studied in unexpurgated forms, especially within the Society of Jesus. See: Luís Tirapicos, "On the Censorship of Tycho Brahe's Books in Iberia," *Annals of Science* 77, no. 1 (2020): 96–107.

⁵⁴⁹ Nieremberg, *Curiosa, y Oculta*, 160.

⁵⁵⁰ Portuondo, *The Spanish Disquiet*, 1.

alternative way of understanding the world. To this end, Nieremberg is illustrative of the general trend that Portuondo has termed the “Spanish Disquiet” – a growing restlessness and anxiety in the epistemology of the natural sciences which stemmed from the rejection or refinement of Aristotelianism, the dissatisfaction with alternative natural philosophies, and generalized epistemological uncertainty.⁵⁵¹ Nieremberg offered, in his works, a remedy for this unhappiness – a proposed means of interpreting and understanding nature that was heavily influenced by theological considerations.

Nieremberg’s Approach to Natural Theology: Influences and Methodology

How can we best understand Nieremberg’s approach to the study of nature? Scholars have suggested many competing sources of influence that likely shaped the way that Nieremberg thought (Renaissance Neoplatonism, Jesuit missional theology, mystical and devotional treatises, and emblematic literature, among others). I maintain, however, that Nieremberg’s efforts are best understood by placing them in the long trajectory of natural theology in early modern Spain. Many have argued, for example, that Nieremberg’s allegorical approach to the study of nature was greatly informed by the revival of Neoplatonism that occurred during the Renaissance.⁵⁵² This assumption is often connected superficially to the idea that nature should be interpreted allegorically, but it can also more clearly be seen, I believe, in Nieremberg’s treatment of the concept of beauty in *De la Hermosura de Dios* (1648).⁵⁵³ It is misleading to label Nieremberg’s

⁵⁵¹ Portuondo, *The Spanish Disquiet*.

⁵⁵² Didier, for example, argues that Nieremberg was “a Neoplatonist thinker, perhaps more Plotinian than properly Augustinian, and very typical of the Baroque.” See: Didier, “Juan Eusebio Nieremberg y Ottin”; most studies passingly mention Nieremberg’s Neoplatonism. See: Miguel de Asúa, *Science in the Vanished Arcadia: Knowledge of Nature in the Jesuit Missions of Paraguay and Río de La Plata*, Scientific and Learned Cultures and Their Institutions 11 (Leiden: Brill, 2014), 57; Hendrickson, *Jesuit Polymath*, 92; Domingo Ledezma, “Una legitimación imaginativa del nuevo mundo: La *Historia Naturæ*, *Maxime Peregrinæ* del Jesuita Juan Eusebio Nieremberg,” in *El Saber de Los Jesuitas, Historias Naturales y El Nuevo Mundo*, ed. Luis Millones Figueroa and Domingo Ledezma (Madrid: Iberoamericana, 2005), 60–61; Miguel de Asúa and Roger French, *A New World of Animals: Early Modern Europeans on the Creatures of Iberian America* (Abingdon: Routledge, 2016), 163.

⁵⁵³ Juan Eusebio Nieremberg, *De La Hermosura de Dios, y Su Amabilidad Por Las Infinitas Perfecciones Del Ser Divino* (Madrid: Por Maria Quiñones, 1648).

work Neoplatonist; it is true that Nieremberg cited Plato, Plotinus, and even Marsilio Ficino, and it is also clear that Nieremberg's theology was greatly influenced by Plato's conception of forms, but Nieremberg was a widely-read theologian who pulled inspiration from a variety of philosophical schools.⁵⁵⁴ The mystical tradition of Pseudo-Dionysius, for example was a source for Nieremberg, as were those spiritual treatises of the preceding century. Nieremberg recommended, for example, the reading of works by Teresa of Ávila (OCD), Luis de Granada (OP) (including specifically the *Símbolo*), John of Ávila, Tome de Jesus (OCD), Luis de la Puente (SJ), Alonso de Villegas, and Alonso Rodríguez (SJ), among others.⁵⁵⁵

Similarly, the tradition of emblematic literature was likely influential in shaping Nieremberg and Isla's natural theologies. William B. Ashworth has asserted that "The emblematic world view is...the single most important factor in determining late Renaissance attitudes toward the natural world....[t]he essence of this view is the belief that every kind of thing in the cosmos has myriad hidden meanings and that knowledge consists of an attempt to comprehend as many of these as possible."⁵⁵⁶ In its most formal incarnation, the emblematic worldview is seen in works such as Andrea Alciati's *Emblematum* (1531), in which an image was presented along with an *inscriptio* (a short title) and a *subscriptio* (an explanation, often in

⁵⁵⁴ Ficino cit. in Nieremberg, *Curiosa, y Oculta*, 334.

⁵⁵⁵ Juan Eusebio Nieremberg, *Partida a La Eternidad* (Madrid: En la Imprenta de Agustin Fernandez, 1714), 147–51.

⁵⁵⁶ William B. Ashworth, "Natural History and the Emblematic World View," in *The Scientific Revolution: The Essential Readings*, ed. Marcus Hellyer, Blackwell Essential Readings in History (Malden, MA: Blackwell Publishing Ltd, 2003), 142; Ashworth rejects the notion that some scholars have made that emblematicism was a revival of a medieval tradition or relied upon a regression to medieval bestiaries. See also: Francisco Javier Pizarro Gómez and José Julio García Arranz, "La Visión de La Naturaleza En Los Emblemistas Españoles Del Siglo Xvii," in *Literatura Emblemática Hispánica: Actas Del I Simposio Internacional (A Coruña, 1994)*, ed. Sagrario López Poza (A Coruña: Universidade, 1996), 226; Arturo Morgado García, "De La Visión Emblemática a La Visión Desencantada: Los Animales En El Mundo Hispánico (Siglos XVII y XVIII)," *Bulletin of Spanish Studies* XVIII, no. 5 (2016): 784.

the form of a riddle or poem).⁵⁵⁷ More broadly, however, the emblematic worldview represented the influence of emblematic works like Alciati's, as well as classical influences; Ashworth examined previously-neglected natural histories of the sixteenth and seventeenth centuries and found in them a "cultural matrix" which was created by "hieroglyphic, antiquarian, Aesopic, mythological, adagial, and emblematic" understandings of the natural world.⁵⁵⁸ The result was a framework which viewed nature as meaning-laden, symbolic, allegorical, and interconnected; as John Slater has noted, "Ashworth's work shows that illustrations by emblematisers and scientists grow increasingly similar during the sixteenth century."⁵⁵⁹ Nieremberg's work, in particular, is a fine example of this blend of emblematicism and scientific inquiry. Nieremberg, for example, describes that studying the *ingenio* of animals is like studying "natural hieroglyphics," in which one way of gaining knowledge is "...in cypher...as when a Painter make a hieroglyph."⁵⁶⁰ Nieremberg's description of creation (and especially creatures) as glyphs or words certainly reinforces this "emblematic" worldview.

Nieremberg's theological approach to nature has also been attributed to his position as a Jesuit; scholars have claimed that the Society of Jesus placed a special emphasis on the connection between knowing nature, knowing God, and saving souls. José Ramón Marcaida, for example, calls this a distinctly Jesuitical "liaison between knowledge and salvation," Hendrickson labels this impulse the "educational mission of the Society," and Miguel de Ásua writes that "...the kind of natural philosophy favored by the Society of Jesus legitimized a perception of a marvelous nature, rich in prodigies and which called for allegorical

⁵⁵⁷ Bradley J. Nelson, *The Persistence of Presence: Emblem and Ritual in Baroque Spain* (Toronto: University of Toronto Press, 2010), 6; Andreae Alciati, *Clarissimi Viri D. Andrae Alciati Emblematum Libellus, Vigilanter Recognitus, & Ab Ipso Iam Autore Locupletatus* (Paris: Christianu[m] Wechelum, 1542).

⁵⁵⁸ Ashworth, "Natural History," 141.

⁵⁵⁹ John Slater, "Eucharistic Conjunction: Emblems, Illustrations, and Calderón's *Autos*," in *Ekphrasis in the Age of Cervantes*, ed. Frederick A. de Armas (Lewisburg: Bucknell University Press, 2005), 81.

⁵⁶⁰ Nieremberg, *Curiosa, y Oculta*, 330.

interpretation.”⁵⁶¹ Certainly, Nieremberg’s theology can be attributed in part to the scientific and educational activity of the Society of Jesus in the seventeenth century; Nieremberg’s position as chair of the natural sciences educating the children of Spanish nobles is paradigmatic of the emphasis which the Society placed on the generation and dissimulation of knowledge.⁵⁶² Jesuit missionaries in the New World, for example, greatly augmented the field of natural history; Nieremberg’s *Historia naturae*, in this context, is just one of many such contributions (although written without actual firsthand experience). Other scholars additionally suggest that the imaginative, sensorial, and considering intellectual activity of Ignatian spirituality may have produced a unique “Jesuit epistemology” to approaching the study of nature.⁵⁶³

All of these factors played a part in informing Nieremberg’s approach to the study of nature, but perhaps most useful for understanding his work is to see it as part within the framework of natural theology. Nieremberg’s interpretation of nature and his approach to the study of natural philosophy and natural history make the most sense when they are viewed as part of the longstanding tradition of natural theology. Nieremberg, like Isla and Suárez, realized that the intricate beauty, design, and wonder of nature demanded the recognition and knowledge of God, and he delighted to examine ways in which the world pointed to its creator.

Knowing God through Natural History: Nieremberg’s “Biblical Natural Philosophy”

⁵⁶¹ José Ramón Marcaida López, “Juan Eusebio Nieremberg y la ciencia del barroco. Conocimiento y representación de la naturaleza en la España del siglo XVII” (Tesis doctoral, Madrid, Universidad Autónoma de Madrid, 2011), 35, <http://hdl.handle.net/10486/7757>; Asúa, *Science in the Vanished Arcadia*, 57; Hendrickson, *Jesuit Polymath*, 104–5; Millones Figueroa, “La *Intelligentsia* Jesuita.”

⁵⁶² On Jesuit science, see: Asúa and French, *A New World of Animals*; Asúa, *Science in the Vanished Arcadia*; Millones Figueroa, “La *Intelligentsia* Jesuita”; Francisco Malta Romeiras, “Jesuit Science and Education: A Brief History,” in *Jesuits and the Book of Nature: Science and Education in Modern Portugal* (Leiden: Brill, 2019), 1–22; Steven J. Harris, “Jesuit Scientific Activity in the Overseas Missions, 1540–1773,” *Isis* 96 (2005): 71–79; Mark A. Waddell, *Jesuit Science and the End of Nature’s Secrets* (Abingdon: Routledge, 2016); also part IV in Ines G. Županov, ed., *The Oxford Handbook of The Jesuits* (Oxford: Oxford University Press, 2019).

⁵⁶³ Hendrickson, *Jesuit Polymath*; Margaret R. Ewalt, *Peripheral Wonders: Nature, Knowledge, and Enlightenment in the Eighteenth-Century Orinoco* (Lewisburg: Bucknell University Press, 2008), 101.

The natural theology which is conveyed in Nieremberg's works is a complex amalgamation of all these influences, but Nieremberg's approach has seemed irregular to some scholars. Hendrickson, for example, writes that he offers "an indiscriminate blend of fact and fiction," and that his works is "a clear indication of how writers in the seventeenth century continued to read nature for its allegorical meaning, while at the same time seeking to treat it in a more scientific manner."⁵⁶⁴ But this contradiction is the result of a presentist notion of science. By "a more scientific manner," Hendrickson means 'using methods that have come to be associated with a modern definition of science.' Rather, Nieremberg shows that reading nature in a "scientific manner" in 1643 involved methods of acquiring and interpreting knowledge which seem distant to the twenty-first century. Hendrickson writes that Nieremberg, at times, "Moves away from allegorical interpretation and attempts to offer a more empirically based reading of his subject matter."⁵⁶⁵ I argue, however, that Nieremberg's work demonstrates how deep, allegorical readings and surface empiricism could exist at the same time; indeed, how both relied on a Christian understanding of nature as creation.⁵⁶⁶

Furthermore, scholars have juxtaposed Nieremberg's allegorical interpretation against empiricism – but this is confusing the issues at stake. Symbolic interpretation is a way of making meaning from collected information; empirical observation is a method for acquiring this

⁵⁶⁴ Hendrickson, *Jesuit Polymath*, 97, 101.

⁵⁶⁵ Hendrickson, *Jesuit Polymath*, 102.

⁵⁶⁶ For this reason, I consider labeling this natural philosophy as 'magic' (Thorndike) or 'occult science' (Findlen) a form of presentism. Lynn Thorndike, *A History of Magic and Experimental Science*, vol. VII and VIII: The Seventeenth Century (New York: Morningside Heights: Columbia University Press, 1958); Paula Findlen, "Empty Signs? Reading the Book of Nature in Renaissance Science [Book Review: Massimo Luigi Bianchi, *Signatura Rerum. Segni, Magia e Conoscenza Da Paracelso a Leibniz* (Rome: Edizioni Dell'Ateneo, 1987), 199 Pp. + 4 Ill, Paper.,"] *Studies in History and Philosophy of Science Part A* 21, no. 3 (September 1990): 511; on this point, see: John Henry, "The Fragmentation of Renaissance Occultism and the Decline of Magic" 46, no. 1 (March 2008): 1–48; Rodney Stark, "Reconceptualizing Religion, Magic, and Science," *Review of Religious Research* 43, no. 2 (December 2001): 101–20. Nieremberg's use of the word "occult" to describe his philosophy carried, I believe, the original meaning of hiddenness, not the contemporary understanding of strangeness or esotericism.

information in the first place. The conflation is likely the result that Platonic and emblematic interpretations of nature were so often textual activities; that is to say, the practitioner could do so from an armchair with a book rather than in the field. But Nieremberg demonstrates that it is possible to have Neoplatonist natural philosophy that incorporates both empirical observation and textual criticism. Indeed, Nieremberg described that his goal was to elucidate a science by which the secrets of nature – including information about God and the Christian faith – could be discerned. Although I label Nieremberg’s subject natural theology, he described it as a scientific activity which studied nature – primarily through natural history – and applied interpretative rules to the information gathered in order to yield knowledge about God. Nieremberg specifically highlighted the “dignity of natural history,” for example, and described ideas such as physiognomy as a “science of nature.”⁵⁶⁷ That is, Nieremberg encouraged followers of his “curious and occult philosophy” to experience the natural world, to observe and gather information through the senses, for example, providing “rules” (*reglas*) to help teach readers how to apply the sense of sight or taste.⁵⁶⁸ Having done this, however, Nieremberg’s philosophy required meditating on this information and translating it to see and appreciate the artifice of nature and to recognize correspondences, order, and skillful design.

This science (Nieremberg’s natural theology) relied upon the collection of empirical observations found in natural history and had biblical precedent. Nieremberg legitimated the pursuit of natural philosophy, and of natural history in particular, by citing Biblical examples. King Solomon, he argued, realized the worth of this subject and even had a school for learning natural history from which other near eastern monarchs desired to learn.⁵⁶⁹ Likewise, God gave

⁵⁶⁷ Nieremberg, *Curiosa, y Oculta*, 277.

⁵⁶⁸ Nieremberg, 342–46.

⁵⁶⁹ Nieremberg, 300–301. See I Kings 4:33, “He would speak of trees, from the cedar that is in Lebanon to the hyssop that grows in the wall; he would speak of animals, and birds, and reptiles, and fish.” (NRSVCE)

Adam, the first man, the task and gift of natural history in the Garden of Eden; Nieremberg went so far as to suggest that it was the lack of knowledge from natural history that allowed for Eve to be tempted and for the fall of humanity.⁵⁷⁰ It was in fact, by studying both of these two forefathers of the faith that Nieremberg founded his methodology for teasing out meaning from nature. Nieremberg considered this approach highly ordered; he described the “method with which Solomon read natural history” and of the “science of Adam.”⁵⁷¹

Solomon, Nieremberg argued, could not have amazed others by repeating merely routine information from natural history – his audience must have been amazed because of some “novelty and particular artifice” that he was able to obtain from studying plants and animals. “It was necessary for Solomon to make some argument...and to show with some clarity the artifice of nature...,” wrote Nieremberg, adding, “This is what I am attempting to look for an indication of.”⁵⁷² Nieremberg clarified his method by studying the “science of Adam,” particularly, by examining the passage in Genesis 2:19 in which God presents Adam with all of the creatures for them to be named. Nieremberg argued that Adam, “the King of all nature,” was not created with a perfect knowledge of individual creatures, rather this was something that he had to learn. “For if he [Adam] knew about them, it was not necessary to put them in front of him in order for him to know them.”⁵⁷³ Nieremberg believed instead that God had “infused in him a general science”

⁵⁷⁰ This last point is not developed in Nieremberg’s works, but it does provide an interesting contrast to those histories which portray seventeenth-century science as seeking to “restore a perfect Adamic knowledge that had been lost or compromised as a consequence of the Fall.” (Harrison 449) James Bono has shown how the postlapsarian estate was linked by some authors with the fall of the Tower of Babel (and the scattering of human languages and knowledge); this link is not present in Nieremberg’s work. Nieremberg implied that the Fall in Eden had impugned, but not negated human ability to gain the knowledge of this infused science. Hendrickson, *Jesuit Polymath*, 107–8; s.n. [Nieremberg], *Prolusion*, 2–3; Peter Harrison, “Was There a Scientific Revolution?,” *European Review* 15, no. 4 (2007): 445–57; Harrison, *The Fall of Man*; James J. Bono, “The Two Books and Adamic Knowledge: Reading the Book of Nature and Early Modern Strategies for Repairing the Effects of the Fall and of Babel,” in *Nature and Scripture in the Abrahamic Religions: Up to 1700*, ed. Jitse M. van der Meer and Scott Mandelbrote, vol. 1 (Leiden: Brill, 2008), 300–301; Nieremberg, *Curiosa, y Oculta*, 303.

⁵⁷¹ Nieremberg, *Curiosa, y Oculta*, 302–3.

⁵⁷² Nieremberg, 303.

⁵⁷³ Nieremberg, 303–4.

by which he could know by visually studying a creature its *ingenio*. Sight was a critical part of this process; God brought each animal before Adam so that they could be named and understood. For Nieremberg, this early activity directed by God to the first man confirmed that God had given to all mankind an ‘infused science’ and ability to discern the natural correlation between visible and invisible creation that he had stamped, as an impression, upon everything. Nieremberg described these as the “general principles...of natural doctrine” which Adam and Solomon followed, and hailed them as superior to those of any other natural philosophy.⁵⁷⁴ “I say therefore,” he explained, “that the truest and pure natural doctrine is...that which Adam and Solomon had, not as that which was reached [for] by other Kings...nor as the other Philosophers that in this erudition gained advantages, Aristotle, Theophrastus, Democritus...Pliny...”⁵⁷⁵

Nieremberg developed, therefore a method for studying nature which would yield hidden information, including information about God. Portuondo has studied the similar efforts of Benito Arias Montano (1527-1598), a humanist biblical scholar who was pivotal in the production of the Antwerp Polyglot Bible and who, in two works from 1593-1601, articulated a new approach to the study of nature inspired by his exegetical studies.⁵⁷⁶ Portuondo describes this as a “biblical natural philosophy” – that is, Arias Montano’s efforts to create “a complete natural philosophical system on the Sacred Scriptures *and* on sensual experience and to propose it as an alternative to Aristotelian natural philosophy.”⁵⁷⁷ This description is certainly fitting for Nieremberg’s activity, and his writing underscores Portuondo’s argument concerning the

⁵⁷⁴ Nieremberg, 305.

⁵⁷⁵ Nieremberg, 306.

⁵⁷⁶ María Fuencisla García Casar, “Benito Arias Montano,” Real Academia de la Historia: Diccionario Biográfico Español, accessed September 11, 2020, <http://dbe.rah.es/biografias/7898/benito-arias-montano>; Portuondo, *The Spanish Disquiet*, 3; Bened. [Benito] Aria Montano [Arias Montano], *Liber Generationis et Regenerationis Adam, Sive de Historia Generis Humani* (Antwerp: Apud Viduam, & Ioannem Moretum, 1593); Benedicto [Benito] Aria Montano [Arias Montano], *Naturae Historia* (Antwerp: Ex Officina Plantiniana, Apud Ioannem Moretum, 1601).

⁵⁷⁷ Portuondo, *The Spanish Disquiet*, 3.

“Spanish Disquiet” – that Aristotelian natural philosophy’s increasingly dissatisfying inability to account for natural phenomena and experience resulted in revisions to the curriculum, to eclectic or disjointed practitioners, or to those who sought to jettison the system in favor of an alternative. But Nieremberg’s work also shows how fine the line between natural theology and natural philosophy was. Nieremberg proposed a method of interrogating nature, inspired by a sacred text – this approach might be understood by Portuondo’s term, “biblical natural philosophy.” Using this approach could yield valuable information useful to the service of mankind – advancements in medicine, for example, that were gleaned from the study of plants and herbs. This approach could also, however, be directed towards the higher goal of learning information about God, his attributes, and his commandments. In this way, biblical natural philosophy can be understood at times as a form of natural theology. Although Nieremberg validated his approach by citing scriptural passages, his method did not rely upon special revelation or upon the knowledge of the text, but rather was an ‘infused science’ which received its greatest clarity upon reflection of the higher, divine truths.

Nieremberg’s Study of Artifice: Physiognomy, Correspondences, and the Design Argument

Nieremberg often argued that deeper, religious truths can be seen allegorically or metaphorically by the consideration of nature, although it must be understood that this interpretation functioned as a natural philosophy, according to methods and rules; it was not so mystical as to be suprarational. Nieremberg described the world as a poetic labyrinth of meaning – but to extend the metaphor, a labyrinth, although confusing, is navigable to one who knows the path.⁵⁷⁸ Unfortunately, despite his language regarding the “manner of knowing” the “clear signs of nature,” much of Nieremberg’s methodology is only vaguely described in the *Curiosa y*

⁵⁷⁸ Nieremberg, *Curiosa, y Oculta*, 308.

Oculita Filosofia.⁵⁷⁹ Most often, an idea about the fundamental reality of nature is presented unclearly, and then Nieremberg provides a specific illustration from natural history without clarifying the principle. Nieremberg did believe, however, that there were “universal rules” (*relgas universales*) which ordered his approach.⁵⁸⁰ I have broadly summarized his approach as two principles: correspondence and similitude. The first established that was a correspondence between the visible aspects of a created thing and its hidden virtues [*virtudes*] or ingenuity [*ingenio*]. God created these virtues to be visibly discernible so that they would be perceptible and of use to mankind. Similitude proclaimed that there was a proportionality and likeness between the different created orders of nature – between animals and plants, for example, or between animals and stars – this connected the macrocosm of the external world to the microcosm of man.⁵⁸¹ Because all things were created by God, they are unified by a consistent, created harmony and purpose.

Both of these rules were strongly connected, as has been discussed, to emblematicism, Neoplatonism, and to the established tradition of both the “book of nature” and the “great chain of being.”⁵⁸² The first of Nieremberg’s ‘rules’ could be simply interpreted as the “doctrine of signatures”, as for example, when Nieremberg argued that “that which aids the liver looks like it.”⁵⁸³ This prefiguration that existed in nature, Nieremberg argued, could be seen in the divination of dreams. Nieremberg also connected this idea to the practice of physiognomy, a practice which he keenly defended and argued was rooted in demonstrable experience and

⁵⁷⁹ Nieremberg, 309–10.

⁵⁸⁰ Nieremberg, 310.

⁵⁸¹ Nieremberg, 330–33.

⁵⁸² Lovejoy, *The Great Chain of Being*; Mahoney, “Lovejoy and the Hierarchy.”

⁵⁸³ The doctrine of signatures, especially to be found in medicine, dictated that certain created things were remedies for those parts of the body which they resembled. Peter Harrison, “The Metaphor ‘the Book of Nature’ and Early Modern Science,” in *The Book of Nature in Early Modern and Modern History*, ed. Klaas van Berkel and Arjo Vanderjagt (Leuven: Peeters, 2006), 20.

observation, unlike other ‘pseudo-natural philosophies’ which he denigrated such as Kabbalah, astrology.⁵⁸⁴ The practice of physiognomy, in which the character and essence of a person was discernible by their physical features, received revived attention in the late Renaissance; as Nieremberg described it, there was a “great commerce between the body and the soul.”⁵⁸⁵ Nieremberg proclaimed the “certainty of physiognomy” and affirmed that, despite others having slandered it, “there is no doubt that from the gesture and exterior bulk [of a thing] the condition and generosity of the bests is suspected.”⁵⁸⁶ Furthermore, Nieremberg desired to extend its methodology beyond the study of human faces and bodies to all created things.⁵⁸⁷ “If by the face and exterior composition the interior complexion is known and by the body the *ingenio* and soul,” Nieremberg questioned, “why not [the] other virtues of plants and fruits?...[It is] no less art to be able to concede by the awareness of the properties of herbs and animals.”⁵⁸⁸ This extension of the principle of similitude was possible because all things because of the second tenet – all things shared in their being and existence the common denominator of having been crafted by God for the purpose of displaying his glory and making himself known. Nieremberg claimed that “In this part of physiognomy, the artifice of nature is notable; this same [artifice] argues for and supports what I am putting forward...”⁵⁸⁹ A physiognomic approach to nature, for Nieremberg, emphasized the design and architecture of nature.

⁵⁸⁴ Thorndike, *A History of Magic*, VII and VIII: The Seventeenth Century: 331; Nieremberg, *Curiosa, y Oculta*, 322.

⁵⁸⁵ Ian Maclean, “The Logic of Physiognomy in the Late Renaissance,” *Early Science and Medicine* 16 (2011): 275–95; Richard Serjeantson, “Francis Bacon and the ‘Interpretation of Nature’ in the Late Renaissance,” *Isis* 105 (2014): 681–705; Mariska Leunissen, “Physiognomy,” in *Oxford Handbook of Science and Medicine in the Classical World*, ed. Paul T. Keyser and John Scarborough (Oxford: Oxford University Press, 2018), 743–64; the revival was promulgated especially in the work of the Neapolitan Giambattista della Porta (1535–1615). See: Gio. Battista Della Porta, *Della Fisonomia Dell Uomo*, trans. Giovanni di Rosa (Napoli: Appresso Tarquinio Longo, 1598); Nieremberg, *Curiosa, y Oculta*, 316.

⁵⁸⁶ Nieremberg, *Curiosa, y Oculta*, 315.

⁵⁸⁷ Nieremberg, 319.

⁵⁸⁸ Nieremberg, 315.

⁵⁸⁹ Nieremberg, 315.

Thus, both demonstrated by and support of his physiognomic reading of nature, Nieremberg highlighted the intricate design of natural things, the presence of beauty, proportion, and harmony in nature, and the governance of the natural world. In this, Nieremberg's description of nature as an artifice and his development of this metaphor is key. Understood through the metaphor of a book, nature conveys information revealed by God; the created things and natural phenomena become cyphers, word, or sentences which can instruct and be interpreted by rational humanity. Understood as an artifice, however, nature becomes a work which can be studied, made of constituent parts which can be analysed, and all of which emphasize two key refrains: this artifice was made by someone, and this artifice carried the stamp of design. In these considerations, Nieremberg deviated from a strictly allegorical interpretation of nature, but rather follows a method which observed and studied nature so that he could find structure and order. Nieremberg described the design of nature as both architecture and governance. He wrote, for example, that "[t]he architecture of each particular nature publicizes and preaches the wisdom of its Author," as well as that "[t]he laws and rites that nature keeps are preaching the highest wisdom and artifice of its Legislator."⁵⁹⁰ The design of the world was therefore discernible, according to Nieremberg, by studying arithmetic and geometry. Nieremberg also discussed the bodily architecture of humans and animals, indicating perhaps that an interest in anatomy was useful to discerning the structure of the world. Certainly, Nieremberg's theory encouraged the development of natural sciences for the purpose of

⁵⁹⁰ Nieremberg, 343; Nieremberg, 341.

investigating and understanding the ‘fabric’ of the world.⁵⁹¹ These disciplines, which rendered the world orderly and intelligible, suggested a Divinity who had instantiated these into nature.⁵⁹²

Thaumatic Natural Theology: Knowledge of the Faith and Wonder

From both a symbolic reading of nature and from a study of its structure and order, therefore, Nieremberg believed that important knowledge could be gained – not just natural philosophical knowledge, but lessons about governance, politics, and most importantly for this study, theological knowledge. On this last point, Nieremberg argued three primary points which God had embedded in nature for humanity to discern and learn. He wrote:

We have already come to the point and surmised that the world was built with architecture and ingenuity [*ingenio*], surmised that it was fabricated [to be] accommodated to our use, [and] supposed that some knowledge about it can be reached by art; it remains to verify something more about what its artifice might be....God had three things in respect to the fabric of nature, [He] enclosed three things in this intent, that by the world its Author should be known and recognized by man, served by this cause of the other created things...the first, the knowledge of its Creator, the second, the teaching of our soul, the third, the remedy of the body; there is no created thing that does not serve one of these things.⁵⁹³

Thus, to Nieremberg, every aspect of creation advanced this threefold, basic introduction to necessary theological knowledge: God’s creation of the world, God’s creation of human souls, and God’s care and rescue for the body and soul. This, in many ways, is comparable to the same set of theological knowledge argued for by previous natural theologies: the existence of a God who is rational, who creates, and who orders and cares for his creation. But Nieremberg also argues that additional theological lessons are discernible for those who learn to decipher the signs of nature. “Nature teaches us not only Philosophy, but Theology, and confirms in us the

⁵⁹¹ Gary Siniscalchi has demonstrated that the modern design argument (Paley’s watchmaker) has deviated from Aquinas’s fifth way by shifting the understanding of causality in nature upon which the argument is based. While Nieremberg affirmed final causality in places, his primary interest in the “governance” of the world seems to be based on efficient causes. Siniscalchi, “Fine-Tuning, Atheist Criticism”; Nieremberg, *Curiosa, y Oculta*, 341.

⁵⁹² Nieremberg, *Curiosa, y Oculta*, 321–24.

⁵⁹³ Nieremberg, 320.

Faith [,]” Nieremberg asserted.⁵⁹⁴ Nieremberg even suggested that each of the seven sacraments had a correspondence to be found in nature: the antidote created by mixing grain in wine suggested the Eucharist, for example, while Matrimony could be seen in the lifelong fidelity of pairs of doves.⁵⁹⁵ Nieremberg thought that these “mysteries of the faith” had been “drawn in nature” and recognized by previous Church Fathers, including the temptation of Adam and Eve, the Conception of the Virgin Mary (seen in the vulture, which was believed to conceive with the wind), and the death of Christ, in the established example of the pelican.⁵⁹⁶

Examples such as these abound in all of Nieremberg’s natural works; Hendrickson, for example, has closely examined Nieremberg’s study of lodestones and birds-of-paradise, and has argued that it contains both an allegorical and empirical approach.⁵⁹⁷ Certainly, this can be seen throughout Nieremberg’s work, and I have argued that the two were not held as contradictory methods in his natural philosophy and theology. To study nature, Nieremberg emphasized time and again the necessity of “sensible signs by which one can track the hidden virtues of things” and affirmed that “the senses are those that can teach us these secret virtues.”⁵⁹⁸ Only by observation and experience could one gain the material needed to meditate on the deeper meaning, and Nieremberg’s frequent reference to writers of natural history and natural philosophy show his interest in gathering the most information that he could. At the end of the day, Nieremberg returned to the idea that the awareness and experience of nature would

⁵⁹⁴ Nieremberg, 356.

⁵⁹⁵ Nieremberg, 358; Nieremberg cited the first-century Greek writer Dioscorides as the source of his information on this ‘antidote’ – most likely indicating that he had access to and had read his *De materia medica*, made more widely available in the sixteenth-century and even translated into Castilian. John M. Riddle, “Dioscorides (Pedanius Dioscorides),” in *The Oxford Classical Dictionary*, ed. Simon Hornblower, Antony Spawforth, and Esther Eidinow (Oxford: Oxford University Press, 2012); Dioscorides, *Pedacio Dioscorides Anazarbeo, Acerca de La Materia Medicinal, y de Los Venenos Mortiferos*, trans. Andres de Laguna (Salamanca: Mathias Gast., 1563).

⁵⁹⁶ Nieremberg, *Curiosa, y Oculta*, 359.

⁵⁹⁷ Hendrickson, *Jesuit Polymath*, 102.

⁵⁹⁸ Nieremberg, *Curiosa, y Oculta*, 364.

reinforce the three central theological lessons, all centred on the fact of God's creation. "...in everything is enameled the impression of God, a face of his Artifice with different views of his perfections," Nieremberg proposed, "that by all parts it is seen and read: *God made me*."⁵⁹⁹

This knowledge, however, was not static or sterile – like Sibiuda and Granada before him, Nieremberg asserted that there was a necessary progression between obtaining the knowledge of the Creator and recognizing and acting upon the need to serve Him; likewise, between wonder at the natural world, curiosity and knowledge of its workings, and increase wonder at its design and artifice.⁶⁰⁰ Nieremberg availed himself, certainly, of the curios and wonderful parts of nature – he wrote about recent discoveries of the new world, of fantastic animals and monsters, all designed to capture the interest and attention of his readers. Nieremberg's use of wonder as the basis for investigating knowledge is not unique. Isla also expressed that wonder was often the first step for building natural philosophies and natural theologies. Isla cited Aristotle's *Metaphysics*, Book I, quoting "It is from wondering that men begin to philosophize."⁶⁰¹ Nieremberg interrupted his description of the order of the world to author a short passage on the "ecstasies of the [natural] Philosophers in the contemplation of nature," in which he described how famous pagan natural philosophers including Zoroastres, Plato, Democritus, and Plotinus were "arrested and astonished at the ingenuity and greatness of [nature's] Author."⁶⁰² The study of nature was both motivated by and generated wonder and admiration – wonder (*admiración, maravilla*) formed an essential epistemological role, therefore, that connected both natural theology and natural philosophy in early modern Spain.

⁵⁹⁹ My translation of Nieremberg, 308; for Hendrickson's discussion of the "Deus me fecit" see: Hendrickson, *Jesuit Polymath*, 122–23.

⁶⁰⁰ Hendrickson, *Jesuit Polymath*, 93.

⁶⁰¹ Ardevines Isla, *Fabrica [Madrid 1621]*, i; Aristotle, "Metaphysics," trans. W.D. Ross, 1994-2009, <http://classics.mit.edu/Aristotle/metaphysics.1.i.html>.

⁶⁰² Nieremberg, *Curiosa, y Oculta*, 341.

For this reason, I describe such works as Nieremberg's and Isla's as *thaumatic* natural theologies. This attention to the role of wonder was shared by the third vision for natural theology, although its methods for generating knowledge was yet again different from Suárez, Isla, or Nieremberg.

The Third Baroque Vision: Natural Theology as Mystical Contemplation; Planes's *Concordancia Mistica* (1667)

The third perspective on natural theology in Baroque Spain may be seen in the mystical and spiritual literature which flourished during the seventeenth century, and which continued many of the themes which were developed by sixteenth-century religious writers (examined in the previous chapter). Works on the three-fold path of mysticism, the “camino de la perfección”, and, most salient for this dissertation, the utility of the contemplation of creation, all continued to be topics of discussion in religious literature during the seventeenth century. While studies of seventeenth-century spirituality in Spain have abounded, none have yet concentrated on the category of natural theology as a framework for understanding how nature and reason played fundamental roles in generating theological knowledge. José Pereira and Robert Fastiggi have surveyed the panorama of expressions of spirituality in Baroque Catholicism, demonstrating that offering any singularly definitive means of understanding religiosity and devotion during this period is impossible.⁶⁰³ Among other currents, they highlight Baroque Scholasticism, oratory, and mysticism – each further complicated by variations found between the religious orders.⁶⁰⁴ I do not argue that natural theology was the defining element of Baroque spiritual literature in Spain, but a study of mystical and spiritual writings from this period show that it continues to be

⁶⁰³ Pereira and Fastiggi, *Mystical Theology*.

⁶⁰⁴ Pereira and Fastiggi.

a helpful way of connecting these works to those of the previous century, and how the efforts to create natural knowledge of God could be used in the quest for Christian perfection.

Bernardino Planes (O.Cart.) and the *Concordancia Mistica* (1667)

This was true, for example, of the *Concordancia Mistica* (*Mystical Concordance*) of the Carthusian monk Bernardino Planes, published in Barcelona in 1667.⁶⁰⁵ Planes described his work as a guide to the “three ways, purgative, illuminative, and unitive” – in short, a clear successor to the mystical tradition and practice of *recogimiento* seen in the previous century. The last three chapters (cp. xxi-xxiii) of the purgative way discuss a “mode of meditation” composed of both affirmative and negative speculation, by which “one is raised by the creatures to the Creator.”⁶⁰⁶ In these chapters, Planes takes as his inspiration the words of Teresa of Avila, who, in her autobiography, especially commended meditating on the Passion of Christ, but noted that several other topics of meditation were beneficial.⁶⁰⁷ According to St. Teresa,

Some, who are tender hearted, get exhausted if they keep thinking about the Passion, but they derive great comfort and benefit from considering the power and greatness of God in the creatures, and the love that He showed us, which is pictured in all things. This is an admirable procedure, provided one does not fail to meditate often upon the Passion and the life of Christ, which are, and have always been, the source of everything that is good.⁶⁰⁸

Interestingly, while the meditative tradition is often described as a fundamentally accessible and “plebian” spirituality, both Teresa and Planes qualified its use. St. Teresa noted that the speculation of the creatures was a valid meditative process for the compassionate, while Planes argued that this method of meditation, which would only produce the “lowest” contemplation,

⁶⁰⁵ Very little biographical information is known about Planes. He was a monk at the Cartoixa Santa Maria de Montalegre, outside of Barcelona.

⁶⁰⁶ Planes, *Concordancia*, table of contents.

⁶⁰⁷ Planes, 80.

⁶⁰⁸ Translation by Peers in Teresa de Jesús, *The Life of Teresa of Jesus: The Autobiography of Teresa of Ávila*, trans. E. Allison Peers, Trans. from the Critical Edition of St. Teresa of Silverio (Grand Rapids, Mich. and Boulder, Colo.: Christian Classics Ethereal Library, 1999), 31.

was really only suited for those who had the ability to know and study nature.⁶⁰⁹ He described the knowledge of God by creatures as “affirmative speculation” which “moved from the knowledge of creatures to the Creator as by effects to cause a process which, according to Planes, was validated by Aquinas, Pseudo-Dionysius the Areopagite, and most interestingly, Robert Grosseteste, who was well-known for his contributions to medieval natural philosophy.⁶¹⁰ Planes noted that:

...[it] is not a mode that is suited for everyone, but for those discursive understandings that know how to ponder things, and know nature, substance, and their accidents; or for people who are already enlightened in the knowledge and appreciation of the works of God, that in all things they find God...⁶¹¹

Here, it appears that Planes believed some knowledge of nature and of Aristotelian metaphysics (indicated by terms such as *substance* and *accidents*) was beneficial or even required for seeing the “footprints of God” in the created order.⁶¹² Planes further clarified what, exactly, is involved in contemplation of the created things. Citing Dionysius, Planes asserted that

...the divine virtue is in two ways: one uncreated, which is his essence, which is in all things, giving them being, and conserving them in him, but not mixed with anything; the other is created in things, and this same is in all things and mixed with them, communicating their certain participation, according to the capacity of each one, from whence all the perfections of the creatures come. Thus, there are also two ways of lifting the knowledge of God from the creatures; one affirming, the other negating. The lower knowledge is by affirmation, trailing [*rastreando*] after some radiances of uncreated excellence and beauty by the created virtue [of the created thing], as by the excellence of the effect, [you reach] that of its cause...⁶¹³

Planes's, elaborating on his early description of the footprints of God, described the first part of affirmative speculation as *rastreando* – a word which can mean trailing or

⁶⁰⁹ Planes, *Concordancia*, 81.

⁶¹⁰ Planes, 80.

⁶¹¹ Planes, 81.

⁶¹² Planes cited Dionysius for this term. Planes, 80. Footprints [*vestigia*] is also the term which Bonaventure employed in his *Itinerarium mentis*.

⁶¹³ Planes, 81.

tracking, or more metaphorically, seeking to validate by signs.⁶¹⁴ Instead of footprints, however, Planes's poetic image is of a person who is seeking glittering hints of radiance, shining through facets of creation. The apparent nature of these hints, however, needed additional translative work before they could be made into intelligible knowledge about God. After this first step, Planes detailed the second stage of affirmative speculation:

These properties and similarities of God, taken from the creatures, we set aside by the operation of the understanding of the imperfection of matter; and making of these subtle concepts, we cloth them with an infinite excellence in order to apply them to God, whose perfection, as the same S. Dionysius says, is located in an incomprehensible virtue above all created things...⁶¹⁵

What Planes had in mind by the “operation of the understanding” is not clarified – but this may be one reason why he thought a background in Aristotelian physics and metaphysics would be helpful. Thus presented, Planes's contemplative method is, in many ways, not incompatible with the natural theological method articulated by Suárez. Suárez argued that physical observation and demonstrations helped “prepare the way” for the heavy lifting of metaphysical reasoning. Similarly, Planes stated that after observing the superficial properties of the created world, an “operation of the understanding” was required to make “subtle concepts” before they could be rightly used to discuss God. What Planes termed “operation[s] of understanding” could very well be applied to Suárez's metaphysical reasoning – and certainly, Suárez's ideas qualify as “subtle concepts.” More likely, however, Planes and Suárez had in mind more substantively different forms of natural theology. For example, while Suárez thought that metaphysics could only generate certain knowledge regarding the existence of a single, uncreated, necessary being,

⁶¹⁴ See “rastrear,” for example, in “Diccionario de Autoridades - Tomo V (1737)[Diccionario de La Lengua Castellana, En Que Se Explica El Verdadero Sentido de Las Voces, Su Naturaleza y Calidad, Con Las Phrases o Modos de Hablar, Los Proverbios o Refranes, y Otras Cosas Convenientes al Uso de La Lengua.],” accessed June 23, 2019, <http://web.frl.es/DA.html>.

⁶¹⁵ Planes, *Concordancia*, 81–82.

Planes proposed that the end result of affirmative speculation was the discernment of attributes of God. This “God of nature” (a term Planes borrowed from St. Lawrence Justinian) could be described in discernible virtues including beauty, goodness, excellence, sweetness, highness, and purity.⁶¹⁶

Planes’s affirmative speculation of the creatures was therefore consonant in many ways with Nieremberg’s physiognomic reading of natural history and in part with the role for physics which Suárez described in his *Disputationes*. Yet Planes was also clear that there was a limit to the heights that reason could reach. Planes, following the Dionysian distinction between affirmative and negative theology, insisted that the contemplation of the creatures generated knowledge about God by both affirmative and negative contemplation.⁶¹⁷ In the first manner, described above, created things [*cosas criadas*] were studied for the similarities of the perfections of God to make affirmative, analogical statements (e.g. We consider the lilies to be beautiful; because God made the lilies, he must have, in some fashion or capacity, this observed beauty ∴ God is beautiful in a way analogous to our understanding of beautiful lilies). In the second method, however, the contemplative individual recognized “such infinite distance and difference” between the “uncreated virtue” of the Creator and the creation in this analogy – not precisely equivocal, but inaccessible by affirmative, rational speculation.⁶¹⁸ Planes wrote that

⁶¹⁶ Planes, 81–82, citing also Saint Lawrence Justinian.

⁶¹⁷ For an analysis on the Dionysian distinction between affirmative (k/cataphatic) and negative (apophatic) theology, by which Planes and the Spanish mystical tradition was greatly influenced, see Jones’s introduction. Pseudo-Dionysius Areopagite, *The Divine Names and Mystical Theology*, trans. John D. Johnes, Mediaeval Philosophical Texts in Translation 21 (Milwaukee, Wisconsin: Marquette University Press, 1980), 15–26; Barbara Mujica, “Beyond Image: The Apophatic-Kataphatic Dialectic in Teresa de Avila,” *Hispania* 84, no. 4 (December 2001): 741–48; Kevin Corrigan and L. Michael Harrington, “Pseudo-Dionysius the Areopagite,” *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), accessed August 16, 2020, <<https://plato.stanford.edu/archives/win2019/entries/pseudo-dionysius-areopagite/>>.

⁶¹⁸ “...tan infinita distancia, i diferencia...” Planes, *Concordancia*, 83; E. Jennifer Ashworth, “Medieval Theories of Analogy,” *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), November 29, 1999, <<https://plato.stanford.edu/archives/fall2017/entries/analogy-medieval/>>; for Suárez on analogy, see: Doyle, “Suarez...Analogy [1/2]”; John P. Doyle, “Suarez on the Analogy of Being,” *The Modern Schoolman* 46, no. 4 (May

“...from this inability to know anything of this virtue and divine uncreated essence comes the second knowledge, which they call ‘negative’ and more perfect than the previous.”⁶¹⁹ While Planes connects this with the “knowledge by the creatures to the Creator,” it is more precisely knowledge that is generated by examining what cannot be known by creatures. Planes uses the example of shadows, which indicate a source of illumination but in themselves are darkness.⁶²⁰ Here, for Planes, is where the limits of any reason or even cognition stop, and it is here where any natural theology becomes mystical theology in his work. Planes advised that:

...when the understanding arrives at knowing that [one] cannot know what God is...leave the negative discourse and active pondering there, which are inferior acts, drowning in that abyss of infinite greatness in which there is no bottom, no end; surrender and give up, and be quiet in this unknown light gilding this greatness, not in the smallness of your understanding.⁶²¹

For Planes, affirmative speculation and natural theology could only generate a limited set of knowledge which he denigrates multiple times as “lower.” On this, he agreed with other proponents of natural theology. Others, however, had used this occasion to assert the primacy of revealed doctrine and special revelation over natural theology, or indicated the need to turn to Scripture and *sacra doctrina* because of the insufficiency of natural theology. As was the case with the *dejamiento* of the *alumbrados* of the previous century. Planes’s alternative source of knowledge through unmediated, suprarational experience of union with God was neither describable nor definable and was viewed with suspicion of heterodoxy.

The connection with spiritual treatises of the sixteenth century is discernible not only in topics (for example, the purgative way of meditation), but by the evidence of citations in Planes.

1969): 323–41; E.J. Ashworth, “Suárez on the Analogy of Being: Some Historical Background,” *Vivarium* 33, no. 1 (1995): 50–75.

⁶¹⁹ Planes, *Concordancia*, 83.

⁶²⁰ Planes, 84.

⁶²¹ Planes, 84–85.

Planes appears to be most strongly influenced by the works of Pseudo-Dionysius (c. 600), especially as they were amended by Hugh of St. Victor (1096-1141) and Richard of St. Victor (d. 1173); but he also references Teresa de Ávila and Juan de la Cruz, two of the most important (and noticeably, accepted and approved) theologians of the Golden Age of mysticism. Yasmina Suboh Jarabo has studied this continuation of mystical theology, including the contemplation of the creatures, in Baroque spiritual treatises in Spain during the seventeenth century.⁶²² These works, according to Suboh Jarabo, included two types: programmatic or “doctrinal treatises” (such as the *Concordancia*), and more narrative and descriptive “experiential works”.⁶²³ Both were concerned with the same “way of perfection” (*camino de la perfección*).⁶²⁴ Suboh Jarabo asserts that historians have largely failed to consider the continuation of the mystic tradition beyond the sixteenth century, or have separated Baroque spiritual literature as distinct from the ecstatic religious experiences found in Golden Age spirituality.⁶²⁵ On the contrary, Suboh Jarabo argues that “...their intentions were the same as in previous centuries, [that is,] to inculcate and transmit the spiritual life to all the faithful, without taking into account their cultural level or social position.”⁶²⁶ Nor were these spiritual treatises limited to the Franciscan order, as they were predominantly in the century before.⁶²⁷ Suboh Jarabo highlights that these practices were cultivated with religious orders (primarily the Dominicans, Jesuits, Franciscans, and Discalced Carmelites). Thus, the historical record suggests that religious orders in Spain were actually

⁶²² Suboh Jarabo, “Inquisición, censura y literatura.”

⁶²³ Suboh Jarabo, 109.

⁶²⁴ Suboh Jarabo, 109.

⁶²⁵ Suboh Jarabo, “Inquisición, censura y literatura”; I support Suboh Jarabo's assertion: no serious study of seventeenth-century theology in Spain has yet been produced to equal, for example, the work of Melquiades Andrés Martín on the sixteenth. See: Andrés Martín, *La teología española*.

⁶²⁶ Suboh Jarabo, “Inquisición, censura y literatura,” 109–10; on the “plebian” or “vulgar” element of this theology, see: Castro Sánchez, “Construcción.”

⁶²⁷ Castro Sánchez estimates that twenty-three percent of spiritual treatises written during the period 1485-1750 were authored by Franciscans (sixty percent of the total number of treatises were written by regular clergy). Castro Sánchez, “Construcción del discurso,” 47.

crucial to the development and preservation of theological traditions which included natural theology in the early modern period (a point which will be contrasted with Protestant experiences in chapter five).

Treatises such as the *Concordancia* show how the contemplation of creaturely assent, especially as it then prompted internal reflection, continued to be associated with mystical spirituality and usually appeared in treatises which had the misfortune of including ‘mystic’ (*mística, mystica*) in their names – almost a surefire way of attracting the attention of Inquisition censors. “Mystical” spirituality could function as a catch-all term in the seventeenth century, and works like the *Concordancia* were loped in with the *Guia Espiritual* of the “abominable heretic Miguel de Molinos.”⁶²⁸ This connection may do much to further account for the persecution of spiritual treatises containing the contemplation of the creatures in the seventeenth century. No longer was an association with *alumbradismo* the main danger facing this practice; in the seventeenth century, these methods of interior spirituality were associated with quietism, and moreover, with a particular form of heretical quietism known as Molinism (named after Miguel de Molinos). Alvaro Huerga has argued that there is a direct, genealogical connection from *alumbradismo* to quietism, and from quietism to Molinism.⁶²⁹ This connection between Molinism and “mystical theology” may be seen, for example, in Antonio Arbiol y Díez’s *Desengaños Místicos (Mystical Disillusionments)*, a rebuff of Molinism first published in 1706 which detailed the various excesses and errors made by practitioners of mystical theology.⁶³⁰

The connection is ironic; Molinism depreciated the value of ‘discursive meditation’ in favor of

⁶²⁸ Joseph Massot, *Compendio Historial, de Los Hermitaños de Nuestro Padre San Agustin, Del Principado de Cataluña; Desde Los Años de 394. Que Empeçó San Paulinoà Plantar Monasterios En Dicho Principado, y de Los Que Despues Se Han Plantado: Como Tambien de Los Varones Ilustres, Que Han Florecido, Assi En Letras, Puestos, y Virtudes, Hasta Los Años de 1699* (Barcelona: En la Imprenta de Juan Jolis, 1699), 341–42.

⁶²⁹ Alvaro Huerga, “Del alumbradismo al molinismo,” *Angelicum* 67, no. 4 (1990): 499.

⁶³⁰ Antonio Arbio [Díez, OFM], *Desengaños Místicos a Las Almas Detenidas, o Engañadas En El Camino de La Perfeccion*, Tenth Printing (Madrid: En la Imprenta de Andres de Sotos, 1784), 6.

passive, interior stillness – the contemplation of the creatures which formed the first step of meditation for so many spiritual practitioners would likely have been rejected by Molinists. Whether or not it was because of its association with Molinism or some other offending tenet of mystical theology, the *Concordancia* was placed on the Index of Prohibited books by 1707.⁶³¹

Conclusions From Baroque Natural Theology

Having confronted with three different visions for natural theology, each with its own definition, methods, and uses, what can be surmised about natural theology more generally as it was found in Spain during the long-seventeenth century? At first glance, these alternative schemas seem to have little in common with one another. For example, Suárez and Nieremberg were both Jesuits, both educated at Spanish universities, both the authors of several well-received works, both living at comparatively the same time; yet their works demonstrate two radically different understandings of the way in which humans should approach, study, and learn about God from nature. Viewing their works in the light of natural theology as a concept allows historians and theologians to draw connections more ably between genres of theological and philosophical literature which have previously remained isolated from one another. A broad, inclusive definition of natural theology as a hermeneutical category (see introduction) helps to understand these thinkers conjunctively, viewing them as two different responses to the same set of fundamental questions. Natural theology asks, “What and how can humans naturally know about a divine being?,” and from this arises questions about the definition of nature, the scope of human reason, and the extent of knowledge about God that can be generated. To conclude this chapter, I examine two essential points which are raised by all three visions of natural theology

⁶³¹ Although not on the 1667 Sotomayor Index, the *Concordancia* is on the 1707 Sarmiento-Valladares Index. s.n., *Index Expurgatorius Hispanus Ab Ex.Mo Dno D Didaco Sarmiento, et Valladares Inceptus, et Ab Ill.Mo D.No D. Vitale Marin Perfectus* (Madrid: Ex Typographia Musicae, 1707), 113, 778.

during the Spanish Baroque: first, the relationship between natural theology and the formation of natural philosophy, and secondly, the role of analogy in constructing natural theology.

Ultimately, I end by suggesting that natural theology invites historians to reconsider the seventeenth century as a dynamic period of transition intellectually.

Natural Philosophy and Natural Theology in the Spanish Baroque

Many scholars have portrayed the development of science in seventeenth-century Spain as one which languishes behind the rest of Europe. The ‘scientific revolution’ and the introduction of the ‘new sciences’ are seen as slow to take hold in Spain and not fully realized until much later in the eighteenth century. Seen from a modern perspective, epistemological values of the “new science”: empiricism, observation, direct experience, experimentalism, mechanicalism, and the search for laws of nature faced stiff competition from traditional authorities, Aristotelian physics, text-based practices, and the search for a “transcendent and symbolic vision of natural phenomena.”⁶³² As part of the ‘polemic of Spanish science’ (discussed in chapter five), historians have portrayed natural philosophy in seventeenth-century Spain as “isolated” from the rapid developments which took place on the continent.

Nieremberg and Isla’s investigations of the natural world are distant from the work of the household names of the ‘Scientific Revolution’, and even further removed from modern understandings of scientific activity. Because their approaches to natural philosophy, and particularly natural history, utilized the study of nature in order to generate allegorical, theological knowledge, many scholars have excluded their contributions from consideration as serious or legitimate forms natural science. Ashworth, defending the study of emblematicism, argued that “...such a conclusion makes a dangerous presupposition about natural history; it

⁶³² Pizarro Gómez and García Arranz, “La visión de la naturaleza,” 221.

assumes that good natural history consists only of true facts, and that a natural history containing mythical or apocryphal information is somehow inferior..⁶³³ Moreover, it presents a sterilized and compartmentalized understanding of natural philosophy, one that by its definition assumes that any attempt to elicit moral, philosophical, or theological meaning from its study compromises its validity. Like the emblematic worldview, natural theology functions as a hitherto underutilized hermeneutic for making sense of the intellectual activity of Baroque Spain. Seen through natural theology, Isla and Nieremberg's work, instead of being relegated to hermeticism, magic, occult science, or pseudo-science, are rescued as manifestations of one of the primary motivations of the seventeenth-century: how are humans to understand nature, and what can nature tell us?

As noted above, Portuondo has suggested that natural theology in Spain can be seen as part of what she describes as 'the Spanish disquiet' – the uncertainty and restlessness which Spaniards had when confronted with the insufficiencies of any one paradigm of scientific inquiry to explain and account for the natural world. She writes that:

Spain's scientific enterprise wrestled with fundamentally the same philosophical concerns that drove the development of science elsewhere in Europe, but, by having tested the bounds of empiricism early on and having identified its shortcomings, sought – perhaps longer than most – a cohesive and comprehensive natural philosophy through which to interpret the natural world.⁶³⁴

Portuondo's assertion is that natural theology and the variations of natural philosophy practiced in the seventeenth century are evidence of an attempt to maintain an explanatory framework for unifying human knowledge and experience. The image might be further explained by applying Kuhnian terms: by the seventeenth century, a significant number of scientific anomalies had accumulated to place epistemic stress on the Aristotelian-natural-philosophical paradigm in

⁶³³ Ashworth, Jr., "Emblematic Natural History," 20.

⁶³⁴ Portuondo, "On Early Modern Science," 195.

which Spain operated.⁶³⁵ Now in crisis during the seventeenth century, Spanish intellectuals sought to offer alternative paradigms which could offer more intelligible and replete explanations; there was a certain degree of incommensurability between the languages of these paradigms (symbolic, emblematic, physiognomatic, etc.).⁶³⁶ In seventeenth-century Spanish science, the new ‘normal’ of mechanicalism would not yet take root until the early-eighteenth century (explored in the following chapter).

Portuondo also rightly notes that natural theology and natural philosophy existed in a mutual relationship; she asserts that it established a “correlation between scriptural texts and the natural world,” and cites Kevin Killeen’s argument that there was a “reciprocal hermeneutics” between the two.⁶³⁷ This is partially right – but natural theology worked beyond establishing a hermeneutical relationship between text and nature, but between doctrine and authority and nature, and even between metaphysics and physics. Suárez’s natural theology, for example, establishes the very ontological rules that ground natural philosophical activity. The works surveyed in this chapter indicate that scientific activity and practices in seventeenth-century Spain can only be understood by framing them within a natural philosophy – and that these natural philosophies were directly informed by theological ideas. Not only did natural theology provide the motivation or legitimization of natural philosophy, but it impacted the way that epistemic rules for the practices and methods of the natural sciences were established. It is, perhaps, a fitting example that Nieremberg was simultaneously the chair of both Sacred Scripture and Natural History at the *Colegio Imperial*.

⁶³⁵ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, Second Edition (Chicago: Chicago University Press, 1970).

⁶³⁶ What one scholar has called “...alternative currents to Aristotelian natural philosophy.” Sergius Koder, “Giambattista Della Porta,” *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), accessed September 12, 2020, <<https://plato.stanford.edu/archives/sum2015/entries/della-porta/>>.

⁶³⁷ Killeen cit. and Portuondo cit. in Portuondo, *The Spanish Disquiet*, 7.

The Seventeenth Century and Spanish Intellectual History: Stagnant or Dynamic?

The volatility of the seventeenth century poses a considerable challenge for scholars interested in the intellectual history of Spain. On the one hand, this time was marked by significant contributions in literature (Cervantes, Quevedo, and Lope de Vega, among others) and statecraft and juridical studies, the flourishing of the fine arts, the impact of the Catholic Reformation, and even at the end of the century, the birth of a movement of natural philosophical inquiry (the *novatores*).⁶³⁸ On the other hand, Spain experienced territorial losses (for example, from the dissolution of the Iberian union in 1640 and the concessions of the Treaty of Münster in 1648) and economic difficulties, described by some scholars as “an inevitable regression at all levels.”⁶³⁹ Added to these considerations are the arguments above concerning the ‘backwardness’ of Spanish science during the seventeenth century. For many scholars, therefore, the seventeenth century in Spain has largely been characterized as a period of intellectual stagnation, in which the Baroque has taken on its alternative definition of exaggerated ornateness without any true substance.

Recent studies have challenged this position. Jeremy Robbins, for example, has asserted that the seventeenth century was: “a pivotal period in the history of ideas...the philosophical and scientific revolutions...gradually transformed the intellectual landscape of Europe by establishing a secular scientific, and pragmatic conception of knowledge and enquiry.”⁶⁴⁰ Yet as Robbins

⁶³⁸ Ezequiel Gonzalez Mas, *Historia de la literatura española: barroco (siglo XVII)* (Dominican Republic: Editorial de la Universidad de Puerto Rico, 1989); Robert Harbison, *Reflections on Baroque* (London: Reaktion Books Ltd, 2000); Michael A. Mullett, *The Catholic Reformation* (London: Routledge, 1999); Maravall, *Culture of the Baroque*.

⁶³⁹ There is a longstanding debate on whether there was an actual economic decline and to what extent this was perceived by Spaniards at the time. See: Earl J. Hamilton, “Revisions in Economic History: VIII. - The Decline of Spain,” *Economic History Review* 8, no. 2 (May 1938): 168–79; John H. Elliott, “The Decline of Spain,” *Past & Present* 20 (November 1961): 52–75; Henry Kamen, “The Decline of Spain: A Historical Myth?,” *Past & Present* 81 (November 1978): 24–50; J.I. Israel, “The Decline of Spain: A Historical Myth?,” *Past & Present* 91 (May 1981): 170–80; Henry Kamen, “The Decline of Spain: A Historical Myth?: A Rejoinder,” *Past & Present* 91 (May 1981): 181–85; Pizarro Gómez and García Arranz, “La Visión de La Naturaleza,” 225.

⁶⁴⁰ Robbins, “The Arts of Perception,” 1.

argues, little attention has been paid to how these movements took place in Spain.⁶⁴¹ Examining the panorama of Baroque natural theology, the seventeenth century shows that the intellectual and theological waters of Spain were far from stagnant; new ideas were being proposed, new information processed and studied; old ideas were revamped, contested, rejected, and reformatted. Terms like “Scholasticism,” “Baroque,” or “Aristotelian” have often been applied sweepingly to the period in histories of Spain, leaving the impression of a monolithic, uniform, and static group of ideas. An examination of Spanish natural theology and its authors, however, demonstrate how complex the relationship between nature, reason, and the knowledge of God was during this period – its manifold and alternative expressions demand that historians and theologians reconsider science, philosophy, and theology in seventeenth-century Spain as a dynamic and rich field.

⁶⁴¹ Robbins, 1.

Chapter IV. Repurposing and Expanding Natural Theology in Enlightenment Spain (1720-1825)

Introduction: Natural Theology in the Enlightenment Classroom⁶⁴²

On Sunday, July 15th, 1787, Agustín de Silva-Fernández de Híjar y Rebolledo de Palafox Abarca de Bolea, the Count-Duke de Aliaga y Castellot, sat through two public examinations – first, at ten o’clock in the morning and later that afternoon at five o’clock, where he had to articulate 324 propositions regarding logic, ontology, psychology, and natural theology.⁶⁴³ The Count-Duke, who would one day become the Director of the Royal Economic Society of Madrid, was fourteen at the time and a student at the *Reales Estudios de San Isidro*; these examinations formed part of his education there.⁶⁴⁴ In the final section, “natural Theology,” he had to defend ten statements, including “There exists a necessary and eternal being whom we call God.”⁶⁴⁵ A report of the exam published in a monthly circular afterwards expounded on the definition of natural theology, writing that it was “on the existence and attributes of God, on internal and external worship, and on natural and revealed religion, etc.”⁶⁴⁶ Natural theology was, in fact, part

⁶⁴² N.b. This chapter incorporates work from my MSt thesis (Oxford 2018).

⁶⁴³ s.n. [Conde Duque de Aliaga], *Exercicio público de Lógica, Ontología, Psicología, y Teología Natural que ha de tener el Conde Duque de Aliaga, y Castellot, Marques de Almenara, Grande de España de Primera Clase, en la Capilla de los Reales Estudios de Madrid, el día [...] de julio de 1787[,] Asistido de su Catedrático Don Manuel Trabeso y Castro* (Madrid: Viuda de Ibarra, 1787), <http://bdh-rd.bne.es/viewer.vm?id=0000077308&page=1>; s.n., “Num. 379. Diario Curioso, Erudito, Economico, y Comercial. Del Sabado 14 de Julio de 1787..” in *Diario de Madrid, que comprehende los meses de julio, agosto, y septiembre de 1787*, vol. 5 (Madrid: En la Imprenta de Hilario Santos, 1787), 58; Richard L. Kagan, *Students and Society in Early Modern Spain* (Baltimore: Johns Hopkins University Press, 1974), 119.

⁶⁴⁴ The institute was only recently founded in 1770 following the expulsion of the Jesuits from Spain in 1767. The building was formerly the Jesuit *Colegio Imperial*, where Nieremberg taught natural history. See the description of the *Colegio Imperial* given in chapter three. Antonio Astorgano Abajo, “Agustín de Silva Fernández de Híjar y Rebolledo de Palafox Abarca de Bolea,” *Real Academia de la Historia: Diccionario Biográfico Español*, accessed August 18, 2020, <http://dbe.rah.es/biografias/19234/agustin-de-silva-fernandez-de-hijar-y-rebolledo-de-palafox-abarca-de-bolea>; s.n., “El Colegio Imperial de Madrid y Los Reales Estudios de San Isidro,” Universidad Complutense de Madrid, Biblioteca Histórica Marqués de Valdecilla, s.a., <https://biblioteca.ucm.es/historica/bc-colegio-imperia>.

⁶⁴⁵ s.n. [Conde Duque de Aliaga], *Exercicio público*, 74.

⁶⁴⁶ s.n., “Memorial Literario. Julio de 1787. Número XLIII.,” in *Memorial Literario, Instructivo y Curioso de La Corte de Madrid*, vol. Tomo XI (s.u. [Madrid]: En la Imprenta Real, 1787), 301. As referenced in the introduction, “natural religion” is not synonymous with “natural theology” in early modern Spain; rather, in the eighteenth century, natural religion was seen as relying upon natural theological insights, but was itself considered an

of the curricula for many universities and seminaries in the eighteenth century.⁶⁴⁷ When the *reales estudios* were originally established in 1625, there was no explicit mention of ‘natural theology’ in the curriculum. By the eighteenth century, however, it was established enough as concept that it had a set of basic propositions and was taught regularly to students.

Two years earlier, in 1785, the Royal Seminary of Nobles published an outline of the studies which their pupils must learn; this included a class in “logic and metaphysics” in which pupils learned “the parts of Metaphysics, to wit: Psychology, Ontology, and natural Theology, this work occupying two hours in the morning...”⁶⁴⁸ This course formed the first of three years of instruction for students of philosophy at the seminary.⁶⁴⁹ Before this, the Royal University of Granada approved an overhaul of their curriculum in 1776, perhaps as a consequence of the expulsion of the Jesuits. Part of the instituted changes added twelve new chaired professorships. A royal provision describing the chairs in the faculty of philosophy revealed the way this subject was to be approached.⁶⁵⁰ “Philosophy is divided into three parts,” it declared,

Rational, Natural, and Moral; the first is Logic, the second is Metaphysics and Physics, and the third is Ethics or Morality...Natural philosophy, which embraces the knowledge of divine and human things, [on the grounds] that they can be understood by natural reason, comprehends metaphysics and physics.⁶⁵¹

incomplete practice or way of recognizing God. Natural religion is not equated with natural theology in this consideration, but rather seen as an occasional product of it.

⁶⁴⁷A similar exam occurred at the Real Universidad de San Marcos, recorded in the *Mercurio Peruano*, 29 August 1793, where natural theology was defined as “...a well-organized compendium of all the truths that are about divine nature, its attributes and works that the profound meditation of the Philosophers has discovered.” s.n., *Mercurio Peruano* [1793], Tomo VII (1793): 288–89.

⁶⁴⁸s.n., *Plan de estudios y habilidades, que por ahora se tienen y enseñan en el Real Seminario de Nobles de esta corte, con una noticia de lo que la Real Casa les dá para su decencia, de lo que han de contribuir por sus alimentos, y de la ropa y efectos que deben traer consigo; como tambien de las circunstancias con que deben formarse los papeles ó informaciones de Nobles que han de presentar* (Madrid: Por D. Joachin Ibarra, 1785), 4–5.

⁶⁴⁹Jacques Soubeyroux, “El Real Seminario de Nobles de Madrid y La Formación de Las Élités En El Siglo XVIII,” *Bulletin Hispanique* 97, no. 1 (1995): 207. Soubeyroux states that the text for this course was Antonio Genovesi’s *Logica e Metafisica* (1767).

⁶⁵⁰s.n., “Cronología [Universidad de Granada],” Universidad de Granada/Historia/Cronología, s.a., <https://www.ugr.es/historia/cronologia>; s.n., *Real Provision de Su Majestad, y Señores Del Consejo. Por La Que Se Establece El Numero de Catedras, y El Metodo de Eseñanzas y Estudios Que Ha de Haver Desde Su Publicacion En La Real Universidad de Granada* (Madrid: En la Imprenta de Blas Román, 1776).

⁶⁵¹s.n., *Real Provision*, 7b–8b.

The subjects for which the chair in metaphysics was responsible included “...natural Theology, that is, the knowledge of God and the Angels according to the sphere of the natural reason of man.”⁶⁵² In this new plan of studies, developed at the end of the eighteenth century in Spain, metaphysics, physics, philosophy, natural philosophy, and natural theology remained comingled together. Similarly, in 1819, a plan for public education suggested that “One will study Philosophy thusly: first year, Logic and Metaphysics with Arithmetic, second, Algebra and Experimental Physics, third, natural Theology and moral Philosophy, with a short notice on the history of Philosophical knowledge.”⁶⁵³ Natural theology, so infrequently used as an explicit term in Spain before 1720, was recognized time and again as a fundamental part of philosophical theology at the end of the eighteenth century and was included as part of a necessary education.

Yet at the same time, there were those who argued against this. Fray Francisco Alvarado, in a letter originally written 10 April, 1787, lambasted the comments of Antonio Genovesi, whose *Logica e Metafisica* (1767) was the textbook at the Royal Seminary of Nobles.⁶⁵⁴ Genovesi had written that “I would abolish so many school[ing] of metaphysics and scholastic theology, and in exchange I would introduce a little more physical theology, because the century is philosophical.”⁶⁵⁵ This, Alvarado believed, was illustrative of everything wrong at the end of the eighteenth century. “What purpose do so many chairs of metaphysics and theology have?” he asked sarcastically.⁶⁵⁶ “Wouldn’t it be better to abolish all the first ones and give a new

⁶⁵² Philosophy had five chairs: one chair was given to metaphysics, while two were devoted to physics (general and experimental). The remaining two chairs were for Logic and for Ethics and Moral Philosophy. s.n., 1b, 8a-b.

⁶⁵³ P.D.M.A.L., *Sistema de Educacion Pública General Conforme al Espíritu de La Constitucion Política de La Monarquía Española* (Madrid: En la Imprenta de Nuñez, 1820), 52.

⁶⁵⁴ Soubeyroux, “El real seminario,” 207.

⁶⁵⁵ El Filósofo Rancio [Alvarado, Fray Francisco], *Cartas Filosóficas que bajo el supuesto nombre de Aristóteles*, vol. V [1825] (Madrid: Imprenta de E. Aguado, 1824), 223.

⁶⁵⁶ El Filósofo Rancio [Alvarado, Fray Francisco], Tomo V: 223.

aspect to the second ones? Can one not invent a physical theology?”⁶⁵⁷ Alvarado continued his sardonic complaint:

How inconvenient can it be to explain the Trinity by Newtonian attractions, predestination by Leibnizian harmony, religion by Wolffian mathematics, and other mysteries by Cartesian particulars? ...*Physico-theology*: Yes sir – Let it be based on experiments that look at the object of a natural body and that explain everything by the mechanism of parts. *Physico-theology*: because the century is philosophical, *hoc est* [that is], because the theologian should accommodate himself to the lunacies of the century in which he writes; because the century of the impious is bad with metaphysics and sacred studies; ...because the century that would not want there to be a God wants to at least put up a wooden God...ultimately, because a Christian, a theologian and an abbot, should conform himself *huic saeculo* [this present age]. For all of these reasons one should choose a Physical Theology...⁶⁵⁸

Alvarado’s blistering critique included insinuations that physico-theology was materially reductionist and accommodated to the new philosophies of science, that it was connected with foreign and Protestant authors and thinkers, and that it was crafted as a way of avoiding sacred doctrine and resulted in supporting the idea of a lesser, false deity. How did natural theology become to be associated with this narrower definition of “physico-theology” over the course of the eighteenth-century? Were the alternative traditions of previous centuries still practiced?

Alvarado’s complaints notwithstanding, natural theology became a legitimate and fundamental part of philosophical and theological education by the end of the 1700s. Indeed, the eighteenth century witnessed the high-water mark of natural theology in Spain. Works dedicated to exploring the way that reason and nature could produce some knowledge of the existence or attributes of God and construct a “natural religion” were frequently published and widely available, and the discussion of natural theology advanced considerably. The eighteenth-century witnessed the unification of the various traditions of natural theology which had previously been

⁶⁵⁷ El Filósofo Rancio [Alvarado, Fray Francisco], Tomo V: 223.

⁶⁵⁸ El Filósofo Rancio [Alvarado, Fray Francisco], V [1825]:223–24.

established in Spain over the previous centuries. Natural theology during this time expanded the frame of “nature,” especially through advancements in the natural sciences; it popularized the concepts of “natural theology,” “natural religion,” and “physical theology.” Perhaps most importantly, it repurposed natural theology as a legitimate philosophical practice and enterprise, especially highlighting its utility as a form of apologetics in defending Christianity from irreligious ideas in the enlightenment.

This chapter explores the definitions and uses of natural theology throughout the Spanish enlightenment by surveying several of the key works of natural theology in the eighteenth-century. Unlike the previous chapters which have examined individual works, this chapter uses examples from a handful of the most influential works of natural theology during the Spanish enlightenment, and examining parts of these treatises in detail to reveal the argumentation of such works.⁶⁵⁹ This is, in part, because many more works were authored in the eighteenth century which specifically referenced “natural theology” as a term – in previous chapters, I have considered works which never or only occasionally used “natural theology” as an appellation; in the eighteenth century, “natural theology” occurs in nearly every text which addresses the topic.

⁶⁵⁹ Juan Bautista Berni y Catalá, *Filosofía racional, natural, metafísica i moral*, vol. 3. (Valencia: Antonio Brodazar de Artàzu, 1736); Luis Joseph Pereira, *Theodicea, o La religion natural :defendida contra sus enemigos, los antiguos, y nuevos philosophos : con demonstraciones metaphysicas que ofrece el systema Mechanico, dispuestas con método geometrico* (Madrid: En la Oficina de Pantaleon Aznar, 1771); Fernando de Ceballos y Mier, *La Falsa Filosofía, o el ateismo, deismo, materialismo, y demas nuevas sectas convencidas de crimen de estado contra los soberanos y sus regalías, contra los magistrados y potestades legítimas*, Second edition, vol. 1. (Madrid: En la Imprenta de D. Antonio de Sancha, 1775); Juan Francisco de Castro [Fernández], *Dios, y la Naturaleza. Compendio Histórico Natural, y Político del Universo, en que se demuestra la Existencia de Dios, y se refiere la Historia Natural, y Civil, la Religion, Leyes y costumbres de las Naciones antiguas y modernas mas conocidas del Orbe*, vol. 1. (Madrid: Joachin Ibarra, Impresor de Cámara de S.M., 1780); Vicente Fernández Valcárcel, *Desengaños Filosóficos, Que En Obsequio de La Verdad, de La Religion, y de La Patria...*, First edition, vol. 1. (Madrid: Don Blas Roman, Empresador de la Real Academia de Derecho Español y Publico, 1787); Theodoro de Almeida, *Armonía de la razon y de la religion, ó, Teología natural: obra escogida del P.D. Teodoro de Almeida, contra las absurdas opiniones de los filósofos del día : este tratado particular sirve de tomo IX y es el complemento de la Recreacion filosófica* (Madrid: en la Imprenta de la Rifa del Real Estudio de Medicina Práctica, se hallará en la librería de Castillo, 1798).

In addition to these, many more sources should be considered if a more inclusive understanding of “natural theology” is adopted.

This chapter advances three points concerning the definition and use of natural theology, each corresponding to the three ‘realms’ sketched out in the introduction to this dissertation. First, I describe the various ways in which eighteenth-century thinkers in Spain defined and understood the parameters of ‘natural theology.’ I demonstrate that natural theology was classified as a part of metaphysical philosophy distinct from ‘proper’ theology, and I also examine the parameters which Spanish thinkers drew around the concepts of “natural reason” and “nature” as the sources of natural theology. I examine especially the different interpretations of the “natural” and of the “created world.” I also briefly survey the influence of previous works in the eighteenth-century literature, noting that largely absent from the record is any mystical or Sibiudan natural theologies which emphasize the *scala naturae*. In this first section, I therefore analyse what eighteenth-century Spanish natural theology considered its source material to be – i.e. what constituted *nature* for theologians during this time.

Secondly, I examine the arguments that different natural theologies marshaled in order to suggest or prove theological knowledge. The different methods used relied, in large part, to the understanding of the source material (nature). I assert that the articulation of natural theology was greatly influenced by the development of the natural sciences and particularly the field of natural history. Natural theologies which utilized lessons from natural history and which formed arguments from design were prominent, and related to contemporary European works of physico-theology. At the same time, however, cosmological arguments remained popular expressions of natural theology. Thus, in this second section, I assess how Spanish natural theology during the Enlightenment justified its arguments as rational, intelligible, and defensible.

Lastly, I consider the purpose of natural theology, arguing that during the Spanish enlightenment, natural theology in eighteenth-century Spain was repurposed as a primarily apologetic discourse. This was in response to the perceived threat of deism and atheism in Spain, seen especially as being the result of new philosophies, new sciences, and foreign influences. Although it continued to have a catechetical, contemplative, and devotional aspect, the defence of the Christian faith was a paramount influence in shaping Spanish natural theology during this time. In this third section, I consider what type of knowledge about God was considered achievable by Spanish natural theologians.

I conclude this chapter by tracing the impact of natural theology to other intellectual and theological concerns of eighteenth-century Spanish society, contextualizing developments in natural theology within the broader, historical *mentalité* of the Hispanic enlightenment. I argue that natural theology sacralized and legitimized the pursuit of science, expanded the consideration of the “natural,” linked nature with creation, shored up the metaphysical underpinnings of the natural sciences, added to the efforts to refute secular philosophies, and reified and legitimized the tradition of natural theology. This, in turn, elucidates such historical phenomena as the development of natural philosophy, desacralization and the reification of the divide between science and theology, and the shift of epistemic standards, evidentialism, and verificationism. An examination of natural theology challenges, therefore, existing notions of rationality and the practice of natural philosophy during the enlightenment. Thus, the case study of eighteenth-century Spain is not only of interest as an historical novelty. It can also inform contemporary discussions on the definitions and uses of natural theology.⁶⁶⁰

Defining Natural Theologies in Eighteenth-Century Spain

⁶⁶⁰ This point is further explored in the conclusion.

As in previous centuries, the term referred to not just one, but an entire set of philosophical and theological practices. Eighteenth-century writers often used several other terms interchangeably or parasynonymously. The polysemic nature of the term evinces, undoubtedly, the definitional instability and fluid nature of the concept in the early modern period. By comparing the major works of the genre, however, an aggregated, general definition of natural theology in the eighteenth century becomes clear. These are that it was a (1) philosophical process belonging to metaphysics; (2) it relied upon natural sources, seen mainly as (a) the observation of the natural world and (b) the use of natural reason; (3) it was therefore often contrasted to ‘Revealed Theology.’ By the eighteenth century, none of these points were novel – each had already been established in the longstanding tradition of natural theology in Spain.

Natural Theology as a Philosophical and Metaphysical Enterprise

We have seen that natural theology was rarely defined in an outright manner; instead authors provided roundabout, appositive definitions of their subject matter. Teodoro de Almeida (1722-1804), a Portuguese Oratorian priest whose works were translated and widely disseminated in Spain wrote that his work, *The Harmony of Reason and Religion* (1793), contained a subtitle noting that “it discusses Natural Theology.”⁶⁶¹ The term, however, is assumed – for at no point in the work did Almeida provide a straightforward definition. Such vague or assumed usage is not uncommon in the eighteenth-century literature. Occasionally, however, authors supplied clearer explanations, making the sources and scope of natural

⁶⁶¹ José Alberto Silva, “The Portuguese Popularizer of Science Teodoro de Almeida: Agendas, Publics, and Bilingualism,” *History of Science* 50, no. 1 (March 2012): 93–122; Francisco Contente Domingues, “A Scientist between Religion and Politics in Portugal (1751-1800): Teodoro de Almeida,” *History of European Ideas* 11, no. 1–6 (January 1, 1989): 325–29; Ferdinand Azevedo, “Teodoro de Almeida: A Religious Orator of the Portuguese Enlightenment,” *Luso-Brazilian Review* 16, no. 2 (December 1, 1979): 239–47; Breno Ferraz Leal Ferreira, “A Teologia Natural Na Cultura Científica Da Ilustração Portuguesa: Oratorianos e Franciscanos (1750-1800),” *Revista de História (São Paulo)*, no. 177 (December 1, 2018): 1–31.

theology more explicit, including its classification as a type of philosophy related to the vaguely defined discipline of metaphysics. Juan Bautista Berni y Catalá (1705-1738), for example, discussed natural theology in his project in *Rational Philosophy* (1736) as a form of metaphysics.⁶⁶² Berni y Catalá, a Valencian priest and theologian as well as the chair of philosophy at the University of Valencia, dedicated the third of this four-volume work to what he labeled “transnatural philosophy, or metaphysics.”⁶⁶³ He was aware that the enterprise was known by many names, writing that:

[...] some call it, with Aristotle, *Metaphysics*, that is, *science that is the end of Physics*; others *Transnatural*, that is, superior to the natural; others *First Philosophy*, that is, the most principle; others, *Natural Theology*, because it concerns God, according to the achievements of natural reason.⁶⁶⁴

For Berni y Catalá, therefore, natural theology was “part of philosophy,” or more specifically, metaphysics, and was so named because it applied a natural subject (reason) to a theological purpose.⁶⁶⁵ This definition is consonant, for example, with the use of the term in Suárez.

Similarly, when critics of the medical doctor Luis Joseph Pereira’s *Theodicy, or Natural Religion* (Madrid, 1771) levied the charge that as a physician rather than a theologian, Pereira was unfit to study the subject, he countered that his work did not belong to the realm of theology at all, but was a philosophical exercise.⁶⁶⁶ “...As if,” he wrote, “the work could not be pure natural Theology, or Metaphysical [theology], which is a part of Philosophy, which, by the Laws

⁶⁶² s.n., “Berni y Catalá, Juan Bautista, 1705-1738,” Universidad Complutense de Madrid, Biblioteca Histórica Marqués de Valdecilla, s.a., <https://biblioteca.ucm.es/historica/berni-y-catala>.

⁶⁶³ s.n.; Berni y Catalá, *Filosofía III*, III:1; Francisco Aguilar Piñal, *Bibliografía de autores españoles del siglo XVIII*, vol. I: A-B (Madrid: Consejo Superior de Investigaciones Científicas, 1981), 630–31; Aniceto Masferrer, “José Berni y Catalá,” Real Academia de la Historia: Diccionario Biográfico Español, s.a., <http://dbe.rah.es/biografias/31086/jose-berni-y-catala>.

⁶⁶⁴ Berni y Catalá, *Filosofía III*, III:2.

⁶⁶⁵ Berni y Catalá, III:2.

⁶⁶⁶ Luis José Pereira (alternatively, Pereyra), was a Portuguese doctor of both medicine and philosophy. Born in Evora but educated in Leiden, he became a member of the Academy in Oporto before practicing in Madrid. It was in Madrid, in 1771, that he authored the *Theodicy*. Pereira, *Theodicea*.

of Spain, every Physician ought to know.”⁶⁶⁷ Natural theology was therefore, in many ways, seen as a misnomer by Spanish intellectuals. The “theological” label was applied to the discipline because the practice often led to speculation about the existence and nature of God, but the work and method itself was wholly philosophical. Pereira stated that he “[wrote] as a pure Philosopher,” and that his “work...is all metaphysics, founded in mechanical physics...”⁶⁶⁸ Whether natural theology was seen as part of metaphysical theology is unclear – Fernandez Vicente Valcárcel, for one, distinguished in his four-volume work *Philosophical Disillusionments* (1787-1797) between the two, noting that “one already knows that Metaphysics is that which can have an influence on Natural Theology,” and described them as separate conceptual categories, for example, “...in Metaphysics and in Natural Theology.”⁶⁶⁹

The emphasis of the metaphysical categorization of natural theology is a point which distinguishes Spanish natural theology from other traditions; indeed, the history of metaphysics in the formation of natural theology remains, as Mandelbrote has asserted, “curiously underexplored.”⁶⁷⁰ In the previous chapter, the work of Suárez demonstrated how metaphysical categories had a discernible impact on the formation of physical theories and natural

⁶⁶⁷ Pereira, 31.

⁶⁶⁸ Pereira, 28; Pereira, 42–43.

⁶⁶⁹ Valcárcel, *Desengaños I [Madrid 1787]*, 1:21; Vicente Fernández Valcárcel, *Desengaños filosoficos, que en obsequio de la verdad, de la religion, y de la patria...*, First edition, vol. 2 (Madrid: Don Blas Roman, Empresor de la Real Academia de Derecho Español y Publico, 1788), 184. Emphasis added. Vicente Fernández Valcárcel (1723-1798) was a canon of the cathedral in Palencia and sometime Royal Chaplain for Fernando VI and Carlos III, as well as serving as a synodal examiner. See: Antolín Alvarez Torres, “Historia Crítica de La Filosofía Racionalista y Empirista En La Obra Del Dr. Vicente Fdez. Valcarcel” (Tesis doctoral, Palencia: Excma. Diputación Provincial de Palencia, Departamento de Cultura, Universidad de Valladolid, 1991); s.n., *De Las Exequias, Que El Real Colegio de San Phelipe, y Santiago de La Universidad de Alcala, Fundación Del Rey Don Phelipe II Para La Educación de Los Hijos de Los Criados de La Casa Real. Celebró Por El Rey Nuestro Senor Don Fernando VI (Que Esté En Gloria) En La Real Capilla de San Diego de Alcala, Los Días 16 y 17 de Marzo Del Año de 1760. Y Oracion Fúnebre Que En Ellas Dixo El Doctor Don Vicente Fernandez Valcarce, Capellan de Honor de S.M. y Penitenciario de Su Real Capilla.* (Madrid: Antonio Perez de Soto, Impresor de los Reynos, 1761); Menéndez y Pelayo, *Heterodoxos*.

⁶⁷⁰ Mandelbrote, “Early Modern Natural Theologies,” 83.

philosophy.⁶⁷¹ Suárez, however, was seldom specifically referenced in eighteenth-century natural theologies. In the same year that Berni y Catalá wrote *Rational Philosophy*, the polymath Benedictine priest-philosopher Benito Jerónimo Feijóo (1676-1764) argued that the subjects of metaphysics and physics needed to be pruned of disciplinary overgrowth that had cropped up over the previous century. In two connected essays (“What Should Stay and Go in Logic and Metaphysics” and “What Physics Covers and it is Missing”), he claimed that the “necessary and essential” core of metaphysical inquiry was “infinite being” (God).⁶⁷² He wrote that “God is the object of Metaphysics” in so far as God is *ente* [being].⁶⁷³ This is why, according to Feijóo, Aristotle named metaphysics as a type of theology. Feijóo stated that: “[Aristotle] has no doubt that Metaphysics is truly Theology: Theology, I call natural [theology]...I ask now, in what part of the world [should] this natural Theology be taught, if it is distinct from Metaphysics?”⁶⁷⁴

⁶⁷¹ Mandelbrote and other scholars have suggested that Aristotelian metaphysics were wedded to new natural philosophies in Suárez. Mandelbrote, 83; Charles H. Lohr, “Metaphysics and Natural Philosophy as Sciences: The Catholic and the Protestant Views in the Sixteenth and Seventeenth Centuries,” in *Philosophy in the Sixteenth and Seventeenth Centuries*, ed. Constance Blackwell and Sachiko Kusukawa (Aldershot: Ashgate, 1999), 280–95.

⁶⁷² Benito Jerónimo Feijóo, *Teatro crítico universal*, New edition, vol. 7 (Madrid: Andrés Ortega, a costa de la Real Compañía de Impresores y Libreros, 1778), VII.12§3¶16:305, VII.13, <http://www.filosofia.org>.

⁶⁷³ Feijóo, *TCU VII*, VII.12§3¶16:305.

⁶⁷⁴ Feijóo, *TCU VII*, VII.12§3¶16:306.

Fig. IV.1 Categorizing Natural Theology as Metaphysics, s. xviii

Berni y Catalá, 1736: ⁶⁷⁵			
Philosophy	Metaphysical	Natural Theology	
		Psychology	
		Ontology	
	Moral	Ethics	
	Rational	Logic	
	Natural	Physics	
Royal Provision for Education, 1776: ⁶⁷⁶			
Philosophy	Moral	Ethics	
	Rational	Logic	
	Natural	Physics	
		Metaphysics	Natural Theology
			Psychology
	Ontology		
Vallejo y Alcedo, 1782: ⁶⁷⁷			
Philosophy	Metaphysical	Pneumatic	Psychology
			Natural Theology
		Ontology	
	Physical		
	Logic		
	Practical	Ethics	

Berni y Catalá, as has been noted, used “metaphysical theology,” “transnatural philosophy,” “first philosophy,” and “natural theology” interchangeably.⁶⁷⁸ Many of the authors referred to natural theology as “metaphysics” or “philosophy.” To Almeida, it was simply “reason and religion.”⁶⁷⁹ Certainly, the line demarcating physical and metaphysical inquiry had become increasingly blurred by the early eighteenth century, which may help to understand how natural theology became entangled with both physical and metaphysical investigation (see fig.IV.2).

Feijóo complained that logic and metaphysics had, in the Scholastic universities of seventeenth-

⁶⁷⁵ Berni y Catalá, *Filosofía III*.

⁶⁷⁶ s.n., *Real Provision*.

⁶⁷⁷ Felipe Carlos de Vallejo y Alcedo, *Proposiciones de La Filosofía* (Madrid: En la Imprenta y Librer[í]a de Andrés de Sotos, 1782), 4.

⁶⁷⁸ Berni y Catalá, *Filosofía III*, III:2–3.

⁶⁷⁹ Almeida, *Armonía* [Madrid 1798].

century Spain, devolved into pointless and abstract controversies. He referenced the criticism the French Jesuit Réne Rapin, who wrote that “The Spaniards...refined so much about Logic in the last century [s. xvii], that they altered the purity of natural reason by the subtlety of their reasoning, throwing themselves into vain and abstract speculations...”⁶⁸⁰ Feijóo noted that the important and ‘useful’ questions about causality and being had been ceded by metaphysics to physics. He wrote that:

You will tell me...that although in Metaphysics nothing or almost nothing is taught about infinite Being, this defect is supplied in Physics, in which is discussed first cause, of his principal action which is the creation, and of the subordination that they have in causes, secondaries, etc. I respond firstly that this is an abuse. Physics does not discuss God...⁶⁸¹

Physics, according to Feijóo, covered moveable, created, finite being, while Metaphysics “comprehends all that is abstracted of all material” – that is, “of the common reason of causality, of efficient causality...final [causality]...”⁶⁸² Similarly, Feijóo wrote that “almost everything that is comprehended in the eight books that are called *Naturali Auscultatione* is esteemed by many [to be] a pure and rigorous Metaphysics.”⁶⁸³ Here, Feijóo cited Suárez as an authority, arguing that “Suárez...knowing how to organize everything in its corresponding place, included in his Metaphysics a large part...of these eight books.”⁶⁸⁴ (This formed, in fact, part of Feijóo’s critique that the study of physics in Spain needed to be refurbished.) In eighteenth-century Spain, insofar as natural theology asked questions about causality and being which lead to consideration of the first cause and uncreated ground of being, it was metaphysical.

⁶⁸⁰ Feijóo, *TCU VII* [1778], 7:VII.12§1¶6:301; see “Sur La Logique” in Réne Rapin, *Oeuvres Du P. Rapin, Qui Contiennent Les Reflexions Sur l’éloquence, La Poétique, l’histoire et La Philosophie*, New edition, vol. 2 (Haye: Chez Pierre Gosse, 1725), 407.

⁶⁸¹ Feijóo, *TCU VII*, VII.12§3¶17:306.

⁶⁸² Feijóo, *TCU VII*, VII.12§3¶17:307.

⁶⁸³ Feijóo, *TCU VII*, VII.13§1¶1:308.

⁶⁸⁴ Feijóo, VII.13§1¶1:308.

Yet as Feijóo's critiques demonstrate, this classification was ambiguous and ill-defined; the porous demarcation which separated metaphysics from natural theology and physics similarly existed in other countries at this time. This has been most recently examined by Scott Mandelbrote, who, by examining English writers such as Francis Bacon, Robert Boyle, and Walter Charleton, has clarified the relationship between metaphysics, natural theology, and the newly-minted term of "physico-theology" which arose in the seventeenth-century. In this time, "[t]opics that might once have been confined to metaphysical theology...were now taught as part of the propaedeutic to the study of physics (itself a part of natural philosophy) within the arts curriculum[.]" asserts Mandelbrote.⁶⁸⁵ This helps to understand why, Mandelbrote asserts, Aristotelian final causes were a fundamental part of defining physico-theology and of separating natural theology from natural religion in early modern England. "... "[P]hysico-theology" is best understood[.]" writes Mandelbrote, "as a new term...that specified a particular kind of natural theological argument drawn from an assumed knowledge of final causes."⁶⁸⁶ Natural theology in enlightenment Spain similarly relied definitionally upon the category of metaphysics. Final causes similarly play an important part of articulating natural theological arguments in works from this period. However, as will be shown, equally important in Spain are other metaphysical principles, including causality and motion.⁶⁸⁷

Defining Nature and 'Natural' Sources

The second common point in definitions of natural theology in eighteenth-century Spain is that natural theology relied upon "natural" sources. It is fundamental to understand, however, that the definition of "nature" varied, sometimes focusing on the created, external world,

⁶⁸⁵ Mandelbrote, "What Was Physico-Theology For?," 71.

⁶⁸⁶ Mandelbrote, 71–72.

⁶⁸⁷ Mandelbrote suggests that in early modern England, the language of "final causes" helped to distinguish between "natural religion" and "natural theology" in works. Mandelbrote, "What Was Physico-Theology For?" 70.

sometimes on the naturality of human reason and cognition. This ambiguity has been seen in previous works of Spanish natural theology, each of which addressed the realm of the “natural” differently. Sibiuda, for example, spoke of reason as a gift which allowed man to recognize his place within the ladder of nature. Venegas separated rational knowledge and the knowledge of the natural world as different “books” of knowledge given to humanity by God. By the eighteenth century, however, the lines of created nature were again redrawn, this time to include within them all created things, including humans and the reason which they exercised.

Writing in exile in 1796, the Jesuit Lorenzo Hervás y Panduro (1735-1809) offered a summary of natural theology which may be the most complete single definition found in eighteenth-century Spanish literature. He asserted that:

The candidate for sacred theology should, in the first place, have studied natural [theology] in philosophy or [should] study it before learning sacred study; and to this effect between the prolegomena to exegetical theology some are put about natural theology. ...Natural revelation, which forms the essence of natural theology, is voiced by all the created things, and by the intimate organ of our conscience and reason. There is not a part of the world in which the natural revelation of the created things does not resound, as it is read in Psalm 18 [19], in which David says: *Coeli enarrant gloriam Dei* [...]. The natural revelation of God makes inexcusable those that do not know and serve him; as it is read in the beginning of the Epistle of S. Paul to the Romans, to whom he writes, saying: *revelatur enim ira Dei* [...]. In these words of S. Paul he clearly determines the principle object of natural theology, which is that with just beginnings and legitimate conclusions the divine attributes are expounded that are revealed naturally and with reason alone are known.⁶⁸⁸

Hervás y Panduro referenced key Biblical texts supporting natural theology, including Romans 1:19-20, in which S. Paul expresses that God revealed himself through “the things that have been made.”⁶⁸⁹ Hervás y Panduro cited this passage in other works as well, noting, for example, that “Everything that man can naturally know in God, he arrives to know it if he wants, because ‘all

⁶⁸⁸ Lorenzo Hervás y Panduro, *Historia de la Vida del hombre*, vol. 4: Continuación de la Parte II (Madrid: En la Imprenta de Villalpando, 1796), 198–99.

⁶⁸⁹ Rom. 1:20 ESV.

that is naturally is knowable in God, this is visible to all, and to all God manifests himself: his divinity, although invisible, in his visible works his creatures.”⁶⁹⁰ He is explicit in his quote above, however, that the natural revelation which is the foundation of natural theology is composed of “all created things, and by...our conscience and reason.” For Hervás y Panduro, natural religion was made by natural theology, and natural theology relied upon naturally revealed sources which included both the external world, the human conscience, and the power of reason, all cooperating together.⁶⁹¹

Thus, examples of natural theology in eighteenth-century Spain contain an indiscriminate blend of examples and arguments which are both metaphysical and physical. For example, in his six-volume work, *The False Philosophy* (Madrid, 1774-1776), the Hieronymite priest Fernando de Ceballos y Mier wrote that natural theology was “the study of nature...attentively observing the factual things.”⁶⁹² These factual things included the outside world as well as humans and their cognitive abilities. Perhaps this elision was facilitated by the advancement of medical and anatomical theories which underscored the createdness of the human body and connected

⁶⁹⁰ Lorenzo Hervás y Panduro, *Viage estático al mundo planetario en que se observan el mecanismo y los principales fenómenos del cielo; se indagan sus causas físicas, y se demuestran la existencia de Dios y sus admirables atributos; Parte Primera*, vol. 1 (Madrid: Imprenta de Aznar, 1793), ii.

⁶⁹¹ This tension exists also in the phrase “*a creatura mundi*” – which can be interpreted as either “by the creature of the world” or as “from the creation of the world.” The first instance highlights man’s position as a creature. Menéndez Pelayo describes Pereira as “a particular application of the general principle *Invisibilia Dei a creatura mundi*.” As John F. Wippel has noted, the interpretation of “*creatura mundi*” was flexible, and could be translated alternatively to mean either man or the natural world around him. If the subject was man, then the means to elevate thoughts from the *creatura mundi* to the invisible things of God was natural reason; if, on the other hand, the *creatura mundi* was the natural world around man, than physico-theology was the proper method. Aquinas interpreted the *creatura mundi* as the former meaning, supporting his claim by demonstrating that this was how Peter Lombard also interpreted the term. John F. Wippel, *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being* (Washington D.C.: The Catholic University of America Press, 2000), 385; Menéndez y Pelayo, *Heterodoxos*, 1228; This is the same interpretation of the *creatura mundi* used by Nicholas of Cusa. See: Nicholas of Cusa, “Trialogus de Possest,” in *A Concise Introduction to the Philosophy of Nicholas of Cusa*, ed. Jasper Hopkins (Minneapolis: University of Minnesota Press, 1978), 62–156.

⁶⁹² Ceballos y Mier, *La Falsa I*, 1:155. Fernando de Ceballos y Mier, OSH (1732-1802), a doctor in Theology, canon law, and jurisprudence by the age of twenty, was a Hieronymite priest at the monastery of San Isidoro del Campo de Santiponce in Seville. He received further training in Salamanca before returning to Seville. See: Gonzalo Díaz Díaz, *Hombres y documentos de la filosofía española*, vol. 2: C-D (Madrid: Consejo Superior de Investigaciones Científicas, 1983), 292–93.

humanity more closely to external creation through the mechanisms and structures of its corporality. For example, the physician Pereira's work (*Theodicy*) relied on demonstrating from one part of nature – human anatomy – the mechanical system which governed nature and abstracting metaphysical suppositions from this existence.⁶⁹³ In this sense, the human body became a work of creation as much as a mountain or waterfall. In the ten-volume work *God and Nature*, published in Madrid from 1780-1791 by the jurist Juan Francisco de Castro Fernández, the author made clear connections to the natural world. Castro Fernández wrote that his aim was the “contemplat[ion] of the marvels of the Universe,” and that “the contemplation of Nature, and the marvels connected to its procedures and the history of the world, singularly that of the human heart, seemed to [him] a very appropriate study.”⁶⁹⁴ For Castro Fernández, the ponderings of the “human heart” was just as much a natural subject as plants and animals found in the wild. Natural theology thus relied on the observation of the natural world – but natural theology was also formed through the exercise of natural reason found in the creature of man.

This semantic difficulty can also be seen in the multiple uses of the idea of “nature” within Spanish during this time. For example, in his *Philosophical Disillusionments*, Valcárcel critiqued the project of natural theology as a “*natural discourse* [which] is not by itself sufficient for discovering *natural truths* which revelation has taught us...that although our *natural reason* has an aptitude for investigating many things of the *natural order*, it is weak...”⁶⁹⁵ In one

⁶⁹³ Pereira, *Theodicea*.

⁶⁹⁴ Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:iv, iii; Juan Francisco Castro Fernández (1721-1790) was a lawyer for the Real Audiencia in Galicia, known mainly for his works on legal interpretation and jurisprudence; however, he was also a parish priest in Pontevedra, Spain, receiving theological training at Santiago de Compostela and Avila. See also: Juan Sempere y Guarinos, *Ensayo de una Biblioteca Española de los Mejores Escritores del Reynado de Carlos III*, vol. 2 (Madrid: En la Imprenta Real, 1785), 158–59; s.n., “Juan Francisco de Castro Fernández 1721-1790,” www.filosofia.org, accessed May 23, 2018, <http://www.filosofia.org/ave/001/a184.htm>; cit. in this reference, also see: Manuel Castro López, “El Doctor Castro,” *Galicia: Revista Regional* 1, no. 10 (October 1887): 173–74.

⁶⁹⁵ Valcárcel, *Desengaños I*, I:406, emphasis added.

passage, Valcárcel used “nature” (*φύσις*, *natura*) to mean “pertaining to natural theology or natural philosophy,” “having the quality of independent, innate, and pre-existent being,” “inherent to or an intrinsic property,” and “the created world and universe – the complete, material reality,” alternatively.⁶⁹⁶ Human reason was as “natural” as the creation – it was, indeed, part of creation. In this way, Berni y Catalá defined natural theology as depending upon “the achievements of human reason,” and Almeida described his work as employing the “weapons of reason.”⁶⁹⁷ Likewise, Pereira claimed that his method was to discuss “...God as the natural Author of Nature, and of those attributes which pure, natural reason inherently recognizes of an Infinite being...”⁶⁹⁸ These two applications of “nature” – reason applied to the observation of the created world were therefore inextricably connected in the Spanish conception of natural theology. Again, Valcárcel joined both reason and creation together in their natural state by pointing to the universality of both. He wrote:

*Wheresoever you turn to look, everything suggests [God]...This was the thinking of Michele de Montaigne, treating the work of Raymundo Sebonde [sic]. There are signs and scattered notices in the university of nature, of which all can manage to arrive at the knowledge of such truths; ...The important truths have their own proportionality with our natural reason; our mind already has certain seeds and principles of them, it only lacks what the teachers present with opportunity and temperance.*⁶⁹⁹

Not only was the created world part of nature, but the ubiquity of reason, planted like “seeds” in every human was also nature.⁷⁰⁰ Spanish natural theology suggests, therefore, that the “things

⁶⁹⁶ For a thorough etymological exploration of “nature,” consult Lewis, *Studies in Words*, 24–74.

⁶⁹⁷ Berni y Catalá, *Filosofía III* [Valencia 1736], III: 2; Almeida, *Armonía* [Madrid 1798], vi.

⁶⁹⁸ Pereira, *Theodicea*, 32–33.

⁶⁹⁹ Valcárcel, *Desengaños I* [Madrid 1787], 1:419; It is possible that Valcárcel had in mind the Augustinian theory of *rationes seminales* – the kernels of potentiality and reason which God implanted in nature during the initial act of creation. See, for example: Alister E. McGrath, *Christian Theology: An Introduction* (Oxford: Blackwell Publishing Ltd, 2011); Alister E. McGrath, *A Scientific Theology*, vol. Volume 2: Reality (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 2002), 77.

⁷⁰⁰ Ceballos y Mier, *La Falsa I* [Madrid 1775]; Hervás y Panduro, *Viage I* [Madrid 1793], ii. Castro Fernández, *Dios y la Naturaleza II.III*§1.37, p. 154-162.

which were made” through which God revealed himself naturally was more expansively defined to include created, inherent, natural reason, not simply the created world of creatures, landscapes, and plants. In this way, the works of enlightenment Spain resolved the spectrum of natural theologies experienced in Baroque Spain. The previous chapter distinguished between “scholastic” natural theologies and “applied” natural theologies, but by enlarging the understanding of natural revelation to specifically include the activity of human reason, eighteenth century works merged (or collapsed) these categories, uniting, for example, the works of Suárez and Nieremberg, bringing them into dialogue with one another.

The definition of natural theology’s sources as “natural” often relied upon the established distinction against revealed theology (alternatively, sacred theology or dogmatic theology). This difference, which had been previously articulated by the tradition of natural theology in Spain, clarified that natural theology did not discuss forms of special revelation – primarily in the form of Scripture, but also tradition, magisterial authority, the person of Christ, and the work of the Holy Spirit. Pereira reported that his work studied God “without touching even a bit of the Mysteries, the Sacraments nor the meritorious works that show the relation with the supernatural estate....”⁷⁰¹ The reason for this was, according to Pereira, because he judged sacred theology to be a “separate science” with its own method and sources.⁷⁰² As part of philosophy, natural theology relied upon a different set of justification and rationalization than sacred theology. Pereira wrote that sacred theology:

ask[s] for another method...takes its proofs from other most diverse sources, as they are revelation, tradition, and the definition of the Councils, the unanimous, or almost unanimous consensus of the Holy Fathers, their constancy, uniformity,

⁷⁰¹ Pereira, *Theodicea*, 32–33.

⁷⁰² Pereira, 32–33.

duration, Holiness, complementarity of the Prophecies, and execution of the true Miracles.⁷⁰³

Ultimately, this distinction rested upon a clear division between the mode of justification (or as Pereira described it “the mode of consideration”), dividing sharply between reason and revelation. Natural theology, as part of philosophy “demonstrate[d] the effect and infer[red] the cause;” revealed theology, on the other hand, relied upon revelation “to prove the cause not by effect.”⁷⁰⁴ This represents an important shift to eighteenth-century natural theology. The naturality of the sources meant that natural theology sought different standards of rationality and proof than traditional theology.

Spanish authors, however, were quick to clarify the proper ordering of the relationship between sacred and natural theology. While they praised the promising power of natural theology (Pereira, for example, described “the Sanctuaries of Science”), they uniformly admitted that natural theology was, as Thomas Aquinas described it, a ‘preamble’ to the proper exploration of the faith provided by revelation.⁷⁰⁵ Moreover, they affirmed that because it was insufficient for knowing the totality of revealed truth about God and the Christian religion, natural theology was ultimately unable to achieve eternal life and happiness. In his introduction to *Harmony*, Almeida made it clear that his work did not seek to “prove the sublime truths of our revealed religion with the arguments of human reason...the truths of heaven only have their firm, solid, and eternal foundation in the word of the Son of God.”⁷⁰⁶ While Pereira “venerate[d] the Sacred Theology,” Berni y Catalá assured his readers early in his work that “as Theologians well know, a conclusion is only theological if it is certainly inferred...from a faith premise, that

⁷⁰³ Pereira, 32–33.

⁷⁰⁴ Pereira, 34. Pereira’s own work, however, fails to follow this distinction, as his natural theology contained arguments which employed both inductive and deductive reasoning.

⁷⁰⁵ Pereira, 28.

⁷⁰⁶ Almeida, *Armonía* [Madrid 1798].

is, revealed.”⁷⁰⁷ “...And if,” Pereira wrote in a thinly-veiled slur against the work of the *philosophe* Rousseau, “...some think that Man can be sufficient with natural religion in order to be happy, the Theologian touches to prove and convince the necessity of supernatural, revealed Religion for our salvation and complete happiness....”⁷⁰⁸ Castro Fernández likewise affirmed this sentiment by distinguishing between “true Religion” and a “general knowledge of a God.”⁷⁰⁹ The former was the ritualistic worship of a particular deity (the Christian God), while the later was a simple “persuasion that we have of his existence.”⁷¹⁰ Natural theology, therefore, was seen as complimentary to the work of revealed theology (although not necessarily prerequisite).

The Influence of Earlier Natural Theologies

Eighteenth-century natural theology in Spain was clearly predicated on the previous contributions – they emerged out of the traditions established by classical and Patristic authors, mediated by medieval scholastics, and developed by previous Spanish scholars. The classical influence, for example, led Andrés Piquer, a mid-eighteenth-century physician and philosopher, to write that natural theology was “...the name that the Gentiles gave to their discourses on the nature of God...,” and that as such they looked at basic human principles of logic and reason as “the primitive lights of understanding about Divinity.”⁷¹¹ For some, therefore, the classical and pagan origin of natural theology underscored its limited use and “primitive” nature. This reinforced the contrast with revealed theology and elevated the role that revelation had over reason. Piquer noted that “...Christian Theology, without depreciating Natural Theology, adds by principles, that which God has revealed by the Sacred Scriptures, and by the living voice

⁷⁰⁷ Berni y Catalá, *Filosofía III*, III:4.

⁷⁰⁸ Pereira, *Theodicea*, 50–51.

⁷⁰⁹ Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:160.

⁷¹⁰ Castro [Fernández], 1:160–61.

⁷¹¹ Andrés Piquer, *Logica de D. Andres Piquer, Médico de Su Magestad*, Third edition (Madrid: Joachin Ibarra, Impresor de Cámara de S.M., 1781).

which the Church keeps in the Apostolic traditions.”⁷¹² Still, many of the classical features of natural theology maintained a visible presence in eighteenth-century works. As in previous centuries, Cicero is quoted by several works, and references were often made to Aristotle, Plato, Plotinus, Seneca, Lucretius, and others.⁷¹³ Along with classical sources, eighteenth-century Spanish natural theologians relied upon Patristic authors of natural theology, especially the writing of Augustine.⁷¹⁴

Medieval theologians, particularly Aquinas, certainly impacted the category of Spanish natural theology in the eighteenth-century.⁷¹⁵ References to Sibiuda and the Sibiudan tradition of natural theology, however, are almost entirely absent.⁷¹⁶ When references to Sibiuda are made, they are oblique and often consider him as a disciple of Ramon Llull (1232-1315).⁷¹⁷ In the first chapter, I demonstrated through the bibliographic compilation of Pellicer y Saforcada that Sibiuda’s work continued to be read – most recently, Sibiuda’s work had been the source material for Johann Amos Comenius’s *Oculus Fidei* (Amsterdam, 1661) and the anonymously written *De natura et obligatione hominis* (Cologne, 1700).⁷¹⁸ These associations with Protestant authors did nothing to improve its standing in Spain; it remained on the Index, and the occasional

⁷¹² Andrés Piquer, *Logica*, iii.

⁷¹³ See, for example, the introductory quote to the preface in Pereira, *Theodicea*; Stephen R.L. Clark, “The Classical Origins of Natural Theology,” in *The Oxford Handbook of Natural Theology*, ed. Russell Re Manning (Oxford: Oxford University Press, 2013), 9–22.

⁷¹⁴ Wayne Hankey, “Natural Theology in the Patristic Period,” in *The Oxford Handbook of Natural Theology*, ed. Russell Re Manning (Oxford: Oxford University Press, 2013), 38–56. Noticeably absent from the references in Spanish natural theology is the work of Boethius.

⁷¹⁵ McGrath, *Re-Imagining*, 13; Padgett, “Theologia Naturalis”; Hall, “Natural Theology in the Middle Ages [2013].”

⁷¹⁶ Webb, *Studies*, 292.

⁷¹⁷ Alan Guy, “Razón y fe en Llull y Descartes,” *Studia lulliana* 32, no. 1 (1992): 59–79; Josep Batalla, “L’art lul·liana com a teologia filosòfica,” *Revista de llengües y literatures catalana, gallega y vasca* 15 (2010); Anthony Bonner, *The Art and Logic of Ramon Llull: A User’s Guide* (Leiden: Brill, 2007); Federico A. López Silvestre, “Dios y La Naturaleza. El Desarrollo de La Teología Natural En España y En Galicia En El Siglo XVIII,” *SEMATA: Ciencias Sociales e Humanidades* 14 (2002): 429; Valcárcel, *Desengaños I [Madrid 1787]*, 1:419 (references Montaigne’s *Apologie*).

⁷¹⁸ Sabunde, *Oculus*; s.n., *De Natura et Obligatione Hominis, Opusculum Solidæ Doctrinae et Pietatis. Auctore Ræmundo de Sabunde Hispano, Quondams. Theologiae. Professore Tholosano.* (Cologne: Sumtibus Johannis Adolphi, 1700).

reference to it do not demonstrate that it was actually read or understood – for example, when the Capuchin theologian Luis Flandes referenced Sibiuda as a medical authority against Giorgio

Baglivi (1668-1707).⁷¹⁹ In response to Flandes's work, Feijóo wrote dismissively:

Who is *Raymundo de Sabunde* to put against [Baglivi]?...Who remembers Rigio, Sabunde, and Gemma, either to buy them or to read them? Maybe two out of two thousand...What Doctor has heard of or read and doesn't speak of these works...except some[one] who wants to waste away the time by reading the Catalogue of Lluist Authors...[one can] occasion to see condemned in the Spanish Expurgated List his book of *Theologia Natural*, which I believe is the only work which he wrote.⁷²⁰

Feijóo continued by stating that the Index had prohibited Sibiuda's work for over two hundred years, that the work specifically condemned was the *Theologia natural* of Sibiuda – not just Comenius's version of it, and furthermore, that according to a rule of the Index, any alternative versions of a prohibited work should not be read.⁷²¹

Indeed, the influence of Aquinas and Suárez far exceeded the legacy of Sibiuda in eighteenth-century Spanish natural theology. References abound to Aquinas, for example, in Berni y Catalá's *Rational Philosophy*, where he often began chapters with the axiomatic declaration "Saint Thomas proves..."⁷²² Similarly, Ceballos y Mier relied heavily upon Aquinas's characterization of philosophy as a "preamble" to faith; indeed, Ceballos used Aquinas's description to support his subjugation of natural theology, dependent upon inconstant scientific practices, to timeless revealed truth in his work, *The False Philosophy* (Madrid, 1774-1776).⁷²³ Further research may elucidate particular connections between medieval and

⁷¹⁹ Luis de Flandes, *El Antiguo Academico, Contra El Moderno Sceptico, o Dudoso, Rigido, o Moderado. Defensa de Las Ciencias, y Especialmente de La Physica Pythagorica, y Medica Enel Conocimiento, y Practica de Los Medico Sabios*. (Madrid: En la Imprenta del Reyno, 1742), 9–10, 50.

⁷²⁰ Benito Jerónimo Feijóo, *Cartas eruditas y curiosas*, New edition, vol. 3 (Madrid: en la Imprenta Real de la Gazeta, 1774), III.4¶41:47, <http://www.filosofia.org/bjf/bjfc227.htm#c227pt45>.

⁷²¹ Feijóo, III.4¶43-46:47–48.

⁷²² Berni y Catalá, *Filosofia III [Valencia 1736]*, III:10, 13.

⁷²³ Ceballos y Mier, *La Falsa I [Madrid 1775]*, I: 155. See: Díaz, *Hombres y documentos II: C-D*, II:292–93.

eighteenth-century practices of natural theology. Also important was the legacy of the “illustrious theologian Su[á]rez,” whose works had become recognized by the eighteenth century as an important part of the theological output of Spain.⁷²⁴ Feijóo, when writing on the relationship between physics and metaphysics, praised Suárez, noting that Suárez was an authority “whom nobody will negate to be a very methodical Scholastic...”⁷²⁵ Similarly, Almeida asked, “Who will doubt the faith and religion of Cardinal Bellarmine, of Su[á]rez and Vazquez, theologians that everyone respects?”, placing Suárez in a longer line of respected theological authorities that included Bonaventure, Duns Scotus, and Aquinas.⁷²⁶

Sibiudan and para-Sibiudan works were rare, nor does it appear that Venegas’s works had a lasting shelf-life in the eighteenth century (even his popular *Agonía del tránsito* was last published in 1682). However, other works which formed part of the longstanding tradition of natural theology in Spain continued to be printed throughout the eighteenth century. The collected works of Luis de Granada, for example, were anthologized and republished.⁷²⁷ This suggests that when works of natural theology were produced in eighteenth-century Spain, it was done in a context which knew and was informed by previous expressions of Spanish natural theology.

Articulating and Expanding Natural Theology: Natural Philosophy and Metaphysics

Natural Philosophy’s Advancement and the Opportunity for Expanded Natural Theology

Natural theology in eighteenth-century Spain certainly expanded its consideration of the natural world’s order, grandeur, scale, and beauty, aided by developments in the natural sciences.

⁷²⁴ Lorenzo Hervás y Panduro, *El hombre físico, o Anatomía humana físico-filosofica*, vol. II (Madrid: En la Imprenta de la Administracion del Real Arbitrio de Beneficencia, 1800), 257.

⁷²⁵ Feijóo, *TCU VII*, VII.13§I¶1: 308.

⁷²⁶ Almeida, *Armonía [Madrid 1798]*, 220; see also: Berni y Catalá, *Filosofía III [Valencia 1736]*, III: 318.

⁷²⁷ For example, the multivolume set of Luis de Granada, *Obras Del Venerable P.M. Fray Luis de Granada Del Orden de Santo Domingo*, ed. Juan de Marieta, vol. I (Barcelon[a]: la Imprenta de Iuan Pablo Marti, 1701).

Spanish science in the eighteenth-century was shaped an ongoing series of novelties, discoveries, and new information which constantly provoked wonder which was readily converted to theological ends. New species of animals and plants were regularly being added to the Spanish awareness – an experience which carried with it wonder. Particularly for the Spanish empire, exploration of previously inaccessible areas likely contributed to leaps in the zoological and botanical record.⁷²⁸ The New World, known by Spanish explorers already for two centuries, continued to yield hitherto unknown places and experiences, and maintained its “context of formidable wonder.”⁷²⁹ Scientific expeditions were chartered to record, catalog, and bring natural specimens, including Iturriaga’s exploration of the Orinoco (1754-1756), Royal Botanical Expeditions to Nueva Granada (1783-1816) and New Spain (1787-1803) and the Malaspina Expedition’s exploration of the Pacific Northwest (1789-1794).⁷³⁰ Natural histories, many written by individuals with first-hand experience such as José Gumilla’s *El Orinoco Ilustrado* (1741), disseminated and popularized these discoveries.⁷³¹

⁷²⁸ Gerardo Ceballos and Paul R. Ehrlich, “Discoveries of New Mammal Species and Their Implications for Conservation and Ecosystem Services,” *Proceedings of the National Academy of Sciences of the United States of America* 106, no. 10 (March 10, 2009): 3843; Xingli Giam et al., “Reservoirs of Richness: Least Disturbed Tropical Forests Are Centres of Undescribed Species Diversity,” *Proceedings of the Royal Society B: Biological Sciences* 279 (2012): 67–76.

⁷²⁹ Mauro J. Caraccioli, “A Problem from Hell: Natural History, Empire, and the Devil in the New World,” *Contemporary Political Theory* 17 (2018): 437–58.

⁷³⁰ Iris Wilson Engstrand, *Spanish Scientists in the New World: The Eighteenth-Century Expeditions* (Seattle: University of Washington Press, 1981); Miguel Ángel Puig-Samper, “Las Expediciones Botánicas al Nuevo Mundo Durante El Siglo XVIII. Una Aproximación Histórico-Bibliográfica-Científica En El Siglo XVIII,” in *La Ilustración En América Colonial*, ed. Diana Soto Arango, Miguel Ángel Puig-Samper, and Luis Carlos Arboleda (Madrid: Consejo Superior de Investigaciones Científicas, 1995), 55–66; Juan Pimentel, *Viajeros Científicos: Tres Grandes expediciones al Nuevo Mundo: Jorge Juan, Mutis, Malaspina* (Madrid: Nivola, 2001); Daniela Bleichmar, *Visible Empire: Botanical Expeditions and Visual Culture in the Hispanic Enlightenment* (Chicago: University of Chicago Press, 2012).

⁷³¹ Joseph Gumilla, *El Orinoco Ilustrado, Historia Natural, Civil, y Geographica, de Este Gran Rio, y de Sus Caudalosas Vertientes: Gobierno, Usos, y Costumbres de Los Indios Sus Habitadores, Con Nuevas, y Utiles Noticias de Animales, Arboles, Frutos, Aceytes, Resinas, Yervas, y Raíces Medicinales: Y Sobre Todo, Se Hallaràn Conversiones Muy Singulares à Nuestra Santa Fè, y Casos de Mucha Edificacion* (Madrid: Manuel Fernandez, 1741); on the different types of natural history which appeared in Spain during this time, see: Alberto Gomis Blanco, “La divulgación de la Historia Natural en la España del siglo xviii,” *Actas VIII Congreso de La Sociedad Española de Historia de Las Ciencias y de Las Técnicas* 1 (2004): 201–18.

Across Spain during the eighteenth century, scientific endeavors increased the knowledge of the natural world – of physics and mechanics, astronomy, botany and zoology, anatomy, and medicine. Museums of natural history were established, anatomical theatres were added to surgical colleges, new medical institutions and hospitals founded, observatories and botanical gardens (many open to the public) were created.⁷³² Scientific societies sprang up across the peninsula, including the Royal Academy of Medicine and Other Sciences in Seville (1736), the Royal Academy of Natural Sciences and Arts in Barcelona (1770), and the Madrid Academy of Medicine (1734), which regularly met, printed findings and discussions, and participated in the exchange of scientific knowledge with other European scientific societies and organizations.⁷³³

These increases in the natural sciences were accompanied by expressions of wonder which came from observing the grandeur of the world, especially from beholding the immensity, beauty, order, or regularity of nature. Natural theology or “physico-theology” united natural philosophy with theology and ‘infused’ the entire scientific endeavor with religious purpose. The grandeur of scale – uncountable multitudes, immeasurable distances and heights, the vastly large and impossibly small –resulted in wonder for natural philosophers, wonder which was converted into statements of natural theology. Feijóo wrote, for example, that “...the magnitude of the Universe always remains many thousands of times greater...in it is a worthy object of our

⁷³² Juan Pimentel, *Testigos Del Mundo: Ciencia, Literatura, y Viajes En La Ilustración* (Madrid: Marcial Pons Historia, 2003); Àlvar Martínez-Vidal and José Pardo-Tomás, “Anatomical Theatres and the Teaching of Anatomy in Early Modern Spain,” *Medical History* 49, no. 3 (July 2005): 251–80; on Madrid, where several key institutions were located closely together on the Paseo del Prado, see: Luis Alfredo Baratas Díaz, “El núcleo de instituciones científicas Matritenses en el Paseo del Prado desde el siglo XVIII,” *Asclepio* 48, no. 1 (1996): 183–217.

⁷³³ James E. McClellan III, *Science Reorganized: Scientific Societies in the Eighteenth-Century* (New York: Columbia University Press, 1985), 263; Richard Herr, *The Eighteenth-Century Revolution in Spain* (Princeton: Princeton University Press, 1958); Antonio Algaba Calvo, “La difusión de la innovación. Las revistas científicas en España, 1760-1936,” *Scripta Nova: Revista electrónica de geografía y ciencias sociales*, no. 4 (2000): 27; Manuel Valera Candel and Carlos López Fernández, “Giuseppe Cervi, Guillaume Jacobe y Las Relaciones Entre La ‘Regia Sociedad de Medicina y Demás Ciencias de Sevilla’ y La ‘Royal Society of London’ En 1736,” *Dynamis : Acta Hispanica Ad Medicinæ Scientiarumque. Historiam Illustrandam* 18 (1998): 377–426.

astonishment. Truly worthy of our astonishment; but more worth [is] the concept that we owe to [recognize] the grandeur and power of the Most Wise Artificer.”⁷³⁴ Hervás y Panduro similarly described the incomprehensible immensity of space, writing, “O grandeur of the works of the Omnipotent, who has put visible signs of his immensity in the sight of mortals!” New vistas, opened up by increasingly finessed technology such as the telescope and the microscope, made far-away and minute wonders possible to behold.⁷³⁵ Naturalist Juan Mieg (1780-1859) described that “[t]he eye and the wing of a fly, for example, offer to the view, aided by the microscope, a gathering of wonders that can supply the naturalist with a vast object of curious indignations and with admiration for the grandeur of the Creator.”⁷³⁶

The beauty of the natural world also occasioned natural theology, as did the consideration of the regularity, lawfulness, productivity, and order to be found in nature. Natural philosophers who considered these notions often voiced the theological ramifications of their natural studies. Joseph Quer, a physician and member of the medical society in Madrid as well as a professor for the Royal Botanical Garden, wrote that

The infinite number of productions that Nature, so prodigious, shows to us is not more than a small part of our wonder and astonishment. Its order [*maquina*], its art, its recourses, its same varieties, are the greater gulf of our wonder and shock in the contemplation of such immensity of wonders [*maravillas*].⁷³⁷

⁷³⁴ Feijóo, *CE*, CE.III.xxi¶8.

⁷³⁵ Alister McGrath, *Born to Wonder: Exploring Our Deepest Questions - Why Are We Here and Why Does It Matter?* (Carol Stream, Illinois: Tyndale House Publishers, 2020), 146; Feijóo, for example, praised microscopic discoveries. See: Benito Jerónimo Feijóo, *Teatro crítico universal*, New edition, vol. 6 (Madrid: Andrés Ortega, a costa de la Real Compañía de Impresores y Libreros, 1778), VI.6§xv¶40:250–51.

⁷³⁶ Juan Mieg, *Paseo por el Gabinete de Historia Natural de Madrid, y Descripción Sucinta de los Principales Objetos de Zoología que Ofrecen las Salas de esta interesante colección* (Madrid: 1818, D.M. de Burgos), 225; Mieg's comments echo Pluche, see: M. Pluche, *Espectáculo de La Naturaleza, ó Conversaciones Acerca de Las Particularidades de La Historia Natural, Que Han Parecido Mas a Propósito Para Excitar Una Curiosidad Útil, y Formarles La Razon á Los Jóvenes Lectores*, trans. s.n., Fourth edition, vol. 1 (First Part) (Madrid: En la Imprenta de Andrés de Sotos, 1785), 13; for biographical information on Mieg, see: Abilio Reig Ferrer, “El Profesor y Naturalista Don Juan Mieg (1780-1859): En El 150 Aniversario de Su Fallecimiento (y II),” *Argutorio: Revista de La Asociación Cultural “Monte Irago,”* no. 24 (2010): 4–14.

⁷³⁷ Joseph Quer, *Flor Española, ó Historia de Las Plantas, Que Se Crian En España*, vol. 1 (Madrid: Joachin Ibarra, 1762), 275.

Such descriptions recall Nieremberg's fascination with the artifice of nature which he expressed in his natural history. The previous chapters have demonstrated that the contemplation of order, beauty, scale, and grandeur in the natural world had been a longstanding component of natural theologies; Luis de Granada, for example, followed biblical precedent in contemplating the beauty of flowers, and Nieremberg and Isla were fascinated at the intricate purpose and design to be found in creation. This element of "physico-theology" in Spain was not new. What *was* new, however, was an increased capacity for observing and interrogating nature, an expanded catalogue of known and unknown information, and augmented methods of explaining and understanding the logic of the natural world. These factors, caused by increases in the natural sciences, created opportunities for expressing natural theology and furnished authors with a new catalogue of natural metaphors and exempla from which to draw.

For example, consider the rapid advancements made to the fields of surgery and anatomy in eighteenth-century Spain.⁷³⁸ The utility of these sciences and their fields of knowledge had previously been undervalued, and the practice of both had been separated from the curriculum of 'learned' medical knowledge. At the start of the eighteenth century, new works promoted the usefulness for anatomy for improving medicine, coupled with the abandonment of Galenic medicine in favor of new standards of observation and empiricism. Societies such as the aforementioned Royal Academy of Medicine and Surgery in Seville championed that anatomy and surgery receive increased attention, as did the anatomist Martín Martínez (1684-1734) in a series of works, including the two-volume *Skeptical Medicine* (1722), *The Complete Anatomy of Man* (1745), and *Anatomical Nights* (1750).⁷³⁹ As a result, studies in anatomy and surgery

⁷³⁸ Marta V. Vicente, *Debating Sex and Gender in Eighteenth-Century Spain* (Cambridge: Cambridge University Press, 2017), 77.

⁷³⁹ Martín Martínez, *Medicina Sceptica, y Cirugia Moderna, Con Un Tratado de Operaciones Chirurgicas*, vol. 1. (Madrid: s.n., 1722); Martín Martínez, *Anatomia Completa Del Hombre, Con Todos Los Hallazgos, Nuevas*

flourished in Spain as never before, culminating in the creation of a series of Royal Surgical Colleges (in Cádiz, 1748, Barcelona, 1764, and Madrid, 1787).⁷⁴⁰ This included applying the technology of the microscope to advance anatomical knowledge – knowledge which could occasion or introduce arguments from natural theology.⁷⁴¹ After musing on nerves, for example, Martínez remarked “...that such a light movement in the nervous fibers should be enough to lift such great weights...all this is owed to the ineffable artifice with which Our Creator composed this machine...”, describing it as “divine Mathematics.”⁷⁴² This knowledge had been hitherto inaccessible to Spanish intellectuals. The increased knowledge of the nervous system, granted by the improved study of anatomy, permitted Martínez and others to better understand the design, order, and intricacy of human anatomy. This, in turn, created new reasons and ways of affirming the traditional arguments of natural theology found in the existence, cause, motion, and design of nature. The realm of ‘nature’ was magnified by the advancing sciences of eighteenth-century Spain.

The turn from observing these new “wonders of nature” (*maravillas de la naturaleza*) to ruminating on the theological implications of their design and existence was, for many Spaniards, almost implicit.⁷⁴³ Feijóo, for example, ended one essay on “Wonders of Nature” with an appendix titled “Invective and Demonstration against the Atheists.”⁷⁴⁴ From discussing the discoveries of the microscope in the preceding paragraphs, Feijóo begins his invective by

Doctrinas y Observaciones Raras Hasta El Tiempo Presente, y Muchas Advertencias Necessarias Para La Cirugia: Segun El Methodo Con Que Se Explica En Nuestro Theatro de Madrid (Madrid: En la Imprenta Real, por Don Miguel Francisco Rodriguez, 1745).

⁷⁴⁰ Juan Manuel Rueda Pérez, “Nacimiento de La Cirugía Española Moderna En El Siglo Xviii,” *Revista Hispanoamericana de Hernia* 1, no. 3 (September 2013): 113–16.

⁷⁴¹ For more information, see: María Luz Terrada Ferrandis, *La Anatomía Microscópica En España. La Doctrina de La Fibra y La Utilización Del Microscópico En España Durante El Barroco y La Ilustración*, Cuadernos de Historia de La Medicina Española, Monografías X (Salamanca: Universidad de Salamanca, 1969).

⁷⁴² Martínez, *Medicina Sceptica* I, 1:153.

⁷⁴³ Feijóo, *TCU VI VI.6§xvi*¶42-46.

⁷⁴⁴ Feijóo, *TCU VI VI.6§xvi*¶42-46.

exclaiming, “Oh Greatness, oh Power, oh Wisdom of that ineffable, supreme Being, that is the life and soul of everything!”⁷⁴⁵ He then concluded his essay on the natural sciences with several arguments against materialist interpretations, affirming that all of nature demonstrates reasons for believing in the existence of a Creator.

Grounding Natural Theology: Metaphysics and Articulating Arguments

It is important, however, to stress the fundamentally metaphysical structure of the arguments which constituted “physico-theology” in eighteenth-century Spain. Spanish natural theology of the eighteenth-century was not simply an effort to harmonize findings from natural philosophy with revelatory knowledge or to anchor and justify scriptural testimony with findings from the natural world. Rather, Spanish natural theology showed how natural philosophy revealed and depended upon a concept of nature that was rational, ordered, designed, and created. Moreover, the arguments which now availed of the advancing sciences were the established paths of “metaphysical” ratiocination – the rational arguments developed by Aquinas and others and developed by the second scholastics of Spain such as Suárez. Arguments from ontology, design, purpose, and cosmological arguments of contingency and causation were the eighteenth-century inheritors of a centuries-long tradition of natural theologies which relied (sometimes exclusively) on such rationalizations.

Spanish intellectuals often employed teleological arguments from design and contrivance – this was, after all, the fifth of Aquinas’s proofs for the existence of God.⁷⁴⁶ Much of Spanish natural theology, however, expressed cosmological arguments founded on the first four of the

⁷⁴⁵ Feijóo, *TCU VI* VI.6§xvi¶42:252.

⁷⁴⁶ Thomas Aquinas, *The Summa Theologiae of St. Thomas Aquinas*, trans. Fathers of the English Dominican Province, Second and Revised Edition, 1920, <http://www.newadvent.org/summa/1002.htm>, I.q.2.a.3; Brian Davies, *Thomas Aquinas’s Summa Contra Gentiles: A Guide and Commentary* (Oxford: Oxford University Press, 2016), 36–55 (I.13).

quinque viae – motion, cause, contingency, and, to a lesser extent, degrees.⁷⁴⁷ To demonstrate how natural theology was articulated in enlightenment Spain, this chapter briefly summarizes examples from three of the most significant works of natural theology: Luis Pereira’s *Theodicy*, a passage from Teodoro de Almeida’s *Harmony*, and arguments from the first volume of Castro y Fernández’s *God and Nature*.

Pereira’s work includes arguments from design, including his first proposition: “The human body is not the work of chance.”⁷⁴⁸ He argued this on the basis of the immense complexity and order of human anatomy. Describing the body as “a hydraulic machine,” Pereira cited some of the more recent advancements in the medical sciences with almost palpable wonder.⁷⁴⁹ “The sensation of sight,” he wrote, citing the work of anatomist Albrecht von Haller (1708-1777), “one of the more delicate [operations] of the Machine, augments itself, fortifies itself, and clarifies itself mechanically with the use of *lenses*...”⁷⁵⁰ It was the mechanics of the body that produced “all the effects of heat, sensation...sensibility, sight, hearing, respiration, the human voice, muscular force, circulation, secretion...,” all of which confirmed Pereira in his belief that “we ought to confess that the human Body is a Machine composed of many springs.”⁷⁵¹ More importantly, Pereira asserted that because all of these precise processes required a distinct order and proportionality in order to exist, their existence was proof of their design. “...A constant order cannot be born of inconstant and blind disorder – that is, of

⁷⁴⁷ William Lane Craig and J.P. Moreland, “Introduction,” in *The Blackwell Companion to Natural Theology*, ed. William Lane Craig and J.P. Moreland (Oxford: Blackwell Publishing Ltd, 2012), ix–xiii; Craig, *The Cosmological Argument*.

⁷⁴⁸ Pereira, *Theodicea*, 104.

⁷⁴⁹ Pereira, 105.

⁷⁵⁰ Pereira, 107.

⁷⁵¹ Pereira, 111–12.

chance,” Pereira wrote.⁷⁵² Thus he concluded that the proof of the body demonstrated “that it could not be the work of chance.”⁷⁵³

Moreover, Pereira argued that beyond chance, “The fabric of the human body is a work of infinite intelligence.”⁷⁵⁴ Referencing numerous examples from natural history, he demonstrated that the human body could just as easily have existed in an infinite number of other combinations, including, for example, non-sentient vegetation. The only being that could distinguish between the infinite forms available and choose to create the human body as it is was a being of infinite knowledge and being – that is, God.⁷⁵⁵ The first four propositions of Pereira’s work, therefore, utilize a sloppy argument from design of the human body. From these claims, Pereira leapt rather quickly to metaphysical claims including the immutability of God, his omnipotence, and his attributes. In these latter claims, the parallels between Pereira’s work and Leibniz’s *Theodicy* are strikingly similar (for example, his defence of the infiniteness goodness of God in proposition twenty-seven).⁷⁵⁶

The core of Pereira’s *Theodicy*, however, did not rely on arguments from design, but instead was articulated through cosmological arguments, reflecting both the instability of the term during the eighteenth century and the close connection that theologians believed existed between the exercise of natural reason and the application of reason to the created world. Pereira began the *Theodicy* with a set of definitions, nearly all of which denote motion, contingency, or cause. His definition of God, for example, included “an entity of whose necessity is that which is his essence...without necessitating another entity...,” while his definition of a created-thing

⁷⁵² Pereira, 113.

⁷⁵³ Pereira, 113; Menéndez y Pelayo claims that Pereira's work uses a similar structure to Spinoza's *Ethics*. Menéndez y Pelayo, *Heterodoxos*, 1228.

⁷⁵⁴ Pereira, *Theodicea*, 131.

⁷⁵⁵ Pereira, 135.

⁷⁵⁶ Pereira, 259.

was “...that which is dependent on another entity...”⁷⁵⁷ These definitions seem to be suppositions which assume the validity of an argument from contingency.⁷⁵⁸ Similarly, his second proposition, which extended the rational origin of the human body to all of “animal life,” relied on an argument from movement and motion.⁷⁵⁹ Movement, according to Pereira, was not intrinsic to the property of matter, rather it was “the forces of *inertia* that are proportional to its quantity or mass.”⁷⁶⁰ Movement, including all of the multitudinous mechanical fluctuations which operated the hydraulic machine of the human body, were gifted as “added virtues” by “another Agent superior to the material of the subject.”⁷⁶¹

According to Pereira, matter created by chance “could not vanquish its own inertia, nor produce even a single degree of movement.”⁷⁶² Here, it is almost certain that Pereira was influenced by new physical theories of natural philosophy, likely from the laws of motion published in Isaac Newton’s *Principia Mathematica* (1687).⁷⁶³ Accordingly, Pereira updated and refitted the Thomistic cosmological argument from motion, discussing the need for an external, unmoved mover in terms of *inertia*, rather than an Aristotelian concept of *motus* as an actuality or potentiality.⁷⁶⁴ This is a clear example of how the development of natural philosophy impacted the revision of natural theology in eighteenth-century Spain. The bulk of

⁷⁵⁷ Pereira, 88–89.

⁷⁵⁸ Adam Barkman, “From Contingency to Necessary Being,” in *Revisiting Aquinas’ Proofs for the Existence of God*, ed. Robert Arp (Leiden: Brill, 2016), 123–30; Edward Moad, “Problems with Aquinas’ Third Way,” in *Revisiting Aquinas’ Proofs for the Existence of God*, ed. Robert Arp (Leiden: Brill, 2016), 131–40; Aquinas, *Summa Theologiae* [1920].

⁷⁵⁹ Pereira, *Theodicea*, 113–14; Aquinas, *Summa Theologiae* [1920].

⁷⁶⁰ Pereira, *Theodicea*, 114.

⁷⁶¹ Pereira, 114.

⁷⁶² Pereira, 118.

⁷⁶³ Isaac Newton, “The Principia [1687, First Edition],” in *Newton: Philosophical Writings*, ed. Andrew Janiak, Second edition, Cambridge Core [Electronic], Cambridge Texts in the History of Philosophy (Cambridge: Cambridge University Press, 2014), 59–114, <https://ezproxy-prd.bodleian.ox.ac.uk:2117/core/books/newton-philosophical-writings/6809BE78302D0272D8167FDD388A742A>. This supposition is based on the particular use of “inertia” as a physical concept.

⁷⁶⁴ Davies, *Summa Contra Gentiles*, 37.

Pereira's argumentation continues in this vein; it is not physico-theological, but based upon rationalization. While he is amazed at the design, order, and irreducible complexity of the human body, his main arguments are cosmological, establish God as the necessary and self-sufficient first cause and prime mover of all other matter.⁷⁶⁵

Perhaps more than any other work of natural theology in Spain, Almeida's *Harmony* was a popular and successful treatise, enjoying multiple translations and reprintings.⁷⁶⁶ It was written in the form of a series of afternoon conversations, mainly between an inquiring Baroness and a clergyman named Theodosius. The same cosmological arguments which Pereira cited made appearances in Almeida's work, this time spelled out in an entertaining, if occasionally pedantic, dialogue:

Teod: ...Do you believe that you exist?
 Bar: Yes, I believe it. I exist.
 Teod: And someone gave you this being?
 Bar: Without a doubt, it was my parents.
 Teod: They also received being from someone, and their parents from others, and finally we come to stop at the first man...no limited creature can have existence from itself...[without God] there would have passed an infinite series of creatures.
 Bar: This is impossible: an infinite series that has already finished cannot be...⁷⁶⁷

Here, Almeida, through Theodosius, confirmed the logical necessity of God as a the only essential being upon whom all other contingent beings rely (the third of Aquinas's *quinque viae*). Like Pereira, however, Almeida conflated the design of the created order with the very fact of its existence. Later in the same conversation, Theodosius, as the voice of Almeida, elaborated on the "mechanism" of the humble ant, expounding on its intricacies, noting that it is "in certain

⁷⁶⁵ This point is noted in Menéndez y Pelayo, *Heterodoxos*, 1228.

⁷⁶⁶ s.n., "Teodoro de Almeida 1722-1804," www.filosofia.org, accessed May 23, 2018, <http://www.filosofia.org/ave/001/a170.htm>.

⁷⁶⁷ Almeida, *Armonía* [Madrid 1798], 42–44.

ways more admirable than the body of a man,” and proclaiming that the “production of...insects proves with evidence the existence of God.”⁷⁶⁸ That is, not only the “admirable mechanism of the ant,” but the chain of its existence – for, when a friend of the Baroness obtusely objected that “other ants engender [ants],” Theodosius responded with the challenge of contingency, stating, “...Just a moment, friend...Who formed the first ant?”⁷⁶⁹

Like Almeida’s *Harmony* and Pereira’s, the first volume of Juan Francisco de Castro Fernández’s *God and Nature* is dedicated to the ratiocination of God’s existence through cosmological and teleological arguments. His initial arguments, like Pereira, were predicated on the idea of movement and the need for a prime mover. “Everything in the Universe moves...this movement is not without cause; it must need a motor...Will we find one who moves without being moved? Because this is the object for which we search.”⁷⁷⁰ Castro Fernández’s was explicitly Thomistic in his language on this point, describing the need for a “prime mover” (*un primer motor*) to avoid the philosophically intolerable concept of an infinite regress.⁷⁷¹ Additionally, Castro Fernández references the extension of this principle to include cause and effect, writing that “one cannot [have] an effect without cause.”⁷⁷²

On a separate occasion, Feijóo cautioned against those who sought to anchor causality and motion in some abstracted or vague notion of “Nature” as a vital force or animating spirit of the cosmos. If this force, according to Feijóo, had a mind and personality, then “...we are convinced...this universal Nature is he whom we call God.”⁷⁷³ If not, and this force were supposed to be an “inanimate entity”, then such a force would be unable to be responsible for the

⁷⁶⁸ Almeida, 49–50.

⁷⁶⁹ Almeida, 50.

⁷⁷⁰ Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:11–12.

⁷⁷¹ Castro [Fernández], 1:14.

⁷⁷² Davies, *Summa Contra Gentiles*, 44–45; Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:14.

⁷⁷³ Feijóo, TCU VI.6§xvi¶44:253.

mind, understanding, and persons found in humanity (as part of creation).⁷⁷⁴ “Where do they come from if it doesn’t have it?” Feijóo asked, also questioning, “Thus who could believe that an agent without understanding and without sense...could have made other works [that are] without comparison more delicate [and] more perfect than those which until now have been worked by human Artificers?”⁷⁷⁵

Castro Fernández, more than other natural theologians in Spain, devotes a fair amount of text to teleological arguments, but the placement of these after passages constructed from cosmological reasoning is revealing. One may surmise that he considered it a fruitless enterprise to draw metaphysical probabilities from the structure of the universe without first firmly establishing the conclusions drawn from its very existence. Having done so, however, Castro Fernández argues that the rational belief in the existence of a deity can be deduced from “the reflection on our spirit and its knowledge,” “the reflection on the foundation of the Universe in general,” “the reflection on the Universe in particular,” and the “existence of man.” The third of these claims, is teleological and argued based on the design and intricate order of the universe, comparing the created world to a well-organized city:

“Who upon entering some town...seeing its streets, plazas, and houses well placed, artificial conducts to bring clean and healthy water...public buildings...well-fortified and walled against its enemies...the citizens in repose and harmony...religion well established, good education for the youth and attention to the elderly, the right administration of justice...who would say...that this nation, town, or city lacked a government...or Governor?”⁷⁷⁶

In the same way, argued Castro Fernández, one could not look at the order of the universe without seeing a divine governor behind it. His articulation of this argument includes descriptions of the harmony of nature which read almost like proto-fine-tuning arguments. “We

⁷⁷⁴ Feijóo TCU VI.6§xvi¶44:253.

⁷⁷⁵ Feijóo TCU VI.6§xvi¶44:254.

⁷⁷⁶ Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:33.

see, or we can understand that this globe maintains itself in a perpetual revolution on its own axis,” Castro Fernández wrote. Without this rotation, he notes there would be no periods of day and night, no “uniformity of time,” no “differentiation of the seasons of hot, cold, temperate, humid, and dry, according to what is convenient to the production and health of mankind and animals.”⁷⁷⁷ In short, the world’s unique appropriateness for man inclined Castro Fernández to look for a designer. Additionally, Castro Fernández included an argument from moral law (“deduced from the morality of human actions” and “deduced from the providence and government which is admirable in the Universe”).⁷⁷⁸

Natural theology in eighteenth-century Spain, therefore, represented the unification of metaphysical and rational arguments to subjects presented by the study of natural philosophy. Arguments from causality or design had existed for centuries prior to the Spanish enlightenment, but with the flourishing of the natural sciences, Spanish theologians and philosophers had new occasions and new ways of expanding and visualizing these arguments.

Repurposing Natural Theology: Apologetics and Catechesis

Different beliefs about the amount and type of knowledge ascertained by natural theology existed in eighteenth-century Spain, and the quality of this knowledge was often directly related to the purpose for which natural theology was seen to be most fit. Spanish intellectuals believed that natural theology would be, in the words of Ceballos, “the legitimate path to learn Philosophy, and one of the ways of knowing God...in this way the truth of the existence of God is demonstrated for the Philosophers.”⁷⁷⁹ “Knowing God,” however, was not necessarily the relational goal expressed by earlier mystical forms of natural theology, but simply the

⁷⁷⁷ Castro [Fernández], 1:36.

⁷⁷⁸ Castro Fernández, *Dios y la Naturaleza* [Madrid 1780] 1.V.117 and 1.VI.122.

⁷⁷⁹ Ceballos y Mier, *La falsa I* [Madrid 1775], I:155.

acknowledgment of his existence and the designation of some of his properties. Certainly, devotional works of natural theology, especially of physico-theology, continued to be printed in eighteenth-century Spain, but in general, natural theology was repurposed for another aim: the defence of the faith.

Natural Theology as Apologetics: Confronting the “False Philosophies”

The most common point which eighteenth-century Spanish natural theologies affirmed was the existence of God. Pereira wrote that the proper use of his work would “convince us of the existence of God [and] of his attributes,” and Berni y Catalá that “it concerns God.”⁷⁸⁰ Almeida, too, introduced his work by noting that “the principal object which I present is God...”⁷⁸¹ The very title of Castro Fernández’s work underscored this point by stating “in which it is demonstrated the Existence of God.”⁷⁸² Yet as many contemporary theologians have similarly experienced, the actual application of natural theology did not always prove the existence of God or ruminate on his attributes.⁷⁸³ Natural theology could have broader metaphysical conclusions which, although related to Divine existence, constituted separate discussions. Pereira, for example, sought to demonstrate forty-three propositions, ranging from the existence of God to the nature of the human spirit and the origins of natural law. Berni y Catalá’s topics similarly included God and human spirits, but also extensive sections on angels and demons, memory, senses and consciousness. One of the examination propositions of Aliaga y Castellot even specifically affirmed that natural theology could prove specifically that the “true religion is that which is professed by the Roman Catholic Church.”⁷⁸⁴

⁷⁸⁰ Pereira, *Theodicea*, 18; Berni y Catalá, *Filosofía III*, III:2.

⁷⁸¹ Almeida, *Armonía* 1798.

⁷⁸² Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780].

⁷⁸³ Barr, *Biblical Faith and Natural Theology*, 2–3.

⁷⁸⁴ s.n. [Conde Duque de Aliaga], *Exercicio público*, 74.

The main emphasis, however, hinged upon proving the existence of a deity and of basic propositions related to the general character of God. This is because of the specific concerns of intellectuals in eighteenth-century Spain to respond to anti-religious charges made by secular and materialist philosophies. In the case of Spain, the need to argue against growing atheism and naturalism converted natural theology into “a pugnacious exercise” used to defend the rationality of believing in the existence of God.⁷⁸⁵ Although the definition of natural theology in the eighteenth century was undoubtedly shaped by the larger tradition of natural theology in Spain, informed by the advancements in natural sciences, and influenced by similar works in Europe (discussed in the following chapter), its use was unequivocally molded by an apologetic impetus for its creation and use to combat the rise of atheism, deism, and materialism in enlightenment Spain.

This apologetic repurposing of natural theology is a great difference which sets Spanish natural theology of the eighteenth century apart from expressions which preceded it (and indeed, which distinguishes it from contemporary works in England or France, as will be shown in the following chapter), is the emphasis placed on its ability to prove the basic truth of Christian and theist propositions and to act as a form of apologetics against the rising tide of atheism, skepticism, materialism, and deism which was perceived by Spain during this time. The Spanish historian Marcelino Menéndez Pelayo (1856-1912) wrote that “the theology of the eighteenth century had a popular and polemical character.”⁷⁸⁶ In order to comprehend natural theology in enlightenment Spain, it is necessary to understand the general crisis which Spanish intellectuals

⁷⁸⁵ David Fergusson, “Types of Natural Theology,” in *The Evolution of Rationality: Interdisciplinary Essays in Honor of J Wentzel Van Huyssteen*, ed. F. LeRon Schults (Grand Rapids: William B. Eerdmans Publishing Company, 2006), 380.

⁷⁸⁶ Marcelino Menéndez Pelayo, *La ciencia española*, Edición digital a partir de Edición nacional de las obras completas de Menéndez Pelayo, vol. 3 (Santander: Consejo Superior de Investigaciones Científicas, 1953), 41, <http://www.cervantesvirtual.com/nd/ark:/59851/bmc6m3p8>.

perceived as occurring in philosophical and theological spheres which created such polemical theology. Federico A. López Silvestre has argued that the genre of natural theology is the key to understanding the eighteenth-century mentality, as it represents “its connection, at the same time, to the Catholic world and to the scientific and humanist vanguard.”⁷⁸⁷ He views natural theology as an attempt both to “recuperate pagan philosophy and to deepen the newborn studies without losing in them faith in a Christian God.”⁷⁸⁸ This is doubtlessly true, but perhaps more crucial to reconstructing the Spanish context is the crisis of the false philosophy experienced by the Hispanic cognoscenti. Spanish philosophers and theologians of the late-eighteenth century viewed themselves as pitched in an intellectual and metaphysical combat with heretical, novel, and (generally) foreign philosophies, often introduced by the new sciences.

Valcárcel, quoting the *l'Encyclopedie*, wrote that “The number of Deists grows every day. In England, men of letters follow this system, and the same is observed in other literate nations...their mode of thinking it is almost always Pyrrhonism...subjecting demonstrated truths to reason...”⁷⁸⁹ Nor was Deism limited to the Protestants of England; it was also closely connected in the Spanish mindset to the overly-liberal tolerance of France. Particularly in the second half of the eighteenth century, Spanish Catholics viewed the philosophy of these two foreign countries as heretical and dangerous. The proliferation of these ideas and their importation into Spain was likened to the spread of a virulent disease. Pereira, for example, wrote of the need to fight ““the clumsiest and detestable abuse of human reason [which make] the cruelest war against its own Creator by means of Philosophism [sic], or by the prostitution of Philosophy, that such Sects have among our Christian nations, in which they run and spread like

⁷⁸⁷ López Silvestre, “Dios y la naturaleza...siglo xviii,” 417.

⁷⁸⁸ López Silvestre, 417.

⁷⁸⁹ Valcárcel, *Desengaños I* [Madrid 1787], 1:28.

a contagion.”⁷⁹⁰ This metaphor of disease was shared by many Spanish writers to refer to heretical philosophies.

In addition to deism, Spanish theologians and philosophers worried about the growing number of atheists. Atheism was hardly a novel concept – Castro Fernández wrote that “in all times there have been Atheists,” describing atheism as “the human perversity to obscure [the knowledge of God].”⁷⁹¹ He even subjected the existence of unbelief as part of Divine providence, writing that, “the Lord has also permitted by His high judgment that the light of His existence should have apparent shadows.”⁷⁹² Spanish natural theologies indicated, however, an urgency and responsiveness that imply that atheism provided a hitherto unseen challenge in the late-eighteenth century. Ceballos wrote that “the name of Deist is new, insolent, and quasi-barbarous in all of Europe...it is even newer in Spain; that it was a fortunate and holy land when neither this nor any other evil beast roamed across her.”⁷⁹³ The claim is hyperbole, although just as John Hedley Brooke has condemned the intolerance of the institutions of Spain as retardant to the development of natural theology, these same institutions – the Holy Office of the Inquisition, the presence of the Society of Jesus (until 1767), and the strong alliance between Scholasticism, religious orders, and the university system – were likely responsible for the inimitable condition of relative uniformity and the rich repository of Catholic theology in Spain during the eighteenth century which produced such a unique form of natural theology.⁷⁹⁴ The novelty of deism, as well as the exaggerated myth of the “holy” and pure orthodoxy of Spain was repeated by Almeida in the preface to his *Harmony*, who wrote that:

⁷⁹⁰ Pereira, *Theodicea*, 37–39.

⁷⁹¹ Castro [Fernández], *Dios y la Naturaleza I* [Madrid 1780], 1:158–64.

⁷⁹² Castro [Fernández], 1:158–64.

⁷⁹³ Ceballos y Mier, *La Falsa I*, 1:6.

⁷⁹⁴ Javier Fernández Sebastián, “Toleration and Freedom of Expression in the Hispanic World: Between Enlightenment and Liberalism,” *Past and Present*, no. 211 (2011): 159–97.

For a long time, I doubted whether I should publish these disputes in my country, judging that it was free from the contagion [of unbelief] and isolated from the countries [where it] flourished; and fearing that pious listeners, through ignorance of my intentions, might raise to evil the vulgarity of the blasphemies from the mouths of our enemies that they hear in the disputes. Nevertheless, I am determined...that is already needed to preserve with this species of antidote against the evil which has started to make havoc in our setting.⁷⁹⁵

Almeida saw in the 1790s, perhaps particularly during the excesses of the French Revolution (Almeida's work was published at the height of the 'Reign of Terror'), the baneful philosophies of deism and atheism appearing in Iberian society.⁷⁹⁶ The trope of the "common listener" or "common reader" (*vulgo*) was a frequently-cited concern of the Spanish intellectual elite, who worried that the populace of Spain and the average reader, once exposed to cleverly written arguments, would be deceived into unbelief.⁷⁹⁷ Indeed, Almeida clarified that the "poison" to which he referred entered Spain in "golden cups of elegant books...in foreign tongues..."⁷⁹⁸ Atheism and Deism were, in his opinion, foreign philosophical systems that not only fooled Spaniards capable of understanding other languages, "but also other ignorant and simple folk who learn from the evil philosophers loose words and systems favorable to the passions..."⁷⁹⁹

It was Ceballos's concern to combat "this modern monster" that motivated his six-volume philosophical rebuttal, *The False Philosophy, or, Atheism, Deism, and Materialism, and Other New Sects...*⁸⁰⁰ In these works, the term "natural theology" was applied to his

⁷⁹⁵ Almeida, *Armonía* [Madrid 1798], viii-ix.

⁷⁹⁶ Although Almeida was Portuguese, he was living and working at the time in Madrid. The homeland or *patria* to which he refers, therefore, is unclear.

⁷⁹⁷ For the best understanding of the *vulgo*, consult Ivy Lilian McClelland, *Ideological Hesitancy in Spain 1700-1750* (Liverpool: Liverpool University Press, 1991).

⁷⁹⁸ Almeida, *Armonía* [Madrid 1798], ix.

⁷⁹⁹ Almeida, ix.

⁸⁰⁰ Ceballos y Mier, *La Falsa I*, 1:8; Ceballos was influenced by others who had written directly against Voltaire, including the French Benedictine Louis-Mayeul Chaudon (1737-1817), who had the privilege of anonymously irritating Voltaire to the point where he was labeled by the *philosophe* "one of the most impudent falsifiers...the author of an infamous libel;" see: Louis-Mayeul Chaudon, *Dictionnaire anti-philosophique, pour servir de commentaire & de correctif au Dictionnaire philosophique, & aux autres livres, qui ont paru de nos jours contre le christianisme: ouvrage dans lequel on donne en abrégé les preuves de la religion, & la réponse aux objections de ses adversaires; avec la notice des principaux auteurs qui l'ont attaquée, & l'apologie des grands hommes qui l'ont*

argumentative apologetics against atheists and deists. These “new sects” provided a new and difficult challenge to Spanish theologians – that was, they demanded that their philosophical and metaphysical positions be refuted and debated using only those modes of justification which were acceptable to them, namely human reason. Thus, towards the close of the eighteenth century, Spanish philosophers and theologians revived the genre of “natural theology” (*teología natural*) as a result of the need to engage atheist, deist, or other nonbelieving philosophers without invoking traditional religious sources of authority. Ceballos wrote of deists and atheists that:

The difficulty of impugning them is so great as to be a necessity. The truth of Religion – can it be founded without the Scripture and the word of God? Because when these impious men, whom call themselves Philosophers, fight against the mysterious and the dogmas of the faith, one cannot respond to them with the holy Scriptures, nor with the doctrine of the Councils, nor with the whole Church, nor with tradition, nor with some of the documents wherein the word of God is proved, because they depreciate all of the divine testimonies as the depreciate God.⁸⁰¹

Without the usual sources of revealed knowledge, Spanish theologians sought to counter heretic philosophers on the epistemic grounds which they would accept and using reasons which they would deem “rational.” This complaint was shared by Almeida, who wrote in his *Harmony*:

When I have found myself in circumstances of fighting against them with equal weapons, that is to say, with only those of reason, since they do not recourse to the passages of Scripture, nor to the Councils, nor to the Fathers, neither do they consent to me arming myself with these weapons that up until now have driven Theology...For this type of fight, one should go out as a philosopher to the field to defend religion, because they are fighting philosophers.⁸⁰²

défendue (Avignon: Chez la Veuve Girard & François Seguin, imprimeurs-libraires, à la place Saint Didier, 1767), <http://gallica.bnf.fr/ark:/12148/bpt6k6545729z>; Voltaire, *The Works of Voltaire. A Contemporary Version*, trans. William F. Fleming, vol. 5 (New York: E.R. DuMont, 1901), 256, <http://oll.libertyfund.org/titles/voltaire-the-works-of-voltaire-a-contemporary-version-in-21-vols>.

⁸⁰¹ Ceballos y Mier, *La Falsa I*, 1:28.

⁸⁰² Teodoro de Almeida, *Armonía de la razón y de la religión ó Respuestas filosóficas á los argumentos de los incrédulos*, trans. Francisco V[á]zquez, Third edition, vol. 1 (Madrid: Imprenta que fue de Garcia, 1820), vi-vii.

Almeida saw *Harmony* as providing the missing gap in philosophical theology. Whereas his previous works had instructed discussed topics such as psychology and moral philosophy, *Harmony* was meant to supply the “needed *natural Theology*.”⁸⁰³ “Need” and “necessity” were used by Ceballos and Almeida to describe natural theology. Natural theology, or metaphysics argued entirely from reason and distinct from Sacred or Revealed Theology was viewed as “...the only method capable of convincing these enemies of Religion.”⁸⁰⁴ Natural theology was therefore necessary to answer this apologetic need, therefore, because of the insufficiency of revelation in philosophical argumentation.

This was a curious turn for Spanish theologians; all of the authors of Spanish natural theology affirmed the superiority and sublimity of revealed theology over natural theology. Although Ceballos, Valcárcel, Feijóo, and Almeida participated in the exercise of *natural theology*, they ultimately recognized its severe limitations, and, following Aquinas and Luis de Granada, designated it only a “preamble for the faith.”⁸⁰⁵ That is, as a theological practice, it was useful for answering the philosophical challenges of deism, but was insufficient on its own for discovering the rich repository of truth guarded by revealed theological knowledge. “The truths of heaven only have their solid, eternal, and firmest foundation in the Son of God,” affirmed Almeida, while Berni y Catalá professed that “the only Theological conclusion that is certainly is inferred at least from a premise of the Faith, that is, revealed...”⁸⁰⁶ While revealed theology was the favored and superior of the two, natural theology was the *necessary* condescension for the purpose at hand. Not yet ready for the bread of doctrinal theology, Spanish theologians and philosophers had to serve instead the palatable milk of natural theology.

⁸⁰³ Almeida.

⁸⁰⁴ Pereira, *Theodicea*, 42.

⁸⁰⁵ Ceballos y Mier, *La Falsa I*, 1:7–8.

⁸⁰⁶ Almeida, *Armonía* [Madrid 1820], xii; Berni y Catalá, *Filosofía III* [Valencia 1736], III:4.

In so doing, natural theologians in Spain repurposed natural theology, converting it from an activity of reflection and meditation on the wondrousness, beauty, and divine contrivance of nature into an apologetic discourse. Such writers viewed themselves as inheritors of a longstanding tradition of the defence of faith against heresy and heterodoxy. Ceballos began *The False Philosophy* with an epigraph taken from the opening lines of Tertullian's (c. 155-240 CE) *Prescription Against the Heretics*, which in turn borrowed from I Corinthians 11:19, exhorting Christians to be prepared for challenges to their faith and to view these trials as appointed opportunities for the defence of truth.⁸⁰⁷ By referencing this passage, Ceballos linked the setting of enlightenment Spain to the "condition of the present times" of Tertullian and the Church Fathers. This connection is strengthened by the patristic and medieval references which Spanish natural theology invoked, including, for example, Aquinas's *Summa Contra Gentiles*, another work written to combat unbelief.

Spanish natural theologians connected, moreover, the apologetic function of their work with exhortations issued by Church Councils and Pontiffs to reclaim philosophy as a Christian enterprise. In explaining his motivation to write the *Theodicy*, Pereira cited the conciliar decree *Apostolici regiminis*, issued by the Fifth Lateran Council (1512-1517), which encouraged that philosophy should support doctrine and required that clergy, both regular and secular, receive training in philosophy.⁸⁰⁸ This enjoinder, released 19 December, 1513, called for Catholic teachers "to apply themselves to the full extent of their energies to refuting and disposing of the philosophers' opposing arguments..."⁸⁰⁹ Pereira viewed this exhortation as a sacred duty which

⁸⁰⁷ Ceballos y Mier, *La Falsa I* [Madrid 1775], frontmatter.

⁸⁰⁸ Translations from this source are provided by Tanner et. al. in Norman P. Tanner, ed., "Concilium Lateranense V - 1512-1517," in *Decrees of the Ecumenical Councils*, vol. I: Nicaea I to Lateran V, II vols. (Washington D.C.: Georgetown University Press, 1990), 817–1138; Eric A. Constant, "A Reinterpretation of the Fifth Lateran Council Decree Apostolici Regiminis (1513)," *Sixteenth Century Journal* 33, no. 2 (2002): 353–79.

⁸⁰⁹ Tanner, "Concilium Lateranense V," 606.

even he, a medical professional who had no religious vocation, was bound to fulfill. “If they [the philosophers] do not recognize revelation, depreciating the most holy authority and the most respectable holiness;” asked Pereira, “if they challenge us with the weapons of pure natural reason, excluding all other [sources], and without ceding to others; how does the precept of the [Fifth Lateran] Council not obligate us now?”⁸¹⁰ Pereira also referenced that similar exhortations had been made by the two most recent popes, Clement XIII (r. 1758-1769) and Clement XIV (r. 1769-1774).⁸¹¹ Natural theology was, for Spain, a religious obligation to reclaim a Christian philosophy; in the eighteenth-century, this meant confronting deism, atheism, skepticism, and materialism through ratiocination.

Spanish natural theologians of the eighteenth century worked also to reclaim the category of “natural religion” from its employment in deist and materialist works. Pereira deliberately co-opted the title of his work from Leibniz’s *Theodicy*, which he condemned in his work and which had been censored in Spain.⁸¹² His intent was to reclaim philosophical concepts which he believed had been unfairly associated with materialist philosophy. He noted, for example, that his subtitle of “Natural Religion” also “startled the ignorant,” who associated the term with “some cult.”⁸¹³ Rather, argued Pereira, the term “Natural Religion,” should designate the

⁸¹⁰ Pereira, *Theodicea*, 40.

⁸¹¹ Although Pereira does not specify his references, he was likely citing Clement XIII’s 1766 encyclical *Christianae Republicae*, or less probably, the 1761 *In Dominico Agro*. The references to letters by Clement XIV are less clear, as Pereira simply describes “repeated briefs” written to the Spanish king and to French bishops “exhorting them to proscribe those impious and libertine Philosophers.” Clement XIII, “*Christianae Reipublicae* [On the Dangers of Anti-Christian Writings],” Papal Encyclicals Online, November 25, 1776, <http://www.papalencyclicals.net/clem13/c13chris.htm>; Clement XIII, “*In Dominico Agro* [On Instruction in the Faith],” Papal Encyclicals Online, June 14, 1761, <http://www.papalencyclicals.net/clem13/c13indom.htm>; Pereira, *Theodicea*, 40–41.

⁸¹² Pereira, *Theodicea*, 48; Sánchez Corredera suggests that Pereira’s work was also influenced by and written in response to Toland and Clarke, further linking Spain to the broader European enlightenment. See: Silverio Sánchez Corredera, *Jovellanos y el jovellanismo, una perspectiva filosófica: (estudio histórico y filosófico sobre Jovellanos, en la perspectiva del materialismo filosófico, desde la ética, la política y la moral)* (Fundación Gustavo Bueno, 2004), 784.

⁸¹³ Pereira, *Theodicea*, 49, 44. The choice of vocabulary could also reflect the fact that Pereira’s Spanish was, perhaps because of his Portuguese origin, rather stilted. Contemporaries complained of the “barbarous language”

“external actions” which “Religion and Natural Law...inspire in all environments and peoples.”⁸¹⁴ This, again, was subjected to, rather than antithetical to the revealed supernatural. Natural Religion “prepared the way for “revealed supernature;” however, as Aliaga y Castellot recited in his examinations, “natural religion is not sufficient to give God the worship he is owed.”⁸¹⁵

Natural Theology's as Catechesis: Teaching the First Steps of the Faith

Indeed, natural theology, rightly studied, was asserted by some theologians as necessarily entailing a movement from natural religion to revealed religion or as the necessary first step to accepting revealed religion. In this, natural theology's meaning as *praeambula fidei* shifted from an auxiliary or elementary introduction to revealed theology to a requisite path that all Christians had to take before contemplating deeper mysteries of the faith. This helps to understand why Hervás y Panduro advised that students of theology first study philosophy and natural theology. He cited St. Paul's statement in Hebrews 11:6, where the apostle states that “...without faith it is impossible to please him, for whoever would draw near to God must believe that he exists and that he rewards those who seek him.”⁸¹⁶ Hervás y Panduro interpreted this to mean that a right relationship with God required knowledge of his existence, a point which was first gained by natural theology and which constituted a central tenet of ‘natural religion’. “Christianity supposes the maxims of natural religion [to be] sincere and incorrupt:” he wrote, clarifying that “he who does not adopt [them] cannot draw near to God, nor enter into Christianity...”⁸¹⁷ While this position was still a far cry from Sibiuda's assertion that natural theology could teach all that

and “obscure method” of his writing, and Menéndez y Pelayo described his “extraordinary aridity” and “perverse Castellano.” Menéndez y Pelayo, *Heterodoxos*, 1228.

⁸¹⁴ Pereira, *Theodicea*, 49.

⁸¹⁵ Pereira, 50; s.n. [Conde Duque de Aliaga], *Exercicio público*, 74. David Hume's *Dialogues Concerning Natural Religion* (1779) had not yet been published.

⁸¹⁶ Hebrews 11:6 ESV.

⁸¹⁷ Hervás y Panduro, *Vida del hombre IV [Madrid 1796]*, vol. 4: Continuacion de la Parte II:198–99.

revealed theology contained, it elevated the position of natural theology from a merely philosophical enterprise or useful devotional practice to an essential part of the formation of a Christian in eighteenth-century Spain.

Natural theology's role as a requisite beginner step towards developing a Christian (or specifically Catholic faith) is reflected into the number of eighteenth-century works which discussed the topic for catechetical and teaching purposes. Such works occurred both as apologetic handbooks, such as Almeida's afternoon lessons in the *Harmony*, but also in works specifically addressed towards the education of the Spanish youth. For example, in 1795, Juan Martín de Escoiquiz (1747-1820), a Spanish courtier, translated into Castilian a critically-altered version of Louis Cotte's *Leçons élémentaires d'histoire naturelle, a l'usage des jeunes-gens* (Elementary Lessons of Natural History for the Use by Young Folk, 1787).⁸¹⁸ Escoiquiz's version simplified the subject drastically, elevated the role of natural theology in natural history, and specifically converted Cotte's more advanced prose for beginners. He described this editorial decision, stating:

...this [writing to an advanced audience] was the same as pretending to construct a building without first laying down the foundations. I owed to a certain person who has formed and executed various useful projects for the instruction of youth, that made me see palpably this error, and I had wanted to remedy it, arranging these new Lessons that I present to the children in the form of a catechism in order to prepare them by their means to that comprehension of the [ii] more extensive lessons that will be put in their hands when they should be more trained.⁸¹⁹

Many other such works specifically used natural theology for didactic purposes, including, for example, Andrés Piquer's *Discourse on the Application of Philosophy to Facts of Religion for*

⁸¹⁸ Juan de Escoiquiz, *Lecciones Elementales de Historia Natural Por Preguntas y Respuestas Para El Uso de Los Niños* (Madrid: en la Imprenta Real, 1795); Louis Cotte, *Leçons Élémentaires d'histoire Naturelle, a l'usage Des Jeunes-Gens*, First Edition (Paris: Chez J. Barbou, 1787).

⁸¹⁹ Escoiquiz, *Lecciones [Madrid 1795]*, i.

the Spanish Youth (Madrid, 1757).⁸²⁰ Moreover, as referenced at the start of this chapter, natural theology became a standard part of the educational curricula at schools and seminaries in Spain and throughout the Hispanic world during this time, a point which is continued in the next chapter.

Natural theology was thus affirmed as a legitimate, and indeed sometimes necessary, philosophical endeavor for Spanish Catholics in the eighteenth century. In the past, natural theology had, at different times, been pursued as a devotional activity practiced by mystical and ascetical religious; it had been codified as advanced scholastic treatment as metaphysics and had been viewed as an auxiliary form of conveying truths about God. In the eighteenth century, however, natural theology was recognized not as auxiliary, but integral for enabling persons to become aware of God, opening themselves to the higher teaching of revealed theology, and for integrating the studies of the natural world within a broader philosophical context.

Contextualizing Natural Theology's Impacts on the Spanish Enlightenment

Thus, the historical context of enlightenment Spain, including the improvement of the natural sciences in Spain, its historical-theological legacy and tradition, and its concerns over the corruptive nature of new philosophical systems, provided the impetus for the generation of works of natural theology in eighteenth-century Spain. Natural theology formed a bridge between physical and metaphysical inquiries, connecting the natural world and reason with metaphysical concepts and philosophical ideas. It is therefore the perfect subject of study to understand the way in which early modern individuals conceived of the boundaries and methods of natural philosophy and theology.

⁸²⁰ Andrés Piquer, *Discurso Sobre La Aplicacion de La Philosophia a Los Assuntos de Religion Para La Juventud Española* (Madrid: En la Oficina de Joachin Ibarra, 1757).

“Theologizing Science”: Natural Theology’s Relationship to Natural Philosophy

Much of the natural theology of eighteenth-century Spain relied upon the advancements made in natural philosophy and demonstrates some of the clearest examples of a Spanish philosophy of science. “He who would look for serious science in eighteenth-century Spain,” wrote Menéndez y Pelayo, “has to look for it in these common and forgotten friars.”⁸²¹ Natural philosophy helped to provide the ability to construct convincing natural theology in enlightenment Spain. Pereira, for example, constructed his natural theology from the foundation of anatomy and physical knowledge, which, he claimed had made patently clear advances in the eighteenth century. “What progresses has Physics not made in this century?” he asked, answering that:

They tell of Machines, Pendulums, Telescopes, and Microscopes, the certain measurements of the earth, the discovery of the latitudes...the widespread clarity of the most obscure arcane points of Chemistry, and the certainty and advancements of Botany and Natural History...Medicine, which has seen the diminution every day of the numerous catalog of diseases which were mortal...⁸²²

Pereira, as a physician, was particularly motivated by the advancements made by anatomy. “The advantages and advancements of modern Medicine....can be seen in the clarified Physiology by the experimental Physics and by Anatomy, in the advanced practice by means of the discoveries of Chemistry, Botany, Natural History, and Pathology...”⁸²³ It was, in fact, Pereira’s knowledge as a physician which he believed set him apart from previous attempts at metaphysical abstraction and which allowed him to be uniquely positioned to write his work.⁸²⁴ Thus, natural theology suggests that natural philosophy and theology existed in a framework of co-

⁸²¹ Menéndez y Pelayo, *Heterodoxos*, 1227.

⁸²² Pereira, *Theodicea*, 21–23.

⁸²³ Pereira, 23.

⁸²⁴ Pereira, 54–55; Indeed, in response to claims that he had plagiarized Antonio Genovesi (1713-1769), author of *Metaphysical Elements of Mathematics* and *The Metaphysical Institutions*, Pereira noted that he had specific knowledge about anatomy which Genovesi’s work lacked. Antonio Genovesi, *Elementa Metaphysicae Mathematicum*, Newest edition (Venice, 1762); Antonio Genovesi, *Institutiones Metaphysicae: in usum tirunumajetatae ac libris quatuor comprehensae* (Naples: Benedicti Gessari, 1754).

development in eighteenth-century Spain. While advancements in natural philosophy enabled the expansion of natural theology, it was legitimized as a subordinate to revealed theology in the search for truth and knowledge.

Spain's longstanding close association with Aristotelianism, seen especially in the previous chapter during the 'Second Scholastic' revival which governed the Spanish universities, likely was responsible for the close connection between the activity of natural philosophy (physics) and the underlying, fundamental questions about reality on which this activity relied (metaphysics). Spanish natural theology in the eighteenth century did not engage superficial arguments of design, nor did it suppose that the articulation of natural theology relied upon mystical or divine influences (as in Planes or in the thought of the *alumbrados*). Rather, like Suárez's disputations, it relied upon the basic metaphysical laws which governed how natural philosophy interpreted the workings of the universe.

At the same time, Spanish "physico-theology" influenced the development of science; Peter Harrison, for example, has argued that physico-theology helped to justify the theological foundations of natural philosophy, that it provided both a utility and a ground set of epistemic assumptions about nature, and that it legitimized crossover investigations for both naturalists and theologians.⁸²⁵ In Spain, physico-theology is hardly discernible from works of natural philosophy; indeed, many of the examples in this chapter are not standalone works of theology. Instead, they represent passages and chapters which are found within works of natural science. Recognizing Spaniards considered these two fields as overlapping areas of inquiry helps to see natural theology as a category which was interdisciplinary by definition. Spanish writers of the eighteenth-century often described their subjects of study in hybridized terms – not just

⁸²⁵ Harrison, "Physico-Theology."

“physico-theological” investigations, but also descriptions such as “infused science,” “philosophical-physical anatomy,” “medico-moralism,” and adjectives such as “sacred” applied to scientific topics such as embryology.⁸²⁶ Such descriptions appear as chimeras to modern eyes but were fundamental to how Spaniards envisioned the function and purpose of natural philosophy. Studying the natural sciences relied upon ideas of causality and contingency; observing the natural world (including humanity) revealed increasing evidence to suggest order, intelligibility, design, and wonder. These points invited reflection and led (it was asserted) to some knowledge of God. This was not a byproduct nor an ulterior motive of some subset natural philosophy that can be cordoned off by historians of science from examples of ‘proper’ or ‘pure’ natural philosophy – there was no such thing in the early modern Spanish mindset. In this worldview, all studies of nature were studies of created things. This position is consistent with the tradition of natural theology in Spain during the early modern period. Nature, as a concept, entails created-ness; the theological doctrines of creation necessarily impacted the way in which Spanish natural philosophers studied the universe.

Thus, Hervás y Panduro described his subject as “science, which the true philosophers in all times theologized [*teologizaron*], because its study conducts toward the knowledge of the Creator...”⁸²⁷ “Theologizing” science, for Hervás y Panduro, was not a contortion of natural

⁸²⁶ Manuel Custodio, *Disertacion Fisico-Teologica, En Que Se Establece El Preciso Instante de La Animación Racional Del Feto En El Cuerpo Humano* (Seville: Josef Padrino, 1779); Josef Vazquez, *Los Eruditos a la Violeta, ó Curso Completo de Todas Las Ciencias, Dividido En Siete Lecciones Para Los Siete Dias de La Semana, Con El Suplemento de Este* (Barcelona: En la Oficina de Juan Francisco Piferrer, 1818); Lorenzo Hervás y Panduro, *El hombre físico, o Anatomia humana fisico-filosofica*, vol. I (Madrid: En la Imprenta de la Administracion del Real Arbitrio de Beneficencia, 1800); Antonio José Rodríguez, *Nuevo Aspecto de Theologia Medico-Moral y Ambos Derechos o Paradojas Physico-Theologico Legales, Obra Ritica, Provechosa a Parrocos, Confessors, y Professors de Ambos Derechos, y Util a Medicos, Philosophos, y Eruditos*, vol. 1, 4 vols. (Zaragoza: Francisco Moreno, 1742); Francesco Cangiamila, *Embriologia Sagrada, o Tratado de La Obligacion Que Tienen Los Curas, Confesores, Médicos ... de Cooperar á La Salvacion de Los Niños Que Aun No Han Nacido*, trans. Joaquín Castellot, 2 vols. (Madrid: La Imprenta de Pedro Marin, 1774).

⁸²⁷ Hervás y Panduro, *El hombre físico I [Madrid 1800]*, I:11.

science, but rather it was a recognition that the knowledge which it produced was closely connected to theological truths. Similarly, Josef Vazquez described the process of “an infused science...[the natural philosopher’s] knowledge recreating in observations of nature, admiring the grandeurs of power and recognizing by the greatness of its Creator.”⁸²⁸ Natural theology thus reveals that science in enlightenment Spain was inseparable from theological reflection.

Engaging the Discourse of Rationalism

The traditional historical narrative of early modern natural theology posits that the rise of the category occurred because of two principle causes: first, the Protestant Reformation’s destabilization of traditional sources of authoritative, revelatory knowledge, and secondly, the methodology of reason advocated by the “new sciences” of the scientific movement of the long seventeenth century.⁸²⁹ In a wholly Catholic context, however, traditional sources of authority remained firmly in place, maintaining a normative epistemological framework for the interaction of reason and revelation, science and theology. As Taliaferro has noted, both orthodox and non-traditional theists have used natural theology, historically, to argue opposite positions on religious tradition and revelation.⁸³⁰ It may be argued, therefore, that although natural theology was developed as an apologetic practice in eighteenth-century Spain, it unintentionally reified the divide between faith and natural philosophy by emphasizing the fundamental epistemic differences between revealed truth and natural reason. This position was famously advanced by theologian Michael J. Buckley, S.J., in his study, *At The Origins of Modern Atheism*.⁸³¹ In this work, Buckley claims that modern atheism can trace its roots to the “self-alienation of religion itself,” achieved inadvertently when religion began to adopt philosophical and scientific methods

⁸²⁸ Vazquez, *Los Eruditos a la Violeta*, 51.

⁸²⁹ Harrison, “Natural Theology, Deism...,” 426.

⁸³⁰ Taliaferro, “The Project of Natural Theology,” 1–2.

⁸³¹ Michael J. Buckley, *At the Origins of Modern Atheism* (New Haven: Yale University Press, 1987).

of justification.⁸³² Although Denis Edwards has connected Buckley's work to Catholic philosophical theology in particular, this complaint is similar to the platform advanced by individuals such as Alvin Plantinga in Reformed epistemology.⁸³³ Similarly, Harrison has stated that "if early modern natural philosophers did not themselves promote deism, it might be said they indirectly contributed to it," laying the more accurate cause of desacralization at the feet of Protestantism and natural causation.⁸³⁴ It is unclear if, by capitulating to enlightenment rationality as the method of justification for religious belief, Spanish theologians unwittingly circumscribed theological activity to a smaller realm. Certainly, the sublimation of reason to revealed theology and to faith would seem to have been a preventative against this notion, but further research may elucidate this point.

At stake here is the relationship between faith, revelation, and reason in the mentality of eighteenth-century Spain. For many years, the historiographical conceptualization of the Spanish enlightenment has been one which portrays the country as merely reactionary, 'traditionalist,' or misoneist. Menéndez Pelayo, for example, wrote that Spanish thinkers responded in backlash to new ideas in dogmatic extravagance proportional to the polemic of French encyclopedists. He wrote:

If they annulled the *supernatural order*, [Spanish thinkers] did the same with the *natural order*; if they exalted more than is fair the value of *reason*, [Spanish thinkers] forgot it entirely, esteeming its power as essentially disorganized, they excluded all except *revelation*, which they extended to all as constituting the foundation of all that can be known...⁸³⁵

⁸³² Quoted in Denis Edwards, "Catholic Perspectives on Natural Theology," in *The Oxford Handbook of Natural Theology*, ed. Russell Re Manning (Oxford: Oxford University Press, 2013), 183; Buckley, *At the Origins*.

⁸³³ Edwards, "Catholic Perspectives"; Horace Fairlamb, "Sanctifying Evidentialism," *Religious Studies* 46, no. 1 (March 2010): 61–76; Alvin Plantinga and Nicholas Wolterstorff, *Faith and Rationality: Reason and Belief in God* (Notre Dame: University of Notre Dame Press, 1984).

⁸³⁴ Harrison, "Natural Theology, Deism...", 430–31.

⁸³⁵ Marcelino Menéndez y Pelayo, *La ciencia española (Polémicas, Proyectos, y Bibliografía)*, Third edition, Revised and Augmented, vol. 3 (Madrid: Imprenta de A. Perez DuBrull, 1888), 449.

The case study of natural theology shows that this charge is, if not false, in need of more nuanced explanation. Spanish natural theologians did not abandon the ‘natural order’ – but they did recognize that the natural order is a created order, and therefore fits within the larger container of a supernatural universe. Nor did Spanish theologians depreciate the powers of reason; on the contrary they had an elevated view of the cognitive abilities of postlapsarian humanity. Indeed, the insistence on the perspicuity, universal culpability, intelligibility, and necessity of natural theology within eighteenth-century Spanish Catholicism relies upon the recognition of basic rational capabilities implanted within every human mind. This reason was, to be fair, a product of a Creator God, and indeed formed part of a concept of ‘general revelation’ as much as the external world. Spanish natural theology invites historians to reconsider, therefore, those fundamental three categories of nature, rationality, and the knowledge of God, and to recognize that the employment of these ideas in the eighteenth-century Hispanic world may have been different from modern conceptions.

Conclusion: Historicizing Discussions of Science and Theology and Further Applications

Accounting for these differences forces scholars of science and religion to connect the development of theological ideas with the grounded historical context which produced them and demonstrates why historicizing theological ideas and conversations is crucial to establishing a productive dialectic. It is for this reason that the definition and use of natural theology in eighteenth-century Spain has been carefully unpacked in this chapter. Theologian McGrath has described “the lengthening shadows of half-forgotten historical debates and cultural circumstances” which have been so powerful an influence that they continue to exert an unknown influence in modern-day theological and philosophical circles.⁸³⁶ Geographers David

⁸³⁶ McGrath, *Open Secret*, 3.

Livingston and Charles Withers have convincingly demonstrated that the construction of ideas, even in the ‘objective’ field of science, is a process of cultural mediation in time and space.⁸³⁷ In a similar move which he described as “lowering the tone” in the practice of scientific history, Steven Shapin wrote in his magisterial work, *Never Pure*, that:

You could say that science happens within, not outside of, historical time, that it has a deep historicity...that it bears the marks of the places where it is produced...that science is not one, indivisible, and unified...that science is not pure thought but that it is practice...that the making and warranting of scientific knowledge are performances...⁸³⁸

Shapin described these as ‘heresies’ of the religion of science, but the same could be said for the history of theology, and the history of natural theology in particular.⁸³⁹ Both scientific and theological ideas carry historical baggage with them, and in order to understand the terms and the conceptual frameworks within which they operate, theologians and philosophers of science would benefit greatly from reexamining the time, place, people, practices, and cultures which produced these ideas.

For example, in McGrath has called for a shift from natural theology as “making sense” to “seeing” nature, less concerned with “proving” God’s existence than witnessing the testimony of the natural world as a divine indication.⁸⁴⁰ McGrath argues that contemporary natural theology continues to be modeled by “the agenda of the Enlightenment” – the search for a

⁸³⁷ David N. Livingstone, *Putting Science in Its Place: Geographies of Scientific Knowledge* (Chicago: University of Chicago Press, 2010); David N. Livingstone, “Science, Text and Space: Thoughts on the Geography of Reading,” *Transactions of the Institute of British Geographers* 30, no. 4 (December 2005): 391–401; Charles W.J. Withers, *Placing the Enlightenment: Thinking Geographically about the Age of Reason* (Chicago: University of Chicago Press, 2007); Charles W.J. Withers, “Place and the ‘Spatial Turn’ in Geography and in History,” *Journal of the History of Ideas* 70, no. 4 (October 2009): 637–58.

⁸³⁸ Steven Shapin, *Never Pure: Historical Studies of Science as If It Was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority* (Baltimore: Johns Hopkins University Press, 2010), 5.

⁸³⁹ Shapin, 6.

⁸⁴⁰ Alister E. McGrath, “Truth, Beauty and Goodness. A New Vision for Natural Theology,” in *The Human Project in Science and Religion: Copenhagen University Discussions in Science and Religion Vol. I*, ed. Anne Leona Cesarine Runehov, Niels Henrik Gregersen, and Jakob Wolf, vol. I (Copenhagen: Copenhagen University Network of Science and Religion, Faculty of Theology, The University of Copenhagen, 2010), 21.

universal method of establishing knowledge through a common, leveling, and inherently human natural reason.⁸⁴¹ He does so by “retriev[ing] and reform[ing] older approaches that have been marginalized or regarded as outmoded.”⁸⁴² Like the case study of Spanish natural theology during the eighteenth-century, these “older approaches” have been relegated as passé or have been thus far neglected because they fail to measure up to the rules of rationality which currently govern modern discussions of natural theology. These rules, according to McGrath, are the direct descendants of Enlightenment conceptions of justification, evidentialism, and reason.

In *Re-Imagining Nature*, McGrath challenges the “traditional” approach of early modern ratiocination, rightly arguing that “it assumes a culturally invariant notion of human reason....fails to recognize the constructive activity of the human mind in the process of observation...[and] fails to appreciate the importance of tradition-mediated rationalities.”⁸⁴³ This “culturally invariant notion” can be seen, for example, in the search for a “universal human knowledge” and method in the work of Descartes.⁸⁴⁴ Nicholas Wolterstorff has extended this analysis, describing a general “evidentialist challenge to religious belief” that arose during the Enlightenment and which “belongs to the mentality of the *Aufklärung*.”⁸⁴⁵ Using John Locke as the paradigm of Enlightenment evidentialism, Wolterstorff contrasts the *theologia naturalis* practiced by Anselm, Aquinas, and Sebonde to “Enlightenment project of evidentialist apologetics,” which reveal a definite shift in the articulation of reason. This, according to Wolterstorff, demonstrates how epistemic justification, rationalization, and the evidentialist standards for justified belief were constructed and negotiated during the long eighteenth-century,

⁸⁴¹ McGrath, 22.

⁸⁴² McGrath, *Open Secret*, 3.

⁸⁴³ McGrath, *Re-Imagining*, 26.

⁸⁴⁴ Luis Arenas, “Matemáticas, Método y Mathesis Universalis En Las Regulae de Descartes,” *Revista de Filosofía* 9, no. 15 (1996): 61.

⁸⁴⁵ Wolterstorff, “The Migration of the Theistic Arguments [1986],” 173–216.

setting standards which continue to hold sway in the modern world. McGrath labels this enlightenment vision “a dead end” – the idea of universal and common human rationalities is neither a historical reality nor a viable possibility.⁸⁴⁶

Certainly, the ‘cultural variance’ in notions of reason is underscored by the example of eighteenth-century Spanish natural theology. Ratiocination was, to theologians such as Valcárcel, Ceballos, and Almeida, a necessary philosophical exercise to accommodate new standards of epistemic justification imposed by the “new philosophers” of the enlightenment. Moreover, it reflected a crucial capitulation of revealed truth and the primacy of tradition and authority (both magisterial and scriptural) to the insufficiency of ambiguous reason. Such an epistemological negotiation is not limited to the example of eighteenth-century Spain, and further research may produce other useful ways in which science and theology have reshaped notions of reason and rationalization. In the case of Spanish natural theology, for example, David Hume’s (1711-1776) critiques of teleological natural theology based on the unverifiability of inductive arguments, for example, were not applicable to Spanish works, while Immanuel Kant’s (1724-1804) ruminations on the unnecessary of existence and ontology were. This is one reason, perhaps, why Hume was so seldom mentioned by the natural theologians of eighteenth-century Spain but why Kant received an enormous following in the Krausist theological and philosophical schools of the nineteenth century.⁸⁴⁷

To conclude, consider two models of understanding Spanish natural theology, taken from illustrations in two of the surveyed works. The first is an anonymous drawing from Berni y Catalá’s 1736 publication, *Rational Philosophy*, where the author provided a small, decorative

⁸⁴⁶ McGrath, *Open Secret*, 140.

⁸⁴⁷ This point merits attention. Krausist thought has been connected, for example, with the origins of panentheistic theology. Adolfo Posada, *Breve historia del krausismo español* (Universidad de Oviedo, 1981).

vignette to open his introduction to the treatise. Pictured is a ladder, climbing into the sky towards the sun. Berni y Catalá, like many other natural theologians before him, often used the language of ascent to describe the project of natural theology. He wrote that “with reason one is elevated to contemplate higher and more subtle things,” and that natural theology discussed God by “the reaching of natural reason.”⁸⁴⁸ His use of a ladder is a direct reference to the *scala naturae* discussed in works by Sibiuda, Luis de Granada, Juan Climaco, and Bellarmine, among others. The second is an engraving drawn by the well-known illustrator Miguel Gamborino (1760-1828) to face the frontispiece of Almeida’s *Harmony of Reason and Religion*. This drawing is divided into two scenes: in the first, Faith, personified by a woman holding both a cross and monstrance, receives a refracted beam of light which streams from God before being reflected in a mirror held by a personification of Reason. Below this scene, the goddess Cybele, mother of nature, holds two lions in chains. To make the allegory clear, either Gamborino or Almeida supplied a quatrain:

*The light of reason is a voice divine
Which dominates the passions to which we incline
Much higher is the light which religion proposes
To which reason sublimates and never opposes.*⁸⁴⁹

This was how Almeida, as well as many Spanish theologians, philosophers, and natural philosophers, viewed the project of natural theology. Natural theology could serve as a ladder, a method of elevating thoughts from the natural (creation and reason included) to the supernatural, from the physical and metaphysical. In this sense, the category of natural theology was a method which could lead from the mundane to the sacred. But Natural theology could also function as a mirror, reflecting the God-given light of reason and of the *creatura mundi* to become sublimated

⁸⁴⁸ Berni y Catalá, *Filosofía III*, III:1–2.

⁸⁴⁹ Almeida, *Armonía* [Madrid 1820], frontispiece. I have taken small liberties to maintain the rhyme scheme; the literal translation varies slightly.

to the Catholic faith. Applied to the contemplation of the created world, natural reason thus added light to revelatory knowledge and increased wisdom and understanding. For readers and practitioners of Spanish natural theology during the “Age of Lights,” God provided both reason and revelation, both natural and divine theology, and only the proper ordering of these two would result in the true ‘enlightenment’ of the world.

V. Accounting for Differences: Historical Explanations for Spanish Natural Theology Compared to Foreign Works

“We do not open [our] eyes well, when we start to see marvels: the sky, the earth, the sea, the rivers, the fonts, the trees, the bushes, the shrubbery, the same plants on which we walk in the meadows, they offer to us a cumulated number of portents which would have us, day and night, enthralled and absorbed...”

-Joaquín Lorenzo Villanueva (1757-1837)

Introduction: Paley’s *Natural Theology* (1802) in Translation

Villanueva, a priest and renowned figure of the Spanish enlightenment, wrote this praise of nature’s wonders in the preface to William Paley’s *Natural Theology*, which he translated into Spanish.⁸⁵⁰ The day before Christmas Eve in 1823, Villanueva had arrived in London from Dublin, where he was living in exile from Spain. Sometime later, while in London, he met with Vicente Rocafuerte, the future president of Ecuador, who was working as a secretary for the embassy of the newly-established Provisional Government of Mexico.⁸⁵¹ Rocafuerte was smitten with the “immortal work of Dr. Paley, entitled: *Natural Theology*,” published in 1802.⁸⁵² At Rocafuerte’s “urging”, Villanueva undertook to translate it from English to Castilian, completing his work in 1825.⁸⁵³ In his preface, Villanueva praised the “exactitude of its ideas and ratiocinations,” recommending that this “wise and most pious method of studying the works of nature” be adopted into the curriculum for schools in the newly-established First Mexican Republic.⁸⁵⁴ For many scholars of science and religion, Paley’s work continues to be the textbook example of natural theology. His watchmaker analogy has persisted to this day as the exemplar of the design argument, and his particular use of the titular term has dominated popular

⁸⁵⁰ William Paley, *Teología natural, ó demonstracion de la existencia y de los atributos de la Divinidad.*, trans. Joaquín Lorenzo Villanueva (London: R. Ackermann, 1825).

⁸⁵¹ Joaquín Lorenzo Villanueva, *Vida literaria de Dn Joaquin Lorenzo Villanueva o Memoria de Sus Escritos y de Sus Opiniones Eclesiasticas y Politicas, y de Algunos Sucesos Notables de Su Tiempo*, vol. 2 (London: SS. Dulau y Compañía, 1825), 383–84.

⁸⁵² Paley, *Teología natural*, 1892, iii “Carta del Sr. D. Vicente Rocafuerte.”

⁸⁵³ Villanueva, *Vida literaria II*, Tom. II:384.

⁸⁵⁴ Paley, *Teología natural* [London 1825].

understandings of natural theology as an exercise in which God's existence and character is teleologically established by the contrivance and wondrousness of the natural world.⁸⁵⁵ This interpretation is supported, moreover, when the history of natural theology is explored in literature from early modern England. Works by Robert Boyle (1627-1691), John Ray (1627-1705), and William Derham (1657-1735), among others, promoted natural theology as “physico-theology,” arguing for the existence and nature of God from the contemplation of the intricately designed mechanisms of nature.⁸⁵⁶

For Spain, however, Villanueva's translation of Paley's work of physico-theology may be understood as just one of many expressions of natural theology which emerged over the course of the early modern period in Spain – and as the final one that marks the end of this study. It is true that similar works which might be classified as variations of ‘physico-theology’ had been published before the enlightenment; the works of Venegas (1540), Isla (1621), Nieremberg (1635), were all early forerunners of this category, and as was argued in the previous chapter, works advocating physico-theology became far more popular during the eighteenth century. Still, this form of natural theology was neither derivative from the English tradition, nor was it the exclusive option for natural theology in early modern Spain.

⁸⁵⁵ William Paley, *Natural Theology*, Reprint (New York: American Tract Society, 1881).

⁸⁵⁶ W. Derham, *Physico-Theology: Or, A Demonstration of the Being and Attributes of God, from His Works of Creation*, 3rd Edition (London: Printed for W. Innys, 1714); W. Derham, *Astro-Theology: Or, A Demonstration of the Being and Attributes of God, from a Survey of the Heavens* (London: Printed for W. Innys, 1715); John Ray, *The Wisdom of God Manifested in the Works of the Creation* (London: Printed for Samuel Smith at the Princes Arms in S. Paul's church-yard, 1691); John Ray, *Three Physico-Theological Discourses* (London: Printed for William Innys, 1713), https://catalog.lindahall.org/discovery/delivery/01LINDAHALL_INST:LHL/1286217710005961?lang=en; William Buckland, *Vindiciæ Geologicæ: The Connexion of Geology with Religion, Explained in an Inaugural Lecture Delivered before University of Oxford, May 15, 1819, on the Endowment of Readership in Geology* / by William Buckland. (Oxford: University Press, 1820); William Whewell, *Astronomy and General Physics Considered with Reference to Natural Theology.*, Third edition, Bridgewater Treatises on the Power, Wisdom, and Goodness of God, as Manifested in the Creation (London: W. Pickering, 1834); Robert Boyle, *The Excellency of Theology Compar'd with Natural Philosophy* (London: T.N. for Henry Herringman, 1674), <https://quod.lib.umich.edu/e/eebo/A28966.0001.001?view=toc>.

Indeed, if one compares, for example, the work of John Ray's *The Wisdom of God Manifested in the Works of Creation* (1691) to a works like Hervás y Panduro's *Ecstatic Journey* or selected essays of Feijóo, these works will seem quite similar in their scope and approach. Even their examples and analogies are alike. Ray, for example, moves from discussing gravity and mass to the Sun; Hervás y Panduro similarly describes "solar density or mass", then describes the Sun, then proceeding to discuss "material attraction" (gravity).⁸⁵⁷ Alternatively, compare the language of Ray and Feijóo on the wonder of microscopic life (*animalcula*). Ray writes that:

...I might draw an Argument of the admirable Art and Skill of the Creator...from the incredible Smalness [sic] of some of those natural and enlivened Machines, the Bodies of Animals...those minute Machines endued with life and motion, I mean, the Bodies of those *Animalcula*, not long since discovered in *Pepper-water*, by Mr. *Lewenhoek*...If these Creatures be so exceeding small, what must we think of their Muscles and other Parts?...Let us not think that the bounds of Science are fixed...The Treasures of Nature are inexhaustible.⁸⁵⁸

Likewise, Feijóo described that:

...I speak of those most minute little animals that are only visible by means of the Microscope, and such by their smallness are least visible to view, such that by the same they abound more in the imagination. ...the Hollander Antoine Leuwenhoek, celebrated Artificer of the Microscope, found that that white substance that infects teeth is nothing other than the cumulation of innumerable little worms...all these extremely little animals have eyes...they have nerves, veins, arteries, muscles, and all of these parts are composed, as is necessary, of innumerable fibers. Where while we stop with such portentous smallness?...Thus is it that it seems marvelous...compared with the infinite divisibility of the Continuum...⁸⁵⁹

The parity of these passages does not imply that Feijóo's work (written after Ray's) was aware of Ray's work (indeed, as is discussed later in this chapter, Ray's work was almost entirely absent from Spain). Rather, it suggests that natural theology's examples were truly common to all and

⁸⁵⁷ Ray, *Wisdom* [London 1691]; Hervás y Panduro, *Viage I* [Madrid 1793].

⁸⁵⁸ Ray, *Wisdom* [London 1691], 118–25.

⁸⁵⁹ Feijóo, *TCU VI* [1778], VI.vi§xv¶40-41:250–51.

accessible – the same microscopic discoveries which fascinated English natural theologians also fascinated Spanish natural theologians, and both saw in it an opportunity to marvel at the vast scale of mechanisms at the smallest level.

Such works are indeed similar to another, but this form of natural theology so common in the eighteenth century was not, as has been shown, the only form of natural theology present in early modern Spain. The previous four chapters have offered snapshots of natural theology in Spain throughout the early modern period, highlighting key works which, I assert, are illustrative for the general treatment of natural theology for each time: for example, Sibiuda and his successors in the late-fifteenth and early-sixteenth centuries, Venegas, Juan de Cazalla, and Luis de Granada in the mid-sixteenth century, Suárez, Nieremberg, and mystical authors in the development of Baroque Catholicism, and a panoply of writers in the Spanish enlightenment, including Teodoro de Almeida, Luis Pereira, and Francisco de Ceballos. Immediately apparent is the fact that natural theology in Spain varied in definition and use over time – the quasi-mystical contemplation of the dialogues found in the *Viola Animae* is a far cry from Suárez's twenty-ninth metaphysical disputation, which in turn looks nothing like the apologetic rhetoric of Teodoro de Almeida's *Harmony of Reason and Religion*. Yet each of these authors could describe their work as forms of natural theology. Understanding the core, constituent questions of natural theology, however, helps to tease out a narrative which connects these works. For this reason, this dissertation has emphasized key thematic concerns related to the concepts of nature, reason, and the knowledge of God, including, for example, what constitutes self-evident knowledge or whether nature and creation are viewed macrocosmically or microcosmically.

Moreover, throughout the dissertation, I have argued that the theological contours of natural theology in Spain were historically contingent and determined. That is, the natural

theologies which emerged in Spain were uniquely shaped by the intellectual and social context from which they were generated. Sibiuda, for example, was profoundly shaped by Franciscan spirituality stemming from Observant movements in the late medieval period. Venegas, it was shown, likely partitioned his approach to natural theology due to the ongoing persecution of the *alumbrados* in Renaissance Toledo. Suárez's revival of Thomist arguments was part of a larger epistemic shift commonly described as the "Second Scholastic" movement in Spain.

Enlightenment authors repurposed their natural theologies as apologetic defences mounted against the rise of materialist, deist, and atheist philosophies. In each of these cases, understanding different factors of the historical context help to understand how and why a natural theology took a particular form.

As a corollary to this assertion, I argue that early modern Spanish natural theology was dramatically distinct, for example, from the better-known example of English, Protestant natural theology (EPNT). That is, early modern Spain, although it shared many things in common with early modern England, was in many ways an altogether different setting. In this final chapter, I examine historical explanations for the development of natural theology in early modern England and contrast these to the early modern Spanish context. I then suggest several reasons which help to explain why Spanish natural theology emerged as a unique field. I showcase several key examples of direct and mutual influence between Spanish, English, and French natural theologies. I conclude by offering explanations for why the Spanish natural theological tradition has been omitted from serious study by theologians, philosophers, and historians.

The EPNT Narrative: England's 'Peculiarity' and Studies of Natural Theology

While scholarly literature is lacking on the tradition of natural theology in early modern Spain, there are numerous works dedicated to exploring the form of natural theology in

seventeenth- and eighteenth-century England. Many of these works are specifically historical in scope and seek to establish the particular historical factors which allowed for EPNT to emerge during the seventeenth century. By studying these ideas from England and comparing them against the backdrop of Spain, the historical contextual pressures which dictated the shape of natural theology in Spain will become clearer.

Natural theology emerged as a category of thought in sixteenth- and seventeenth-century England in response to “disagreements about how one should read the evidence of nature, and what weight one should give to the Bible and to reason as lights to guide one in doing so.”⁸⁶⁰ The Protestant Reformation had simultaneously undermined the role of religious authoritative knowledge and opened the interpretation of both Scripture and the natural world to the priesthood of all believers. Advancements in natural philosophy and challenges from Renaissance strains of skepticism encouraged English theologians and natural philosophers to develop a systematic approach which sought to reconcile the ‘two books’ of nature and Scripture under the harmony of their shared, divine authorship.⁸⁶¹ The result was a distinct form of theological activity which studied the order, lawfulness, contrivance, and beauty of the natural world to reinforce belief in the existence of God and to bolster scriptural statements and truths. The impact of such works has been shown to have contributed to the development and legitimization of natural philosophy, the revision of Aristotelian physics and university curricula, changing understandings of divine action and the lawfulness of mechanistic nature, and the separation of science and theology as two spheres of inquiry and knowledge.⁸⁶²

⁸⁶⁰ Mandelbrote, “Early Modern Natural Theologies,” 76.

⁸⁶¹ Harrison, *Territories*; Wilkins, *Of the Principles and Duties*; Mandelbrote, “Early Modern Natural Theologies”; Brooke, *Science and Religion*, 269–76.

⁸⁶² Peterfreund, *Turning*.

While English physico-theology was only one expression of natural theology, it has become the touchstone for understanding the concept of natural theology, both in historical and contemporary conversations. While affirming the “peculiar” nature of English natural theology, the existing historiography has simultaneously implied that natural theology formed a “common language” which ecumenically bridged the confessional gaps between Protestants and Catholics in early modernity.⁸⁶³ Yet serious studies of Catholic natural theology have remained largely absent from the historiographical discussion – and in this paucity, almost no studies have undertaken the Spanish example. Indeed, John Hedley Brooke has argued that natural theology was unique in gaining prominence in England alone, comparing it specifically to France:

In France there was no such continuum of tolerated belief. A far sharper polarization between Roman Catholic orthodoxy and religious dissent was the norm. A system of censorship had to be evaded. In England there was no need for enlightened minds to overthrow religion...no pope, no inquisition, no Jesuit order, no comparable grip of the priesthood on families through the practice of confession. Consequently, a critical mentality and faith in progress could thrive in England *within* piety. The peculiar resilience of natural theology can then be understood as a visible, and enduring, symbol of an Enlightenment goal – the pursuit of science – thriving with piety. Natural theology flourished in England not because of a peculiar English mentality but because there were social and political circumstances that gave the English Enlightenment a distinctive character.⁸⁶⁴

Brooke is right to note that English natural theology thrived because of a particular set of historical factors. This dissertation refutes, however, Brooke’s assertion that because these circumstances did not exist in other areas of Europe, natural theology did not exist in these countries.⁸⁶⁵ This dissertation presents numerous examples of natural theology in Spain and

⁸⁶³ Mandelbrote, “Early Modern Natural Theologies,” 76; Brooke, *Science and Religion*, 276.

⁸⁶⁴ Brooke, *Science and Religion*, 272.

⁸⁶⁵ Moreover, Brooke’s depiction of the intolerance of France (and by extension, Catholic Europe) seems to perpetuate several false tropes which have been historically disproven, including the “black legend” of Spain and the “polemic of Spanish science.” See: Ernesto García Camarero, “Polémica de la ciencia española,” *Triunfo* 26, no. 469 (May 29, 1971): 14–19; Marcelino Menéndez y Pelayo, “La Ciencia Española : Polémicas, Indicaciones y Proyectos,” 1879, <http://www.cervantesvirtual.com/obra-visor/la-ciencia-espanola-polemicas-indicaciones-y->

demonstrates that Spanish theologians and natural philosophers were involved in a long and well-documented conversation about natural theology almost entirely apart from contemporary English discussions. The result is not an absent natural theological category, only a different *type* of natural theology. This assumption has contributed to a critical lacuna of Catholic natural theology from the early modern and modern periods.

If historians looked elsewhere, beyond the Anglophone and primarily Protestant examples, they failed to find this tradition of natural theology alive and well in other climates. I offer two explanations for this. First, these studies neglected to consider other terms used to describe the activity of natural theology, and both “natural theology” and “physico-theology” as phrases were unpopular and infrequent in Spain until the eighteenth century. More to blame, I argue, is the fact that the forms of natural theology in early modern Spain were different from their counterparts because Spain was neither English nor Protestant. Spain’s case being dismissed (as well as all of Southern Europe, Iberoamerica, and most of Eastern Europe), the English understanding of natural theology became the definition of natural theology – it has been asserted by numerous scholars that natural theology was peculiarly English and the unique intellectual product of British Isles, connecting it to the cultural mentality, the religious and political atmosphere, and even the temperate fairness of England’s gentle greens and orderly gardens.⁸⁶⁶

proyectos--0/html/; J.M. Millas Vallicrosa, *La Vindicación de La Ciencia Española Por Menéndez Pelayo* (Madrid: CSIC, 2017); José Pardo-Tomás and Álar Martínez-Vidal, “Medicine and the Spanish Novator Movement: Ancients vs. Moderns, and Beyond,” in *Beyond the Black Legend: Spain and the Scientific Revolution/Mas Allá de La Leyenda Negra: España y La Revolución Científica*, ed. William Eamon and Victor Navarro Brotóns (Valencia: Universidad de Valencia, 2007), 323–46; María José Villaverde and Francisco Castilla Urbano, eds., *La sombra de la leyenda negra* (Madrid: Tecnos, 2016); John Slater and Maríaluz López-Terrada, “Being beyond: The Black Legend and How We Got over It,” *History of Science* 55, no. 2 (2017): 148–66.

⁸⁶⁶ “characteristically British” (Gillespie), “particularly prominent and persistent in Britain” and “a pervasive tradition” (Brooke), Neal C. Gillespie, “Natural History, Natural Theology, and Social Order: John Ray and the ‘Newtonian Ideology,’” *Journal of the History of Biology* 20 (1987): 2; “...the peculiarity may lie with the English landscape, deficient as it is in earthquakes and volcanoes. It was surely more difficult to rejoice over nature as the

Yet the emergence and development of natural theology cannot be separated from the historical circumstances which gave rise to it. The type of natural theology developed at a particular time and place reveal the theological and philosophical concerns and values of that setting. Both Mandelbrote and Harrison affirm that natural theology was an imprecise category that could include a wide range of definitions and uses which depended on theological orientation and authorial intent. Mandelbrote has demonstrated, for example, that in seventeenth-century England the application of natural theology could include arguments from both the “lawful operation of the universe” and “the wondrousness of nature.”⁸⁶⁷ Similarly, Stuart Peterfreund has demonstrated how the importation of new natural philosophical knowledge forced a responsive evolution in English natural theology from teleological arguments articulated on the design of the “creature” to those on the design of “mechanisms,” eventually passing onto arguments about the contrivance of mechanistic systems.⁸⁶⁸ Even with England, therefore, different theological camps dissented on the proper application of natural theology and continually revised their theologies in response to new natural knowledge and to shifting standards of acceptable proof and argument.

By demonstrating abundant examples of physico-theology in Spain, this dissertation challenges the claim that early modern England’s ‘peculiarity’ or ‘uniqueness’ was the only fertile ground in which physico-theology could grow. Secondly, it more fundamentally criticizes this approach for applying an ahistorical definition of natural theology and failing to recognize

work of benevolent design in those countries wracked by natural disasters.” Brooke, *Science and Religion*, 269; M.D. Eddy, “The Rhetoric and Science of William Paley’s Natural Theology,” *Literature & Theology* 18, no. 1 (March 2004): 14; The idea that climate produced religious variations and the subsequent theme of English theological exceptionalism is at least as old as enlightenment studies on natural religion. See: R.J.W. Mills, “William Falconer’s Remarks on the Influence of Climate (1781) and the Study of Religion in Enlightenment England,” *Intellectual History Review* 28, no. 2 (November 24, 2017): 303.

⁸⁶⁷ Mandelbrote, “Uses of Natural Theology,” 451.

⁸⁶⁸ Peterfreund, *Turning*.

that alternative natural theologies exist and existed. Thirdly, it provides ample historical evidence to show that such alternatives to physico-theology were widely practiced and promoted in early modern Spain and formed part of a longstanding and important theological and philosophical tradition. These claims are fundamental to revising the historiography of natural theology.

Historical Factors in the EPNT Narrative

Alister McGrath has identified four ideas which functioned as “historical origins” and shaped the way that natural theology, as a “socially mediated and polemically constructed” part of seventeenth- and eighteenth-century English Protestantism, emerged. He argues that EPNT was the product of the rise of (1) biblical criticism, especially in the “Reformed Tradition,” which complicated the perspicuity of the text (2) anticlericalism and anti-ecclesiastical authority, (3) the simplicity of “natural religion”, especially contrasted against complex theological or ecclesiastical instruction, (4) the success of the natural sciences and the scientific worldview (especially mechanicalism).⁸⁶⁹ McGrath notes that in England, further societal pressures shaped physico-theology, emphasizing especially the “stabilizing influence” that physico-theology had in the period following the English Civil War; that is, during a period when sectarianism had undermined confidence in traditional sources of religious authority, EPNT offered the appeal of studying a more organic, individually-accessible, unmediated, and evidentially-proven (through natural philosophy) source of the knowledge of God.⁸⁷⁰ McGrath describes the result of this crucible of English factors as “a specific form of natural theology which went far beyond anything known to the first sixteen centuries of Christian theological reflections.”⁸⁷¹

⁸⁶⁹ McGrath, *Scientific Theology: Nature*, Volume 1: Nature: 241–48.

⁸⁷⁰ McGrath, Volume 1: Nature: 243.

⁸⁷¹ McGrath, Volume 1: Nature: 244.

This interpretation is largely supported by the work of Peter Harrison. Harrison's several studies on natural theology in England especially demonstrate the way in which natural theology engaged natural philosophy, legitimized the practices of the natural sciences, and reinforced metaphysical ideas regarding the lawfulness and orderliness of the universe. In explaining why natural theology was so prevalent in England, Harrison writes that:

One of the most far-reaching consequences of the Protestant Reformation of the sixteenth century was a crisis of authority that pervaded the whole of Western Christendom...In this context the need for a criterion of religious truth became particularly acute. During the medieval period, tradition, scripture, reason, and experience had all been acceptable sources of religious authority...following the religious upheavals...serious challenges were issued to each of these long-established sources of authority. These challenges were underscored by new developments in the natural sciences.⁸⁷²

Like McGrath's first two criteria, Harrison identifies natural theology as a genre that responded to a felt need in a "crisis of authority," and again emphasizes that the key influential factor in shaping natural theological discourse was the question of "religious authority," principally expressed in the forms of "tradition, scripture, reason, and experience."⁸⁷³ In the wake of the Protestant Reformation and in the subsequent religious wars and movements experienced, for example, in sixteenth-century France, the Low Countries, or England, natural theology offered a way of establishing knowledge that was free from the contested categories of scripture and magisterial tradition. The challenge of Christian tradition is particularly highlighted by Scott Mandelbrote as a decisive factor in the renovation of EPNT. Mandelbrote notes the importance of classical sources, patristic authors, Neoplatonist thought, and Aristotelian metaphysics in shaping the early modern mindset on questions of nature, reason, and revelation.⁸⁷⁴

⁸⁷² Harrison, "Natural Theology, Deism...", 426.

⁸⁷³ Harrison, 426.

⁸⁷⁴ Mandelbrote, "Early Modern Natural Theologies."

All three of these scholars also affirm the importance of the development of the natural sciences and of the mechanistic worldview in creating a new theological discourse capable of interpreting the natural world. McGrath specifically highlights the success of the mechanistic worldview; Harrison emphasizes the “mostly congenial relationship between science and natural theology” in early modern England, and Mandelbrote writes about the “revolutions in knowledge and natural philosophy” which challenged early modern thinkers to confront the work of Descartes, Newton and others and to interpret the theological ramifications and potential of such natural philosophies.⁸⁷⁵ Peter Barrett has implied that it was the increased ability to empirically know the created world that encouraged the development of arguments from design in “the second great flowering of natural theology [which] occurred mainly in England from the late 17th-to the early 19th centuries...”⁸⁷⁶ Katherine Calloway explains in her study of natural theology during the English Scientific Revolution that natural theology was generated by advances in the natural sciences. “As new methods of acquiring knowledge came to dominate in seventeenth-century England,” she writes, “there arose a new kind of natural theology, known as ‘physico-theology.’”⁸⁷⁷ According to Calloway, the tandem growth of natural theology and natural philosophy benefited both fields. She argues that “empirical science needed to be shown to be in harmony with the aims of religion if it was to gain traction...and devout intellectuals wanted to reconcile new knowledge and methods with their old faith.”⁸⁷⁸

Similarly, Neal C. Gillespie notes that in England, natural history and natural theology “were merged into a single powerful instrument of religious and social apologetics. The motives

⁸⁷⁵ McGrath, *Scientific Theology: Nature*, Volume 1: Nature: 241–48; Harrison, “Natural Theology, Deism...,” 432; Mandelbrote, “Early Modern Natural Theologies,” 87–91.

⁸⁷⁶ Peter Barrett, “Natural Theology in a Pluralist Society,” *Scriptura* 61 (1997): 169.

⁸⁷⁷ Calloway, *Natural Theology*, 1.

⁸⁷⁸ Calloway, 2.

behind this merger arose out of the religious and social turmoil of the late seventeenth century...”⁸⁷⁹ He connects it with the need to establish “social order”; explaining that “The rising vogue of physico-theology helped those who were well disposed toward science, latitudinarian religion, and social order to deal with a number of difficult problems.”⁸⁸⁰ Similar to McGrath’s notion of the “stabilizing influence,” Gillespie interprets natural theology’s success in part due to its ability to speak across different religious groups in England (even to deists) and to find a way of incorporating the philosophies of the natural sciences.

Still, another way for accounting for the rise of natural theology in early modern England is that the same ‘Protestant ethic’ which, in Weberian theory, inspired the development of capitalism, was responsible for the unique success and achievement enjoyed by early modern Britain.⁸⁸¹ This idea, suggested by Ian Barbour, is that Protestantism, and specifically Puritanism, valued the rigorous study of nature to “reveal God’s handiwork and exemplify rational and orderly activity.”⁸⁸² Two virtues of English Protestantism are thus reinforced in the historiography of EPNT: its freedom and toleration of multiple religious groups and its commitment to critical thinking and free inquiry. In the first case, toleration of religious groups (which was by no means a decided point of the English landscape for much of the early modern period) increased the plurality of rival opinions on authority – different religious groups attributed different epistemic values to tradition, scripture, and the church, and the mere existence of so many contradictory opinions could lead some to seek, as McGrath has suggested, a simpler form of religious expression. Natural theology thus grew out of this religiously pluralist society and was uniquely able to converse in a language palatable to almost all of its

⁸⁷⁹ Gillespie, “Natural History, Natural Theology...,” 3.

⁸⁸⁰ Gillespie, 30.

⁸⁸¹ Ian G. Barbour, *Issues in Science and Religion* (New York: Harper Torchbook, 1966), 49.

⁸⁸² Barbour, 49.

groups. On the second point, it is asserted that English Protestants valued the interrogation of the natural world and allowed for the development of natural philosophies without impeding these ideas by religious dogmatism.

Brooke has also attributed the development of EPNT “...not because of a peculiar English mentality but because there were social and political circumstances that gave the English Enlightenment a distinctive character.”⁸⁸³ These circumstances are not well-defined in Brooke’s work, but they can be inferred from his critique explaining the comparative lack of natural theology in early modern France. According to Brooke, the fundamental difference between England and France was the presence of a constructive space for “critical mentality...*within* piety.”⁸⁸⁴ That is, Brooke asserts that early modern England was home to a diverse array of theological opinions and a generally liberal and tolerant environment for the articulation and speculation of various religious practices and beliefs. Alternatively, Brooke portrays France as ruled by sharply-defined dogmatism and orthodoxy, regulated by religious orders, the Inquisition, and censors, and with religious knowledge controlled and mediated by a priesthood and formally-defined ecclesiastical structure. The accuracy of these claims for eighteenth-century France is itself debatable, but their application to Spain during this time would surely emphasize even greater distinctions.

Because of the familiarity of EPNT, contemporary discussions of natural theology have largely been limited to considerations of design arguments, teleological interpretations of the natural world, and other concerns which arose from the EPNT tradition. Indeed, even in Hispanic scholarship, the story of natural theology is associated more often with Paley-Darwin design arguments than with earlier, Spanish contributions to metaphysics or natural

⁸⁸³ Brooke, *Science and Religion*, 242.

⁸⁸⁴ Brooke, 242.

contemplation.⁸⁸⁵ Yet recent scholarship on the EPNT has revealed that the narrative is more complicated than has been traditionally asserted. Scott Mandelbrote and Katherine Calloway have demonstrated that English natural theology had subtle variations in use, argumentation, and audience over the seventeenth century.⁸⁸⁶ Calloway, for example, describes “shorter-lived efforts” of natural theology which yet had important implications for how early modern thinkers viewed the relationship between nature, reason, and the sciences.⁸⁸⁷ Likewise, Mandelbrote has demonstrated a substrain of natural theology in England that focused on the wonder of nature (similar to Nieremberg’s *thaumatic* natural theology) rather than on its ordered lawfulness, connecting this form of natural theology particularly with the Cambridge Platonists.⁸⁸⁸ These works suggest that the narrative of EPNT is itself being revised and nuanced, and that natural theology, did not always have to rely upon the same refrain of design-based or teleological arguments raised from the scientific and experimental observation of the external world. This study on Spain’s historical factors, therefore, may be of use in challenging how historians approach natural theology in England.

Historical Factors Contributing to the Uniqueness of Spanish Natural Theology

The historical factors of the EPNT being thus established, I now turn to consider whether these ideas have similar explanatory power for the narrative of Spanish natural theology. To contrast with these historical markers for the development of natural theology in the EPNT tradition, the following generic historical explanations may be asserted for the development of

⁸⁸⁵ Leandro Sequeiros, “El rearme Creacionista en España: aviso para navegantes,” *Enseñanza de las Ciencias de la Tierra* 16, no. 2 (2008): 145; Nelio M.V. Bizzo, “Darwin e o Rompimento Com a Teologia Natural de Paley,” *Brazilian Geographical Journal: Geosciences and Humanities Research Medium* 1, no. 1 (June 2010): 21–32; Blázquez Paniagua, “A Dios por la ciencia.”

⁸⁸⁶ Mandelbrote, “Uses of Natural Theology”; Calloway, *Natural Theology*.

⁸⁸⁷ Calloway, *Natural Theology*, 2.

⁸⁸⁸ Mandelbrote, “Uses of Natural Theology,” 468.

natural theology in early modern Spain. Some of these factors are specifically related to the fact that Spanish natural theology was part of early modern Catholicism and shared in Catholic doctrines regarding nature, reason, and revelation. Still others are specific or peculiar to the Spanish context alone – the presence of the Spanish Inquisition, for example, or the epistemic impact of the encounter of the New World. Similar to McGrath’s fourfold explanation for the emergence of EPNT, I have identified the following eight factors, shortly summarized, as but a handful of explanations which have emerged from this study of natural theology in early modern Spain. These factors fall into two categories: those explanations which are unique to early modern Spain’s historical setting, and those explanations which are shared more broadly across the early modern Catholic world.

“Religious Homogeneity”⁸⁸⁹: Catholicism in early modern Spain

The EPNT narrative specifically highlights the relationship between religious pluralism or latitudinarianism in English society and the cultivation of natural theology. Natural theology, in this understanding, represented a way of speaking across divides in a religiously pluralist society by framing its claims in language of universality, both through human reason and the work of natural philosophy. This argument, however, might be inverted for the case of early modern Spain. While many recent studies have been dedicated to demonstrating elements of toleration or religious diversity in early modern Spain, it is doubtlessly true that Catholicism was the main religion in Spain and maintained an almost exclusive hegemony, especially in the sphere of the production of philosophy and theology (detailed, for example, in factors of religious orders, the Inquisition, and universities).⁸⁹⁰ Indeed, recent studies which have

⁸⁸⁹ I credit this term to Allyson M. Poska, *Regulating the People: The Catholic Reformation in Seventeenth-Century Spain* (Leiden: Brill, 1998), 1.

⁸⁹⁰ Stuart B. Schwartz, *All Can Be Saved: Religious Tolerance and Salvation in the Iberian Atlantic World* (New Haven: Yale University Press, 2009); Mercedes García-Arenal, Gerard Wiegers, and Ryan Szpiech, eds., *Polemical*

highlighted the presence of religious minorities in early modern Spain or distinguished between local religion and “official religion” within Spanish society may give impressions of a comfortably or generally pluralist society. Catholicism was the only permissible religious practice in early modern Spain; there were institutions dedicated to its propagation and defence, the Inquisition regularly monitored for heterodox practice and belief, and the Catholic Church represented a massive cultural and intellectual safeguard in the peninsula.⁸⁹¹ In short, theological or religious philosophically ideas were overwhelmingly and inescapably Catholic in nature. The works surveyed in this dissertation are a testament to this; while a few were of questionable orthodoxy (Sibiuda, the *alumbrado* treatises), all were authored from a Catholic worldview and worked with Catholic ideas and doctrines. Yet natural theology flourished under such “religious homogeneity,” proving that latitudinarianism is not a requisite historical factor.⁸⁹² On multiple occasions, Spain’s commitment to Catholicism directly shaped the way that natural theology was formed. In chapter two, for example, I demonstrated how the threat of interior mysticism and unregulated spirituality was associated with Franciscan and *alumbrado* spirituality, leading to a separation between Sibiudan and contemplative studies of creation from Venegas’s natural theology. In chapter four, I examined how the rise of irreligious philosophies prompted Spanish thinkers to repurpose natural theology for specifically apologetic ends.

In fact, the near-exclusivity of Catholicism in early modern Spain may have allowed for the development of alternative forms of natural theology which in polemical, pluralist settings

Encounters: Polemics between Christians, Jews and Muslims in Iberia and Beyond (University Park: Penn State University Press, 2019); Menéndez y Pelayo, *Heterodoxos*; James S. Amelang, *Parallel Histories: Muslims and Jews in Inquisitorial Spain* (Baton Rouge: Louisiana State University Press, 2013).

⁸⁹¹ Amelang, *Parallel Histories*; Poska, *Regulating the People*; Helen Rawlings, *Church, Religion and Society in Early Modern Spain* (New York: Palgrave, 2002); Christian, Jr., *Local Religion*.

⁸⁹² Poska, *Regulating the People*, 1. Poska distinguishes between the “religious homogeneity” of official Catholicism, and the lived religion of the Spanish populace.

would have been, as Calloway describes them, “short-lived.”⁸⁹³ One such example might be the thaumatic, wonder-driven natural theologies. Mandelbrote has shown that these theologies existed on the theological fringe of early modern England in the Cambridge Neoplatonists; in Spain, however, a very similar form of natural theology was widely accepted and found in the popular work of Juan Eusebio Nieremberg.⁸⁹⁴ Specifically, natural theologies which sought to cultivate a particular form of devotional or mystical focus may have been particularly well-suited to Spain because the readership was assumed to belong to the particular confessional parameters of Tridentine Catholicism. Alternatively, when rival ideas concerning deism or atheism emerged in eighteenth-century Spain, the natural theological discourse became, like England, far more couched in terms of universal reason and natural science. In other words, natural theology produced in latitudinarian settings is responsively reconciling, while the homogeneity of Spain allowed for deeper and more specific ways of relating nature not just to theism, but to Christian and Catholic theology.

“Religious Homogeneity” may also have translated to an established, acceptable, and agreed-upon canon of authoritative works which formed the core of references and citations. Mandelbrote argues that “the survival of classical writers as genuine interlocutors” is fundamental to understanding both natural philosophy and natural theology in the early modern period, yet often overlooked.⁸⁹⁵ Many examples of these classical partners in dialogue have been seen in the case of early modern Spanish natural theologies. For example, Ovid’s description of the “upturned face of man” (*os homini sublime*), for example, was a standard citation as proof that even in non-Christian societies, humans were distinguished in the natural order by their

⁸⁹³ Calloway, *Natural Theology*, 2.

⁸⁹⁴ Mandelbrote, “Uses of Natural Theology.”

⁸⁹⁵ Mandelbrote, “Early Modern Natural Theologies,” 77.

inclination to seek divinity. Venegas and Isla both cited this passage (and added motion to their translations).⁸⁹⁶ Nor was this limited to Spanish writers – Jean Calvin referenced Ovid in the *Institutes of the Christian Religion*,⁸⁹⁷ for example, as did Lord Bolingbroke in his essay on natural theology.⁸⁹⁸ Indeed, most of the references remain the same throughout the entirety of the period. Augustine is often referenced, Aristotle’s *Physics* and *Metaphysics* were both obvious citations; added to this is also Cicero’s *De Natura Deorum*, Ovid’s *Metamorphoses*, and Plato’s *Timaeus*. Furthermore, the concept of “tradition” in early modern Catholic theology could have added to the notion that the practice of natural theology by Church Fathers (for examples, references to Augustine, St. Anthony, and other early concepts of the “book of Nature”) constituted a recognized source of theological knowledge and a legitimate practice. Certainly, by the time that natural theology is converted into a widespread part of the philosophical curriculum in eighteenth-century Spain, there is very little to suggest that any Spaniards saw it as a fundamentally “new” concept.

Catholic Perspectives on Human Reason, Noetic Sin, and Romans 1:20

Greater attention is needed on the subject of the noetic effects of the Fall and of the power and limitation of human reason and cognition in early modern Catholic thought.⁸⁹⁹ This topic, central to the purview of natural theology, is also key to understanding natural law theory, and is often thus discussed in the more abundant field of studies of natural law. Several recent studies have suggested that the typical narrative of Catholics as being confident in the positive

⁸⁹⁶ Vanegas [Venegas], *Diferencias* (Toledo, 1540), 51r.

⁸⁹⁷ Classicist Eric Hutchinson has made this point, citing Institutes 1.15.3, E.J. [Eric] Hutchinson, “Calvin’s Ovid,” *The Calvinist International* (blog), March 14, 2018, <https://calvinistinternational.com>.

⁸⁹⁸ Henry St. John Bolingbroke Lord Viscount, *Lord Bolingbroke’s Philosophical Works*, vol. 5 (London: s.n., 1754), 314.

⁸⁹⁹ A work by Moroney, for example, examines only Protestant theologians, including Calvin, Kuyper, and Brunner. See: Stephen K. Moroney, *The Noetic Effects of Sin: A Historical and Contemporary Exploration of How Sin Affects Our Thinking* (Lanham: Lexington Books, 2000).

abilities of human reason and of Protestants as negatively assessing the fallenness of the human intellect is not as straightforward as has been presented, either historically or in the present.⁹⁰⁰ Still, this dissertation has supported the idea that, in general, Catholic theologians accorded more power to the human intellect and “natural reason” than Protestant theologians did. This did not mean that Spanish natural theologians ignored the cognitive effects of the fall and of human sin; specific attention was noted, for example, on Sibiuda’s perspective on postlapsarian effects, as well as Venegas’s perspective on this topic. Also referenced was the Tridentine Catholicism, which noted that the “intellectual powers” of “the human mind” are “limited.”⁹⁰¹ According to this teaching, human reason can “discover many divine truths...” but “...never know or comprehend most of those things by which eternal salvation...is attained.”⁹⁰² This middle ground was also seen in the writings of Suárez, who simultaneously upheld Aquinas’s notion that the existence of God was “self-evident”, while aware that humans could often be left with a “common and confused concept” of God.⁹⁰³

In all of these positions, however, these natural theologies asserted a basic level of human rational ability that could still be exercised even in a postlapsarian setting, and that this rational ability was sufficient enough to at least obtain the general knowledge of the most basic tenets of general revelation (i.e., the existence of a creating deity). Indeed, for many of the natural theologies of Spain, this doctrinal position on human reason was related necessarily to the scriptural interpretation of passages such as Romans 1, Psalm 18/19, Wisdom 1 (unique to the

⁹⁰⁰ See, for example: Juuso Loikkanen, “Early Lutheranism and Natural Theology,” *Teorie Vědy/Theory of Science* 37, no. 2 (2015): 173–86; R.J. Snell, “Thomism and Noetic Sin, Transposed: A Response to Neo-Calvinist Objections,” *Philosophia Christi* 12, no. 1 (2010): 7–28; Francis J. Beckwith, “Natural Law, Catholicism, and the Protestant Critique: Why We Are Really Not That Far Apart,” *Christian Bioethics: Non-Ecumenical Studies in Medical Morality* 25, no. 2 (August 2019): 154–68.

⁹⁰¹ Pius V, *Catechismus...Concilii Tridentini*, 1.

⁹⁰² Pius V, 1.

⁹⁰³ DM.29§35, Suárez, *Disputaciones*.

Catholic tradition), and Isaiah 40, which were seen as mandating a certain level of culpability because of the presence of human reason. As Venegas stated, “...nothing is obligated which is impossible...”, from which Venegas affirmed that the only way that humans could be held accountable as described in Romans 1 was if a certain level of human intellect were assumed.⁹⁰⁴ Additionally highlighted here was the Catholic position which emphasized the amelioration of the human condition in the effective causality of the sacraments; according to this interpretation in Catholic theology, the eucharist and baptism may have prompted greater confidence in the epistemic abilities of Christian minds. Thus, it is crucial to remember that doctrines and teaching of early modern Catholicism such as human reason, biblical interpretation, and even sacramental theology could have important ramifications on the way that the discourse of natural theology was framed in early modern Spain. This was, therefore, uniquely different from natural theologies which were formed through the influence of early modern Protestantism.

Catholic Religious Orders as Cultivators of Theological Tradition

Brooke has critiqued French Jesuits as one factor which stifled the growth of natural theology.⁹⁰⁵ In Spain, however, we have seen that different types of natural theology often flourished within different religious orders. In the sixteenth-century, the Franciscans cultivated the Sibiudan and Buenaventurian tradition of studying the *scala naturae* for signs and symbols of God; in the post-Tridentine period, the Dominicans at Salamanca presented a Thomist-influenced metaphysics that was yet further modified by the Jesuits Suárez and Vázquez at the beginning of the seventeenth-century. In this way, perhaps the religious orders of early modern Spain (of which the number includes dozens of new religious formed during the sixteenth and seventeenth centuries) provided different niche environments in which alternative forms of natural theology

⁹⁰⁴ Vanegas [Venegas], *Diferencias* [Madrid 1569], 36r.

⁹⁰⁵ Brooke, *Science and Religion*, 272.

could blossom: one form, for example, in the Complutensian work of Alcalá, while another might be found by authors working or trained at Salamanca.⁹⁰⁶

Certainly, there was room for disagreement and counter-examples in every order, but the religious orders do represent institutions which collectively identified key valued ideas, built up a corpus of writings from members, developed informal canons as well as formal curricula and controlled education through universities and seminaries, created spaces for intellectual exchange and “horizontal learning,” and promoted specific, agreed-upon interpretations of points.⁹⁰⁷ The fact that they differed from one another on some interpretations points to the toleration for divergent opinion that was part of ‘early modern Catholicism.’ The caricature of a monolithic, unified Catholic perspective that is invoked by Brooke here is not accurate for early modern Spain.⁹⁰⁸

Spanish University System and Scholasticism

Related to the influence of religious orders and the establishment of schools of theological tradition is the role that actual universities had in determining the way that natural theology was included in instruction of philosophy and theology. By 1600, there were thirty-three universities in Spain.⁹⁰⁹ Unlike the secularization of universities which took place in

⁹⁰⁶ John Patrick Donnelly, S.J., “The New Religious Orders, 1517-1648,” in *Handbook of European History 1400-1600: Late Middle Ages, Renaissance and Reformation*, ed. Thomas A. Brady, Jr., Heiko A. Oberman, and James D. Tracy, vol. II: Visions, Programs and Outcomes (Leiden: E.J. Brill, 1995), 283–316.

⁹⁰⁷ Micol Long, Tjamke Snijders, and Steven Vanderputten, eds., *Horizontal Learning in the High Middle Ages: Peer-to-Peer Knowledge Transfer in Religious Communities* (Amsterdam: Amsterdam University Press, 2019); Bert Roest and Johanneke Uphoff, eds., *Religious Orders and Religious Identity Formation, ca. 1420-1620: Discourses and Strategies of Observance and Pastoral Engagement* (Leiden: Brill, 2016); for an historiographical overview, albeit dated, of studies on religious orders in early modern Spain, see: Magdalena de Pazzis Pi Corrales et al., “Las Órdenes Religiosas En La España Moderna: Dimensiones de La Investigación Histórica,” in *Iglesia y Sociedad En El Antiguo Régimen*, ed. Enrique Martínez Ruiz and Vicente Suárez Grimón, vol. Volume 1 (Las Palmas de Gran Canaria: Departamento de Publicaciones, Universidad de Las Palmas de Gran Canaria, 1994), 205–51.

⁹⁰⁸ See overviews of the complexity of Tridentine Catholicism: John W. O’Malley, *Trent and All That: Renaming Catholicism in the Early Modern Era* (Cambridge, Massachusetts: Harvard University Press, 2000); R. Po-chia Hsia, *The World of Catholic Renewal 1540-1770* (Cambridge: Cambridge University Press, 1998).

⁹⁰⁹ Twenty in Castile, thirteen in Aragon, and five in Latin America. Richard L. Kagan, “Universities in Castile 1500-1700,” *Past & Present* 49 (November 1970): 46.

Northern Europe and in the British Isles during the early modern period, the Spanish university system experienced a process which Richard Kagan describes as “christianization.” Generally speaking, poor instruction offered by university faculty, low attendance rates, hiring practices, and other institutional problems meant that large numbers of students were regularly abandoning their seats in the lecture halls of the universities proper in order to attend teaching offered by the religious colleges which surrounded each university – at most Jesuit colleges, university degrees could be obtained through collegial instruction.⁹¹⁰ Kagan has shown that in some cases, 40-50% of students at universities could be accounted for by colleges controlled by religious orders; furthermore, members of the religious clergy enrolled at universities and held an increasing number of university teaching posts (especially within the faculty of theology), including some positions which were specifically reserved and designated for certain orders.⁹¹¹

In chapter two, it was noted that Venegas’s work emerged out of a circle of humanists associated both with the university of Toledo and that of Alcalá de Henares. Similarly, in chapter three, the roots of Suarencian natural theology were found in the tradition of “Spanish second scholasticism” which typified the teaching of philosophy and theology in Spanish universities; in Suárez’s case, particularly at the Universidad de Salamanca, where he was both a student and teacher. Kagan argues that a period of curricular “stagnation” took place in the universities of Spain from approximately 1600-1771, during which time hardly any changes were made to the teaching offered in the arts (where philosophy was taught) or theology.⁹¹²

Kagan, while admitting that the Inquisition may have had some role in this, attributes this mostly

⁹¹⁰ For a description of the problems suffered by Spanish universities during this time, see chapter eight, “Teachers and Students,” in Kagan, *Students and Society*, 159–95.

⁹¹¹ Kagan, “Universities,” 60.

⁹¹² Kagan, 68.

to the “general spirit of the times” which distrusted novelty.⁹¹³ He writes “The immutable nature of the university curriculum in the seventeenth and eighteenth centuries is therefore best attributed, not to any external force such as the inquisition or Spain’s “supposed” intellectual isolation from Europe, but to the ideas and aspirations of university teachers themselves.”⁹¹⁴ Functionally, this helps to explain why particular traditions of natural theology (or at least of the relationship of metaphysics to natural theology) could remain ‘frozen’ for long periods of time during the early modern period in Spain.

The Impact of the Natural Sciences in Spain

The same arguments which have been asserted connecting the growth and success of the natural sciences in early modern England may be made for early modern Spain; the ‘polemic of Spanish science’, which proclaimed a narrative in which Spain lacked scientific advancements and contributions, has been sufficiently dispelled by the work of historians of science in Spain, enabling historical theologians to better understand the connection between the active community of natural philosophers and the development of physico-theology in the eighteenth century, particularly.⁹¹⁵ The differences of Spanish natural theology cannot be attributed to the lack of natural philosophy or the sciences in early modern Spain.⁹¹⁶

⁹¹³ Kagan, *Students and Society*, 163.

⁹¹⁴ Kagan, 163.

⁹¹⁵ On the “polemic” see: Juan Pimentel and José Pardo-Tomás, “And yet, We Were Modern. The Paradoxes of Iberian Science after the Grand Narratives,” *History of Science* 55, no. 2 (Special Issue: Iberian Science: Reflections and Studies) (2017): 133–47; Juan Pimentel, *Fantasmas de La Ciencia Española* (Madrid: Marcial Pons Ediciones de Historia, 2020); Víctor Navarro Brotóns and William Eamon, eds., *Más Allá de La Leyenda Negra: España y La Revolución Científica* (Valencia: Publicacions de la Universitat de València, 2007); Alberto Elena and Javier Ordóñez, “History of Science in Spain: A Preliminary Survey,” *The British Journal for the History of Science* 23, no. 2 (June 1990): 187–96.

⁹¹⁶ Among many other works, see: Antonio Barrera-Osorio, *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution* (Austin, Texas: University of Texas Press, 2006); Daniela Bleichmar et al., eds., *Science in the Spanish and Portuguese Empires, 1500–1800* (Stanford: Stanford University Press, 2009); Jorge Cañizares-Esguerra, “Iberian Colonial Science,” *Isis* 96 (2005): 64–70; Jorge Cañizares-Esguerra, “Iberian Science in the Renaissance: Ignored How Much Longer?,” *Perspectives on Science* 12, no. 1 (2004): 86–124; Pimentel and Pardo-Tomás, “And yet, We Were Modern”; Paula De Vos, “Natural History and the Pursuit of Empire in

However, some attention may be given to the kind of natural philosophy which was present in Spain. The EPNT narrative has often claimed that it was the development of the new sciences and the new philosophy of science which kickstarted the production of physico-theology. While this may have been true for early modern England, Spain offers a different narrative. Spanish natural theology was abundant long before the arrival of Baconian experimentalism, Cartesian philosophy, or Newtonian mechanical philosophy. This did not only include natural theologies that were defined more metaphysically or philosophically, but physico-theologies that were based on the observation, often scientific, of the natural world. In other words, Spain did not wait until the 1745 publication of Diego Mateo Zapata's *Twilight of the Aristotelian Forms* to take up the project of observing the features of the world for evidence of a creator; it had for over two centuries advocated Aristotelian physico-theology.⁹¹⁷

This factor can be clearly seen in the example of Venegas's *Primera parte*, discussed in chapter two. In interrogating the "book of nature", Venegas departed from a merely 'symbolic' interpretation found in Sibiuda to use the techniques and knowledge produced by the natural sciences of his day. This included many examples from natural history, but also extensive discussions of Aristotelian natural philosophy, including an analysis on the movement of the heavens and how this motion implies the existence of God.⁹¹⁸ This was likewise found to be the case in Suárez, who specifically allowed for the role of natural philosophy and "physics" in helping to "prepare the way" and "dispose for constructing the demonstration" of metaphysical arguments of natural theology.⁹¹⁹ There is no question as to which "physics" Suárez would have

Eighteenth-Century Spain," *Eighteenth-Century Studies* 40, no. 2 (Winter 2007): 209–39; Portuondo, "On Early Modern Science"; Slater and López-Terrada, "Being Beyond."

⁹¹⁷ Diego Matheo Zapata, *Ocaso de Las Formas Aristotelicas*, ed. Juan Martin de Lesaca, vol. 1 (Madrid: En la Imprenta del Hospital General, 1745).

⁹¹⁸ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 52.

⁹¹⁹ DM29.1§41, Suárez, *Disputaciones*.

had in mind in 1597, before the paradigmatic shifts of Bacon, Descartes, and Newton. Nor was Aristotle the only available option; Nieremberg and Baroque mystical authors, I argued, often employed Neoplatonist natural philosophical evidence in their natural theologies.

Spanish natural theologies were constructed originally with Aristotelian or Neoplatonist natural philosophies in mind; the “nature” and the “natural world” which was invoked in their arguments was a nature that had been produced by these systems of thought. The eighteenth-century interrogation of the “new philosophies” of science and their incorporation into natural theology, therefore, might be better understood when the weight of this intellectual tradition, practiced for centuries, is considered. This is further compounded by the entrenched teaching of Spanish universities in the early modern era.

The Inquisition and Censorship

The ‘black legend’ of Spain continues to exert historiographical influence in Anglophone studies, which argue, with morbid fascination, that Spain’s intellectual and theological activity was not free, but fettered by the intolerant control and rigorous censorship of the Inquisition.⁹²⁰ As has been shown in this demonstration, this position is almost entirely misleading. The Inquisition’s most important impact on Spanish natural theology, I argue, is the pursuit of *alumbradismo*, *iluminismo*, and *molinismo* which marked the sixteenth and seventeenth centuries and persisted into the eighteenth. As has been argued, both in chapters two and three, because the contemplation of the macrocosm and the turn to the microcosm were often posed as the initial steps in the “way of perfection” which was discussed in mystical literature and spiritual treatises meant that, functionally, the pursuit of these treatises for tangential material deemed heretical made this practice guilty by association. Qualified language on the usefulness of the

⁹²⁰ Brotóns and Eamon, *Más allá*; Villaverde and Castilla Urbano, *La sombra*.

contemplation of the creatures was introduced, and above all, a sharp demarcation in the realm of nature between the external and internal realm.

These influences, however, must be moderately qualified by the historical testimony of the gross inefficacy of censorship, as promoted through the indices of prohibited texts and enforced by the Spanish Inquisition during the early modern period.⁹²¹ From the examples within this study, we have seen how Inquisitorial censorship and the ‘dreaded’ Index was inconsistently applied and enforced, how these policies were circumvented (for example, with translations and varying reframing of Sibiudan works in chapter one), as well as how there existed legitimate ways of reading prohibited works in Spain by the obtention of licenses and privileges (for example, the entire library devoted to such works found at the Dominican College of San Esteban at the University of Salamanca, where prohibited spiritual treatises were read through the seventeenth and eighteenth century in chapter three).⁹²² By the eighteenth century, the fear of the pernicious effects of foreign works in Spain almost certainly entails the existence and availability of these foreign works, contrary to whatever emetic desires the Inquisition may have had. Consider also, that the ‘fluidity’ of natural theology was particularly well-suited to running through the censorial sieves of the indices. Outside of Sibiuda, the presence of the Spanish Inquisition and of censorship did not have a visible impact on the formation of natural theology in Spain.

Spain and the Hispanic World: the Impact of the New World

⁹²¹ Manning, *Voicing Dissent*; Nesvig, “‘Heretical Plagues’”; Martin Austin Nesvig, *Ideology and Inquisition: The World of the Censors in Early Mexico* (New Haven: Yale University Press, 2009); Nesvig, “The Index...Mexico”; Bujanda, “Literary Censorship”; Esteve, *Las Razones Del Censor*; Vose, “Introduction.”

⁹²² Yasmina Suboh Jarabo, “La revisión de la bibliotecas eclesiásticas españolas tras el Edicto de 1747 y sus fondos espirituales y religiosos del siglo xvii español,” *Arte y Patrimonio* 2 (2017): 114–32.

Although the ‘discovery’ of the New World was not limited by any means to the Spanish experience, Spain and Iberia more generally have a privileged place in the history of the Atlantic world, being the first and most extensive colonial endeavor of the early modern period, with colonial territories stretching from the Pacific Northwest to modern-day Chile and Argentina, and even across the Pacific to the Spanish Philippines. This study has focused, by necessity, only on works written from the metropole of the Spanish peninsula, only occasionally referencing the dissemination of these peninsular works to sites in colonial Latin America. But in many ways, this is a false construction, for to think of Spain in the early modern period is to recognize that it was necessarily imperial and global. The research that I have begun in this dissertation should be expanded to include wider consideration of the Hispanic world, including especially the contributions of Latin American works of natural theology.

There are several ways which the New World could have impacted the production of Spanish natural theology, some of which have already been noted in this study. First, the encounter of new civilizations and of peoples who had no connection to the Judeo-Christian tradition or the Abrahamic religions provided Spain with special motivation for shoring up a well-defined tradition of both natural theology and natural law (the latter being excluded from the consideration of this dissertation). This was seen, for example, in the work of Venegas, who specifically included the consideration of indigenous persons when speaking about the power of human reason and the universal culpability of recognizing God in the natural world. Anthony Pagden has written specifically concerning the proto-ethnographic writings of Europeans seeking to classify and describe the indigenous civilizations which they encountered in the New World; such classifications undoubtedly challenged the way that Europeans thought about the cognitive

abilities of humanity, and in turn, the scriptural mandates concerning the perspicuity of general revelation.⁹²³

Secondly, the encounter generated a “shock of discovery” which constituted a critical challenge to the European epistemology; just as the EPNT points to the “crisis of authority” generated by the Protestant Reformation and religious and political instability, a similar pivotal moment occurred by the ‘discovery’ of the New World.⁹²⁴ The authority of the ancients was called into question, and even the scriptures could be reassessed to account for the new world of information. Sir John Elliott describes that the encounter was:

...a totally new phenomenon, quite outside the range of Europe’s accumulated experience and of its normal expectation. ...The very fact of America’s existence...constituted a challenge to a whole body of traditional assumptions, beliefs and attitudes...⁹²⁵

Elliott argues that the “mental baggage” of Europeans had a cognitive impact, filtering their experiences of the New World through a grid of preconceptions and altering the way they saw and thought about their discoveries.⁹²⁶ The epistemic impact, however, worked both ways – as Spain incorporated the society and culture of the New World into their collective knowledge, the way that they viewed nature, reason, and experience was challenged, reshaped, and altered.⁹²⁷

Lastly, the New World expanded the realm of the marvelous and offered to the imaginations and minds of Spanish natural theologians new occasions for wondering at the natural world; furthermore, it furnished natural philosophy, and especially natural history, with

⁹²³ Anthony Pagden, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology*, Cambridge Iberian and Latin American Studies (Cambridge: Cambridge University Press, 1982).

⁹²⁴ Anthony Grafton, *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge: The Belknap Press of Harvard University Press, 1992).

⁹²⁵ John H. Elliott, *The Old World and the New, 1492-1650* (Cambridge: Cambridge University Press, 1970), 8.

⁹²⁶ Elliott, 6; see also: Elliott, “Mundos Parecidos.”

⁹²⁷ See, for example, the works of: Anthony Pagden, *European Encounters with the New World* (New Haven: Yale University Press, 1993); Stephen Greenblatt, ed., *New World Encounters* (Berkeley: University of California Press, 1993); Joyce Appleby, *Shores of Knowledge: New World Discoveries and the Scientific Imagination* (New York: W.W. Norton & Company, 2013).

new experiences in which could be discerned, order, ingenuity, contingency, design, beauty, and artifice. Nieremberg, for example, included many ‘wonders’ of the New World in his works as opportunities for theological reflection, including birds of paradise.⁹²⁸ In sum, the New World opened new horizons of knowledge and of experience for Spain which challenged the fundamental concepts of nature, reason, and the knowledge of God which form the central pillars of natural theology.

The Accessibility of Scripture in Spain; Scripture in Early Modern Catholic Theology

One of McGrath’s four explanations for the emergence of natural theology in early modern England is the rise of biblical criticism.⁹²⁹ This point may be divided into two: criticism concerning the validity or accuracy of the Biblical text, and criticisms concerning the accessibility or perspicuity of the text. Both, as we have seen, had historical importance on the formation of natural theology; these influences were distinct, however, than those found in early modern England or France. Criticisms concerning the accuracy of the Bible in Spain did not gain enough traction until the end of the eighteenth-century to prompt any serious responses. However, we have seen that the rejection of any sources of revealed knowledge by atheists in the eighteenth-century encouraged Spaniards to develop natural theology apologetically; thus, like England, natural theology was a response to Biblical criticism, but unlike England, this was not seen as an ‘in-house’ problem. On the other hand, the Spanish tradition of natural theology was, from the very beginning, connected to the idea that revealed knowledge, while superior, was not always accessible by the majority of individuals. Theological ideas were difficult to grasp, metaphysical demonstrations required an elevated level of intelligence and training, and at a very

⁹²⁸ D. Scott Hendrickson, “Seeing in Imagination: Visual Representation and Spiritual Contemplation in the Ascetical Treatises of Juan Eusebio Nieremberg,” *Hispanic Studies Review* 2, no. 2 (2017): 181–95; Pimentel, “Baroque Natures.”

⁹²⁹ McGrath, *Scientific Theology: Nature*, Volume 1: Nature: 241–48.

basic level, religious texts required a person to have access to the text and the ability to read and understand it.

Moreover, access to Scripture was less-available to the majority of individuals in early modern Spain, and thus alternative forms of securing natural knowledge were needed. The Bible in early modern Spain remained a book that was written in Latin and read by a restricted number. Sibiuda, it may be recalled, charged that natural theology was “...common to all, while the book of Scripture is not common to all, because only the priests know how to read it.”⁹³⁰ This statement was less accurate as the early modern period waxed on, but the text of the Bible was limited in its ability to reach large numbers of the population. Although vernacular translations of the Bible were permissible within early modern Catholicism, they would not have been readily accessible to wide readership in Spain. Wim François has argued that despite the Council of Trent’s conspicuous silence of the issue at the fourth session (April 1546), subsequent restrictions enacted by Paul IV in 1559, the Tridentine Index (1564), and the Index of Clement VIII (1596) resulted in the “de facto banishment of vernacular Bibles from the religious life of the South-European Catholics.”⁹³¹ It is true that the occasional vernacular translation of the Bible would have been accessible and read within Spanish literary circles (although these translations were often associated with heretical Protestantism); also, portions of Biblical texts

⁹³⁰ Sibiuda, *Tratado del amor*, 85:68.

⁹³¹ See: Nalle, “Printing and Reading”; Nalle, “Literacy and Culture”; Antonio Viñao Frago, “The History of Literacy in Spain: Evolution, Traits, and Questions,” *History of Education Quarterly* 30, no. 4 (Winter 1990): 573–99; M.J. Hunter et al., “The Vernacular Scriptures,” in *The Cambridge History of the Bible*, ed. G.W.H. Lampe, vol. Volume 2: The West from the Fathers to the Reformation (Cambridge: Cambridge University Press, 1969), 2:338–491; M.J. Hunter et al., “The Vernacular Scriptures (IX) - The Cambridge History of the Bible,” in *The Cambridge History of the Bible*, ed. G.W.H. Lampe, vol. 2: The West from the Fathers to the Reformation, 3 vols. (Cambridge: Cambridge University Press, 1969), 338–491, <https://ezproxy-prd.bodleian.ox.ac.uk:2102/10.1017/CHOL9780521042550.010>; quote found in Wim François, “The Council of Trent and Vernacular Bible Reading in the Early Modern Catholic Church” (Invited Keynote Presentation, The 3th [sic] International Symposium on “Investigations into Romanian and European Biblical Traditions,” Iași, May 30, 2013), 1, https://limo.libis.be/primo-explore/fulldisplay?docid=LIRIAS1882811&context=L&vid=Lirias&search_scope=Lirias&tab=default_tab&lang=en_US&fromSitemap=1.

would have been accessible through commentaries, sermons, and other theological works.⁹³²

Still, vernacular translations of the Bible were not by any means commonplace or acceptable until the 1790s with the publication of Scio de S. Miguel's multivolume translation, *La Biblia Vulgata Latina Traducida...*⁹³³

The relative absence of the "Book of Scripture" may have increased the attention which Spanish theologians gave, therefore, to the "Book of Nature" that was so readily accessible and at hand. Even in cases where the authors had recourse to the physical texts of special revelation, they expressed the awareness that this was not the case for the majority of the readers. Nature, however, was common to all. In addition to Sibiuda, Venegas, for example supported that "the university of creatures is a book so common to all...so clear and so open a lesson," and Suárez affirmed the self-evidentiary truth of God's existence.⁹³⁴ This point was again affirmed during the eighteenth century, when non-Catholics who rejected the Bible as a legitimate source of information had to be answered from non-scriptural positions. Although scripture was elevated as the prime source of special revelation whose truth was higher and more trustworthy than that generated by human reason, it formed only one source of theological knowledge in early modern Catholicism. The position of scripture within early modern Catholic theology may have led Spanish Catholics to value natural theology more deeply, to incorporate it as a routine part of the

⁹³² For example, Casiodoro de Reina's (c. 1569) 'Biblia de Oso,' and Cypriano de Valera's 1602 revision of this text. See: s.n. [Casiodoro de Reina], *La Biblia, Que Es, Los Sacros Libros Del Vieio y Nvevo Testamento. Trasladada En Español*. (s.u: s.n., 1569); Cypriano de Valera, *La Biblia. Que Es, Los Sacros Libros Del Viejo y Nuevo Testamento*, Second edition (Amsterdam: Casa de Lorenço Iacobi, 1602); and for scholarly research on these bibles, see: Gemma Avenoz, "The Bible in Spanish and Catalan," in *The New Cambridge History of the Bible*, ed. Richard Marsden and E. Ann Matter, vol. 2: From 600 to 1450, 4 vols. (Cambridge: Cambridge University Press, 2012), 288–306; Ellie Gebarowski-Shafer, "The Bible in Roman Catholic Theology, 1450-1750," n.d., 489–517; Emidio Campi and Mariano Delgado, "Bibles in Italian and Spanish," in *The New Cambridge History of the Bible*, ed. Euan Cameron, vol. 3: From 1450 to 1750, 4 vols. (Cambridge: Cambridge University Press, 2016), 358–83.

⁹³³ See, for example: Phelipe Scio de San Miguel, *La Biblia Vulgata Latina; Traducida En Español y Anotada Conforme al Sentido de Los Santos Padres y Expositores Catholicos*, Second edition, vol. 3 (of the New Testament: the Epistles of Saint Paul) (Madrid: La Imprenta de Don Benito Cano, 1797); Francisco Salas Salgado, "La Traducción de La Biblia Del P. Felipe Scío y Su Época," *Fortunatae* 22 (2011): 303–14.

⁹³⁴ Vanegas [Venegas], *Diferencias [Madrid 1569]*, 35; Suárez, *Disputaciones*.

life of faith (especially in devotional or catechetical contexts), and to attribute to it greater explanatory powers than Protestants.

The Mutual Influence of Spanish, English, and French Works

Spanish natural theology was greatly influenced by classical authors (Ovid, Cicero), Church Fathers (Augustine), and medieval theologians (Aquinas, Bonaventure). In addition to these sources, however, works written contemporaneously during the early modern period outside of Spain also had an impact within Spain. This dissertation has occasionally referenced the influence that foreign works of natural theology had in Spain, and to a lesser extent, the impact which Spanish natural theologies had in other countries. It is difficult to gauge how much exchange between foreign and Spanish works of natural theology occurred. The textual record is best for the eighteenth century (although far from comprehensive), and thus the eighteenth-century is the main example in the following discussion.

Foreign Influences on Spanish Natural Theology; Spanish Translations of Works

By examining the citations and references of Spanish authors, it seems that they often had access to and read works by foreign authors. Foreign natural philosophers such as Newton and Boyle were certainly read, but even works of natural theology were occasionally referenced. Hervás y Panduro, for example, specifically cited Derham, Nieuwentyt, Sturm, and Marchetti.⁹³⁵ In general, however, the English canon of physico-theology was not commonly referenced in Spain. The language barrier between English and Spanish and the comparative closeness between French and Italian with Spanish may have been a factor in the paucity of English works which were translated and available in eighteenth-century Spain. Paley's *Natural Theology* (1802) was translated by 1825 by Villanueva, but most other works of English natural theology

⁹³⁵ Annibale Marchetti, *Iddio Rintracciato per Le Sue Orme*, Second edition (Rome: Gaetano Zenobj, 1707).

remained untranslated. John Ray's important work of natural theology, *The Wisdom of God Manifested in the Works of the Creation* (1691), for example, although popular in England and translated into French and German, never once appeared, even referentially, in the Spanish record. Indeed, the only credit "Juan Rayo" receives in Spanish texts is for his work as a botanist and his *Historia Plantarum* (1686).⁹³⁶ Other works, such as Derham's *Astro-Theology...* (1728), may have had some readership after being translated into French and Italian (both in 1728).⁹³⁷

French works which contained elements of natural theology, however, were extremely influential in eighteenth-century Spain. Particularly influential were works of French natural history which could be converted to more explicit theological purposes – or, in the words of Hervás y Panduro, could be "theologized" for Spanish audiences. One example is the work of Juan de Escoiquiz, referenced in the preceding chapter. In 1787, the French priest Louis Cotte authored *Leçons élémentaires d'histoire naturelle*, a work designed to teach the elementary lessons of natural history to the French youth. In 1795, it was both republished in France and translated into Castilian in Madrid by Juan de Escoiquiz, a courtier of Fernando VII. More than a mere translation, however, Escoiquiz's version reformatted the use of natural history to a physico-theological study of God in nature. In so doing, Escoiquiz's translation repurposed the study of natural history, citing as his example earlier works such as Abbé Noël-Antoine Pluche's (1688-1761) *Spectacle de la nature* (1732), another work which enjoyed immense popularity within enlightenment Spain.⁹³⁸ Escoiquiz's work not only suggests that natural history maintained a distinctively sacred purpose throughout eighteenth-century Spain, but it

⁹³⁶ Charles E. Raven, *John Ray, Naturalist: His Life and Works*, Reissued Second Edition (1986) (Cambridge: Cambridge University Press, 1986), xxiv; Quer, *Flor Española I*, 1:183.

⁹³⁷ Antonio de Leon Pinelo, *Epitome de La Bibliotheca Oriental, y Occidental, Nautica, y Geografica*, Added to and Newly Emended, vol. 2 (Madrid: En la Oficina de Francisco Martinez Abad, 1738), 994.

⁹³⁸ Pluche, *Espectáculo I.1 [Madrid 1785]*; Elena Serrano, "The Spectacle de La Nature in Eighteenth-Century Spain: From French Households to Spanish Workshops," *Annals of Science* 69, no. 2 (April 2012): 262.

demonstrates how Spanish authors read, incorporated, and repurposed foreign works during this time. This is supported by the work of Elena Serrano, who has analysed the four editions of the sixteen-volume translation of Pluche in Spain (1753).⁹³⁹ By extensively comparing the original with the Spanish versions, particularly in the footnotes, Serrano has convincingly established that the Spanish version repurposed Pluche's work for Spain's concerns, including an attempt to "harmonize experimental knowledge and scholastic tradition."⁹⁴⁰ This repurposing of Pluche can also be seen in Escoiquiz's publication, as well as other sources which selectively use the natural histories of Pluche or the Comte de Buffon (1707-1788).⁹⁴¹

Spanish Influences on Foreign Natural Theology

The influence of Spanish works of natural theology in Europe is even more difficult to assess. Somewhat ironically, Sibiuda's *Liber* and para-Sibiudan publications, although they had a limited impact in Spain through late-sixteenth century, may have been the most influential Spanish source on this topic to be noticed by other countries. However, as shown in the first chapter, this was mainly because of Montaigne's *Apology*, a work which can hardly be defined as a faithful interpretation of Sibiuda's work. The result is that most references to Sibiuda's "Théologie naturelle" in foreign works are actually references to the work of the French essayist (with the exception of the 1661 *Oculus*). In addition to Sibiuda, the work of Luis de Granada was likely the most successful work of natural theology to be translated – although since Granada did not specifically use the term and the devotional style of the writing has allowed it to escape the notice and classification of scholars of natural theology. It may be recalled that

⁹³⁹ Serrano, "The Spectacle de La Nature in Eighteenth-Century Spain."

⁹⁴⁰ Serrano, 257.

⁹⁴¹ Kevin Padian, "Review: An Enlightened Buffon. Reviewed Work: Buffon: A Life in Natural History. Jacques Roger by Sarah L. Bonnefoi," *BioScience* 49, no. 1 (January 1999): 72; in addition to Escoiquiz, see: Mieg, *Paseo por el Gabinete*.

Granada's works had over sixty versions in France alone and also enjoyed great success in post-Reformation England.⁹⁴²

Even if Spanish works were not translated or sold by foreign booksellers, their influence may still yet be discernible. Many scholars, for example, have argued that Suárez's works (published in Latin) were undoubtedly influential for many European philosophers and thinkers. Jorge J.E. Gracia writes that "Among those on whom Suárez's impact is most evident are Jungius, Descartes, Leibniz, Spinoza, Wolff, Berkeley, Schopenhauer, and Vico, but echoes of his language and views can be seen in many others, including Locke."⁹⁴³ Descartes, for example, specifically cited Suárez's *Disputationes*.⁹⁴⁴ Additional research is needed to examine other works for similar references and citations that might indicate how widely-read Spanish works in other areas of Europe.⁹⁴⁵

Some Iberian works were influential enough to be translated and sold in other European countries during the long eighteenth-century, although this was not nearly as common as the importation of foreign works into Spain.⁹⁴⁶ Many of Teodoro de Almeida's works, for example, were translated into French, including his *Teologie naturelle* in Paris, 1823.⁹⁴⁷ Hervás y Panduro's works, written during the Jesuit exile, were published originally in Italian. In general,

⁹⁴² León Navarro, "La lectura de Fr. Luis," 327; González, "Algunas notas"; Walsham, "Luis de Granada's Mission."

⁹⁴³ Jorge J.E. Gracia, "Francisco Suárez: The Man in History," *American Catholic Philosophical Quarterly* 65, no. 3 (Summer 1991): 265.

⁹⁴⁴ Igor Agostini, "Descartes's Proofs of God and the Crisis of Thomas Aquinas's Five Ways in Early Modern Thomism: Scholastic and Cartesian Debates," *Harvard Theological Review* 108, no. 2 (2015): 236.

⁹⁴⁵ This could include examining not only translations of works, but analysing references and citations in non-Spanish publications, registers and records related to the book trade, and other sources.

⁹⁴⁶ Nicolás Bas Martín suggests that the language barrier and political differences resulted in the omission of eighteenth-century Spanish authors from the book markets of Paris and London. Nicolás Bas Martín, *Spanish Books in the Europe of the Enlightenment (Paris and London): A View from Abroad*, trans. Andy Birch (Leiden: Brill, 2018), 87–88.

⁹⁴⁷ Fnt. 8 in Luís Manuel A.V. Bernardo, "Le Souci Du «canon» Chez Teodoro de Almeida: Les Lumières Portugaises Entre Affranchissement et Conformité," *Dix-Huitième Siècle* 46, no. 1 (October 1, 2014): 603–21.

however, there seems to be little evidence to suggest that the vast majority of works of Spanish natural theology were ever translated and disseminated in foreign countries.

Conclusion: Some Explanations for the Silence of Spanish Natural Theology

In a bibliographical compilation produced at the end of the nineteenth century in Barcelona, only three Spanish examples were listed as works in which “the spectacle of the marvels of nature elevate our souls toward God...from here, so many rich works have been written about Natural Theology...”⁹⁴⁸ These were the writings of Ramon Llull (c.1232-1315), Raymond Sibiuda (c.1385-1436), and Juan Caramuel (1606-1682). Still, by the mid-to-late nineteenth century, a period which Stephen Jay Gould described as the “heyday of natural theology,” this description had become the definition for the genre of natural theology across the Iberian world.⁹⁴⁹ How can we explain the absence of Spanish natural theology from the historical and theological literature? Several possible explanations exist. First, as shown above, differences in languages, ecumenical differences, and frequent political and state tensions (Spain was perennially at war with England and France throughout the early modern period) likely contributed to the lack of Spanish books translated in foreign book markets; this lack is one reason for the comparatively unknown status of Spanish natural theology. The majority of scholarship on natural theology has been conducted from the Anglophone world, and the lack of Spanish sources readily available in English contribute to their neglected state. Secondly, the “black legend,” which denigrates Spain’s contribution to intellectual history during the early modern period, continues to haunt historiographical assumptions in some works. Thirdly, as

⁹⁴⁸ s.n., *Jochs florals de Barcelona* (Barcelona: Estampa de la Renaxensa, 1895), 337.

⁹⁴⁹ Stephen Jay Gould, “Nonmoral Nature,” *Natural History (Pre-1988)* 91, no. 002 (February 1982): 20; also argued in Peterfreund, *Turning*; [s.n.], *Revista occidental*, vol. II (Lisboa: Escritorio da Revista Occidental, 1875); Jose Antonio Cortina, *Revista de Cuba*, vol. 7 (Habana: Imprenta Militar de la Viuda de Soler y Compañía, 1880), 344.

demonstrated in each of the periods, the term *teología natural* was not usually employed by Spanish authors, nor was *teología física* or *física-teología* (except when referring to foreign works).⁹⁵⁰ Scholars in search of this term would find very little, although I have shown that many other ways of describing the activity of natural theology existed in early modern Spain. Lastly, and most importantly, the definition of EPNT has occluded alternative forms of natural theology from scholarly attention, a point which I have argued in this chapter. In the following conclusion, I address this oversight by offering suggestions as to how the historical example of natural theology in early modern Spain may contribute to contemporary discussions concerning the definition and use of natural theology.

⁹⁵⁰ For a recent study of this term in early modern Europe, consult: Blair and von Greyerz, *Physico-Theology*.

Conclusion: Reconceptualizing Natural Theology's Past and Future

Summary of the Dissertation:

This dissertation has provided a historical analysis of the development of natural theology within early modern Spanish Catholicism, 1436-1825. It has examined especially the definition, articulation, and use of natural theology as it changed over time in Spain throughout the early modern period. Natural theology in Spain, most broadly considered, described the activity of generating knowledge about God by invoking natural sources of knowledge – but as I have shown, what was meant by nature, what types of arguments or reflections were used to interrogate these “natural sources” and considered rational or convincing, and what type of knowledge could be achieved all varied. In the introduction to this work, I explored how the central tenets of natural theology require an understanding of nature, rationality, and the knowledge of God. Throughout my dissertation, I demonstrated that these were not static ideas in early modern Spain; rather, they depended on other cultural, social, intellectual, and religious notions. Most fundamentally, therefore, I have argued that natural theology must be understood as a historically-embedded concept, as a set of theological ideas and methods which vary in time and place.

In order to underscore how natural theology shifted in meaning and applicability throughout early modern Spain, this dissertation provided four portraits of natural theology spanning the period, with each of the first four chapters corresponding to a different period in Spanish history (late-medieval, Renaissance, Baroque, Enlightenment). Each portrait demonstrated that, while the fundamental questions of natural theology remained the same, the answers changed over time, producing markedly different interpretations of natural theology. Chapter one, “The Medieval Legacy,” examined how the category of natural theology was first defined in Spanish theological literature by the Catalan thinker Ramón Sibiuda. It analysed his

work, the *Liber Creaturarum* (1436, 1484/5), as well as subsequent variations of it to demonstrate a natural theology that invoked the metaphors of the “book of nature” and the “ladder of nature,” and argued that by a process of reason and observation of creation and of mankind’s relative place in it, one could come to know and love the God who created it.

Although the *Liber* was never printed in early modern Spain, I demonstrated that it was yet able to have a discernible impact on Spanish spirituality through paraphrasing publications and works who were inspired by its message. In the second chapter, “Knowing Nature, Self, and God,” I examined how the Sibiudan theme of interior contemplation was developed in the spiritual practice of *recogimiento* and suggested reasons for the divorce of natural theologies of interior contemplation from those which studied the created, external world, manifested especially in the *Primera parte de las diferencias* (1540) by the Toledano humanist, Alejo de Venegas.

Venegas’s work was shown to demonstrate how Aristotelian natural philosophy, as well as a conception of emblematic nature, could be used to generate natural knowledge about God. Particular attention was given to emphasizing Venegas’s belief that natural theology was necessarily knowable by everyone.

Chapter three, “Between Metaphysics and Mysticism,” examined the development of Baroque natural theologies, presenting three different ‘visions’ which occurred in the seventeenth century. These alternative versions of natural theology included scholastic metaphysics, thaumatic natural philosophies, and mystical and devotional contemplations of the created world. Suárez’s *Disputationes Metaphysicae* (1597) demonstrated how natural theology continued to be seen as the purview of Aristotelian and Thomist metaphysics, particularly among the pantheon of “Second Scholastic” authors. At the same time, works such as Nieremberg’s *Oculto y Curiosa Filosofia* (1643) showed how natural history and natural philosophy (including

alternative frameworks for understanding nature) furnished opportunities to consider the world emblematically, producing a natural theology that fundamentally stressed artifice and wonder. Meanwhile, mystical works like Planes's *Concordancia Mystica* (1667) continued to advocate for the contemplation of creatures as part of the first step of devotion. These Baroque visions were extended in chapter four, "Repurposing and Expanding Natural Theology in Enlightenment Spain," in which I demonstrated two trends of natural theology in eighteenth-century Spain. I showed that growing concerns of skepticism, atheism, and deism, particularly seen as foreign threats, catalysed Spanish theologians to write natural theologies which functioned as apologetic defences of Christianity (and of Catholicism, more specifically) which could speak effectively to individuals who refused to acknowledge sources of revelatory knowledge or who would not accept fideist epistemic claims. I also argued that the increased attention given to the burgeoning natural sciences in eighteenth-century Spain, coupled with the success of physico-theological traditions associated with natural history, inspired a similar and slightly-derivative stream of physico-theology in Spain.

What all four of these portraits have shown, therefore, is that even within early modern Spain, natural theology meant different things to different people in different times; natural theology's evolving definition and use indicates how Spaniards thought about nature, reason, and God in a given society and at a given time. In each chapter, I highlighted particular historical settings and concerns which may have influenced the production of natural theology. Many of these historically-contextual factors were shared across the early modern period, and to elucidate this, I compared and contrasted those factors which differed in Spain from the better-known example of natural theology in early modern England in the final chapter, "Accounting for Differences." I noted that the form of physico-theology most associated with early modern

England was only one type of natural theology in the Spanish tradition, and postulated that the reason for Spain's divergent forms of natural theology were because of its unique historical parameters. After reviewing explanations offered for the emergence of EPNT such as the rise of biblical criticism and religious latitudinarianism, I argued that these considerations do not apply to the case study of early modern Spain. Instead, I offered eight examples of historical reasons for the production of natural theology in Spain. These included, for example, Catholic teaching on the noetic effects of sin and grace, the pre-eminence of Catholicism as the only official religion in early modern Spain, mediated through institutions such as universities, religious orders, and the Inquisition, the Encounter of New World civilizations, and the role of the developing natural sciences in early modern Spain.

The Significance of Early Modern Spanish Natural Theology:

This dissertation represents a new area of scholarship on natural theology and on early modern history and historical theology. While previous studies have focused, for example, on the individual work of Sibiuda, Venegas, Suárez, and Almeida, no work has placed their contributions within the larger conceptual understanding of natural theology, nor sought to discover how natural theology changed over the early modern period in Spain. This research, therefore, is the first to offer a systematic study of natural theology in early modern Spain – how it was defined, articulated, and what purpose it served. The fact that there *was* a tradition of natural theology in early modern Spain has been almost entirely overlooked in the existing scholarship, both among historians and theologians of Spain and early modern Europe as well as among philosophers and theologians interested in the genesis of natural theology. The first major point, therefore, achieved by this dissertation is to conclusively demonstrate that works of natural theology abounded in early modern Spain. Although the term ‘natural theology’

(*teología natural*) was uncommon, it can be found in dozens of works across the early modern period; if a more ampliative understanding of natural theology is considered, this number increases significantly. As I have shown and argued, not only did natural theology exist in Spain, it thrived and represented a longstanding and familiar theological tradition. While works such as Sibiuda's *Liber* and Almeida's *Harmony of Reason and Religion* (1793) have previously been examined, many of the sources which I have included in my analysis have not received any significant scholarly attention, including, for example, Isla's *Fabrica Universal* (1621) or Berni y Catalá's *Filosofia racional* (1736). Others, while they may have been studied for other purposes, have never before been connected to the tradition of natural theology – Nieremberg's works, for example, the mystical treatise of Planes, or selected essays from the enlightenment author, Feijóo.

My work has reclaimed an area of intellectual activity which has been overlooked, both within Hispanic studies and among histories and contemporary studies of natural theology. It poses a significant challenge of necessary revision to the historiography of natural theology. As I demonstrated in the introduction and in the fifth chapter, numerous scholars have presented the history of natural theology in the early modern period as a uniquely and 'peculiarly' English tradition.⁹⁵¹ In compendiums and studies on natural theology in the medieval and early modern period, examples from Spain, with the exception of a passing reference to Sibiuda, are entirely absent.⁹⁵² While studies have abounded on the role and importance of natural theology in early modern England, these studies do not reference contemporary works from Spain, nor do similar studies exist for the case studies of Spain (excepting a handful of articles within the last

⁹⁵¹ Brooke, *Science and Religion*; Gillespie, "Natural History, Natural Theology..."

⁹⁵² William Lane Craig and J.P. Moreland, eds., *The Blackwell Companion to Natural Theology* (Oxford: Wiley-Blackwell, 2012); Russell Re Manning, ed., *The Oxford Handbook of Natural Theology* (Oxford: Oxford University Press, 2013); Blair and von Greyerz, *Physico-Theology*.

decade).⁹⁵³ Indeed, the imbalanced focus of research on natural theology in England has led to the assumption that natural theologies were particularly *English* and not to be found in abundance in other historical settings.

By calling attention to a hitherto unstudied tradition of natural theology in Spain which predated English examples, this dissertation refutes the idea that natural theology flourished uniquely in England or had its origin in the mixture of experimental science, English socio-political pressures, or Protestant latitudinarianism. My dissertation invites historians to reconsider the history of natural theology and particularly to expand the way in which they conceive of its definition and use – it does so by showing alternative ways of understanding natural theology to be found in Spain. It also demonstrates that natural theology’s mutability is connected to historical considerations. Already, historians of English natural theology have noted a certain degree of variability – different arguments and purposes of natural theology have been highlighted, for example, by Calloway and Mandelbrote.⁹⁵⁴ To this scholarship, the examples of Spanish natural theology in this dissertation providing supporting evidence of uses and interpretations of natural theology beyond design-based arguments of physico-theology. For example, Mandelbrote has studied a variant of natural theology which relied upon the “wondrousness of nature” and was associated with the Cambridge Platonists, a form of natural theology which faded as mechanistically-based physico-theology gained popularity.⁹⁵⁵ This natural theology, however, might be compared to those Neoplatonist-informed works in Spain

⁹⁵³ Gillespie, “Natural History, Natural Theology...”; Brian W. Ogilvie, “Natural History, Ethics, and Physico-Theology,” in *Historia: Empiricism and Erudition in Early Modern Europe*, ed. Gianna Pomata and Nancy G. Siraisi, Transformations: Studies in the History of Science and Technology (Cambridge, Massachusetts: The MIT Press, 2005), 75–103; Harrison, “Physico-Theology”; Mandelbrote, “Uses of Natural Theology”; Calloway, *Natural Theology*; Blázquez Paniagua, “A Dios Por La Ciencia”; Sánchez-Blanco, “La Crisis de La Físico-Teología”; Portuondo, *The Spanish Disquiet*.

⁹⁵⁴ Calloway, *Natural Theology*; Mandelbrote, “Uses of Natural Theology”; Mandelbrote, “What Was Physico-Theology For?”

⁹⁵⁵ Mandelbrote, “Uses of Natural Theology,” 451.

which similarly spoke of the wonder of the artifice of nature and employed physiognomatic or emblematic natural philosophies – Nieremberg, for example, or sections of Venegas. Even more so, the earliness of the tradition of creaturely contemplation found in Luis de Granada and Sibiuda and the popularity of these works abroad posits a new way of interpreting the historical origins of natural theology. Instead of a Protestant reclamation of Augustinian “two-book” theory, sharpened as individuals sought authoritative ways of creating knowledge outside of the Scriptures and the Church, the Catholic narrative shows the tradition of natural theology handed from Patristics to medieval commentators, and developed by spiritual reform movements of the fifteenth and sixteenth centuries. My dissertation thus challenges and revises the historiographical narrative of natural theology significantly, adding examples of Catholic and Spanish natural theologies which have never before been considered and which constitute new and different ways of understanding natural theology.

Reclaiming Spanish natural theology not only impacts the history of natural theology, but also holds important ramifications for the theological, philosophical, and intellectual history of early modern Spain, more broadly. In studies of the history of ideas in early modern Spain, “natural theology” as a concept is all but absent, although it is clear from this dissertation that it was an important and often-referenced category of thought in early modern Spain. My dissertation thus revitalizes a forgotten area of religious and intellectual thought which represented an important tradition and which closely impacted other scientific, philosophical, and religious notions in the Spanish mentality. Understanding the existence of this tradition, I argue, is the key to a more nuanced knowledge about how early modern Spaniards approached the study of nature, reason, reality, and God. In chapter two, for example, I asserted that elements of natural theology help historians to better understand movements of interior

spirituality, especially *recogimiento*, in the Spanish Renaissance. Additionally, I suggested in that same chapter that natural theological teachings could directly inform theories of natural religion and law in the discovery of the New World.

In the third chapter, Nieremberg's natural theology indicated that alternatives to Aristotelian natural philosophy were held and promulgated in teaching institutions in mid-seventeenth-century Madrid. Seen by themselves, these natural philosophies may be mischaracterized as esoteric or less effective than experimental and empirical methods promulgated at the same time, for example, in early modern England. Natural theology, however, demonstrates why and how such natural philosophies such as Neo-Platonist readings of nature could be persuasive ways of interpreting nature and reality and ground these approaches in a longstanding tradition of encountering creation. In chapter four, natural theology reframed enlightenment debates about natural religion, clarifying the limitations of such a religion, subordinating it to revealed theology, and yet insisting that it had a legitimate place as a defence of the faith and as a catechesis for beginners. In this context, the tradition of natural theology elucidates the Spanish enlighteners' (*ilustrados*) understanding of natural reason as an object which, given by God to all of humanity, could form (and according to some, should form) a common language by which to establish certain self-evident truths.

My research challenges, therefore, the existing historiographical narratives about the history of philosophy, theology, and the development of the sciences in Spain by drawing attention to the utility of 'natural theology' as a framework for understanding early modern thought. Intellectual pursuits that have formerly been viewed as distinct and separate are seen, from the perspective of natural theology, to be parts of a larger composite goal of early modern Spanish theologians and thinkers – the study of the natural world, the exercise of human reason,

and the establishment of knowledge about God and his attributes. This is clear, for example, in the way that natural theology in the seventeenth and eighteenth centuries united both the area of metaphysics and physics by articulating the metaphysical underpinnings which formed the framework for philosophies of nature. It is clear from the historical records that Spanish theologians lived and worked with the category of “natural theology”; if historians fail to incorporate or understand the term and its usage, they will miss its deeply-embedded nature in contingent areas such as: the development and motivation for the study of natural history and the “theologizing” or sacralization of natural philosophy, the perspicuity and accessibility of biblical studies, the tension between individual, unmediated forms of personal piety and devotion and ecclesiastical authority, and natural law and the moral imperatives of rational beings.

Lastly, by demonstrating the historical “embeddedness” of natural theology as well as reconceptualizing the history of natural theology, my work challenges the parameters and limitations placed on the definition of natural theology by the revival of the “new natural theologies” among contemporary discussions. This largely supports the arguments of theologian Alister McGrath that:

The lengthening shadows of half-forgotten historical debates and cultural circumstances have shaped preconceptions and forged situation-specific approaches to natural theology that have proved singularly ill-adapted to the contemporary theological situation. The notion of “natural theology” has proved so conceptually fluid, resistant to precise definition, that its critics can easily present it as a subversion of divine revelation, and its supporters, with equal ease, as its obvious outcome. Instead of perpetuating this unsatisfactory situation, there is much to be said for beginning all over again, in effect setting aside past definitions, preconceptions, judgments, and prejudices, in order to allow a fresh examination of this fascinating and significant notion.⁹⁵⁶

McGrath’s first claim is two-fold: a) that natural theology is inherently contextually-determined and therefore must be situated historically, and b) that because any one natural theology is

⁹⁵⁶ McGrath, *Open Secret*, 3.

embedded within the culture in which it was produced, any attempt to pry it from this setting and lift it, anachronistically, to ‘today’s problems’ fails. Instead of McGrath’s call to start anew in the formation of a “new vision for natural theology,” however, I argue that a close attention to the historical record may prove a fruitful endeavor for contemporary theologians and philosophers.⁹⁵⁷ To this end, McGrath identifies the existence of “older and potentially more productive approaches...” and asserts that his ‘new vision’ “...retrieves and reformulates older approaches that have been marginalized or regarded as outmoded in recent years...”⁹⁵⁸ The example of Spanish natural theology certainly qualifies as an “marginalized” and “older approach”; its promise to be useful to new natural theology is explored in this conclusion.⁹⁵⁹ The natural theologies examined by this dissertation, therefore, may have a powerful influence on the development and reconsideration of modern natural theologies.

Studies in natural theology are, as one scholar describes it “alive and well”, and although many of these are simply retreading the familiar paths established by earlier natural theologians, there have been several changes to the approach of natural theology within contemporary religious studies that these efforts are usefully described as “new natural theologies” (NNT) or as a “revival of natural theology.”⁹⁶⁰ In 1995, John Polkinghorne argued that, thanks to the efforts of faith-believing scientists, there was a “new natural theology that is not only revived but...also revised.”⁹⁶¹ Two of these ‘revisions’ are, for Polkinghorne, hallmarks of the NNT: first, that the NNT sought to “proffer insight” rather than *prove* the existence of God, and secondly, that the NNT was more interested in the philosophy of scientific “law, rather than on the results of the

⁹⁵⁷ McGrath, title.

⁹⁵⁸ McGrath, 7, 3.

⁹⁵⁹ McGrath, 7, 3.

⁹⁶⁰ Swinburne, “The Revival of Natural Theology”; James Brent, “Natural Theology,” Internet Encyclopedia of Philosophy, accessed August 4, 2020, <https://iep.utm.edu/theo-nat/>.

⁹⁶¹ John Polkinghorne, “The New Natural Theology,” *Studies in World Christianity* 1, no. 1 (1995): 42. Emphasis by Polkinghorne.

process.”⁹⁶² The first revision responded to critiques that natural theology failed to offer conclusive evidence or that it omitted the need for revelation and revealed theology in Christian doctrine.⁹⁶³ The second helped to dodge the “God of the Gaps” challenges and Humean anthromorphism which plagued traditional physico-theology. The NNT is not concerned with design or artifice, but with orderliness and intelligibility. Barbara Hernstein Smith describes this as “the compatibility of traditional religious beliefs and current scientific accounts of the natural world...” adding to this a phrase found in Hervás y Panduro, that it is “...a theologizing of nature...”⁹⁶⁴

Polkinghorne provided a brief intellectual history which claims that the NNT was developed in response to specific challenges which were raised in response to the physico-theology typified by Paley and Protestant British theologians in the seventeenth through nineteenth centuries.⁹⁶⁵ The character of the NNT, therefore is a reflection of the work of Protestant, British, physico-theology (EPNT) and its successive critics. Herein lies a fundamental problem. Proponents of NNT have defined it as “new” because they view it as a departure from an older tradition of a particular type of natural theology. However, by conflating this one expression of natural theology with all the other attempts and contributions of historical natural theology, practitioners of NNT have not yet realized that there have been several “new” natural theologies long before this current iteration. Much of the NNT is not so new at all, but rather has historical precedents in writers of marginalized natural theologies. The NNT is postulated against the design-arguments and certain proofs of English physico-theology

⁹⁶² Polkinghorne, 42–43.

⁹⁶³ See: Barbara Hernstein Smith, *Natural Reflections: Human Cognition at the Nexus of Science and Religion* (New Haven: Yale University Press, 2009), 97.

⁹⁶⁴ Smith, *Natural Reflections*, xiii–xiv.

⁹⁶⁵ John Polkinghorne, “Where Is Natural Theology Today?,” *Science and Christian Belief* 18 (2006): 169–71.

– but if the NNT assumes that this is all that past versions of natural theology have to offer, then it is engaging with a historical myth. More critically, it will miss the opportunity to engage with versions of natural theology developed in the past which have been resurrected in recent studies as ‘new’ directions for natural theology.

Because of this presentism, entire landscapes of natural theology have been lost, and the valuable insights which their articulations and arguments supposed have been overlooked and forgotten. For example, although scholars have argued that there was a silence in natural theology which followed the “death knell” of natural selection and Darwin, there was in actuality a fertile field of natural theologies during this time (1858-1923) which specifically incorporated developments in evolutionary science and psychology; at the same time, following the conclusion of Vatican I (1869-1870), Catholic theologians continued to promote the orthodoxy of rationally argumentation for the existence of God.⁹⁶⁶ Egil Asprem has identified five different

⁹⁶⁶ In chronological order, fifteen examples of this forgotten period include: Horace Bushnell, *Nature and the Supernatural, as Together Constituting the One System of God* (New York: Charles Scribner, 1858); William Jackson, *The Philosophy of Natural Theology: An Essay, in Confutation of the Scepticism of the Present Day* (London: Hodder and Stoughton, 1874); John Bascom, *Natural Theology* (New York: G.P. Putnam’s Sons, 1880); Paley, *Natural Theology [New York 1881]*; William Forsell Kirkby, *Evolution and Natural Theology* (London: W. Swan Sonnenschein & Co., 1883); Bernard Boedder, *Natural Theology*, *Manuals of Catholic Theology* (New York: Benziger Brothers, 1891); William F. English, *Evolution and the Immanent God: An Essay on the Natural Theology of Evolution* (Boston: Arena Publishing Company, 1894); J. Morris, *A New Natural Theology Based Upon the Doctrine of Evolution* (London: Rivington, Percival and Co., 1896); John Buchan, *The First Things: Studies in the Embryology of Religion and Natural Theology* (Edinburgh: William Blackwood and Sons, 1902); Joseph Wilhelm and Thomas B. Scannell, *A Manual of Catholic Theology Based on Scheeben’s “Dogmatik,”* Third Edition, Revised, vol. Volume I: The Sources of Theological Knowledge, God, and Creation and the Supernatural Order (London: Kegan Paul, Trench Trübner & Co., Ltd., 1906); Newman Smyth, *Constructive Natural Theology* (New York: Charles Scribner’s Sons, 1913); Josiah Nicholson Shearman, *The Natural Theology of Evolution* (London: George Allen & Unwin, LTD., 1915); Cardinal Desire Joseph Mercier, *A Manual Of Modern Scholastic Philosophy*, trans. T.L. Parker and S.A. Parker, Eighth Edition, vol. II Natural Theology (Theodicy), Logic, Ethics, History of Philosophy (London: Kegan Paul, Trench, Trubner & Co., Ltd., 1917); Own A. Hill, *Psychology and Natural Theology* (New York: The MacMillan Company, 1921); George Hayward Joyce, *Principles of Natural Theology*, Stonyhurst Philosophical Series (London: Longmans, Green & Co., 1923). The defence of this point at Vatican I may be debatable. Fergus Kerr, “Knowing God by Reason Alone: What Vatican I Never Said,” *New Blackfriars* 91, no. 1033 (May 2010): 215–28.

“schools of natural theology” during the period of 1900-1939 alone, prior to Barth’s 1934 publication, *Nein!*.⁹⁶⁷

“New” is a relative term. There have, in fact, been “new” natural theologies time and again throughout history, a fact that is explored in Peterfreund’s *Turning Points in Natural Theology*, which charts changes in the definition and use of natural theology in the wake of paradigmatic shifts by Bacon, Boyle, Newton, Paley, and Darwin.⁹⁶⁸ The central lesson to be learned from Peterfreund and by careful historical examinations from scholars such as Harrison, Mandelbrote, and Calloway is that natural theology, in so far as it invokes both ‘nature’ and ‘reason’ as fundamental concepts, has changed over time because these terms are contextually and historically-embedded.⁹⁶⁹ *Tempora mutantur*: natural philosophers in Tudor England did not conceive of or engage nature the way that physicists at CERN do today – why would we expect their corresponding natural theologies to remain neatly and conveniently static?

This is a point established by the Reverend Joseph Morris in his 1896 work *A New Natural Theology Based Upon the Doctrine of Evolution*.⁹⁷⁰ Morris wrote that

...it is no wonder that the attempts to construct a natural theology appear to have been quixotic and inane...no natural theology can possibly be constructed which shall be for all time, and which will continue to preserve its essential features throughout time. The conclusions established in any system of natural theology are strictly relative to the knowledge of Nature upon which the system is based..⁹⁷¹

⁹⁶⁷ Asprem, “Five Schools of Natural Theology”; Asprem’s timeline is also problematic, leaping from Aquinas to the Enlightenment, where he references Hume, Paine, and Paley. See Cit. 14 in Egil Asprem, *The Problem of Disenchantment: Scientific Naturalism and Esoteric Discourse 1900-1939*, Numen Book Series, Volume 147 (Leiden: Brill, 2014), 96.

⁹⁶⁸ Peterfreund, *Turning*.

⁹⁶⁹ Peter Harrison, “What’s in a Name? ‘Physico-Theology’ in Seventeenth-Century England,” in *Physico-Theology: Religion and Science in Europe, 1650-1750*, ed. Ann Blair and Kaspar von Greyerz, Medicine, Science, and Religion in Historical Context (Baltimore: Johns Hopkins University Press, 2020), 39–51; Mandelbrote, “Early Modern Natural Theologies”; Calloway, *Natural Theology*.

⁹⁷⁰ Morris, *A New Natural Theology*.

⁹⁷¹ Morris, 15–16.

Morris's work was one of many that proposed changes to the way that theologians approached natural history in a post-Darwin world and demonstrates that the enterprise of natural theology responds to historically contextual demands.⁹⁷² Morris's claim, evidenced by this dissertation, is that natural theology constantly reshapes and redefines itself as the understanding of the three realms – nature, reason, and the knowledge of God – change over time and across space. The NNT which currently occupies the discussion of scholars of science and religion is but one “new” natural theology in a line of new natural theologies.

Many of the “new directions” of natural theology today can find distant echoes in early modern Spain. “Incarnational” natural theology which reconceptualizes the boundaries between general and specific revelation in light of Christ's Incarnation, for example, may find Sibiuda's conception of duplicate books of Scripture and Nature of use.⁹⁷³ Modern critiques which fault apologetic natural theology as capitulating to enlightenment evidentialism are rebutted when compared to devotional or catechetical purposes for natural theology.⁹⁷⁴ Thus, the natural theologies of early modern Spain may be useful in reframing contemporary discussions related to the revival of the “new natural theologies.”

The main focus of this dissertation, however, has been to better understand how natural theology emerged as a category of religious and philosophical thought in the early modern period by examining an unstudied context. By studying these ideas historically and critically, furthermore, I have been able to demonstrate both that the construction of natural theology is

⁹⁷² For another example, see: W.W. [William Wilberforce] Lord, “The Watch Found on the Heath: Remarks on Some Suggestions towards a New Natural Theology,” in *The Southern Magazine*, vol. 16, 1875, 267–76; s.n., “Lord, William Wilberforce,” in *The Oxford Companion to American Literature*, ed. James D. Hart and Phillip W. Leininger (Oxford: Oxford University Press, 1995).

⁹⁷³ Emil Brunner, *The Christian Doctrine of Creation and Redemption: Dogmatics Vol. II*, trans. Olive Wyon (London: Lutterworth Press, 1952), 29; McGrath, *Open Secret*, 14–15; Lisanne Winslow, *A Trinitarian Theology of Nature*, Princeton Theological Monograph Series 244 (Eugene: Pickwick Publications, 2020), 29–32.

⁹⁷⁴ Plantinga, “The Prospects for Natural Theology”; Buckley, *At the Origins*; Moore, “Should Christians.”

necessarily historically-contingent, as well as explore ways in which changes of natural theology help to better understand the intellectual, social, and cultural mentalities of early modern Spain. Additionally, by comparing Spanish natural theology to EPNT, I have identified several key historical factors which I believe to be influential in the way that natural theology emerged in early modern Spain. Because my work is the first full study of natural theology in Spain, it has critically challenged both the historiographies of natural theology and of the theological and intellectual narrative of early modern Spain.

Directions for Future Research:

This dissertation has offered a comprehensive, panoramic view of natural theology in early modern Spain. Although it has answered many questions about the contours of natural theology in the early modern world, it has also raised others that merit additional inquiry and which the limitations of this work have not allowed to be included here. Firstly, this dissertation only discussed works which were generated within early modern Spain (1436-1825); it did not cover works which were written in the wider Hispanic world or Spanish empire. Yet Spain was not isolated from this imperial context, and it is clear that the consideration of natural theology in early modern Spain demands a similar analysis for those works and ideas of natural theology produced in the Iberoamerican world. This dissertation has, at times, referenced the dissemination of Spanish natural theologies to Latin America, but no attention has yet been given to the construction of natural theologies from Central and South America – locations which had markedly different historical contexts which would influence the emergence and understanding of natural theology. Almost no scholarly attention has been dedicated to the development of natural theologies in colonial Latin America – especially work which comparatively seeks to understand natural theologies of Mesoamerican and pre-Columbian societies and how these

might have syncretized with early efforts to convert indigenous persons to Christianity by Spanish missionaries and colonizers. It is possible that the natural theology produced in these contexts will help historians to better understand how and why Spaniards and other Europeans constructed ethnographies of religion and described the natural religion of the New World. Additionally, preliminary research has suggested that in eighteenth-century Mexico, as in Spain, natural theology formed a key part of religious and philosophical knowledge; moreover, natural theology may have been a crucial factor in encouraging religious tolerance in the Republic of Mexico post-independence.⁹⁷⁵ Similarly, this study has emphasized how much of natural theology in early modern Spain differed because it was produced within a Catholic theological framework (as opposed to Protestant England). This invites a closer analysis of similarly marginalized natural theologies in the early modern period, including other Catholic settings such as Portugal and Italy, but also underrepresented subjects such as Eastern Europe.

Secondly, this dissertation did not discuss natural law, although it is closely connected to natural theology and had a rich tradition in early modern Spain. A more systematic investigation regarding the philosophical connection between natural law theory and natural theology during the early modern period (and especially during the period of second scholasticism experienced in the Spanish Baroque) is needed. While there are many studies of the development and evolution of theories of natural law in the early modern world, very few of these studies have explicitly connected natural law to natural theology. However, as examples of Spanish natural theology have suggested (for example, Venegas and Suárez), the self-evidence of knowledge by natural

⁹⁷⁵ Rafael Antonio Morales y Andrade and Manuel Pasqual Mariano Pinzon Baeza, “Logicae. et. metaphysicae. assertiones” (Mexico, Apud. Marianum. Zunnigam. et. Ontiverium. ad. viam. spiritus. sancti, 1797), The John Carter Brown Library (B797.S456d); Juan Felipe de Bendiaga, *Errores del Entendimiento Humano, con un apendice* (Puebla de los Angeles: Oficina del Real y Pontificio Seminario Palafoxiano, 1781); Vicente Rocafuerte, *Ensayo Sobre Tolerancia Religiosa* (Mexico: Imprenta de M. Rivera, a Cargo de Tomas Uribe, 1831).

theological methods is the ground for developing systems of natural law. Moreover, conceptions of natural law which posit a general awareness of moral and ethical behavior is itself a way of arguing or constructing arguments for the existence and awareness of the existence of God. “Moral” natural theologies thus form an overlapping area of interest for scholars of both natural theology and natural law which merit additional research.

Finally, there are numerous works of natural theology in early modern Spain that have only been tangentially referenced or described in this overview, texts which deserve to be studied as closely as those sources which have formed the majority of the four “portraits” of natural theology in early modern Spain in this dissertation. Most of the works which I have analysed – Sibiuda, Nieremberg, and Hervás y Panduro, for example – I chose for their prominence in early modern Spain and their clarity; others such as Isla have thus far remained unknown (even among Hispanists). Particularly because Spanish works of natural theology did not necessarily employ *teología natural* as a term, works doubtlessly remain to be discovered in archives and libraries which could be added to the study of natural theology in early modern Spain.

Conclusion:

The introduction of this dissertation began with the pathfinding example of Lewis and Clark, who, in June of 1805, were deliberating upon the course that their journey would take. To conclude, consider another metaphor from later that same summer, when the two explorers met and communicated with Cameahwait, the chief of the Shoshone people and brother of Sacagawea, hoping to secure horses and to learn about possible routes to the Columbia river. Relations were generally amicable, despite differences in language. In his journal entry for Wednesday, August 14th, 1805, Lewis described his efforts to communicate to the Shoshone, which was mainly achieved through a French-Shawnee scout, George Drouillard:

The means I had of communicating with these people [the Shoshone nation] was by way of Drewyer [Drouillard] who understood perfectly the common language of jesticulation [sic] or signs which seems to be universally understood by all the Nations we have yet seen. it [sic] is true that this language is imperfect and liable to error but is much less so than would be expected. the [sic] strong parts of the ideas are seldom mistaken.⁹⁷⁶

The language of the universal book of nature is similarly “imperfect and liable to error” – but like the earnest communication of Lewis and Drouillard in the Lemhi Pass of the Bitterroot mountains in August, 1805, the “strong parts of the ideas” of nature are, Spanish natural theologians argued, “seldom mistaken.”⁹⁷⁷ Natural theology, by appealing to the fundamental and shared experiences of reality, seeks out, identifies, and explores those nodes of mutual intelligibility. It concentrates on the “strong parts of the idea” of nature. Yet as we have seen, nature is not a universally accepted concept and is culturally mediated and constructed; so too, rationality varies in time and in place.

Despite these variations, perspicuity was a theme which the Spanish authors of natural theology returned, even when they did not agree upon what natural theology meant or how it should be used. Nature was everywhere, nature was accessible, nature was constant in its proclamation of deeper theological truths waiting to be grasped. Nieremberg wrote that “by all part it is seen and read: *Deus me fecit*.”⁹⁷⁸ Venegas described creation as “a book so common to all,” supporting Sibiuda’s arguments that one could read it and know “really, infallibly, without difficulty or labor.”⁹⁷⁹ Many of the authors returned to the classic example of the heavens in natural theology – not just because of the Scriptural impetus found in Ps. 18/19 (*Coeli enarrant*), but because it formed an essentially common fact of reality for every human being. The skies

⁹⁷⁶ Lewis Journal, August 14, 1805. Lewis, “Lewis and Clark.”

⁹⁷⁷ Lewis Journal, August 14, 1805. Lewis.

⁹⁷⁸ Nieremberg, *Curiosa, y Oculta*, 308.

⁹⁷⁹ Vanegas [Venegas], *Diferencias* [Madrid 1569], 35r; Sabunde, *Theologia Naturalis* [Lyon 1488], 28.

and stars may have varied in season and hemisphere, they may have been perceived in alternative ways, they may have carried with them different connotations and ideas, but the fact of their existence called attention. “In order to see in this mirror the greatness, the wisdom, and even the beauty...of the Creator,” wrote Feijóo, “...it is enough to see it as the most simple and rustic Aldeano, or as the most ignorant shepherd in whatever time, but more especially on a serene, clear, and clean night in spring or summer.”⁹⁸⁰ Feijóo further explained:

This is an object in which, although it is even imagined fills my heart with smoothest delight that I will detain it with my pen as I do here at present. What a spectacle, so sad, so magnificent, so beautiful! How many lights and how brilliant in the spacious field of the Firmament! And [in] this same field, how pleasing is that truly heavenly blue colour that was made, with which it [is] entirely dressed! What comparison does it have...?⁹⁸¹

For Feijóo, as for the countless other authors of natural theology in early modern Spain, a scene such as a starry night in spring or summer called out and demanded attention. Nature conveyed meaning – it carried “strong parts of ideas” – but what these ideas were, how best to interpret and understand them, and why, were endless sources of discussion for Spanish Catholics, searching for meaning through natural theology in early modern Spain.⁹⁸²

⁹⁸⁰ Feijóo, *CE V [1777]*, CE V.ii§viii¶57:47-48.

⁹⁸¹ Feijóo *CE V.ii§viii¶57-58:48*.

⁹⁸² Lewis Journal, August 14, 1805. Lewis, “Lewis and Clark.”

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