Bonácz Ágnes

“I’ll Sing of Time, of Space”: Observation and Vastness between 1608-1648 in the Works of Donne, Herbert, and More

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Nothing contains all things. It is more precious than gold, without beginning and end, more joyous than the perception of bountiful light, more noble than the blood of things, comparable to the heavens, higher than the stars, more powerful than a stroke of lightning, perfect and blessed in every way. **Nothing always inspires.** Where Nothing is, there ceases the jurisdiction of all kings. Nothing is without any mischief. According to Job the earth is suspended over Nothing. Nothing is outside the world. Nothing is everywhere. They say the vacuum is Nothing; and they say that imaginary space – and space itself – is Nothing.


Translated by Edward Grant in *Much Ado About Nothing*, 216. Emphasis added.
I. Introduction

This dissertation was inspired by *Paradise Lost*, John Milton’s influential epic, a poem which has been in the axis of my interest since the beginning of my university years. Albeit I stand by my personal and professional conviction that Satan, probably the most exalted character of the collected readership through the centuries, should not be the fulcrum of interest, the first outline for this dissertation was admittedly influenced by his perceptions of Chaos in the epic. Upon deciding on the particulars of the focus for the current research, soon the complexity which the notion of Chaos presented surfaced. Thus, instead of attempting to decipher the exact nature of Chaos, which has already been mapped from several angles in secondary literature, the “vast vacuitie” of the realm of Satan’s journeys (2.932) prompted me to examine how space imposes on people’s minds. The chosen framework for the dissertation became – and remained – the emerging interdisciplinary onlook of the “literature and science” movement. Since this framework is a relatively recent endeavour, it is still in the making: quite conveniently for the researcher, it defines and redefines itself during its (r)evolutions, thus it does not force the final text to unnecessarily, and quite confusingly for the reader, immerse itself in complex terminologies and set ideologies. Since I did not intend to discuss literature as a secondary layer, or an intriguing mirror to science, this analysis resolved to consciously apply the tenet of this framework which states that the understanding of an era or a text commences truly when one inspects the “coevolutionary dependencies among literature, science, technology, mathematics, and medicine” (Clarke and Rossini xvii). These connections will be brought to the surface through literary texts, employing a methodology which is to be introduced in the following subchapters.

After abandoning Chaos as its axis, the dissertation focused on the notion of “vastity,” which the *Dictionary of Early English* correlates simultaneously with “vastation,” i.e. “devastation” (esp. between 1600-1660), earlier “waste,” and acknowledges that from the 17th century on its meaning shifts towards “vastness, immensity” (Shipley 700). The *Dictionary* uses Shakespeare’s *Hamlet* as an example for the ambiguity in meaning: Horatio talks about “the dead vast and middle of the night” (I. 2. 197.) in the meaning of ‘empty,’ ‘wasted,’ and ‘immense’. In order to explore all meanings of “emptiness,” the fulcrum shifted to the then unproven but longstanding concept of the vacuum, and the question of whether this phenomenon inspired or discouraged the British authors in the first half of the 17th century to know more about their surroundings. Returning to the original inspiration for
this endeavour, and in order to find a more specific angle to the vastness of space, along with its constantly warring “embryon Atoms” (Paradise Lost 2.900) early modern atomism was considered, which swerved the discussion towards the question of atheism, and finally, religious and “imaginative enthusiasm”\(^1\). Gradually, the epic – quite naturally – disappeared from the vast oeuvre in question, and only other poets remained, all of whom had at least one focal point in common: God. Consequently, the central question of the research morphed into the following: how is the relation of God, the telescope, and the vastness of space unravelled in selected poetry written by well-known English authors in the first half of the 17th century after the appearance and dissemination of Galileo’s telescope.

The poems I chose for scrutiny also had several other features in common: their chronologies aligned in that all of them were written after the dissemination of the telescope in Europe (1610), yet before the official founding of the Royal Society (1660). The three poets – John Donne, George Herbert, and Henry More – were all devout believers, yet all of them warred, as believers do, with God. The selected poems demonstrate a reference to, or at least a reflection on the telescope, defining and redefining the natural limits of human sensoria. Albeit the texts to be examined vary in their genres, this is not to hinder their comparison, or rather, their reading alongside each other. That Donne’s *The First Anniversary* is a philosophical poem of commiseration, Herbert’s short poems are lyrical devotional poems taken out of their larger context, and More’s *Democritus Platonissans* is a specimen of an ephemeral genre, i.e. a poetical discourse on natural philosophy only entails that producing knowledge – making science – was not confined to one genre only. Donne’s *The First Anniversary* is a visceral reflection written approximately within a year of Galileo’s *Sidereus Nuncius*, which announced his new instrument and the preliminary, yet ground-breaking observations. Herbert’s “Astronomer-poems” – a term which I’ve coined for the group consisting of “The Agonie,” “The Temper (I),” “Vanitie (I),” “Divinitie,” and “The Search” – are all part of his *The Temple*, one of the most important devotional volumes of the 17th century and beyond; albeit these poems appear to be generally more informed of the functions of the new instrument, yet they still consider, with a sense of anxiety, one’s God-given limits. Finally, More’s *Democritus Platonissans*, written almost forty years after Galileo’s discoveries, is an attempt at the reconciliation of divine and empirical knowledge – a truly holistic framework, which used the telescope so naturally as if it were a divinely

\(^1\) This term is to be used mainly in Henry More’s œuvre, thus it is to be discussed later. The concept entails the overly zealous usage of one’s imagination, anchored in the material realm, in order to compensate for one’s lack of knowledge of the transcendental realm and the true nature of God.
inspired extension to the human eyes. All three bodies of works will demonstrate a natural aversion towards the overworking imagination, which renders observation to appear differently – more, or less – than things really are. The additional focus in the following three chapters is whether – based on the knowledge produced by the poems as well as the implications of the original discoveries – the outer space encountered visually after the dissemination of the telescope is potent, filled with life and generative energy, or barren, testifying to destruction and dissolution, and most importantly, whether these investigations of the fabric of space lead one closer or, on the contrary, away from seeing the whole as God sees: “sicuti sunt,” as they truly, entirely are.

A Historical Overview: the (Non-existing) Hierarchy of Literature and Science

The current dissertation is not one concerned with the literariness or thorough aesthetic evaluation of these works – it is rather the mentality expressed in them which is scrutinised. The telescope slowly brought about a change in perspective, and this change was not unaffected by these pre-Royal Society poetical works which were read, discussed, and interpreted widely. This is pre-scientific or proto-scientific language (in verse) due to the fact that there was no decorum, no set terminology for the non-existent natural sciences then. However, what one nowadays would label as “making science” applies to these texts as well. When one “makes science”, or produces knowledge about their surroundings, it results in a shift (however subtle) in mentality: how one looks at the world, how phenomena relate to each other, how these phenomena are explained, the constituents of their inner workings. All these signify a shift in the physical, chemical, biological, etc. constitution of the examined phenomenon, object, or living being. Following the Baconian fashion, when something is destabilised by such a new shift/factor, one needs to confine themselves to the realm of hypotheses, denying any absolute truth value to the statement until it becomes verified or its antitheses falsified. Even today scientific thinking also includes newer and newer attempts of verification, which can be observed in these works as well. However, this is only one answer of many: I aim to point out also a partially outdated mode of making science, observable in these writings, which actively problematised the connection between things unseen and the empirical observations, and constantly accounted for the former. This mode emphasises that when something new is discovered and renders all else “out of joint,” the answer is not to hypothesise, but to unify with a non-empirical framework: the transcendental realm. So far one could object that this mode of making science is the almost faithful copy of the Jesuit scholastic mindset, however, this era is different from scholastic
philosophy since here a more encompassing shift in observation, reading and faith introduced a world – through the tenet of “sola scriptura” – which can be observed literally, as-is (cf. Harrison 70-73). It is in this intellectual climate that the three authors attempt to introduce alternative interpretations to the world, and try to mentally (not empirically) shift the course of the emerging sciences.

Retrospectively one knows that the Baconian rhetoric slowly became more prominent than the one accounting for transcendental connections and obscure meanings. Sprat, in his History of the Royal Society solidifies these foundations in the form of a manifesto: the Society’s grand idea was to “separate the knowledge of Nature from the colours of Rhetorick, the devices of Fancy, or the delightful deceit of fables” (112). Contemporary scientific language faithfully reflects these sentiments, yet, arguably, some sensed that albeit this is quite a utilitarian and successful mindset to follow, it is not an all-encompassing answer to each possible question related to the human being and their environment. The following three chapters will demonstrate how Donne, Herbert, and More opposed this agenda. However, it is not only the onset of the 17th century which sustained these voices; Mary Midgley, a well-renowned contemporary philosopher theorises the very same issue in her Science and Poetry. Very similarly to the poets, Midgley emphasizes that there are some aspects of the self and of the human being which cannot be explored using the fragmented, isolating, meticulous methodology of science (123). Although this statement cannot be verified or falsified using the preferred methodology of the “hard sciences,” it belongs to a school which this subchapter will explore from a historical point of view: a movement which seeks how we can resist the academic fashions that now fragment us. This is the first reason pertaining the non-hierarchical relation of science and literature. It is not the language of science which needs to be assimilated to the language of literature, nor is it the language of literature which should be regarded as more scientific; it is also not poetry which needs to be seen as more scientific or science as more literary – it is simply the interplay of thoughts and the awareness of the different modes of producing knowledge about one’s environment and oneself, i.e. making science in the most basic sense that is in the fulcrum of the current study.

The exploration of the interaction between what we now perceive as science and literature commenced with a formidable study entitled “Mutability, Decay, and Seventeenth-Century Melancholy” by George Williamson, published in 1935. Albeit its title does not immediately suggest the paper’s focus to be the intersections between what in 1959 C. P.
Snow perceived as the “Two Cultures,” it is one of the first comprehensive studies of the metaphysical poets\(^2\) in such a light. The first subchapter makes up for what the title lacks in clarity, as George Williamson starts his paper by describing the comet of 1572. From here, he makes the now well-known argument in literary studies, then only to be found in Berry’s *The Short History of Astronomy*, that the appearance and disappearance of the “star” gave a final, steady but slow push in the long process of undermining the geometrically perfect, immutable and unchangeable cosmos. That these celestial objects may come and go as they wished meant that the supralunar sphere (the space over the trajectory of the Moon in the Ptolemaic-Aristotelean system) was also full of death and decay, and that, in the long run, everything is advancing towards disintegration. How the metaphysicals (and their contemporaries) reacted as a tendency is called the “Jacobean melancholy” (127), which is not only a result of the comets in the end of the 16\(^{th}\) century, but several other factors as well, i.e. quasi-biological treatises on the bodily corruption of man (with the emergence of anatomy), as well as modern Epicureanism (132). However, after enumerating all possible factors, the paper concludes that the “new astronomy” ultimately affirmed the world’s mutability by taking away the eternal crystalline spheres.

The 1950s and 60s were the first golden age of the study of science and literature. Robert Ellrodt’s 1964 paper – “Scientific Curiosity and Metaphysical Poetry in the Seventeenth Century” – is not only suggestive of the topic in its title, but also in the sources its author uses. Instead of relying on textbooks from other disciplines, he summarises and counters the literary papers of his contemporaries, signalling that such studies were, if not abundant and widely accepted, but existing and prevailing. Ellrodt detected four, largely overlapping and non-exclusive attitudes the 17\(^{th}\) century metaphysical poets could assume. Upon examining these attitudes, he pointed at a pressing problem, namely that the oeuvres of these poets cannot be adequately categorized according to any clear-cut system of influence. In contrast to his predecessors, the study is of importance due to this very disclaimer: as we will see, contemporary researchers of science and literature largely refuse to accept a linear logic of influence. Whereas the 50s and 60s, following Williamson, examined how *science* influenced literature, as if they had already been separate entities, or as if there were a unified set of criteria applying to either, Ellrodt, albeit still categorizing his subject matters, begins to refuse such linearity. Even when he concludes his paper stating

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\(^2\) Later on, I use this term in the sense with which it became used both in the majority of secondary literature and in the classroom: Donne and Herbert are often considered to belong to this group, while Henry More’s position of heavily debated – thus, I do not label him as such.
that “with the eventual triumph of the rational and utilitarian spirit the scientific conceit [in poetry] died out” (193), he admits that all major poets of the age had different motives, and that one cannot talk about underlying, grand narratives. The metaphysical poets and the “new science” were so intertwined in scholarship that even Smith’s book on *Metaphysical Wit* concludes with the new paradigm; his last chapter claims, quite famously, that it was Descartes’ dualistic philosophy, and the new empirical sciences, which caused the metaphysical wit to slowly lose its influence by the 1660s (247-248). Unfortunately, he repeats the same overused phrase, perhaps inspired by Donne’s poetry, that many researchers of the early modern intersection of science and literature do: ultimately, it was the shift from faith to empiricism which furthered the end of metaphysical poetry.

However, this shift as presented by Smith does not say anything about the inherent processes. The narrative could be summarised as such: Cartesianist tendencies emerged along with a strong belief in the workings of matter, and finally, through steps logical to us, the language and the through-processes of science were born. What is omitted from this plot is that this shift was not given or self-evident at all: that divergent paths had been open for a long time, and those paths offered alternative routes which re-emerge in their transformed form even today, e.g. in the philosophy of Midgley or in the papers of the “new wave” literature/science scholars to be surveyed below.

Highlighting one of these divergent paths is Elizabeth Spiller’s *Science, Reading, and Renaissance Literature*, whose manifesto also iterates the conclusion my investigations also came upon, namely that “imaginative literature provides a form for producing knowledge” (2). The literary works to be presented here do not only reflect on the tools advocated by the later members of the Royal Society. Donne’s speaker³ will publish a *practical demonstration* of the proven fact that both the old and new world system failed, while introducing a new form of reading and looking at the world which promises a different form of acquiring knowledge. This transcendental mode of reading the world will make its picturesque expression in Herbert’s Astronomer-poems, evoking the psychology of knowledge acquisition; finally, More’s *Democritus* will explicitly make science through actively trying to demonstrate the experimental logic inside material phenomena and the logic which connects these to their transcendental sources. Demonstration, the production of hypotheses, and looking at the root causes are all tools employed by their contemporaries as

³ By ‘speaker’ I mean a construed voice appearing in the literary texts as well as in other scripted and written iterations. This voice is usually distinct from the biographical author unless clearly stated in the analysis.
well as ours. As Spiller explained, the common goal of early modern science and imaginative literature was to “convert accounts of personal experience into new stories of universal truth” (15). What is experimentation in the era but universalizing something conducted with unreliable instruments in unreliable and non-reproducible circumstances? What are hypotheses but exercises in logic and imagination, stretched onto the fabric of the whole world? What are the texts mentioned above but all these in limitless permutations? These writings are not only historical repositories: they contributed to the fashioning of one’s environment in the period.

In her *Reading through Galileo’s Telescope*, Spiller argues that Cavendish’s *The Blazing World* is an answer to the notion of a need for verification, as neither the images transmitted by the telescope drawn and published in the *Sidereus*, nor the world of the novel might be seen with the naked eye; they can only be imagined (196). Galileo’s *Sidereus Nuncius* will be the subject of extensive discussion in the upcoming chapters. At this point the statement above only confirms the “material world as an artefact of human action” (Marchitello *The Machine* 16), hence the axiom that how one reads the world shapes it in return. Today one of the books above is regarded as proto-science – the observation of the heavens; and the other as fiction. However, there is no such stark contrast between the two, as, in a sense, and especially from the point of view of 17th-century contemporaries, both worlds only exist through the text, the act of reading and imagination.

Why these papers are significant for the current research is precisely the methodology they employ. Instead of examining the direct influence of scientific discoveries – be that the telescope, the biological or the physical ones – the current analysis aims to provide a history of mentalities, i.e. how a natural fusion of what was perceived in the environment and what was inside a person converged in a non-binary manner. The influential 17th-century poets in discussion produced knowledge side by side of the Baconian, Cartesian, or even Hermetic, alchemical agendas. Ultimately, they fused their own perceptions with their own mentalities and convictions into verse to persuade, to show, and to make something understood. Science, for most of the history of mankind, often used literary tools for expression: metaphors, picturesque descriptions, embellished sentences hewn together into treatises, even poetry. Claire Preston summarises the manifesto of contemporary (21st-century) “lit-science” scholars as such: “[we maintain] the claim that scientific expression, the behaviour of natural philosophers, and even the shape and structure of their investigations have a literary and rhetorical basis” (10). Marchitello’s 2017 preface to *The Palgrave Handbook of Early
Modern Literature and Science states the following: “this new generation of critics does not study the literary and the scientific as distinct, but rather as productively in-distinct cultural undertakings and operations” (xxiv).

Without delving into the (also not entirely distinct) realm of cognitive literary science, one may consider that science, even today, is made using both language and poetic tools, among others. It is also worth noting that language instinctively morphed to the needs of contemporary science, and metaphors became part of standardised expressions. For the early modern scholars, what was seen needed to be expressed somehow; today, albeit the majority of scientific endeavours rely on data (encodings, transmitted signals, calculations, etc.), these data still need to be interpreted with the help of language. But the problem with this discourse is that it regards literature as a tool for science: the non-scientific texts about scientific matters exist either to popularise their subject, or to interpret it. Logan, in his 2010 The Poetry of Physics and the Physics of Poetry, intends to “trace the influence, the rise of modern science had upon the thinking in other areas of human enterprise and thought” (67) presupposing a linear (and fallacious) relationship between science and literature: however, the linearity of influence simply cannot be established in an era which saw an intricate network of intellectual correspondences (still in the progress of properly tracing back), a culture of oral discourse, and of a largely decentralized group of thinkers expressing themselves sometimes in treatises, sometimes in poetry, sometimes in satirical writings. Still, in his analysis Logan proposes that science is, in its nature, completely different from emotions, and more “human” matters – it is as if science belonged to a realm operating on an absolutely non-human basis (73). His fallacy results in a discourse which traces the cultural history of the natural sciences with poems as mere illustrations: the author compulsively looks for in-text references for actual scientific discoveries instead of reading poetry as a legitimate treatise. That science should naturally be “above” literature, however, is not a new idea: Robert Boyle, who argued for the existence of vacuum in nature based on his empirical experiments, already argued that “mechanical philosophy should come before rhetoric” (Hyman 32). This argument seems natural for most, as seen in Western school curricula. That literary texts might be read as science in themselves, and not as mere reflections, is only a recently emerging thought among literary scholars (cf. Preston 21, among others). Literature is used to consider problems, situations, mere thoughts in a manner which is alienated both in its logic and in its language from the “everyday experience”.
The early modern era provides some instances to illustrate the point above: that this altered mode of thinking might result in actual discoveries is to be seen in Henry More’s *Democritus Platonissans*, for example. The 21st century contemporary reader of these lines might argue that these “discoveries” are still very much imbued with personal emotions, or predispositions towards divinity. The current analysis does not claim otherwise: however, it asserts that the emotions of any human interpreter cannot be disregarded even in “proper” scientific discourses, especially in a time when the idea of the separation between secular and religious science had only started to emerge. Even Francis Bacon received an “intensely rhetorical humanist training of the grammar schools, universities, and Inns of Court” (Preston 12-13); Crystal Hall even argues that for Galileo, literature and poetry were “a model for thinking through philosophical problems” (Marchitello and Tribble xxxix). Thus, even without proposing a universal theory of language, rhetoric, emotional responses, and empirical science, the formal logic received both by educated poets and educated natural philosophers stems from the same humanist framework, which inherently enables scientific texts of the period to be literary, and literary discourses to postulate scientific hypotheses. Literature is not “in its cozy academic bungalow” and, similarly, science has descended from “its flashy mansion on the hill” (Clarke and Rossini 15).

Instead of asking the question how science affects literature, let us examine the (similarly one-sided) idea of how literature contributes to science. Albeit this undertaking is advocated by Marchitello, for example, in the context of this dissertation it is only a small, theoretical segment of the whole. It is instrumental to read the following analyses with the understanding of “making science” - the idea that hypotheses, verification or experimental circumstances were not comparable to the current standards, and as such, developing hypotheses had as possible a root in using literary tools as in different styles and approaches. Universalizing one’s experience derived from one’s circumstances was a significant feature of both natural philosophy and the literature of the age. However, the theoretical background to how literature might influence scientific language has been around for the last twenty years already; Arbib and Hesse argued that “scientific revolutions are, in fact, metaphoric revolutions” (Hyman 16). How one expresses what one thinks or sees organically alters with the change of the human perception and understanding of both inner and outer processes or phenomena – but the two revolutions happen parallely, rather than causally. The suggestion that analogies and metaphors are focal to knowledge acquisition will be one of the main arguments of this dissertation: as well as the idea that with the changes in the perception of
one’s environment, these previously established links tend to sever. Donne’s anatomist is lost in a universe without the proper “correspondence” between what can be seen and what remains unseen; when the metaphors attached to the transcendental realm and the physical space beyond the natural reach of human eyesight fail to correspond to what is observed with the spyglass, the speaker sees dissolution, and a total anarchy in relations – or the contrary might also be argued for, i.e. the new usage of language shapes perception, albeit this claim is already outside of the framework of my current analysis. By the time Henry More published his Democritus Platonissans, the metaphoric revolution was at a more developed stage: his God resides in the smallest grains of the immense black “stole” of the universe, embellished by the life-giving light of myriad suns. It is also in the same poem that the clarifying effect of metaphors and analogies can be seen: Claire Preston already argued for such an effect (15), yet she reached back to actual examples of early modern theorists, claiming that they used the power of rhetorics to transmit their meaning better. On a more general level, analogies and metaphors will be shown, through the analysis of the poems, to familiarise the reader with abstract concepts, thus aiding in the clarification of ideas. Instead of thinking in unrelated, physically inaccessible terms, these natural concepts or phenomena (such as the atomic theory, celestial revolutions, or other solar systems) appear in relation to something more in the reach of the unaided human sensoria. These two factors – the tight correspondence of metaphors and science, and the familiarisation of science through analogies and metaphors – thus justify the first basic assumption of my analysis, namely, that literature and science are not to be treated as separate entities, nor is it my aim to unravel a history of influence between the two subjects in the first half of the 17th century.

Thus, secondary literature is quite scarce on these issues so far not due to the lack of analyses, but for the reason that instead of “reading” science and literature together, these papers (regardless of the work(s) they are concerned with) lead to an image of literature illustrating, or being in other ways inferior to science. By looking at specific poems of these well-known figures of the period, the current dissertation aims to undermine this hierarchy; meanwhile the fulcrum of investigations remains the intersection of the vastness of space proposed by the users of the telescope and its immediate effect on human understanding of God. Knowledge was not only being obtained through observation, experiments, and calculations; as there was no centralised, stable form of knowledge taught and disseminated, new knowledge – in general: abstract and practical alike – could also be obtained through writing. This analysis, then, aims at establishing a framework in which the new horizons of
modern science, along with objective, empirical observations become personal, immediate concerns, worthy to explore not only through data obtained, but through the language of poetry as well.

**Science in the 1600s**

In order to understand the poetic reactions to the *telescopium*, one also needs to understand some of the processes and ideas which led to the ground-breaking explorations using the instrument. What follows is a very brief overview of the major influences in the period; however, as we have established that science and literature need to be read together, I intend to delve into the particulars only when the poetic text demands it. Below are some general ideas which are taken as underlying predispositions during my analysis; the rest is to naturally follow in more depth in the three main chapters of the dissertation.

One is tempted to begin an overview of early 17th-century science by using the phrases “the dawn of modern science” or “the scientific revolution”. However, these categorisations omit an important consideration, namely, that disregarding the telescope and the microscope, the first sixty years of the century were closer to the “Renaissance” educational model than to the “Enlightenment’s”. For most of the century (and even after) one or other alteration of the Ptolemaic system prevailed along with widely different theories of matter, different theories of how the body works, and, based on these workings, how the practical treatment of different diseases should progress. There was no centralised body of knowledge and learning still progressed through the widespread net of correspondences in England and on the continent; advanced students still travelled to learn from a highly skilled individual or obtain necessary material for their studies. The Royal Society was only founded in 1660, and it took several decades to arrive at a somewhat standardised mode of research and publication (albeit Oldenberg’s *Philosophical Transactions* needs to be mentioned: the periodical was first published in 1665 is regarded as the first modern academic journal). Thus, when the public talks about the “scientific revolution,” they usually omit the fact that it did not, in reality, entail a drastic paradigm shift from an innately Christian, geocentric, quasi-Hermetic tradition to a secularised, heliocentric, and exclusively empirical one, but that it was rather a slow repurposing of different disciplines and foci. There is, however, a consensus in secondary literature on the fact that these decades were indeed of substantial change, and the different physical and theoretical innovations, together with constructs emerging already in the 16th century contributed to the intellectual vigour of the following decades as well. The question of true knowledge has always been an innately human concern,
and with new methods of knowledge acquisition available, it became perhaps even more instrumental than previously. Francis Bacon’s often-cited essay “On Superstition” (first published in 1612) illustrates the troubling fluctuations of its time when it condemns the astronomers who “feign eccentrics and epicycles … to save the phenomena” (77). His agenda proposes to unveil superstition, and to look at the phenomena as they are, without predispositions or set frameworks, which is entirely different from the previous frameworks with existing axioms to operate with. If there was a change in paradigms, it was this: that phenomena were attempted to be seen outside of “what had always been thought” of the world, and it was rather the world which was moulded as a result of the thorough examination of different particulars.

When considering astronomical knowledge, Hatfield draws the reader’s attention to the early modern distinction between its two purposes. The earlier consideration entails that astronomy is only useful for “the mathematical calculation of apparent planetary motions,” whereas later on, Kepler declared that “astronomy should seek to discern the true physical constitution of the universe” (Hatfield 110). The first approach is the one Bacon shunned in his essay, as it relies on immediate appearances only. Yet at first, Kepler’s idea might also have seemed as an instance of enthusiasm to his contemporaries; determining something which cannot be seen borders on the threat of enthusiasm derived from imagination. Overall, the perfect way of knowledge acquisition did not exist when it came to astronomical phenomena: the process was either too superficial, or the observer relied too much on imagination and guesswork. Moreover, as Bacon also warns the reader, humans need to understand their limits of understanding: it is unadvised to “take an aim at divine matters by humans, which cannot but breed mixture of imaginations” (78). The image of the divine and the cosmos intertwine in the period precisely because the mysterious, unknowable nature of both.

That the authors considered here all made a connection between God’s infinity and the infinity/indefinite extension of space opened up by the telescope has its historical roots. The late medieval concepts explicitly equated God with space, or else space was an attribute of God. Bradwardine along with some theologians claimed that since “God is necessarily everywhere in the world and all its parts,” even an infinite space beyond the productive

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4 This threat appears in Henry More’s oeuvre, and as such, it is to be explored in the corresponding chapter. In general, the fear of human imagination being “over-enthusiastic,” and thus, projecting its own (false) phantasms onto the plain of transcendence is in focus here.
cosmos can “in no manner exist without God” (Grant 135). Albeit his thoughts were only published in England in 1618 by Henry Savile, and are conspicuously absent from all 17th century treatises (Grant 148) the concept nevertheless persisted. The scholastics of the 16th century, the Scottish John Major among them, also found the relation of God and space focal: Major’s reasonings also ascribed space to God, as it was not imaginable for him to posit God’s existence outside any form of spatiality. However, his God is not rendered finite by any physical borders: his circumference is indeed infinite (Grant 156). The talk on God’s attributes and space did not cease with the waning of scholastic thought: when atomism reentered the intellectual landscape, mainly with Lucretius’ *De Rerum Natura*\(^5\), space became something different, an independent force to explore. Siplicius’ ideas, derived from the Stoics, were also widely disseminated among the thinkers of the period: he hypothesised that there is a finite spherical cosmos surrounded by an infinite three-dimensional vacuum without worlds or matter (Grant 183). Bruno, Galileo and Kepler all held different opinions on the matter, albeit when it came to a general view on astronomy as such, the Copernican system was better accepted amongst practical men (Knight 7). The 17th century also saw the dissemination of Hermetic philosophy\(^6\), merging alchemy, spirituality, and some new aspects of empiricist experiments, yet since the current poetic oeuvre does not present any such inclinations, the dissertation does not thoroughly consider this philosophy.

**Infinity, the Telescope, and the History**

There’s Nothing more common amongst Authours, then so to measure all things according to the Model of their own senses, as either proudly or rashly to reject the things which may in infinite spaces exist above us.

The quote above is taken from Edward Herbert’s *De causis errorum* (qtd. in Reid, *Metaphysics* 58), and describes the mindset which each of the following texts showcases and evaluates, namely that of the anthropocentric observer’s. This sentence is a focused summary for several reasons: first, it is aware of a “model” created by the senses; secondly, it mentions pride and rashness as hindrances for these “authours”; and finally, it uses the modal “may” when hypothesising external space. Theorising the space above the Moon (i.e. the supralunar

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5 Albeit it should be noted that Mary Crane, in her *Losing Touch with Nature* eruditely considers the fallacy of attributing too high a significance to certain books. Crane calls this “The Myth of Powerful Books” (11) and gives the *De Rerum’s rise* to fame following Greenblatt’s *The Swerve* as the prime example of the phenomenon (12).

6 The dissemination of which had already started in the 16th century, however, it was also an important and ever-spreading aspect of 17th-century knowledge.
realm) had been for a time, as it was shown, inherently linked to God’s nature, and in our current Judeo-Christian culture, theorising God’s nature in relation to space and matter dates even further back. When Herbert mentions the human sensoria as an inhibiting factor, he summarises an inherent, almost natural experience, namely that human understanding (be it mental or physical) has a torus, a limit. Thus, these limits were naturally applied to space as well – Oresme’s counterargument aiming to prove the infinity of space is to be mentioned in the analysis of *The First Anniversary*. However, the general equation is the following: one cannot imagine infinity, but one also cannot imagine finite space, because all finite objects have something outside of them; a globe has a myriad of other objects around it on a table, for example. Yet, since one’s existence is characterised by the knowledge of physical and temporal finiteness, many “authors” were inclined towards the notion of a finite universe. However, the disturbing idea of infinity and nothingness prevailed throughout the decades, since, as Géza Kállay put it,

nothingness is a substantial and indestructible experience, something like a ‘fact’ of human life we cannot evade, which is there in the ‘there is’ and in thousands of other forms, and we can only reckon with it; it cannot be really ‘known’; it is only to be acknowledged (*A Deed without a Name* 256).

Thus, in an anthropocentric mindset, one always encounters one of the two paradoxes related to the finite-infinite axis. Pride and rash judgement derive from this idea as well: many remain in an anthropocentric mindset, claiming (directly or in an indirect manner) that their observations and sensory experiences are absolute truths. This pride was shunned by Bacon in his “Of Superstition”, and it is shunned by all three of the following set of texts. Expressing such claims implies that the observer is indeed claiming to understand the intricate ways of God, or, in non-religious terms, the intricate complexity of the universe (and sometimes both). Such lack of intellectual humility is seen as hubris in the face of an unknowable force, be that God or the scholastic notion of extracosmic space. Rash judgement results from the same anthropocentric mindset: it is a natural process of instinctively equating what I perceive with what is generally out there. A resolution of these fallacies is to be seen in the last clause: that the author employs “may” suggests that he considers whatever is to be discovered in relation to space (or God) to be a mere possibility; and also that full certainty cannot readily be claimed when one considers notions above their natural limitations. That there is a certain humility or uncertainty in the sentence is the feature
which distinguishes this observer from many of his contemporaries – and it is also what makes this quotation function as an anachronistic motto for Donne’s, Herbert’s, and More’s respective speakers.

The question of infinity will not be dealt with on a theoretical basis, nor will the history of science contribute to my analysis on a deeper level than demonstrated here. As infinity is most often linked to God in the three bodies of texts, the notion of infinity (or, the notion of God, for that matter) could not, in any case, be regarded on its own. I will work with the telescope as an instrument similarly: I only consider its history if the literary text and/or context explicitly demands it, otherwise, a textual analysis of mentalities and content (based on close reading) will follow. Outer, unreachable space, the unknowable God, and the finite human mind and sensoria blend together to constitute meaning.

The third often used notion in my analyses is the notion of the spatial turn, deserving special attention especially in the analysis of Donne’s *The First Anniversary*. It is used, on the one hand, in the 20th-century sense of a theoretical inclination, which posits that “metaphors are a critical means by which we understand and appreciate the importance of space and spatiality in social life” (Warf 59), i.e. how one considers, moves in, and shapes space is largely dependent on one’s mental framework, and *vice versa*. On the one hand, the term might punningly be used to describe the shift in focus in the beginning of the 17th century as well: with the dissemination of the telescope, natural philosophers became even more preoccupied with space than they were beforehand. Although the cultural history of the telescope will be explained in the first chapter, comparing Galileo’s *Sidereus Nuncius* to Donne’s *The First Anniversary*, a short overview by Anthony Malet of its contribution to knowledge acquisition will be given here due to its relevance to Edward Herbert’s summary of his contemporaries’ fallacies. There is a general consensus in secondary literature on the unprecedented, innovative role of the instrument: whereas other tools for measurement and magnification had previously been used, none extended human sensoria as much as the telescope (and its “twin,” the microscope) did. In lieu of a feasible optical theory, it was debated throughout the entire 17th century whether the telescope actually modified or only augmented eyesight; according to Anthony Malet, the former was the more widespread opinion, especially in England (239). In 1671, Segget even claimed that the telescope “improves nature” by turning humans into gods – its effect was so great, the powers of sight extended so significant, that the possible acquisition of knowledge by the observer sparked a quasi-religious zeal (qtd. in Malet 242). Yet the telescope’s reliability was questioned.
specifically due to the understanding that the telescope somehow alters eyesight: Malet also claims that “[the idea that] telescopes are machine-like, impersonal producers of objective images (even when applied to the eye) is a late invention, which did not gain wide currency before the mid-seventeenth century” (261). Thus, when the speakers in the following poems relate ambiguously to the instrument, it is because they either wish to bypass the fallacy of pride or rashness, or because they cannot verify the truth value of the images shown by the instrument.

My analysis follows a chronological order for reasons of convenience. I do not wish to claim any linear “development” whatsoever: the only temporal consideration is the amount of time between the dissemination of the telescope and the publication of the poem in question. First, I examine John Donne’s *The First Anniversary*, an often-analysed poem among scholars of literature and science. My focus in the analysis is to read the poem as an immediate response to the appearance of Galileo’s telescope less than a year prior. The enumeration of the physical and spiritual effects of the instrument will be continued with George Herbert’s “astronomer-poems”. Although Herbert is not conventionally considered among the poets answering to the status quo of natural philosophy in the 17th century, his poems showcase a keen awareness of the changing perception of the world. He features the character of the astronomer in these works, which will be analysed in the light of the telescope, as well as the limits of imagination. Finally, Henry More’s *Democritus Platonissans* will be read in the light of atomic theory, including, as in the case of the previous two chapters, the influence of the telescope on one’s relationship with God. Finally, the conclusion aims not at establishing a unified narrative based on the three oeuvres considered, but rather at a dynamic assessment of how God, space, and knowledge define the most visceral layers of human experience.
II. Observing the World through Donne’s Telescope

Surveying the Landscape

Galileo Galilei used a spyglass capable of 20x magnification to observe four of Jupiter’s moons for the first time in late 1609. Four centuries later enhanced tools originally developed from Galileo’s prototype were used on the spacecraft named after him to explore the same celestial objects. The high-resolution pictures transmitted by the Galileo are silent companions to all who are interested; the alien beauty of celestial objects has become a physically unreachable phenomenon, and a frequent visual encounter. Yet in the first decade of the 17th century the existence of the four major moons of Jupiter was not a fact based on empirical evidence; when Galileo published the Sidereus Nuncius in 16107, showcasing his findings, his descriptions on what he had seen were reluctantly accepted, as the validity of the image mediated by the telescope had not yet been established. Published in 1611, John Donne’s The First Anniversary8 is among the first responses to the telescope in English literature9. He directly addressed the paradigm change induced by the dissemination of Galileo’s tool and ideas and contemplated the ontological consequences of such an enhancement of human vision. This new, telescopic vision enabled the observer to see those heights which were only subjects of theory beforehand. As Clark’s study on early modern vision suggests, an important factor in the later dissemination of the instrument was that it enabled the augmentation of one’s biologically determined abilities10 (102). This augmentation, however, possessed both physical and metaphysical consequences. Donne’s response includes both perspectives, that of theology and of the new science; his comprehensive point of view ensures that his claims are based on both fields of knowledge. His underlying concern in the poem is whether knowledge acquisition through an instrument

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9 The Ignatius, His Conclave is generally regarded to be among the first responses to Galileo’s telescope; see e.g. Bucciantini et. al. p. 147. John Piers Russell Brown devotes a whole chapter on the Ignatius’ primacy, and presents a comprehensive overview of the historical- and secondary sources leading to the same conclusion, see Brown, 109-173. See also Chris Hassel’s insightful study on the 20th-century critical reception of the Ignatius.
10 Although the book is on early modern visuality, Clark mentions the telescope surprisingly few times in Vanities of the Eye. A chapter is devoted to the response of Athanasius Kircher in 1642, thus, for chronological reasons, his argument for the pure enthusiasm concerning the capabilities of the telescope is somewhat outside of the scope of the current paper.
which defies the natural limitations of the human biological construction is a beneficial
dezaventures, or whether this method blurs the dividing line between true and false even more.

*The First Anniversary*, together with *A Funerall Elegie*, was written and first
published sometime in 1611, but the particulars are not known, as the Stationers’ Register
does not provide any information on the printer (Manley 4). Some accounts claim that the
text, lamenting the state of the world, was probably written beforehand (Anderson 154), and
only later accommodated to fit for the commiseration held for Elizabeth Drury’s death.
Given the chronological proximity of Galileo’s *Sidereus Nuncius* to Donne’s
commemorative poem, the chapter focuses on *The First Anniversary*, yet later poems are
also mentioned when discussing the aftermath of the anatomist’s observations. The concept
of anatomy is the main framework in *The First Anniversary*, and the *Sidereus* can also be
said to meticulously dissect the surface of the moon and the constituents of the night sky.
The figure of the anatomist is similar to that of the astronomer due to their process of
knowledge acquisition: both take a whole which they cannot fathom in its entirety, and take
the time to isolate specific parts by physically or mentally cutting them off the main body.
Then, in the age of the telescope and the microscope, both tend to use man-made magnifying
instruments which render the object’s details more accessible – the difference lies only in
the relative proximity and size of the object. In order to unravel the constituents of this
particular (yet quite influential) early poetic answer to telescopic observations, then, one
must keep in mind the framework of an anatomical dissection as well.

The history of how critics regarded the question of Donne and the telescope is as
diverse as the answers they give, but a path which continued to underline how most papers
deal with the poem had been laid by Coffin. Charles Monroe Coffin was one of the earliest,
and among the most influential of those 20th-century critics who problematised Donne’s
relationship with early modern science. His book *John Donne and the New Philosophy* (in
1937) depicted Donne as a deeply religious and highly intellectual figure struggling with the
unity of the mind, the body, and the soul. The “new philosophy” (which “calls all in doubt”,
as the 205th line of *The First Anniversary* famously exclaims) seems to have destabilised the
surroundings of Donne and his contemporaries – the Copernican revolution and the rise of
the natural sciences casted a new light on both nature and culture. Arguably, these
surroundings were in a transitional state already, since the framework of the Aristotelean
theory of nature was questioned by some late scholastic thinkers. In his *Sentence
Commentary*, written in 1519, John Major, the Scottish scholastic philosopher proposed the
existence of the infinite extracosmic void space\textsuperscript{11} which, for Aristotle, would have been entirely unimaginable as an actual existent. This space existed outside of the “productive”, created (and possibly still spherical) cosmos, and as such, it was also a sign of God’s infinite perfection, which encompassed each and every possibility. For Major, this infinity was still imaginary, yet possible – God’s infinite being could create an infinite space, and he could also destroy that space, along with the spherical creation itself (Grant 149). These thoughts decidedly parted from the idea of an absolutely closed and perfectly harmonious universe, and built their foundations on the tradition set by Oresme. There was a tendency among classical scholastic thinkers who regarded the human mind as something which tends to confuse itself by imagining infinite spaces – and they argued that the fact that one’s senses cannot perceive such a space proves its non-existence. These thinkers were following the logic proposed by Averroes and grounded in the Aristotelean understanding of matter, both of which proved to be difficult to overthrow. Averroes proposed that one’s \textit{virtus imaginativa} (i.e. “imaginative power”) enables them to see objects which are not there even in their immediate surroundings. This would prove that infinity is only a fancy of this imaginative power – as there is no concrete, physical, observable proof of infinity, the logic induced by imagination is flawed. However, Oresme declared that the very reason why an infinite extracosmic space could exist lies, in fact, in one’s inability to perceive and comprehend infinity. Since infinity cannot be perceived by finite senses, reason remains the only faculty with which to “perceive”, or rather construct such an immense space (Grant 120). How else could anyone ever perceive infinity than with one’s immaterial reason? There was, at that point, no technological augmentation which could sufficiently equip the eye to see beyond its given scope. Yet Oresme’s counterargument is also the point when the imaginary and real qualities of space, and, by means of extrapolation, the deceptive nature of human mediated sensory experiences merge. The ontological divide between reality and deception becomes meaningless when sensory perception (in this case, eyesight) enters the picture, since it seems that what one cannot see, one can imagine. Nevertheless, it does not logically follow that what one imagines must be false, and what one perceives must be true. And if eyesight is finite, one cannot ascertain the existence of infinite, immense, or even faraway places by relying on the immediate senses; reason and extrapolation must be employed to create a framework of one’s surroundings.

\textsuperscript{11} The exact term is “spatio infinito imaginario,” which Edward Grant often cites, comes from Major’s \textit{In primum Sententiärum}, bk. 1, distinction 37, fol. 93r, col. 1; see also Grant’s notes on p. 353.
Thus, the picture of the imaginary infinite void space and the possibility of a real, but unperceivable infinite space had been an intellectual challenge throughout the late middle ages. However, with its debut in ca. 1608, the telescope soon became the primary means of exploration. The appearance of the instrument induced a new spark in the old debate: the problem of observation became even more pronounced. As the instrument started to appear in royal courts of Europe, this problem implicitly appeared among those interested as well. According to Van Helden’s remarks, the instrument had already been “in the air” as soon as the end of the 16th century; though today we would call the very early designs magnifying glasses, and they were employed in the opera houses and the workshops of natural magicians rather than by astronomers (3)\(^{12}\). A few weeks before Galileo wrote his letter to the Doge of Venice in September 1609 about this “occhiale” (Van Helden 7), Thomas Harriot had already used a 6x telescope to draw the moon (Van Helden 9 and Bucciantini et al. 132).

Allegories depicting the astronomer and the astrologer – any learned scholar who studies the heavens – had been appearing in emblem books in the continent starting from the 15th century. Alciato’s astrologer is depicted as Icarus, falling from the sky (see Figure 1). The vanity of the endeavour is showcased in this emblem, drawing one’s attention to the vain attempt of predicting the future based on constellations, i.e. trying to deduce the divine plan with finite mental capabilities. If one were to try the mental ascendance to the realm of the stars, and into the realm of the future, that person would surely fall like Icarus; such knowledge is not for mere humans to decipher. The appearance of the telescope sparked a shift in the iconographical tradition quite a while after 1610. There is an image which first occurred in the Netherlands in 1629 (see Figure 2), and later it reappears in Nuremberg in 1652 (Manning 315, cf. Figure 3). The image explicitly features the telescope as an instrument with which one may observe and gain prescience of the eternal life to come. Both pictures draw on Deuteronomy 32:28-29: “For they are a nation void of counsel, neither is there any understanding in them. O that they were wise, that they understood this, that they would consider their latter end!” The emblems depict a man observing eternal life ahead of him; in this, he “considers his latter end”. However, contrary to the vanity of the astrologer as Icarus, this man does not seem to be punished for trying to make predictions of the future; in the first image, the telescope only helps him in more clearly observing damnation and

\(^{12}\) According to Levy and Hayden’s argument, however, the history of the instrument is perhaps not as straightforward as one would have thought: several inventors, workshops and astronomers could be claimed to have used a similar device already some three or four decades before the “official” declaration of the existence of the instrument (Levy and Hayden 84-86). However, none of these became a subject of general talk in Europe.
heaven. The figure does not see the stars, nor does he wish to divine anything from the sky. The 1629 image suggests a transformation of the act of observation, and uses it to contemplate the smallness of man in the face of the inevitable end. The 1652 image excludes the sight of hell, however, the transcendental focus of the observer’s lens remains. It is notable that while he is looking at the sky (heaven, the seat of last judgement), the observer is anchored down. This anchor is a reminder of one’s physical and mental limitations – Icarus transformed. According to the emblem, the contemplation on matters which are yet out of reach should not entail a complete disregard of earthly matters; using the instrument and trying to see more than readily available does not seem to be a crime in itself. However, common sense dictated that the observer should, at all times, be aware of his finite nature.

The very beginning of the 17th century also saw the gradual differentiation of astrology and astronomy; with the mainly mathematical approach of Kepler and his peers, the mystical and alchemical aspects of the planetary motions were less and less discussed. The urge to rationalise and gain insight into the intricate details of celestial motions fuelled the establishment of the later descriptive-empirical framework. However, scientific culture as we understand it today did not come to existence precipitously – rationalisation and a growing fascination with empirical data did not mean that astrology ceased to exist or even that it was widely regarded as untrue. On the contrary: analogies between heavenly and earthly matters continued to be widely accepted. That the heavens influence the medicinal qualities of plants, that constellations alter one’s mood and fortune existed parallelly to mathematical tables of stellar motions. A complementary view presented by Newman in his *Atoms and Alchemy* stresses the importance of the “old” alchemical framework as well – so much that its experimental nature directly became the groundwork for chemistry as well as later mechanical endeavours (12). One cannot think thus about the era as the first “purist” manifestation of the natural sciences – the current paradigm might stem from the initial works presented in the century, but those works still operate conforming to notably different, more spiritual and holistic standards.

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13 Cf. Bacon’s quite sarcastic observation concerning anthropocentric cognition and science: “Hence it cometh, that the mathematicians cannot satisfy themselves, except they reduce the motions of the celestial bodies to perfect circles, rejecting spiral lines, and laboring to be discharged of eccentrics. Hence it cometh, that whereas there are many things in nature as it were monodica, sui juris; yet the cogitations of man do feign unto themselves relatives, parallels, and conjugates, whereas no such thing is; as they have feigned an element of Fire, to keep square with Earth, Water and Air, and the like; nay, it is not credible, till it be opened, what a number of fictions and fancies, the similitude of human actions and arts, together with the making of man communis mensura, have brought into Natural Philosophy” (*Works*, “Of the Advancement of Learning: Second Book” 3:395).
Mapping the Ocularcentric Ego

Albeit Robbins, in the most recent annotated edition of Donne’s complete poems (835), is strongly against the line of critics who believe that Donne himself was indeed so familiar with the new astronomical breakthrough of his time that he actively reflected on them, I side with the critics who, after unravelling the journey of Galileo’s text through Europe, conclude that there is indeed a considerable chance that Donne heard a quite faithful rendering of these new ideas. Bucciantini et al. argue that it was indeed Donne’s The First Anniversary, not the early translations in London, which disseminated Galileo’s methodology and his findings in England (129-148). His association with Henry Wotton and the Northumberland circle ensured that he had heard of, or indeed even read the Sidereus as soon as it arrived to England (ibid. 151). Examining this particular interpretation of the telescopic vision also contextualizes the spatiality of the innovation; as Barney Warf suggested, “metaphors are a critical means by which we understand and appreciate the importance of space and spatiality in social life” (Warf 59). Donne’s metaphorical and allegorical treatment of physical concerns familiarizes the reader with abstract, physically unattainable notions, and helps them to establish a relation to these otherwise unattainable phenomena. However, the spatial turn of 20th-century criticism brought on another important framework which further aids in the full contextualization of The First Anniversary; namely, the revision of the ocularcentric ego. The absolute primacy of sight as knowledge in current criticism is exemplified in the image of the Cartesian observer: a person who interprets everything through the absolute knowledge of the self, which is the axis of contextualisation and meaning-making (Warf 60). Warf also asserts that “the rise of printing, the reliance on the written word for communication, and the use of the telescope and microscope to bring the distant and the invisibly small into view all contributed to the tendency to equate seeing with knowing” (63)14. Thus, the new, ordered, empirically grounded fashioning of space was furthered by the telescope; what one sees, one may catalogue. Seeking the knowledge of the afterlife through the telescope seems perfectly justified, as the exploration of the physical world also happened through sight – why not the exploration of the transcendent one? The First Anniversary, ultimately, functions as an early modern peer-review of this ocularcentric framework: by reproducing the proposed methodology, it aims at verifying or falsifying its validity.

14 Warf also mentions Jay’s Downcast Eyes and Jenks’ Visual Culture as two definitive studies in this field.
But as in cutting up a man that’s dead,
The body will not last out, to have read
On every part, and therefore men direct
Their speech to parts that are of most effect,
So the world’s carcass would not last if I
Were punctual in this anatomy (435-440)

The immense geography of the world was still in the process of mapping; the intricacies of
the human body were only beginning to unravel. Similarly to cartography, mapping space
was supposed to be “a net thrown / upon the heavens” (line 279), whose function was to
familiarize the said territory. According to Jay, mapping both the physically attainable and
outer space in the early modern period “robbed [space] of substantive meaningfulness to
become an ordered, uniform system of abstract linear coordinates” (Jay 52). The speaker of
The First Anniversary analyses some isolated fragments of the world for 450 lines, and
renders his findings in the form of a straightforward, neat cataloguing of ideas, symptoms,
and deficits, much like his learned (and real-life) colleagues would showcase their findings
in the anatomical theatre – and similarly to Galileo’s step-by-step descriptions of his
observations in the Sidereus. Yet this quest is not sustainable: the human body is such that
it naturally starts its own dismemberment after death, thus, it leaves very little time for the
observer to methodically examine each of its minuscule parts in detail. Analogically, the
world is so complex that rendering it by the means of a linear coordinate system results in
loss of data. In the poem’s imagery, it is so vast that it would sooner decay than one could
observe each of its intricate segments.

Transmitting the Images
The fallacy of the ocularcentric ego entails that it regards itself as an observer independent
of time, space, and social influence. It tries to build a catalogue of the world, all the while
ignoring the threat of the mutability of the world and of its own. There might be a possibility
that the observer maintains the delicate balance between knowledge and humility, thus
evading the fate of Icarus or the fallacy of absolute independence. Even so, the question
remains whether the images mediated by the telescope could be trusted at all. The act of

15 Brown makes a similar argument in his introductory chapter which he does not follow later: “[Donne’s] suspicions turned on what he saw as the reductive tendencies of methodical systems in the face of the seemingly endless multiplicity of natural particulars” (Brown 29).
independent, objective verification is instrumental in establishing the truth value of anything. If the observer takes the images seen in the telescope to be untrue, then his whole quest is fundamentally flawed. Similarly, if a traveller by sea takes the images in front of his or her eyes to be mere illusions, his travel is rendered to nothing but a vivid dream – detached from reality. Trust in telescopic vision was the basis of the *Sidereus*, as it is the basis for many professional and non-professional observers of outer space today. Even now, in the age of broadcasts that defy spatial limitations, one needs to trust that the images mediated by advanced technology are true to reality. Nonetheless, augmented vision had its limitations: the telescope could not interpret, verify or falsify its images, thus a new methodological framework was required. *The First Anniversary*, following the descriptive catalogues of the *Sidereus*, employs the same methodology which Galileo advocated: it anatomizes a whole body, and examines its smaller constituents. Whereas Galileo refrained from any overarching conclusions, the poem dare try to rebuild the whole in hopes of knowing more than before. The speaker’s aim is to “try, / What we may gain by thy anatomy” (line 60), meaning both the anatomy of Elizabeth, consumed prematurely by a mysterious illness, and the world. The execution of this task both reproduces and questions the method of observation by inducing doubt. The anatomist cuts a larger body into smaller pieces in order to understand the workings of the whole in depth; the astronomer studies small segments of the sky in order to decipher the whole universe. In both cases the observer is first confronted with an object which is incomprehensively large and complicated – outside of one’s reach in every sense of the word. *The First Anniversary* poses two fundamental questions which destabilize one’s conviction in the image of space mediated by the telescope: firstly, whether a truly all-comprehensive understanding might ever be the result of the examination of fragmented parts, and secondly, whether the mechanical augmentation of one’s naturally given senses might be verifiably able to show the truth. However, contrary to a well-established line of criticism, Donne’s persona does not reject the methods of the new,

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16 Brown argues that the structure of the poem closely mimics the “Wunderkammer or the cabinet of curiosity” as well (Brown 188). However, if one takes the poem to be a direct response to the *Sidereus*, it is more likely that its structure would rather mirror the very methodology it presents.

empirical science; indeed he is open to try it himself, and uses the very same methodology to disprove its value/efficiency.

In his *Sidereus Nuncius* Galileo noted down three of the (arguably) most important and prolific theses of the astronomy of the early 17th century. If the *Sidereus*’ claims were true, it would mean (a) that “the Moon is by no means endowed with a smooth and polished surface, but it is rough and uneven” (36), thus the supralunar sphere is also prone to corruption; (b) that “[one can see] innumerable other [stars] never seen before, which exceed tenfold the number of old and known ones” (35), and (c) that the moons of Jupiter can revolve around the planet while the planet revolves around the Sun; it is not only the Earth which has a moon, thus it is not the only centre of the universe (84-85). Thus the question was guided away from philosophico-theological treatise; Donne’s persona and his contemporaries needed to decide whether to accept and incorporate what the observers call evidence. Many still doubted that the instrument would show reality in a magnified form (Van Helden 89) – considering the lack of a unified (and plausible) optical theory up until the 1690s, perhaps the motive behind this distrust is understandable. However, by the end of 1610, scarcely one year before *The First Anniversary* was published, several independent observers had verified Galileo’s claims, and the ‘telescopium’ became the new paradox: further verification was needed in order to decide whether the instrument aided the observer, thus battling the imperfection of human sight which is prone to register optical illusions – or it “impose on our senses” (Flamsteed qtd. in Van Helden 89), altered our vision, and showed false images.

Marchitello recalls that Clavius, contemporary to Galileo, claimed that the telescope “manufactures” the four Medicean stars (Marchitello, Galileo’s Telescope 100). This claim might even be true as a signpost of the general concern surrounding optical illusions, the “fancies” of the eye; images are manufactured in the sense that they are not, as one observes it, readily available, but are always mediated by an instrument – either the very air itself (as in the case of optical illusions) or the telescope. This latter can be trusted even less than the air itself, though Spiller for example agrees with Alpers in that “it is not the recognition that visual phenomena may be distorted and misleading that is new in this period. Rather, the telescope and other new optic devices reveal how distortion is the basis for all acts” (qtd. in Spiller 195). However, this revelation in early modern England only comes a few decades later, when the exact fashioning of the looking-glass and the anatomy of the human eye are more widely understood. Spyglasses are fashioned by imperfect human beings, whose finite
biological and mental capabilities inherently distort perfect knowledge on non-material phenomena.

The Illusions of the Eye
Charles Coffin believed that “it is [Donne’s] preoccupation with the new astronomy and its implication of confusion that constitute the backbone of Donne’s poetical thinking” (Coffin 105). His chapter entitled “The Moving of the Center” is, in its essence, largely on the same phenomenon that Marjorie Hope Nicolson expanded some 25 years later. Both scholars believed that restructuring the spherical universe led to a general sense of anxiety apparent in the oeuvre of several early modern authors, poets and playwrights. The lack of the perfect circle in the heavens, by means of extrapolation, entailed the lack of a perfect design in creation. This thought, however, also destabilised the transcendental perfection of a divine creator, whose work had long been described as harmonious and unified. Coffin features Donne’s poetry as one of the most apparent specimens of this underlying anxiety: while the Copernican theory of the motion of the earth is not explicitly featured on the textual level, Coffin found a plethora of allusions to this “new philosophy” which are rendered as highly unstable environments in the poems (97 note 36). Coffin’s narrative has been accepted and refuted several times since then: Hirsch, Anderson, Williamson, among others regard the Anniversaries as works yearning for unanimity and reconciliation. Chris Hassel, however, enumerates several of those later 20th-century critics who rejected Coffin’s image of a disillusioned Anglican pastor: Martz’s argument takes The Second Anniversary into account, in which the poetic speaker escapes from the disillusionment of the First; Kermode, Manley and Stein all argue for a speaker who essentially uses the tools of the “new philosophy” in order to disassemble it, and to prove that reason and empiricist thinking are insufficient when unaccompanied by faith (Hassel 329-332).

Arguably, the gradual shift which led to the “revolution of the heavens” started as early as the last third of the 16th century (Crane 52-55). In conjunction with this idea, Judith H. Anderson argues that the new discoveries, in fact, were not quite so shocking for Donne as some critics would have it believe, as by the end of the first decade of the 17th century, the new theories of the cosmos had been in circulation for quite some time (151). Tycho’s “new star” had already shaken the ground in 1572 – the same year John Donne was born. Historically, then, both the Copernican theory (via Digges and his contemporaries) and, consequently, the mutability of the heavens were widely talked about throughout Donne’s entire life. When the two “Anniversaries” respond to the new astronomy (almost half a
century in existence by that time), likely it is not a response to the actual theories, but to the empirical turn brought about by the telescope. Anderson is right in highlighting that different approaches to the Copernican theory had already taken root by the time of the “Anniversaries”. In England, Thomas Digges emended his father’s treatise, *A Prognostication Everlasting*, with a detailed account on the Copernican theory in 1576. Although his addendum quite convincingly described the new theory of the heavens, he was yet to rely on empirical observation as irrefutable proof. Although the “old astronomy” started to lose its primacy, this did not entail that physical observation was naturally aligned with theory: Gingerich insightfully remarked that even Copernicus’ *De revolutionibus* was only taken to be a mathematical tool, a guide for computing planetary motions, but not as depicting or prescriptive of the actual physical reality (135). Hence, in contrast to *The First Anniversary*’s conceit, the immensity and incomprehensibility of one’s surroundings had not yet appeared as threatening of disorder:

> We may easily consider what little portion of God’s frame our elementary corruptible world is, but never sufficiently be able to admire the immensity of the rest. […] *Our sight being not able farther to reach or conceive*, the greatest part rest, by reason of their wonderful distance, invisible unto us. To [God’s] infinite power and majesty such an infinite place surmounting all other both in quantity and quality only is convenient. *(qtd. in Danielson 137, my italics)*

The highlighted section shows a long-term axiom which the appearance of the telescope negated; namely, that the human eyesight is inherently insufficient, and not designed, *per se*, to observe the heavens. Digges, an ardent advocate of the Copernican theory saw it appropriate to amend his finite human senses by the extension of infinite transcendence. God’s full glory was not meant to be seen – and with it, the true physical reality of outer space remained hidden as well. Digges’ account affirms the divide between theory and reality: reality remains best described by common sense, and the reality which one may comprehend is the reality which is experienced through sensoria. Not only is the infinity of space – whether spherical, as Digges thought, or ordered differently – only a result of mental deduction (as opposed to finite eyesight18), but the sensory impalements of the (created and finite) human beings seem to be the greatest obstructions of comprehension, thus, theology

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18 See Oresme’s argument earlier.
and transcendence need enter the discussion. The limitations of sight help affirming man’s status as one of God’s numberless creatures.

Yet observation is key to understanding, especially to understand any form of order. Observation was needed to read the Book of Nature and to interpret the spiritual connections between heavenly and earthly phenomena. The only available method in lieu of diagnostic and observational tools was plain sight, the most exulted and “noblest sense of any one” (35319). The speaker sees that “Summer’s robe grows / Dusky” (355-356) proportionately to the life force which had been Elizabeth, and as her influence fades, so does the speaker see colour and proportion depart from this world of matter. Employing a system based on alternative, non-intuitive proportions as the elliptical orbits of Kepler or the indisputably heliocentric and decaying universe of Galileo upsets the perfect proportion of a circle, hence the whole system becomes more unstable (see Nicolson’s argument). Summer’s lively colours are fading precisely due to this “deformity” (336), which is further exemplified in the spiritual departure of Elizabeth, the idea who possessed “all colour” (366). Her animating and beautifying force – the proportionate view of the world – melded everything together, and she, the “best and first original / Of all fair copies” (227-228) served as the axis from which all beauty and virtue would emanate. Her death is a new era of absolute disproportion – the incomprehensible chaos of Heaven and Earth, in which one’s eyes become insufficient tools, and homogeneity is unattainable. The anatomist realises the result of this examinations before he even begins:

But though it be too late to succour thee,
Sick World, yea dead, yea putrified, since she,
Thy intrinsic balm and thy preservative,
Can never be renewed (55-58)

The lines above describe a reversed causality which also indicates the dishevelled state of relations. Any seeker of truth is granted confusion, nothing else. If one cannot trust the proportionate workings of the world, and colour’s rejuvenating force, which used to be an ailment residing in the most proportionate, now dead, Elizabeth, what follows then? The observer cannot trust their eyes or any of their senses, as the observed phenomenon fails in

19 Cf. Plato Timaeus 47a.
its essence to lead to true results. Sight in the poem is proven to be an insufficient tool due to the slow decay of the world, which allows a limited amount of time as well as the uncertainty of ever-shifting identities and phenomena. The sheer immensity of our surroundings, the inner workings of the body and the celestial motions also cannot be discerned by mere human sight. “Beauty’s best, proportion, is dead” (line 306); “colour and lustre, now is as near spent” (340); “yet sight hath only colour to feed on, / And colour is decayed” (354-355) – the theses of an overall 70-line-long lament of the speaker imply the absolute loss of trust in sight as well as in nature. As Elizabeth’s influence fades, so does the speaker see colour and proportion depart from this world of matter, consequently, sight’s nobility is seriously affected. The “best and first original / Of all fair copies” (227-228) served as the axis from which all beauty and virtue emanated. Now “th’air shows such meteors as none can see / not only what they mean but what they be” (357-358), and the observer cannot trust their eyes or any of their senses, as the observed phenomena fails in its essence to lead to true results. How could unruly chaos be tamed when “noble” sight is deceitful, hence it distorts the truth value of any observation: reading the Book of Nature yields only unfathomable gibberish. The comets appear in the supralunar realm, moreover, the mountaintops, which are parts of the anatomized body seem to reach for and touch the moon (286-288). The observer is equally fazed by the immense and uncontrollable depth of the seas (“Seas are so deep that whales, being struck today, / Perchance tomorrow scarce at middle way / Of their wish’d journey’s end, the bottom, die” 289-291) and the deep vaults of the earth (“And men, to sound depths, so much line untie / As one might justly think that there would rise / At end thereof one of th’ antipodes” 292-294). By looking up as well as by looking down – by inspecting the firmament as well as the very ground one walks on – the observer is solely confronted by confusion resulting from vastness. These immensities are perhaps owing to a malfunction in our perception, in the eyes, or the “corruptions in our brain and in our hearts” (330) – or, taking into consideration the colourless and terminally ill world, it might as well be the world itself showing a frightening set of symptoms. These symptoms filter into the unborn children (“We are born ruinous; poor mothers cry / That children come not right, nor orderly” 95-96), who, in turn, fashion instruments which then again destabilise the truth value of vision. The poem further undermines the link between appearance and (a singular) meaning with degrading the nobility of sight. Whatever the reason is for this general and variously expressed impalement in understanding, both the world and our perception appear to be insufficient to discern and maintain static knowledge.
The Fault in Our Language

The unstable and deceptive qualities of observation are only one of the methodological concerns surrounding Galileo’s tool. Perhaps the language used to describe these findings is also faulty, and might mislead the reader to envision a different phenomenon from that which had been observed. Observation yields several results; these results are usually presented in a more-or-less factual manner. Given that Donne’s speaker operates in a poetic environment, his statements are also more poetic and perhaps eccentric – they seem to be far from the “scientific language” of today’s, or even of early post-Newtonian science; yet the slow development of the modern scientific register is shown in the fact that Galileo’s language is as eloquent as Donne’s, who described the state of the world with poetic embellishments.

The *Sidereus Nuncius* was dedicated to the Medici family, and was made to impress the royals of the continent; it is not a scientific treatise *per se*, since it contains almost no theoretical implications, and remains on the level of simple and picturesque descriptions instead of drawing deductive conclusions. The two texts, then, also align in that while Galileo anatomised the sky, Donne’s speaker anatomised not only the world (one’s immediate surroundings) but also those who perform these “heavenly dissections”. Factuality and poetic language intermingle in both works (and, as it has been argued, in several others\(^{20}\)), and this fusion enables the observers to express their own opinions and points of view through their analyses. Thus, when comparing a quasi-scientific and a literary text in the era, differentiation between the two “genres” is not as instrumental as it would be in the 21st century. The scientific discoveries themselves are of no central importance in the current analysis, as I believe that the discovery of the craters on the Moon did not affect the world’s decay directly for the speaker of *The First Anniversary*. These spots, as countless other phenomena, were only a result of decay and mutability. Thus, the exact scientific discoveries of the age and the physical/theoretical implications of Galileo’s observations are not to be dwelt upon – the analysis of the relationship of science and literature does not need to concern the direct influence and incorporation of scientific ideas into literature, however, it can also explore the wider mental framework in which the scientific and literary ideas entered into a mutually inclusive interplay.

That the *Sidereus* enters the realm of the “non-scientific”, and the *The First Anniversary* the realm of “science” can be shown by theorising what science exactly does.

\(^{20}\) See e.g. Hyman’s article entitled “Deductions from Metaphors,” where she argues for the importance of metaphorical language both in the early modern era and today.
Following Latour’s ideas, Howard Marchitello argues that “the work of science [is] the transformation of objects into other objects” (Marchitello, Galileo’s Telescope 94). This transformation can be done through what is now called the “scientific method”: the criteria an observed phenomena has to conform to in order to be proven plausible or “real,” to acquire meaning and consequence. The process can only ensue after the actual observation and description; it is only later, and due to this method, that Galileo’s findings become proof for the Copernican system. In 1610 the *Sidereus*, however, remained content with the demonstration and discovery of these objects, and did not transform them into something else, something more or other than they were. In this regard, then, it is only a collection of observations presented in a straightforward, yet eloquent manner. Similarly, Donne’s *First Anniversary* might be regarded as scientific precisely because the text extrapolates its findings and analyses the state of the world, then uses its analysis to pass irrefutable judgement on the current state of affairs. Galileo only dared fully affirm his status in his 1632 book, *A Dialogue Concerning the Two Chief World Systems*. The speaker of *The First Anniversary* meticulously explores the first question in the form of a straightforward, neat cataloguing of ideas, symptoms, and deficits, much like his learned (and real-life) colleagues would showcase their findings in the anatomical theatre – and very similarly to Galileo, who did the same in his *Sidereus*. Thus, while the *Sidereus* fails to meticulously analyse the consequences, *The First Anniversary*, in its language, is almost a scientific treatise in that it “transforms” a set of symptoms into another object, the consequence of which is more than the sum of its parts.

As the anatomist tries to understand the world, he cuts its subject to small, easily contained pieces. Upon examining them, however, he sees that his efforts are inherently insufficient: he does not have the time, the words, the sight, and the insight to fully unravel the decaying world. The anatomist cannot provide the “punctuall” (*IAnn* 439) medical record: to decipher and consolidate all what one witnesses seems impossible for him. These small and isolated pieces pose no apparent problem to Galileo, as the image of the imperfect Moon is presented only factually, but not “transformed into another object”, as Marchitello would have it. Galileo simply states that “the Moon is by no means endowed with a smooth and polished surface, but it is rough and uneven” (36) – when objectively assessed, this observation was the most important one when addressing the possibility of a spherical universe, but in itself it is nothing more than a testament of casual decay. If one can believe their eyes as well as the image that the telescope shows, then the constant and immutable
sphericity of the supralunar territories becomes irrevocably refuted: given the proper instrument and circumstances, everyone may see that the Moon is not a perfect celestial body, but subject to the same decay the dying Earth is. Galileo does not follow the same deduction as Donne’s anatomist, however; he rather says that

we will say more in our System of the World, where with very many arguments and experiments a very strong reflection of solar light from the Earth is demonstrated to those who claim that the Earth is to be excluded from the dance of the stars, especially because she is devoid of motion and light. For we will demonstrate that she is movable and surpasses the Moon in brightness, and she is not the dump heap of the filth and dregs of the universe, and we will confirm this with innumerable arguments from nature. (57)

What Galileo proposes here is significant for two reasons: firstly, that “real” science is going to happen at a later time, when the Earth is going to be transformed into another object (an object which is included in “the dance of stars”, and bears “motion and light”); and secondly, the paragraph is focal because irrespective of the “scientific process” to happen at a later time, the telescope had already produced a differentiation in meaning. The spyglass presented an image which was to be deemed either an illusion or reality; Galileo deemed it real, and started describing what he saw – this is the first level in the meaning-making process. He saw decay and irregularities in motion, which he described: yet, from the possible duality of this meaning he chose not the image of absolute decay and loss of relation, as the anatomist did, but saw an ever-changing, mobile, and active universe instead, a celestial harmony with the “dance of the stars”. This point is quite significant not only due to its historical relevance – these are the first truly detailed sightings in the history of astronomy – but also because these sightings acted as a catalyst in the shifting mentalities of the age. The telescope simultaneously presented a world of decay and of endless possibilities, “innumerable other [stars] never seen before” (*Sidereus* 35), and thus showed the inherently conflicted nature of not only this earth, but possibly of the whole of creation.

**The Body and the Stars**

Since the poem is inherently embedded into a poetical convention of its time, the images it employs also conform to a given set of metaphors. These do not obscure the true discourse, but rather render them accessible: the immediate sensory experiences are not only relatable, but also deeply personal to most human beings. Moreover, these experiences double as their
cosmic counterparts; in the spirit of the long-standing microcosm-macrocosm analogy, the human body becomes analogous with the world, a metonymical mirror-image of it. As the anatomist cannot dissect a body before it starts to rot, the astronomer cannot observe each detail of the night sky before the outlook changes or he dies. That mutability and one’s biological limitations are a major hindering factor in the act of observation is expressed through parallel images as well. Comparing humanity before the flood with his contemporaries, the speaker describes the futility of the current endeavours:

[Before the flood] When, if a slow-paced star had stol’n away
From the observer’s marking, he might stay
Two or three hundred years to see’t again,
And then make up his observation plain; (117-120)

“Observation” cannot be “plain” if all the time the observer has consists of a few decades. The mechanics of the heavens operate on a different time scale, and corruption and change either evade them completely (as the Ptolemaic system advocated), or consume them at a much slower pace. The smallness of human existence is contrasted with the vastness of non-human space and time, and isolated, fragmentary analysis seems insignificant from this vantage point.

Harvey and Harrison, while examining the metonymical images in the Anniversaries, quite convincingly argue that “the idea that all things bear a sign that manifests and reveals their invisible qualities”, also labelled as the “doctrine of signatures,” enables the speaker of both The First and The Second Anniversary to translate heavenly knowledge to earthly language (990). This language, however, was supposed to carry good and ill omens; was supposed to heal or corrupt; yet, since the heavens now lack perfection, this correspondence simply cannot ascribe full meaning to material existents any longer. Not only are notions connected by analogy, but their alignment is understood through bodily sensoria. This analogy is the overarching theme of the poem, so much so that an instance of this can also be touched upon in The Second Anniversary, published scarcely six months after its predecessor. Brown’s analysis highlights the simultaneous usage of mundane anatomy and a transcendental vantage point in the meaning-making process (Brown 258). In the latter poem, the planets align resembling the vertebrae in the body which they directly influence:
And as these stars were but so many beads
Strung on one string, [...] 
Whose quick succession makes it still one thing
As doth the pith, which, lest our bodies slack,
Strings fast the little bones of neck and back; (207-212)

It is not only the existence of the micro- and macrocosm which is described, but something far more immediate: the planets are to be understood through physically observing the spine. After extending this relation, one sees that it is not only the spine, but the entire body of Elizabeth (exalted as the whole world in *The First Anniversary*) which is opened and analysed. Due to this quite mundane act, abstract notions of decay and heavenly influence become objects one can touch, see, and smell. Poetic language renders incomprehensible notions into comprehensible cognitions by ascribing a human body to them. The human body is a familiar terrain, as one has a quite intimate and immediate experience of comprehension through one’s own body; and it also becomes familiar as another’s body by anatomization. The abstract motion of the heavens is rendered more accessible by the image of the spine, which the anatomist can see and touch. This is, however, not an act of voyeurism, but rather a quasi-scientific method, in which the guidance of the spine is needed in order to cope, not to show. The specific albeit fragmentary knowledge which the telescopic vision presents is thus familiarized by connecting it to the similarly specific and fragmentary knowledge of the anatomization of the human body. As the alien logic of the non-human conquers the previously anthropocentric realms of solar motions, meteors and constellations, hidden knowledge needs to be revealed and understood, and previously rejected phenomena above need to be assessed and familiarized with below. By using metonymy/analogy, *The First Anniversary* constructs a familiar human body which, according to empirical knowledge, yields to examination unlike the untouchable abstractions behind it. The narrative enables the reader to imagine, to visually *and* verbally comprehend something as immensely complex as the cosmos, and the death and grief felt over the instability of its ever-changing space. A carcass is presented, the world is laid out on a table: yet full knowledge still evades the anatomist and the astronomers.

The act of anatomising has been a prolific subject among scholars of early modern literature, especially in the analyses of drama and stage representations of the anatomised
body. While the gore of the revenge plays might seem less philosophical than the careful anatomisation of the world, a certain perversion is shared in both instances: the need to know, to *fully* understand overpowers and unsettles the otherwise conventional scene. Though dissection becomes a common spectacle, the corporal turn represents a much larger field of significance than a simple spectacle of voyeurism, gore and destruction. As Attila Kiss put it: “these representational techniques of dissection and violence participated in a general epistemological effort of early modern culture to address those territories of knowledge that had formerly been hidden from public discourses” (4). The human body is interwoven with transcendental signs as well as its own lowly and disgusting functions; it is saint and profane, and innumerable degrees of meaning in-between. The body and the world cannot be easily divided into flesh and soul, the rotten earth and incorruptible heaven; there are liminal spaces, motions and uncertainties which fail to be easily assigned to one category or the other. The demarcation between reality and imagination falters as the body (and the world, and, by extrapolation, the heavens) seems to be “uncontrollably heterogeneous” (Kiss 6).

The carcass, which is a human body (as well as the world we apprehend through body and mind), is thrice connected to the abstraction of “the world”, the phenomenon that the text aims to understand. One needs to exploit these three links as much as one can while the decaying frame lasts: as the body of Elizabeth decays, so does everything else due to the metonymical connection – the dismemberment of her body is the *physical* dismemberment of the world:

> And so the world had fits: it joyed, it mourned;
> [...] Her death did would and tame thee [the world] then
> [...] thou [the world] wast
> Nothing but she, and her thou hast o’erpassed. (20-32)

These lines constitute a complex conceit – they open with a simile, but Elizabeth and the world’s relationship in the 31st line is expressed in a metaphor. Analogically, the departure of her person and her long illness beforehand also signal the departure of the life-force, the “intrinsic balme and preservative” (57) of the world, which entails *spiritual* loss. As the body decays, and its physical integrity loosens, so does medicine destroy the body instead of healing it, even though resurrecting Elizabeth’s body was never considered as the final

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21 For the idea of the Paracelsian balm as a preservative, see Ramie Targoff’s analysis of the *Anniversaries* in her book *John Donne: Body and Soul.*
aim of the poem. Earlier medicine served as a link to nature’s hidden essences, which were strongly connected to transcendent healing powers and the human body, which in turn was a microcosm mirroring the created world. This twofold body-nature-transcendence chain seems to be severed as, quite ominously, in *The First Anniversary* “new diseases” appear (159), “and with new physic, a worse engine far” (160). Though medical practices had been mistrusted even before, the practitioners of the new, seemingly improved and more complex medicine tended to further damage the human body, and were more grotesque than effective. Elizabeth’s illness is the world’s illness: it is also sick (23) and failing to recover from a fever (24). The favoured medicine comes in a quite disturbing analogy, as the remnants of her virtue need to poison us in order to heal us:

   But as some serpents’ poison hurteth not
   Except it be from the live serpent shot,
   So doth her virtue need here to fit
   That unto us, she working more than it (409-412)

The inevitability of decay and corruption is perhaps the most strikingly explained in these four lines, as Elizabeth’s virtue – the spiritual agent soon to be dissected as well – is compared to venom. Two major concerns arise: one is that the world needs to be poisoned by the potent venom of Elizabeth’s virtue, and secondly, that Elizabeth’s workings can be equated to a serpent’s guile, only turned to one’s benefit after its death. Both of these concerns seem to undermine the initial idea which exults Elizabeth and sees a perfect ailment in her person for the “sick World”.

The third, and perhaps most painful loss manifests in the speaker when he realizes that “the art is lost, and correspondence too” (396), drawing one’s attention to the severing of the *transcendental* bond between heaven and earth; the correspondence between physical object and its concealed purpose; the vigour behind lifeless matter. Thus, familiarization through a body-cosmos analogy is not possible any longer; the human body in its smallest parts used to naturally correspond to the workings of nature as we perceive it, but with the increasing complexity resulting from the plethora of new information, this link has been
“lost”\textsuperscript{22}. The corruption of this correspondence is highlighted in the reverse relationship between Elizabeth and the world: “this world must itself refer / As suburbs or the microcosm of her [Elizabeth]” (235-236). So, what the anatomist observes is an important principle: the absolute worship and centrality of the human individual in a world where “the Sun is lost, and th’earth, and no man’s wit / Can well direct him where to look for it” (207-208). Man becomes the only focus, individuality the firm basis upon which any framework and philosophy is built. Elizabeth, as an individual, is not accidental to the poem; she is the intrinsic balm precisely because she is a human being with a soul and an ability for transcendence as opposed to unknown and uncharted matter in space. Paradoxically, Elizabeth also signals the loss of relation in herself: unlike her, human beings are not usually taken for the life-force of the earth, the “best and first original / Of all fair copies” (227-228), the container in which souls are shaped\textsuperscript{23}. Rather, following the Platonic and Medieval tradition, human bodies and physical beings are the “fair copies”, the vessels which imitate and mirror the greater spiritual and physical workings of the universe and the heavens. “Fair copies” are also the opposites of the so-called “foul papers” – the term used for the incomplete drafts of Renaissance dramas which may contain several errors, to be emended in the “fair copy”, the one which goes to the printer and becomes the official text. Elizabeth, given that she was virtue embodied, was a “fair copy” of creation, a “text” that other printers could copy and distribute – similarly to the anatomist, who copied and distributed her qualities in his poetry. The rest of the world, however, seemed to be the “foul paper” – innately corrupt and not worthy of reproduction and conservation. Following this parallel, then, it is as if God had made several corrupt versions, at the end of which Elizabeth acquired the possibly most perfect state that could be achieved – yet this “fair copy” was lost to the corruption of the world. This poetic image seems quite forced and misguided in its intentions of praise: however virtuous she was, it is a new take on an old conceit to call her the only fair copy in creation on which everything else was modelled, especially since Donne never met Elizabeth in person (Marchitello, Galileo’s Telescope 124). This a mourning poem, and as such, a longstanding convention of the age, specialised on the praise of the deceased; because of this, the speaker cannot explicitly be thought to be autobiographical as much as perhaps on other occasions. It is a “conventional mask” but “does not cancel Donne’s

\textsuperscript{22} The original idea of the micro- and macrocosm relation to is be found in Plato’s \textit{Timaeus} 28d-30d; 44d. See also Peter Harrison, \textit{The Bible, Protestantism, and the Rise of Natural Science} 48 among others. Harrison also argues that Plato’s original idea carried on to ecclesiastical thought on exegesis, and became one of the foundations of the allegorical interpretation of the Bible. (ibid.).

\textsuperscript{23} Cf. ibid. lines 314-16: “That souls were but resultances from her, / And did from her into our bodies go”.

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personal investment in these poems” (Anderson 155). This poetic image seems quite forced and misguided in its intentions of praise: Elizabeth’s soul can travel to the heavens, but her body simply cannot serve as the first original of the world.

The anatomist, then, faces a twofold problem before he even begins his detailed investigations: firstly, that the world is dead, and humanity is left only with an isolated, empty shell; and secondly, that the agent which held the world together was inherently part of the physical world as well, “corrupt and mortal in thy purest part” (62). For there is no part of the world which seems immutable and constant: the world itself is in an iron age already (426), and the supreme agent, Elizabeth, is dead. Correspondences can no longer sustain the world of the poem as the human factor weakens, or rather lies dead on the table.

The Image of Elizabeth
The concluding lines of the poem openly admit the defeat over the preservation of Elizabeth:

“Nor could incomprehens’bleness deter / Me from thus trying to imprison her” (469-470). Although the method fails, there was a trial-and-error process beforehand. The speaker needed to understand the workings of inner- and outer space; having failed to do so, he reverted into the chaotic and fragmentary knowledge of the telescopic-anatomizing vision. Donne’s speaker did not reject the new empirical, scientific method: truth in science is achieved by meticulous verification and falsification, an ongoing observation of one’s immediate and extended environment. The First Anniversary recreates this methodology, and aims at the “imprisonment” of the world and Elizabeth. Limitations help comprehension, hence the observers only focus on an arbitrary segment of the night sky or of the human body. However, the whole appears unlimited; smaller and smaller details surface, and due to this immense complexity, new theories are formulated. However, the speaker tries to examine aspects of the decay and uncertainty of the world, only to find that these aspects are humanly ascribed limitations only, and there are always new segments to observe. The world is immensely, non-anthropocentrically complex: all is concluded in incomprehensibility.

The Second Anniversary talks about mankind gazing through “spectacles” that make “small things seeme great” (293). Though the word ‘spectacles’ in The Second Anniversary may mean ‘glasses’ 25, I argue that they simultaneously refer to both the microscope and the telescope. Since Donne’s Ignatius His Conclave, published in the same year as The First

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24 Also cf. Ovid. Metamorphoses I.125-150.
25 As Robbins’ glossary certainly says that they are, also cf. OED: 6a “A device for assisting defective eyesight” and 6c “A means or medium through which anything is viewed or regarded”.

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Anniversary, explicitly features the telescope, I am more than tempted to agree with Buccianti et al.’s conclusion and think that the anatomist’s complaint that “loath to go up the hill, or labour thus, / To go to heaven, we make heaven come to us” (281-282) in the poem’s immediate context refer to the usage of the telescope. Whatever is small can become large; whatever is far away can be drawn incredibly close. The First Anniversary showcases the true alienating power of the instrument: immediately after these lines the speaker expresses his uncanny feeling arising from earthly optical illusions (287-288). One could even argue that earthly phenomena (the supposed Book of Nature, and the mirror through which we understand God’s creation) cannot be verified as true and real, especially not in the decaying cadaver-world in front of the anatomist. Thus, the speaker realizes that the means by which these discoveries were conducted are either unreliable due to mankind’s own deficiencies, or the tools are simply unnatural, artificially constructed, and thus, cannot be trusted. Marchitello’s statement reveals an interesting hue to the question of the spyglass after reading Ignatius (Marchitello, Galileo’s Telescope 118-119): “[These] “spectacles” that allow the narrator's vision to penetrate into the “channels in the bowels of the Earth” and lay all of Hell open to his sight, is also meant to discredit those “spectacles” through which the discoveries of Sidereus Nuncius were made possible: the telescope.” – It is interesting to compare the sentiment with The First Anniversary, where Hell is “under all a vault infernal” (295), where torment is “invented” (297) and moreover, it is perceived “spacious” (296), since it must hold all the condemned souls. The description is rooted between two other interesting illusions: the seemingly endless depth of the seas is described right before, and the Earth’s actual size is questioned afterwards. These descriptions, while they satirically point at the illusory nature of eyesight, also destabilise what one would call the “relative measurements” of the earth –it seems either endless or unimaginably large, its downward and upward expansions perhaps as vast as the “firmament” above. Thus Hell’s observation might be equally significant in the Ignatius, since it happens not to be using the naked eye – which deceives – but the telescope – which either deceives or augments. Neither sight nor its aid can be fully trusted to show physical reality, and stretching observation too far in all cases leads to the sight of Hell; a place of fluctuation, uncertainty, and confusion.

The spyglass induced the incomprehensibility of one’s immediate and extended surroundings. The question is whether the telescope battles the imperfection of human sight which is prone to register optical illusions – or whether the telescope itself “imposed on our senses,” (Flamsteed 89) altered our vision, and showed false images. When the news of a
new discovery travels through countries, societies, and languages, the results are often either misinterpreted or vaguely described, thus might essentially belong to the category of belief. This sentiment also fuelled Galileo’s contemporaries, who, having received news of discoveries conducted with the telescope, tended to discredit the instrument. Although the previous decades brought on the spatial exploration of new continents, personal, sensory experiences of those travels were more readily accepted as true than a visual impression mediated by a man-made tool. The fact that outer space cannot be physically reached and experienced with all five senses rendered it an object of myth, a fragmentary, instable phenomenon; the Indies, however, were readily available for anyone with sufficient funds and a taste for adventure. However, anything which is mediated can be questioned: what can be taken as the truth? Perception is versatile and different observers describe different experiences. The initial mistrust in the observation of complex phenomena is only amplified by the following segment describing the very subject of the poem:

But long she’th been away, long, long, yet none
Offers to tell us who it is that’s gone (41-42)

Secondary literature seems to overlook this statement, except for Hugh Grady’s recent publication which sees Elizabeth’s fragmented, allegorical figure as a prefiguration of the postmodern doubt in “intrinsic meaning and worth” (Grady 78-81). Nevertheless, these two lines are deeply unsettling: although “her name defined [the world]” (37), and she was the world’s “intrinsic balm and preservative” (57), “whom th’ ancients seemed to prophesy / When they called virtues by the name of ‘she’” (175-176), she is not known. This lack of knowledge raises the question of trust: can the most ideal being in the world be cloaked in this ontological uncertainty? She is there, she is seen, and her deeds are somewhat deduced; yet again full knowledge evades the anatomist who can only analyse isolated functions of an inexplicable whole. The poem only ever shows Elizabeth’s functions, but these fragments of information cannot be reassembled into a coherent and detailed whole. The uncanny ontological question the poem poses is: who is Elizabeth? Who is this girl – is she the idea of whom “a faint love of virtue and of good / Reflects” (71-72)? Is she the macrocosm? Is she the serpent still lingering here to lend her rejuvenating poison for the dying world laid bare on the anatomical table? Is she a woman after all, criticized in the poem as man’s “languishment” (102)?
These questions refuse to be answered, or rather they remain as a secondary concern to the anatomist as he discovers the severity of the quickened decay of Elizabeth’s dead body and analogically, the dead world. The sense that somehow the human body, and especially the body of Elizabeth, is connected to the cosmos persists, and what happens to one happens to the other as well. One may hazard the ruined state of the world further by administering virtue, the serpent’s venom, but since nothing can be known with utmost certainty any longer, the underlying sense is that the act may prove to be destructive, or without any real effect. The physician has come in the image of Elizabeth, bearing Asclepius’ rod of the serpent: she is herself, yet more than herself, an aid, or perhaps “languishment”. This anxiety, the uncanny fluctuation of (bodily) identities, and the invasive nature of a seemingly gentle, spiritual agent all align with the uncertainty concerning the appearances and disappearances of heavenly bodies which are in an equally (physically) dishevelled state:

And freely men confess that this world’s spent,
When in the planets and the firmament
They seek so many new; they see that this
Is crumbled out again t’his atomies.
'Tis all in pieces, all coherence gone (209-213)

The roots of Hugh Grady’s statement, “the fully enlightened world radiates disaster triumphant” (Grady 73) are figured in these lines. With the dysfunctions of the unifying heaven-earth correspondences, Grady argues that the only glue which holds Donne’s world together might be art, “a repository […] the compensating marker of absence that is also a new presence and gift to the world” (78). However, art cannot physically piece together a deconstructed, incoherent universe. Giubbory moves a step further and blames human inconsistency to be the most immediate symptom of an unstable universe (72). Hellegers believes that the lines allude to “the Baconian programme of doubt, which shuns us from accepting easily presented hypotheses”, and as such, the whole poem’s target is the intrigue and chaos of the royal court which Donne himself experienced (83). However, the reverse might similarly be true: this dissolution might indeed be the people’s fault, and not the universe’s. The persona’s perhaps most prominent problem is indeed expressed in the criticism directed to his own contemporaries, exemplified in astronomers who “seek so many new,” (209-212). These seekers only find
[...+] various and perplexed course,
Observed in divers ages, doth enforce
Men to find out so many eccentric parts,
Such divers downright lines, such overthrowts,
As disproportion that pure form. (253-257)

These lines, when read together with 209-213, confuse the old Ptolemaic-Aristotelean (253-257) astronomy with the new Galilean method. The section seems to retain the anxiety felt over the geocentric system burdened with deferents and epicycles, yet a few lines before and after the speaker mourns over the complexity and instability induced by the use of the telescope. That “new stars [arise], and old do vanish from our eyes” (260) is not troubling because of the possible clash of the geo- and heliocentric systems, since the speaker integrates these newfound stars into the constellations of the zodiac. One might assume that speaker’s excessive reaction to a few astronomical findings in The First Anniversary is merely a Renaissance conceit, and is more of convention than of real substance, or perhaps an ironic dismantling by poetic tools; however, this is a concern only if the analysis focuses on the actual theory behind the speaker’s claims – i.e. if the question is whether he believed that the described phenomena are actual realities. The old and the new seemingly merge seamlessly, however, these lines show that the speaker’s ultimate concern is precisely not with astronomical theories, but with the pursuit itself. The geocentric world system is as much criticized in these lines as Galileo’s universe is – physical, observable spatial instability is more unsettling than any theories. That the astronomers impose their own, mundane limits by dissecting the universe into constellations and signs is as horrible a violation as the augmentation of natural human senses is. This is where astronomy and anatomy merge: orientation in the vastness of space is only possible if one ascribes certain limitations to that space, and since they come from a finite mind embedded into time and space, those limitations are instinctively finite, human ones as well. Consequently, finite human perception changes vast (or even infinite) space, and in turn this altered space changes human perception to posit dissolution and chaos. The speaker observes (in both senses of the verb) something which is innately alien to the human mind by dissecting it and meticulously analysing each part. Yet when one tries to remove these arbitrary frameworks
by synthesis, when Elizabeth should “all parts to reunion bow” (220), the intricate and detailed knowledge already gained prevents all efforts toward unification.

The Swan-song: Dissolution and Atomes

Thus, there is an uncanny feeling as the speaker realizes that whatever is uncovered, the means by which these discoveries were made are either unreliable due to humanity’s own deficiencies, or they are simply unnatural, and thus cannot be trusted. The two-fold nature of the telescope is brought to light when, even though weak human sight is aided and amplified by the instrument, “[the astronomers] seek so many new” (211), that the “eccentric parts” (255) mar the perfect proportion, and the segmentation of the night sky results in constant fluctuation and absolute mutability. Augmented sight does not offer a more ordered world – quite the opposite, and “in those constellations there arise / New stars, and old do vanish from our eyes” (259-260).

In his Essays in Divinity (1614), Donne says the following: “For all acquired knowledge is by degrees and successive; but God is impartible, and only faith which can receive it all at once, can comprehend him” (50). While the quote affirms the image of Donne who assigned ‘scientia’ and ‘sapientia’ to their respective realms, the The First Anniversary shows signs of serious ontological crisis, mostly due to the impossibility of comprehension, the severity of which was only heightened by employing the telescopium. Yet if true knowledge comes only after death, why fret upon seeing the dishevelled, hectic state of the world? Donne’s Ignatius his Conclave, albeit published in the same year as The First Anniversary, is an openly satirical piece, and when Hassel analyses the text, he concludes:

Donne’s gullible, impressionable narrator, in his awe toward and exuberance over the discoveries of the new astronomers, certainly represents the equally naive contemporary of Donne’s, who might so thoroughly confuse scientia and sapientia as to believe that the very heavens were being reshaped and governed by these new titans (334).

One might wonder exactly how intertwined The First Anniversary and the Ignatius might be – whether they are truly two sides of the same coin. As the Anniversaries were commissioned and paid for by the father of the deceased Elizabeth, the overall diction and tone remains exulted; yet I wonder whether the (sometimes vastly) overdrawn, all-encompassing ruin that
the poem’s anatomist-speaker sees is not only an elaborate, tongue-in-cheek anamnesis of the contemporaries.

That “this / Is crumbled out againe to his Atomis” (212) is often thought to be the central line of the poem. Quite a few critics, Hirsch and Targoff among them, look at the Lucretian atomism of the age which they compare to the speaker’s sentiment in this line\(^{26}\). The annotated edition says that the atoms presented are “not a statement of belief in atomic theory, merely a loose use for particles” (Robbins 838). The following lines from the Devotions could also be taken into consideration when trying to determine the exact function of the line in the poem: “Man, who is the noblest part of the Earth, […] feeles that a Fever doth not melt him like snow, […] but calcine[s] him, reduce[s] him to Atomes, and to ashes” (Devotions 11). Yet it would not quite matter whether Donne and/or his speaker believed in any theory of natural philosophy when observation is innately flawed. In fact, if he did believe in atomic theories, I assume that he would have concluded that when anything falls apart, it becomes sheer potential to be reused and reformed into something new\(^{27}\). In The First Anniversary’s universe, however, these “Atomis” are barren, empty, and dead – never to be put back together again. During the process of his anatomization he even bitterly complains that “we seem ambitious God’s whole work t’undo / we strive, too, to bring ourselves to nothing back” (155-156). The deeply ontological problem of perception, understanding, and sight is articulated in its purest and most striking form: it is man’s folly, engrained into his nature it seems, to understand phenomena not in their entirety, but in fragments. The firmament fails to appear as a unified and constant entity partly because – as we now know – its workings are immensely intricate. Yet in the universe of the poem, the speaker attributes the “earthquakes” (261) above and below to our postlapsarian mind, and fault in understanding; one tends to cut the indiscernible whole into so many little pieces that it simply ceases to exist as a whole.

At the culmination of the speaker’s enquiries, the world in The First Anniversary is singing its swan-song, at the end of which it is due to “vanish” entirely (407-408). Vanishing and the concept of “atomes” intertwine in the poem as the new science and the telescope only increase the fragmentation which had been present ever since the fall of man – yet this fragmentation is not only ideological anymore, but it truly threatens one’s bodily and


\(^{27}\) The same idea is presented concerning the Valediction in Hirsch, “Atomies and Anatomies”, 78.
transcendental existence. Should the proportion completely disappear from the previously unchanging and incomprehensible vastness of space, as well as from one’s immediate surroundings, the threat of complete personal dissolution is not unimaginable any longer. The world is anatomised, and the corpse bears no signs of transcendence anymore; its body is as mutable as can be, as prone to destruction as the fallen, disobeying generation before the Flood. What is observed is a broad (or rather, incomprehensibly large) surrounding which one can only anatomise in parts; those parts, however, cannot enter a synergy, and remain isolated, then without their “balm,” they essentially decay. If this is the Book of Nature – if this is the macrocosm that one should study in order to understand providence – then it is a ghastly sight: it is a purely physical world where order is absent and human understanding is insufficient to comprehend the whole whether it is ordered or not. And even if we start understanding the world, we are confronted by several ontological problems: are we and/or our instruments good enough to comprehend and perceive our surroundings? Has the world always been this fragmented and heterogenous, or do the observers somehow further its decay, similarly to the anatomist, who cuts the corpse apart? Hirsch emphasizes the fear of absolute dissolution in the poem: “by anatomizing the representative body to the limits of material dissection, Donne attempts to discover a radical immutability of selfhood which could refute his fear of dissolving into nothingness” (71). Without transcendence, as John Carey, Donne’s biographer asserts, “everything [intelligible] would slide into [a ‘black hole of nothingness’], Donne believed, if God ceased to exercise his sustaining power” (qtd. in Hirsch 73). But magnifying is not in itself evil; three years after the publication of The First Anniversary, in the Obsequies to the Lord Harington, Brother to the Countess of Bedford, the speaker transforms the telescope, the root of much confusion, into God himself:

God is the glass; as thou, when thou dost see
Him who sees all, seest all concerning thee,
So, yet unglorified, I comprehend
All, in these mirrors of thy ways and end.
Though God be truly our glass through which we see
All, since the being of all things is he,
Yet are the trunks which do to us derive
Things in proportion fit by perspective
Deeds of good men: for by their living here
Augmentation of one’s limited sight happens not through the physical instrument of the telescope, but through the actions of virtuous men; their life is the “trunk” which mediates the true lens of God’s perspective to keen observers. These lines also deepen the gap between ‘scientia’ and ‘sapientia’, as only through God may one comprehend the full truth – one needs not any instruments besides faith itself, no other subject than providence. This later poem does not seem to find answers to these enquiries, and he does not wish to do so. Faulty, treacherous human sight is aided by God’s eternal, all-encompassing sight which is somewhat reflected in virtue – thus the dubious instrument of the telescope becomes God Himself\textsuperscript{28}. The poem can be read as a conceit: Lord Harington is deified in the first part quite similarly to Elizabeth Drury’s figure. This conceit equates light with the Sun/Son, and *The First Anniversary* displays Elizabeth as the World and its animating spirit. Both figures are essential to perceive and understand the world’s workings; Elizabeth leads the anatomist to understanding through her death and the ensuing final decay of relations, virtues, and physical reality, while Harington seems to bring light back to this decayed world, and reanimates it so that the cadaver can be reassessed. His figure is conceived in a climate which was becoming more and more familiarised with optical theory, and which is going to lead to the ultimate reconciliation of theology and eyesight: the argument from design. However, these arguments only consider the mechanical design of the eye, which is drawn together with the mechanics of the telescope, while neglecting the role of perception (Riskin 354). In 1655, Henry More (whose *Democritus Platonissans* will be assessed in a later chapter) pioneers in constructing the argument from design, establishing the role of the eye in later theological and evolutionist arguments. Yet *Harington* does not pioneer in the reestablishment of the eye as the noblest of the senses; it simply asserts perception through eyesight, mirrors and looking glasses as an integral part of witnessing divine Providence.

The soul, it seems, also needs such instruments – it experiences by seeing. Yet even though the speaker “see[s] through all” in the revelatory light of the virtuous Harington, he cannot seem to comprehend himself, “the hardest object of the sight” (30). The metaphor in these lines focuses on the mirror aspect of the interplay between light and glass – and it is in God where one’s own self is truly revealed.

\textsuperscript{28} See an alternative analysis in Brown 18-21.
And while the anatomist could not complete his dissection, thus he could not present a general and unified understanding of the dying world, the never-ending questions and the scientific methods which produce isolated fragments of understanding are also transformed in divine grace. It seems that the speaker of Harington is as lost in the ever-fluctuating nature of human flesh, emotions and natural phenomena as the anatomist was, yet the sentiment is nullified when his gaze turns from empirical matters to the matters of providence:

But where can I affirm, or where arrest
My thoughts on his deeds? which shall I call best?
[...]  
As bodies change, and as I do not wear
Those spirits, humours, blood I did last year
[...]  
Because God knows where every atom lies; (41-53)

Thus, instead of trying desperately to find order in a vast and mostly alien landscape (be that the body or the heavens), the speaker turns from, and implicitly rejects this new-found chaos and focuses on the only focal point which is completely outside of the realm of the empirical agenda: God.

Thus, when the speaker of The First Anniversary sees the carcass of an already decayed world, his anatomy is no mere curiosity, but a forensic necessity stemming from the need to identify the cause and exact time of death, and, even more importantly, it is an experiment using the methodology and framework of the new science. This anatomy is trying to reinstate relation and order into the disassembled parts left after the telescopic observations. As the anatomist cannot consolidate these spatially isolated parts, he arrives at the conclusion that the man-made tools of observation cannot show objects and phenomena as they truly are. Thus, instead of gaining more insight into the intricate workings of the universe, the world along with the individual becomes unstable and ambiguous before both essentially dissolve. Finally, the only reconciliation, which comes in the form of The Second Anniversary shortly after The First, is no reconciliation at all: the impotent, confusing image of the vastness of his surroundings inspires Donne’s speaker to return to a seemingly more
intuitive and heavily transcendental approach, and await for God, who, after death, may grant the individual the gift of observing things *sicuti sunt* – as they are.
III. The Astronomer's Search: Imagined Heavens in George Herbert’s Devotional Poems

The case of The First Anniversary’s anatomist perhaps demonstrated, among other points, the problematic nature of the fragmentation of knowledge. My argument intends to continue the logic of the previous chapter while chronologically moving some fifteen years ahead in time. Whereas both Donne’s and Herbert’s poetry seem to be arbitrary examples of the period’s mentalities, the common thread lies in their popularity and the fact that both poets turned scientific imagery into poetic tools. The First Anniversary introduced both the need for and the futility of meticulous scrutiny, tying the act of anatomical observation to (Galileo’s) telescopic observations, and universalising the deeply personal. However, categorisation, and thus fragmentation are integral parts of our mental structures: human beings operate similarly to the anatomist in that they usually cannot comprehend the whole, but need to acquire knowledge step by step, piece by piece. Yet there is the idea of unification and of an image of a world which makes sense in its entirety, as is. The main focus of the current chapter is to show, through the example of one of the most popular English devotional poets of the century, the intersection of faith and natural philosophy: how he makes a certain science of his own by scrutinizing the emerging quasi-scientific attitudes. Although I could not detect any of the heliocentric ideas in Herbert’s English poems, still his speakers are so concerned with the figure of the astronomer and the knowledge one attains by observing the sky, that in these poems all of the speakers become “occasional astronomers”.

If one looks solely at the tenets that Herbert’s poetry tries to communicate, they might find that there are no unconventional, innovative or shocking statements regarding the relationship between God and man among them. This section of his oeuvre needs to be studied first of all because it was among the most widely read of the mid-17th century in England; secondly, for the reason that Herbert, in these poems, uses the image of the astronomer and the practice of celestial observations in an innovative, albeit non-reflective manner; and finally, because his poetry deconstructs some of the major dichotomies between the emerging mindset of the new science and the well-established patterns of the Christian faith. The true distinction does not lie between “irrationality” and “rationality,” but between

29 Herbert’s speakers are different in each poem; what is common in all of them is that they are attempting to define their relationship with God in the light of the vastness of their surroundings.
human comprehension and transcendence, and even these two, seemingly distinct notions are to be brought together by Herbert’s “astronomer-poems”.

It is important to emphasise, however, that the major opposition that Herbert tries to annihilate in these poems is not between the “old” (Ptolemaic) and the “new” (Copernican) cosmology. I put the adjectives into quotation marks due to their relative meanings since variations of the “old” system persisted until the late 17th century, and the Copernican system had had its advocates from the late 16th century on. Thomas Digges’ translation introduced heliocentrism in the vernacular in his emendation to his father’s A Perfit Description in 1576, and Giordano Bruno visited the intellectual circles of London and gave lectures in Oxford between 1583 and 1585, inspiring several Englishmen with his ideas on Copernican, infinite space. The transition from one system to the other was not the product of a battle of ferocious treatises, but rather a slow and evidence-based process, which culminated (and became somewhat more ferocious) with the appearance of the Royal Society in the second half of the century. In the shifting intellectual climate, the image of an immense heliocentric universe was becoming even more prominent in everyday discussion especially among practical men (Knight 7), yet questions of faith did not suddenly disappear, and reflections on the current cosmological situation did not always manifest in a quasi-scientific, reflective form. George Herbert was able to employ the metaphors of “old astronomy” fused with the methodology of the “new science” precisely because the search for God and the need for decoding one’s surroundings in astronomy had been present for several centuries, and matters of “science” and of “theology” were not sharply distinguished.

God, in His essence, is more than human, and had traditionally been equated with might, greatness and immensity. There are several biblical passages testifying to the vastness of God: His remoteness and non-human nature is shown in Deuteronomy 10:17, which says that “the Lord your God is God of gods, and Lord of lords, a great God, a mighty, and a terrible, which regardeth not persons, nor taketh reward” (KJV). Job 26:14 also talks about God’s vastness: “Lo, these are parts of his ways: but how little a portion is heard of him? but the thunder of his power who can understand?” (KJV). Both the Old and the New Testament testify of His inscrutable nature: “For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts” (Isaiah 55:9), “how

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unsearchable are his judgments, and his ways past finding out! For who hath known the mind of the Lord? or who hath been his counsellor?” (Romans 11:33-34). These attributes of God traditionally set Him apart from men, since they cannot be fully comprehended. However, scholastic thinking had already started merging the concepts of outer space, similarly vast and inscrutable, with the attributes of God. God’s omnipotence, omnipresence and unconfined nature was, in some instances, equated with the possibility of infinite and timeless space; the location of heaven was postulated in space, as the qualities of the one appeared to be reflected in the other.

Imagination and vastness have been innately connected since Aristotle’s remark, according to which “the imagination can always conceive a ‘beyond’ reaching out from any limit, so that the series of numerals seems to have no limit, nor mathematical magnitudes, nor the ‘beyond the heavens’” (Physics III. II. 203b). This idea has been applied both to theology and theologically charged space in the Middle Ages: Averroes, Thomas Aquinas, and John Buridan were all wary of human imagination, which conjured up false images, the vastness (and even infinity) of space among them (Grant 118-120). The early 17th century has only a few documents to offer on the fusion of theology and the obscure notion of infinite space. One quite unique exception is Bradwardine’s De causa Dei contra Pelagium from the 14th century, which was edited and published in Latin by Henry Savile in 1618, and which accepts infinite void space as an attribute to God’s immensity. Yet Bradwardine’s notion became more widely read and accepted only in the late 18th and early 19th centuries, and any references in other 17th-century works are yet to be found (Grant 148). Convincing documents are also missing on the influence of the idea which was popularised by Nicholas of Cusa, and according to which God is to be regarded as an infinite sphere (cf. De Docta Ignorantia I. 23), moreover, he also asserted that “God is the center and the circumference of all the stellar regions” (qtd. in Koyré 22). Fishacre’s 13th century commentary on the absolute equation of an infinite space with God also had its legacy in scholastic philosophy, however, it never took root in popular imagination (Grant 143-144).

Albeit there are no implicit philosophical or contemporary scientific theories (at least not in their complex form) present in Herbert’s oeuvre, he must have been aware of the tradition which asserted that by understanding the nature of space (or the entirety of the observed world, for that matter), one might also understand God. He will explicitly argue for this idea in Vanitie (I), and imply it in his other “astronomer-poems” as well. Izaak Walton, who was among the first of George Herbert’s biographers, highlighted the poet’s
great zeal both in worldly and in religious matters. This steadfastness led Herbert to Cambridge, and it made him an orator and one of the king’s favourites at the time (Walton 335). Yet the praise of his contemporaries and Herbert’s almost saintly devotion is not of primary concern – unless one wants to establish that it was precisely due to his beliefs that he ignored the achievements of contemporary science. But similarly to John Donne’s “rejection,” this sentiment is not a stark and well-defined entity which can easily be teased out of the poetic text: the perceived reality of the relationship between poetry and the natural sciences is less profound and more complexly interrelated than simple causality. The scrutiny of causes and effects is yet again to be dismissed from my analysis: as Donne’s poetry was not a simple (reactionary) answer to modern scientific discoveries, so Herbert’s religious metaphors are not to be seen as reactionary and anti-science. As it has been mentioned already, science (in the period, at least) does not only “influence” literature, but rather the “two cultures” enter into a synergy, thus, poem-making becomes science-making, and science very often needs the tools of literature in order to express itself. Hence it is perhaps not surprising when Walton mentions that Herbert was tutored by Sir Francis Bacon31 in Cambridge, and that the eminent scientist greatly appreciated the (then no less devout) Herbert (320). They became such good friends that in 1623, Herbert helped in the preparations of the Latin edition of Bacon’s Advancement of Learning – and Bacon “usually desired his [i.e. Herbert’s] approbation before he would expose any of his books to be printed […]” and dedicated his translations of some of the psalms to Herbert (ibid.). Both tutor and friend, Bacon must have conversed with Herbert about natural science and the new discoveries of the age. Exactly how much and in which fields did Herbert learn from Bacon is not recorded anywhere; yet as natural science was not as far removed from the other disciplines (such as theology, philosophy and ethics) as it has been in the post-Newtonian scientific age, I assume that Herbert and Bacon might also have talked about the imminent possibilities of the new science, along with the new method and language the latter helped devise. Herbert was definitely not ignorant of the achievements of the early 17th century.

As the world had already been in the process of a slow alteration in paradigms from the mid-16th century on,32 Herbert was born into a world in flux with several cosmological, political and social systems emerging at the same time. Appelbaum argued that compared to

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31 The note (the reproduction of which is party damaged on EEBO, thus it is somewhat difficult to decipher) to this sentence reads as follows: “Such is the celebrity of the name of Bacon, that to mention it is to suggest an idea of every thing great and super-eminent in knowledge.”

32 For the particulars of this phenomenon see the Introduction and the introductory pages of the first chapter.
20th and 21st-century conceptions, physical distances in the 17th century were perceived greater than they are today – given the limitations in transport. Time also had a vastly different perception: the end of times was always nigh and the beginning of time – the concept of creation – was not so far away (28). This statement is to be kept in mind when one asks as to why Herbert often seemed to disregard contemporary natural philosophy if he had Sir Francis Bacon as a good friend and as a tutor. The Temple had six editions in the first ten years of its publication (Wilcox xv-xvi); it was clearly among the most popular books of devotional poetry. This chapter argues that Herbert’s widely read texts did not blatantly ignore the new science, nor did they go against the new ideas of the “new philosophy” – they simply did not distinguish between natural science and theology in the sense that both ultimately belonged to earthly, finite knowledge and could, at most, be only used as guides to heavenly, infinite wisdom. Donne’s was a poem of mourning employing the post-Renaissance conceit: he mourned for Elizabeth, mankind, the world, and above all, for himself. Yet a central issue in the poem is whether one can trust one’s own eyesight and comprehension connected to observation. The most important question is which one is more defective: the insufficiency of human physiology or the crafting of a new instrument by insufficient human beings. This latter tool, the telescope, was especially intriguing, as by the augmentation of the eye, it seemed that the instrument had shown the same image to several independent observers. John Spencer Hill deems Herbert’s response “more mature than Donne’s […] visceral reflex” (32), precisely due to the consolidation of the new science into everyday language and thought. In the fifteen years between Donne’s The First Anniversary and Herbert’s poetry (though those are not sufficiently dated, and were only published posthumously, in 1633) the images of mutability and fluctuation shown by the spyglass became more widely accepted and definitely less of a novelty than they were for Donne.33

It is hardly surprising, then, that George Herbert, a rhetorically and theologically inclined, albeit quite studious and ambitious person did not become the ardent advocate of the new science. There was no new science per se to speak of – only the aftermaths of the myriad new paradigms that had entered the conversation a few decades before. The Copernican theory was old; the telescope was known; anatomising the human body became a common spectacle; it was not a new world, but the world. There remained quite a few uncertain points, ontological and theological questions to be answered; but these questions,

33 One should not forget, however, that the Copernican world view had been in existence for almost a century. Cf. the third chapter (entitled “Losing Touch with Nature”) of Mary Thomas Crane’s Losing Touch with Nature.
however unique, are natural constituents of each era. Several scholars identified the great crisis of the 17th century as the crisis of “losing the centre”: the two of the oldest and most influential studies are perhaps Harris’ *All Coherence Gone* (1949), which follows the process from different angles; and Nicolson’s *The Breaking of the Circle* (1965), which explores the poetics of a non-Aristotelean/Ptolemaic universe; and one of the most recent in the line of these publications is Crane’s *Losing Touch with Nature* (2014), a book which finds the roots of the 17th century “scientific revolution” in 16th century thinking. These arguments and my chapter share a common feature: they suppose that change did not happen in an isolated and discernible form, and that religion and “science” had not already begun their infamous separation in the first half of the 17th century. George Herbert’s poetry is of importance, then, since not only did it reach several readers in the period, but it was also far enough removed from the novelty of the new magnifying instruments; moreover, it was written by an excellent orator, theologian and pastor who was – presumably – scientifically not absolutely ignorant. Still, his poetry remained in the realm of devout worship while completely submitting the powerful images of astronomy to his own poetic means.

Objections might be raised against considering a pastor’s poems from the point of view of the history of science. While reading the texts, one will notice that all the speakers seem to know only the basic outlines of the most pressing astronomical problems of both their age and of before, yet struggle (quite understandably) with the actual depth of scientific knowledge behind the phenomena. This does not imply that one should dismiss either Herbert, his perceived aims, or his readership, as one also should not dismiss 21st century contemporary thinkers pondering the ethics, ontology, or phenomenology of the natural sciences. Even today, these responses to science possibly outweigh – at least in number – the responses given by “specialists” and, in the 17th century, they also surpass the texts written by natural philosophers with an experimental background.

George Herbert’s collection of English poems, entitled *The Temple* is, as its title suggests, a structure both in the metaphorical and in the allegorical sense; the poems are ordered according to a deliberate scheme. Helen Wilcox states that Herbert’s aim was to induce pleasure, so that readers of his poems may be brought to faith (xxx). As it has already been established, Herbert’s poems do not want to achieve the feeling of pleasure in the reader by means of astronomical imagery, nor does he dress in the robes of an anatomist or any man of science. How these astronomical images found their way into devotional poetry and to what ends did they stay in the larger narrative is a more concerning question – was it
because of anxiety, wonder, perhaps mockery? One possible answer might be that they found their way into prayer because they were yet to be resolved. Perhaps the magnitude of the undertaking, understanding the entirety of the universe prompted the idea that the bold venture for knowledge should be, or rather, may only be undertaken by a much more powerful agent, whose omnipotence can discern the complexity of such a vast and manifold system. Thus bringing the existential questions of astronomy in front of God in prayer may induce a deeper understanding, a scattering of doubt, an assurance. Nevertheless, one must not forget about the heritage of the previous centuries which equated some of God’s attributes with the attributes of space, and astronomical questions with theological ones. Yet if Herbert followed tradition, or thought to put his doubts concerning knowledge acquisition into God’s hands, how come these matters do not occur more often and more prominently in his oeuvre?

The answer lies perhaps in the structure of the volume, which I intend to keep in my analysis of the poem as well for this very reason. Richard Strier argues for an “ironic ekphrasis” in Herbert’s poetry, analysing two poems entitled The Altar and Sin. These poems, Strier argues, embody in themselves what one of the possible aims of The Temple might be: an argument against seeming, as sight, even inner sight, is only to deceive the reader (Strier, George Herbert and Ironic Ekphrasis 98). By exploring the visual-architectural elements in the two poems together with the basic conceit of the poem, the reader is confronted by their own imagination. The poems in the volume seem to lure the reader into believing in their own mental structures, e.g. that the soul is a temple, whose elements are held together by cement; that the cardinal virtues are pillars to lean on – and while the reader visualises these elements, Herbert’s collection is working on undermining them (ibid. 107). He, in Strier’s view, wants the reader to remember that what they are looking at are only metaphors – not real structures and not real buildings; not solid knowledge, but only seeming (ibid. 109). I believe that based on this argument, one can also say that there is a disparity between form and meaning, words and truth, which the reader needs to notice, much like what Stanley Fish’s Surprised by Sin urges the readers of Paradise Lost to do: metaphors are not realities, and overindulgence in unattainable images lead to disappointment.

I have found that five of The Temple’s poems feature the image of the astronomer in a prominent way; that means that the figure and/or his profession and practices are not only used as a metaphor or a metonymy, a mere decorative tool, but have an integral and central
part in the poem. I have called these the “astronomer-poems” for easier reference, and I have analysed them in order of their appearance in *The Temple*. All five poems are part of the main section of the volume, namely “The Church,” and comply to the typography of the most recent Cambridge annotated edition. Besides featuring the figure of the astronomer, *The Agonie, The Temper (I), Vanitie (I), Divinitie*, and *The Search* all express a specific ontological and epistemological stance on the relationship between God and man. The epistemology related to the understanding and cognition of God is showcased through the mentality of the astronomer, who incorporates both the image of the previous centuries and the methodology of the new science. Cognition could be dwelt upon in connection to these matters, however, I have chosen not to incorporate the methodology of cognitive literary analysis into my framework, as it is not the cognition of the early modern readers and the speakers which I am interested in, but rather the concept of knowledge acquisition and its relationship to the vastness of (outer) space and other immeasurable magnitudes in theologically inclined poetry. Thus the question of the previous chapter might be reiterated at this point: what is real knowledge, and what is imaginary?

Although Strier asserts that “it must be acknowledged that at times, like most other figures in the period, Herbert does feel the pull of Stoic equanimity – ‘the pliant minde, whose gentle measure / Complies and suits with all estates’ (“Content” lines 3-4) […] at times he also feels the pull of Stoic apathia” (*The Unrepentant Renaissance* 54), these occasional sentiments do not imply that Herbert’s speakers are sceptical towards obtaining knowledge because they are Sceptics as such, or even that he would be generally sceptical towards knowledge. I would propose that the figure of the astronomer becomes a warning precisely because he misses true knowledge acquisition, the one which might only be attained by the union with God. While the activity of mapping the night sky becomes the image of vanity despite the observers’ real, scientific achievements, this image of the astronomer also contributes to the erasure of boundaries, as well as to bridging the vastness which separates God from man.

A systematic analysis of each poem follows, during which each metaphor that Herbert employs is going to be examined in terms of meaning-making, knowledge acquisition, and the binary categories of earthly and heavenly knowledge.

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34 I use Helen Wilcox’s *The English Poems of George Herbert* for all future quotations and references (Cambridge: Cambridge University Press, 2007).
“The Agonie” of Measurements

The Agonie, which opens with the word “philosophers” is the fifth of the poems in the main body of Herbert’s The Temple. The poem follows a string of poems which could easily be regarded as the opening narrative for “The Church”. As the volume progresses from the “Church-porch”, the introductory verses of the volume, the reader is led into the heart of worship, the second and most important step: the sacred “Church” itself. In the four opening poems, Christ’s sacrifice is shown in great detail along with (thus implicitly compared to) human minuteness; and once the speaker explores the main tenets of Christology through praises and prayers, he moves on to reprimand the “philosophers”, who are instinctively tied to the image of vanity.

Philosophers, however broadly the term was defined, became central figures in the pursuit of knowledge. Their (Graeco-European) history and a description of the abundant iconographical tradition which would describe different attributes of “the philosopher” exceed the scope of this chapter, and at this point perhaps it would be sufficient to state only that the philosopher, in its stereotypical form, was a well-established and quite burdened figure. One must not forget the phrase “natural philosophy” either – a term which the OED dates back in its Anglicised version to the end of the 14th century – and that the term “philosophy” did not only entail the pursuit of metaphysical and ontological problems. On the contrary, any person who was interested in “natural philosophy” – in the physical sciences, as one would use the term today – was a philosopher.

The first three lines of the fifth poem in “the Church” enumerate some of the sensational accomplishments of these natural philosophers, all tied to the notions of vastness and spaciousness, the true meaning of which the speaker explains only in the fourth line:

Philosophers have measur’d mountains,
Fathom’d the depths of seas, of states, and kings,
Walk’d with a staffe to heav’n, and traced fountains (1-3)

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35 Consider their titles, which already foreshadow the narrative of Christ’s suffering: “The Altar”; “The Sacrifice”; “The Thanksgiving”; “The Reprisall”.

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First the reader is presented with earthly matters, i.e. two different focal points of geology. The same preoccupation with the vastness of one’s natural environment is also present in John Donne’s *First Anniversary*, which might have served as an indirect influence for the lines above; there, Donne alludes to some of the optical illusions (i.e. discrepancies in human eyesight, which confirm the fallen nature of humanity) by recalling the deceitful image of the moon over “Teneriffe or a higher hill” (286), and only a few lines later, the speaker also condemns men who brave seas which “are so deep that whales” might “at the bottom die” (289-291). Colonisation brought about the opening up of one’s surroundings, and the sense that fantastical beings and events might not only be the product of one’s imagination. Donne’s and Herbert’s time had been one already accustomed to the idea of colonies and exotic customs, peoples and landscapes; yet the seemingly infinite amount of *otherness* also indicated a seemingly infinite number of phenomena to be explored and understood. The inanimate segment of creation, mountains and seas among them, were as much part of this conquest as the occupation and taming of lands, other cultures, and animals were. Though expansion might have been a more integral, perhaps even more accepted and silently normalised part of the everyday mindset in the early 17th century, the actual process of it tends to be exponential – the more one familiarises, the more one wants to conquer. And since mapmaking and navigation played a crucial role in the period, our planet’s “outward” geography was quite sufficiently understood, yet the particulars were not. Everything was to be conquered by thorough understanding: and understanding, as Donne’s anatomist has already demonstrated, involved cataloguing. The deepest and highest points of the globe could be “measur’d” and “fathom’d,” and through sacrifices, all can be conquered – it was only a matter of time and determination on the side of these philosophers to expose the hidden particulars of creation.

This sentiment can be found in John Jewel’s *A Treatise of the Holy Scriptures*, originally quoted by Margaret Turnbull in her analysis of *Vanitie (I)* (84), yet perfectly applicable to both this poem and to the sentiments of the other “astronomer-poems” as well. Jewel preached the sermon which served as the original for his treatise in the 1580s (some forty years before Herbert wrote the poem), and the influence of his ideas can also be seen in Donne’s poetry. These first three lines of *The Agonie*, especially the images connected to

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36 These particulars were sought for by several natural philosophers, most notably by William Gilbert, whose *De Magnete (On the Magnet)* is still among the most studied scientific treatises of the early 17th century – Knight recalls that the idea of magnetism was so alluring that it soon became the basis for several anecdotes and some rather hilarious incidents (10).
topography, quite directly allude to the ideas delivered in this particular sermon – and these ideas seem to be embedded into the poetic undertakings of Herbert, as Jewel’s influence is also discernible in *The Temper* (I), *Vanitie* (I), and *The Search* as well. It is due to this explicit and overarching influence that, in order to proceed with the analysis of *The Agonie*, Jewel’s *Treatise* needs to be quoted at length. However, his ideas do not only apply to poetry, but could also help in unravelling the intersection of faith, personal values and natural philosophy in the era:

Thou néedest not runne hither and thither, nor wander ouer the Sea, nor beate thy braines in searching what thou shouldest doe, or by what meanes thou maist liue vprightlye: the worde and commaundement of God will teach thée sufficientlye. […] Humaine knowledge is darke, and vnceerne. Philosophie is darke, Astrologie is darke, & Geometrie is dark. The Professours thereof oftimes runne a masket: they léese themselues, and wander they knowe not whether. They séeke the deepthe and bottome of naturall causes: the chaunge of the elements: the impressions in the aire: the causes of the rainebowe, of blasing starres, of thunder, and lightning, of the trembling and shaking of the earth, the motions of the planets, the proportions and the influence of the celestial bodies. They measure the compasse of heauen, and count the number of the starrs: they goe downe and search the mynes in the bowels of the earth: they rippe vp the secrets of the Sea. The knowledge of these thinges is harde, it is vnceerne. Fewe are able to reache it. It is not fit for euery man to vnderstand it (208-209).

In the lines above, Jewel picturesquely walks through the depths and heights of this world, taking the reader first out to the sea, which implies the vertical progress of colonisation, as well as the idea that true knowledge is *elsewhere*, thus it is to be obtained in a faraway place. Afterwards, he logically demonstrates why some intellectual pursuits hinder true understanding: first, the tendency of overanalysing one’s own actions is mentioned, after which the prominence of God’s commandment is established, and finally the horizontal progress of natural philosophers becomes focal. This progress is also “running”, chasing knowledge and assurance outside of the reach of faith. That philosophers “léese [lose] themselues, and wander they knowe not whether” might be of importance, as the pursuit of knowledge traditionally emends and completes; yet a Faustian idea of the loss of self emerges, in which to seek knowledge does not cause the approximation to an ideal state of mind. Understanding earthly phenomena does not equal the feeling of fulfilment. On the contrary, understanding, for Jewel, does not come easily: this knowledge is “darke”, “vnceerne”, and very few can truly comprehend its particulars. St. Paul also warns his
spiritual children that “the deep things of God” (1Cor 2:10)37 are not accessible by human knowledge, which “comes to nought” (1Cor 2:6) and that “judge nothing before the time, until the Lord come, who both will bring to light the hidden things of darkness” (1Cor 4:5). He demands spiritual meekness from his followers, who claim to have certain knowledge in all of God’s matters; however, it is only the Holy Spirit who can illuminate those “hidden things” in the “darkness”. In contrast to this, astronomy, philosophy, and all earthly knowledge remains in the dark, keeping its seeker in uncertainty.

Most of these philosophers, though, never leave the state of constant search, of “running”: they look for the depth of the earth and “the bottome of natural causes”; they observe the intricate motions of the heavens, and yet, ultimately, they are lost. The Treatise explains this by elaborating on the opposition of heavenly (biblical) knowledge and earthly knowledge, and by the assertion that understanding the world does not imply an understanding of the self and of one’s purpose. In a similar vein, one could state that this sermon is another prime example of the slow destabilisation of the Book of Nature – while it is true that God devised the “change of elements” and all other phenomena listed above, earthly knowledge might not, after all, transfuse into heavenly knowledge. Deduction from earthly phenomena to heavenly matters might not be a path to follow, after all; perhaps God did not create nature to be read as a guidebook to His ways. Even though quite a few of the “philosophers” (in both senses) equated infinite space with God, and strived to read the Book of Nature in as much detail as possible, without the knowledge of the Scripture these remain partial truths. One of the Old Testament’s most often quoted segments asserts the lack of integral connection between heaven and earth: “For my thoughts are not your thoughts, neither are your ways my ways, saith the Lord” (Isaiah 55:8). Even if human understanding would seek out every minuscule detail of the created world, God’s ways might still be more intricate. The tools of deduction and extrapolation, and of drawing parallels do not apply when considering the nature of the transcendent in the light of the workings of the immanent.

The word “Agonie” in the poem’s title does not only denote the suffering of Christ – it is also the suffering and hopelessness of these philosophers, ensued by their vanity, an ever-present thirst for knowledge, and the possibility of being so engulfed in their pursuit that they lose sight of their own salvation. Christ suffered in the Hill of Olives and on the cross; yet the speaker’s conceit is that if one ceases to look at the two main elements of

37 Or “the bottome of Goddes secretes,” as in the 1530 Tyndale Bible.
Christ’s suffering, and focuses solely on their own (and vain) achievements, it only testifies of their lack of true knowledge. The fourth and fifth lines draw one’s attention to the fact that sin and love are as “vast [and] spacious” (or even more so) as the physical progress of the philosophers and their knowledge of geology, power (“states and kings”), and physics (“walk’d with a staff to heav’n”):

But there are two vast, spacious things,
   The which to measure it doth more behove:
   Yet few there are that sound them; Sinne and Love. (4-6)

These two notions seem to be the constituents of true knowledge: they are the ones to be measured, though few are willing to do so (line 6), and the remaining two stanzas in the poem are dedicated to one of these notions, respectively. The philosophers may have used their rod as an aid to reach heaven: the rod had been an attribute of the astronomer, and the Bible also alludes to a measuring rod (Gen 32:10, cf. Wilcox 120). Yet this staff will not aid them in measuring sin and love – as The Temper (I) also explains, these “inner” measurements are impossible to reproduce on the outside. The text does not say, however, that sin and love cannot be measured at all; the main focus is rather the fact that such spiritual notions cannot be quantified and catalogued using the same methods as in the case of measuring worldly ones. It is due to the spiritual nature of sin and love that the speaker advises these philosophers to rather run towards another direction: towards their own soul. Instead of seeking to measure sin and love employing their usual methodology, contemplation is advised in the second and third stanzas. To “measure” sin, one must contemplate the sufferings of Christ on the Hill of Olives; and to “measure” love, one must contemplate the blood of Christ which he shed for mankind on the cross.

However, the poem does not contrast the two modes of attaining knowledge as starkly as Jewel’s Treatise did; the first six lines only draw the reader’s attention to the fact that in spite of all worldly achievements, the spiritual “measurement” of sin and love is the only such act which could yield some substantial form of knowledge. One would be tempted to describe the speaker’s tone as ironic; however, I believe that the wording simply calls for a reassessment of focus without condemning or prohibiting the pursuit of the other disciplines. The knowledge attained there might be dark and uncertain, as Jewel believed
they were; however, the possibility of light and certainty is not denied in either of these texts. Herbert’s speaker might, in fact, offer an emendation to Jewel’s thoughts – if one were to measure (by contemplation) sin and love, then those two important notions could serve as guides in the pursuit of earthly knowledge, which, ultimately, still remains a vanity, and does not belong to the plan of salvation.

The Fickle Nature of Humans

The Temper (I), still in the first third of the volume’s structure, can be understood as a profound prayer requesting to see God, as in the well-known Biblical letter written by Paul, “face to face” (1Cor 13:12). This sight, which had been paramount for John Donne’s speakers as well, is primarily connected to the notion of distances in the poem – after the enumeration of some “vast and spacious” things in The Agonie, the speaker here moves on to an explicitly astronomical conversation. Understanding previously unattainable and thus unobservable phenomena (in astronomy as well as in other branches of natural philosophy) had been a paramount feature of the age of magnification. The vastness of space became infinitely larger and a lot smaller at the same time: by being able to attain a spyglass of considerable magnification, those details which one had not been able to observe with the naked eye drew closer to the observer, yet the world opened up to a vastness of possibilities, and with these possibilities, the magnitude of one’s environment became significantly larger and almost impossible to fully grasp. But the poem’s speaker requests not only that he would be able to discern the anatomy of the heavens, to see the structure of the world clearly and stripped of theories and speculations, but he is also keen to know the inner workings of the grace of God, and the dynamics of the relationship between God and man. As such, these requests are even larger than the thirst for astronomical knowledge, as they are spiritual rather than physical.

The profundity of this prayer, however, might be questioned, as its wording contains some hints of irony, and is more reminiscent of the “classical” metaphysical mode of writing; the grammatical structure of the first exclamation in the first line: “How should I praise thee, Lord!” simultaneously evokes both the Petrarcan conceit, an overused and overdramatised form of praise, and the genuine cries of some of the Psalms (which Herbert was deeply familiar with, and which he had perhaps read in Sir Francis Bacon’s translations). Perhaps it is the illusion of the postmodern mind to regard the speaker’s every self-belittlement as a form of irony, however, such emotionally charged statements expressed so often tend to appear as overwhelming in the least. Most notably, this devout praise is infused with images
of warfare: the expression steel (line 2), rack (line 9), meet arms (line 13, and as a part of a problematic phrase to be mentioned later), and measure (line 15) all contribute to the militant tone of the poem which opens essentially as a paean. This stark opposition instantly questions the aim previously set by the speaker, and turns the adulation of God into suffering from the aggressive acts of God. The title might help in unravelling the paradoxes of the first stanza: *The Temper (I)* can, in its most common understanding, refer to human temperament, which is often prone to such extreme changes. Perhaps the speaker’s fluctuating tone is not due to his irony, but rather a warning sign for his (and others) fickle temperament. Schoenfeldt confirms that the title refers to those corporeal and physiological qualities which ultimately showcase to the disparity in human temperament (113-114; 117); Bowers believes that the title also serves as a pun for tempering metal, hence the militaristic images of the poem (206); moreover, it is also a reference to tempering a musical instrument, hence the “tuning of my breast” line (207). Perhaps the title alludes to all these layers of meaning, in which case the ultimately “metaphysical” nature of the poem is confirmed, and the hints of irony might be taken to be even more significant.

To consider an interpretation of the possible irony in the poem, one needs to assess the feature which causes the sense of irony – the self-imposed insignificance and minuteness of the speaker. The constituents of this sentiment are, on the one hand, the poet’s inability to “engrave” God’s love “in steel” (2) in his verse; and on the other hand, it is his inability to identify an attainable (physical) place where God resides. Both of these actions fail because the speaker is not able to fully grasp the magnitude of God (His love, location and person). The first stanza, in which the opening question (exclamation) has already been identified as problematic, continues by pointing to the fact that God’s love cannot be “engraved” simply because of its immeasurable magnitude; human poetic languages will not be able to channel and maintain the feeling and state of the divine affection. Though the last line of the first stanza wishes for the immortality of the feeling, agency is denied of God in this matter; the speaker maintains the image of minuteness by focusing on himself and his own actions rather than God’s. It is he who should “engrave” God’s love “in steel”, so that what his “soul doth feel sometimes” might be felt forever. It is notable that the lines are not about the disappearance or withdrawal of God’s love – it is never God who ceases to pour His love onto His creatures, but the temper of the speaker which prohibits him from feeling this love. The second stanza explains one possible (and in this poem, the main) factor in this self-
alienation: the minuteness of human beings, and, as a result, the great physical, emotional, and spiritual distance from God it creates.

If we first entertain the idea that the poem does not display bitter irony, but rather the honest struggle of a Christian man who is aware of his minuteness as one of the Almighty’s many creatures, yet strives to accept it as a necessary impediment in his understanding, we can perhaps understand his fits of temper that hinder him from getting closer to God. The striking, fresh quality of the thought paradoxically does not lie in its novelty; at the core of the poem is the double nature of the world advocated by 3rd century Classical and 15th century Italian Neoplatonic philosophies, both of which have been apparent as commonplace influences in Christian thought for quite a while. Platonising philosophies tend to distinguish between a fuller form of existence (a transcendent one which is rid of matter), and a baser, incomplete form of existence, which one cannot escape in the world of matter. All advocates of these thoughts, especially Plotinus, saw the ultimate goal of one’s days on Earth in attaining a glimpse of the wholeness, or the One, without completely shunning material existence; a thought which can also be found in the tenets of Christianity. The juxtaposition of the knowledge of belonging to the spiritual (thus eternal) realm and the limitations of far-removed material/physical existence is a well-known duality; however, the debate on the nature of the physical heavens and the pressing need for the revaluation of one’s surroundings together with the strife for progress give this thought quite another, distinctly new-science-esque hue. The second stanza is the most prominently astronomical in the whole poem:

Although there were some fourtie heav’ns, or more,
Sometimes I peere above them all;
Sometimes I hardly reach a score,
Sometimes to hell I fall. (5-8)

38 Cf. e.g. Plato’s *The Republic* 508b-508c and 621c-d and Plotinus *The Enneads* I.1.1., I.6.5. and I.6.6.
39 The first Ennead warns the reader not to commit suicide solely for the purpose of releasing the soul and attaining the sight of the One; one must not take violent emotions with them and must not hinder their own progress): “But suppose someone contrives the dissolution of his body? He has used violence and gone away himself, not let his body go; and in dissolving it he is not without passion; there is disgust or grief or anger […] And if each man’s rank in the other world depends on his state when he goes out, one must not take out the soul as long as there is any possibility of progress” (I.9.12-15; 17-18).
40 Cf. 1 Corinthians 13:12, among others.
The statement on “some fourtie heav’ns or more” is a quite perplexing one: Wilcox only considers the Biblical idea of more than one heaven, citing 2 Corinthians 12:2: “I knew a man in Christ above fourteen years ago, (whether in the body, I cannot tell; or whether out of the body, I cannot tell: God knoweth;) such an one caught up to the third heaven” (194). The interpretation of this biblical phrase has been one of the questions of comparative theology, however, the number forty does not appear in any of these discussions. There is a variant of the poem which has the number hundred instead of forty – however, that is the earlier one and while the higher number might carry several meanings (mainly the idea of perfection and magnitude), I believe that Herbert had originally used it only for emphasis (for the earlier variant, see Wilcox 192-195). Yet the generic number was changed to a more specific one, thus the phrase might refer to something which might be instrumental in understanding the speaker. The “fourthie heav’ns” are the focal point of the stanza: they are the axis above which the speaker “peeres”; which the speaker can “hardly reach”; and below which the speaker falls “to hell”. The word heaven was widely used in the sense of a “sphere” (OED 4), thus, given the abundance of astronomical metaphors in “The Church” and the general intellectual climate, one can postulate that these “heav’ns” are rather the spheres of the (Ptolemaic) astronomers. The exact number of the spheres in the poem is most likely determined by Aristotle’s Metaphysics, in which the number varies between 47 and 55 throughout the text (1073b1-1074a13) while Ptolemy’s widely used world system traditionally acknowledges nine spheres. It is not quite well understood how and why Herbert uses Aristotle’s system instead of Ptolemy’s – perhaps to accentuate the overbearing nature of the firmament, or perhaps due to a misunderstanding which merged the systems of the two philosophers (lest one forgets, Herbert studied under Francis Bacon in Cambridge, but he also had several other tutors, and his studies never focused explicitly on natural philosophy). The number forty recalls another biblical reference: the forty years of wandering in the wilderness, a tribulation which God afflicted unto Moses and his people (cf. Numbers 14:33-34\(^{41}\)); it might be that the forty heavens allude to the vastness of space the same way the forty years traditionally alluded to the vastness of the desert and the vastness of the sins of the wandering tribes. Herbert’s speaker might not be able to get through these spheres due to his sinful, human “temper” – the one which prohibits him from

\(^{41}\) “And your children shall wander in the wilderness forty years, and bear your whoredoms, until your carcases be wasted in the wilderness. After the number of the days in which ye searched the land, even forty days, each day for a year, shall ye bear your iniquities, even forty years, and ye shall know my breach of promise.” (KJV)
staying above these spheres. Similarly to the Old Testament’s tribes, perhaps the speaker’s journey to fully know God is hindered because of his lack of trust, or his straying away from the God-given focus. The fluctuation of human emotions and allegiances, or more specifically, the fluctuation of one’s faith (which the speaker also expresses in the first stanza in his plea for a constant feeling of adulation) might lead one to stray and get lost – as in The Agonie – in the idols of astronomy or of natural philosophy. It might still be that the number forty should be taken solely a simple tool of emphasis, and that it does not refer either to any of the old or new cosmological systems or to biblical passages. Nevertheless, whether these heavens are the astronomical spheres or the biblical idea of several heavens or of the desert, they cannot be permeated by a minute creature; even if he “peere[s] above”, without the help of God, he eventually falls back under42. Nevertheless, if we imagine God to reside outside of the created world, either in a heaven or in the topmost of the spheres – a more widely accepted view than Him nestling between the planets somewhere or everywhere – there are at least forty barriers standing between the faithful and his God, and that number excludes the earthly realm and the possibility of a hell placed somewhere outside the reach of the forty spheres. Thus, it seems, it is not only the spiritual barrier which alienates the Creator from His creation, but the inherent structure of nature also reinforces this hindrance.

The speaker’s constant failure is due to the disparity between human and divine nature, which is also mirrored in the disparity between earthly and heavenly distances. The third stanza fully realises the “vast extent” (9) which hinders the speaker from expressing himself as well as from being in constant communion with God. The forty spheres, the planet, and hell are all too large for the human imagination to fully comprehend, and even if they were to be acknowledged, the speaker still does not have the means to discern the intricate inner mechanisms of all “natural causes” (as Jewel saw men do), even less to choose to overcome them. Layers and layers of vast distances stand between him and God, and the observer feels “racked” when confronted with them, as he also realises the impossibility of overcoming the distance between a divine and a finite being. Even though the speaker tries to surmount those “heav’ns,” he soon contends that ultimately “those distances belong to thee [God]” (10), and indeed it seems that they do; such human aspirations appear to be even dauntless and vain. It is only God, the Creator who can fathom the expanse of His own creation – how could man, trapped in his immediate environment, who for long centuries

42 In the (later) vein of John Milton’s Paradise Lost (1.254-255), heaven and hell might be regarded as two opposing states of mind; this framework would further emphasize the frailty of human “temper,” yet would not account for the vividly spatial descriptions.
could only see and go as far as the continent, dare reach God when the weight of such a “vast extent” bears down on him? The speaker knows that the world is enormous – the extent of the Earth had been revaluated and rediscovered in the decades before the poem was written, – and there were still yet a myriad of earthly mechanisms to be understood. Yet it is “too little for [God’s] tent” (11), the tabernacle which the peoples of Israel erected for Him (cf. Exodus 36:8-38). Though God’s tent had ritualistic rules, such human building cannot contain the divine being; the whole world (the earth and perhaps all forty heavens) fail to do so, since God is the one who resides in some unknown realm, maybe in His designated space, and who, unlike His child, created these distances, and thus understands them.

Several biblical passages refer to the spatial boundlessness of God; Isaiah 40:12 talks about God’s omnipotent knowledge as an ultimate inventory, encompassing the waters, heaven, earth, and the height of all the mountains – all above, and all below.43

Who hath measured the waters in the hollow of his hand, and meted out heaven with the span, and comprehended the dust of the earth in a measure, and weighed the mountains in scales, and the hills in a balance? (KJV)

Similarly to this, Job 38:1-11 warns the servants of God about the mighty power of the Lord, who set all measurements – incomprehensible to us – before human beings were even created. The vast extent of the world, “foundations, bases, cornerstones, the seas and clouds”, everything above and below were laid out by God, so rightly, those distances belong to Him. Absolute assurance comes from Jeremiah 31:3744, where God deems it impossible for men to “measure” the sky and “search out” “the earth below” – so sure, indeed, that He binds His promise to man’s incapability; shall man measure the heavens or discover the depths of the earth, God shall also break his promise not to “cast off all the seed of Israel”. Perhaps The Agonie warns the reader only to “measure […] Sin and Love,” those two “vast, spacious” things, so as not to evoke the wrath of God. These two cornerstones of Christianity keep the observer on the path of faith. Contemplation on earthly matters is vanity ultimately leads to the faithful to stray and “léese themselves” (cf. Jewel’s treatise). When the speaker of the present poem concludes that “[the world is] a grave too big for me,” he merely affirms that not only is man unable to ascend to the heavens, and not only is God mightier than to

43 Cf. the premise of The Agonie and Vanitie (I).
44 “Thus saith the LORD; If heaven above can be measured, and the foundations of the earth searched out beneath, I will also cast off all the seed of Israel for all that they have done, saith the LORD.” (KJV)
be contained in “the world”, but man is so miniscule that he perceives his own environment as “too big”. The ultimate end to all vain enterprise is death; thus, the poem becomes a *memento mori* for all who attempt, out of vanity, to find their way out of the vastness of their environments.

In order for man to reach God’s realm, he would need to be “stretched […] from heav’n and hell” (13-14). This is in line with the previous stanza, where attaining understanding of God was also compared to torture – this expression moves further by imagining that it would be God who stretches a creature thus. According to Wilcox’s reasoning, there had been only one being who was “stretched” by God, and for whom this act resulted in encompassing the whole world: Christ (195). Bowers goes as far as asserting that Christ’s open arms “encompass infinite distances” (207), since contrary to the speaker, Christ was the perfect man and he already had a perfect communion with God. This picture is expressed in the expression “to meet arms”, which is not necessarily a militant metaphor, nor does it refer to sparring, but rather the image of the open arms of the crucified Christ which man cannot mimic. The acts of “racking” and “stretching” might also allude to another problem of the natural philosophers of the century: the question of contraction and expansion, which is closely connected to the question of vacua in nature. Rarefication and contraction had been questions of interest for most of the Middle Ages, and the physics behind expansion and shrinking were not clearly understood, given that in the Aristotelean world of set physical bodies, matter should remain constant (Grant 73). God is also above these notions, and Herbert’s speaker likely does not refer to the physical nature of such “torture”, but rather its spiritual counterpart. This rarefication is that of the finite soul: in order for the finite creature to reach God, it needs to be expanded to “meet arms” not only with Christ’s sacrifice, but with the infinity of God as well. Setting aside a yet unresolved matter, the persona assigns such capabilities solely to God; how could one’s soul expand on its own?

The crucial question of the fourth stanza: “Will great God measure with a wretch?” (15) thus seems to be answered. Man is simply not capable to obtain the *knowledge* (i.e. ideas which he/she distilled from outward inputs and observations) which would be

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45 The term “meeting arms” is Herbert’s own coinage: Bowers thinks that it implies wrestling rather than sparring or warfare. According to his argument, every person stands as equal in front of God, with the same capability to prove: their faith. Thus the “wrestling match” is a contest of the strength of faith (206). This match, however, would be immensely imbalanced if one were to wrestle with the source of their own faith, i.e. with God.
sufficient to live in communion with, yet alone to understand God, as He understands His creation. Human attempts to “peer above” the spheres are futile not only because the distances and magnanimity are incomprehensible; these are incomprehensible because of our limited human nature. As in The First Anniversary and in the case of the telescope, instruments and aids seem only to destabilise one’s own environment – obtaining knowledge might not lead anywhere primarily because the finite nature cannot integrate the possibility (and the image) of the possibly infinite, or even of the immeasurable. The vast distances in the poem yet again serve as a caution for those who are willing to reach a universal truth by delving into one’s physical environment.

There are other literary scholars who argue that Herbert’s poetry contains some inclinations towards apathy and despair. Strier finds some instances of Stoic “equanimity” and “apathia” in these poems, yet these might only follow the fashion of the era (The Unrepentant Renaissance 52). However, I argue that this train of thought does not lead the speaker into nihilism or despair, but rather to complete submission, and the profound acceptance of human limitations. “For sure thy way is best” (21), he admits after the full acceptance of his state. Even more so when “this [the afflictions given by God] is but tuning of my breast” (23), the divine touch which helps to attune to transcendent knowledge transfused with love. The understanding that everything was made by the hands of the Creator makes it – for the speaker, at least – more acceptable not to know, not to understand the intricate workings of his surroundings. The biblical tradition, seen in Old Testament passages above, also proves the futility of human search in the realm of an unknowable, divinely made universe.

Although Herbert and Bacon were good acquaintances, the former is never really seen to have delved into the particulars of the new philosophy in his writings. Herbert’s speakers are probably only concerned with the effect of this search and the images it evokes, not the particulars and the results. Perhaps the “tent” (11) and “roof” (17) of the world were needed to be built in order to establish a framework for finite human beings, since God “make[s] one place ev’rywhere” (28). The speaker shows some pictures of architectural constructs – the forty heavens among them, as they can also be imagined as the classical concentric structure of the Ptolemaic cosmology – which he tears down in the last line of his poem. The whole poem lures the reader into speculation on the heavens and the nature of God, only to conclude that the desired state is not division and categorisation, but unity; not confinement but the willingness to receive. Ultimately, one does not need to be put on a rack
in order to bridge the enormous distances between God and himself: through God’s “power and love” and man’s “love and trust”, a bridge can be built. Astronomy, and the great distances it creates might be an artificial temple, even an idol of the search for which one needs to wander for forty years (and through forty spheres). The overstructured descriptions of space of the “old science” were already criticised by Donne’s anatomist in *The First Anniversary*:

[man] tears  
The firmament in eight-and-forty shares,  
And in these constellations then arise  
New stars, and old do vanish from our eyes; (my emphasis, 257-260)

Compare these lines with the last stanza of *The Temper (I)*:

Whether I fly with angels, fall with dust,  
Thy hands made both, and I am there;  
Thy power and love, my love and trust,  
Make one place ev’rywhere. (21-24)

In the light of the last stanza, the framework which contains these distances seems to be a human projection: the spheres, the constellations, perhaps the infinity of space and all regularities and patterns one observes might be the result of one’s own imagination. What man projects, devises, draws on the night sky is but their own fancy in the light of the divine sight, which bridges even the largest distances: that between God’s and his creation’s perspective. As in the case of the telescope, the truth value of observation is implicitly questioned, and the human mind is put under scrutiny. One must not forget the fallen nature of man, and also that the fallen intellect may produce fallen deductions. The speaker of *The Temper (I)* is, in a sense, an astronomer himself. Bowers sees the meditation on these distances as a “mental” telescope (203), an instrument through which the observer may “peer” into the immensity of God the same way the astronomer peers into the immensity of space. And if we accept this image, the “temper” of the speaker begins to influence the act of observation, as he uses his own mind as a telescope, and the mind cannot be sharply
distinguished from the emotions one experiences. The changeability described in the first and second stanzas is also due to the finite and fallen nature of man: many Biblical passages refer to the fickle nature of man. Perhaps it is indeed the human “temper” that the speaker experiences: joy and exultation (heaven), depression and disillusionment (hell). To be engulfed in the idea of an unsurmountable vastness only alienates one from God; and though God is infinite, indescribable and greater than humanity in every sense, He is not confined either to His dwelling place above the spheres, or to His tent in the world – He permeates everything. His “stature” cannot be “spelled” in the same matter the astronomers try to “spell” the night sky (cf. “spell” *OED* 2c: “contemplate, scan intently”), because reason and understanding do not apply to God in the same sense they apply to natural phenomena. This, however, is not a proof for alienation, but rather the call for disregarding this human “temper”.

Thus, the persona’s chief concern does not seem to lie in his inability to find the right praise, the appropriate words to describe the omnipotent, omnipresent and fearful Creator, whose qualities the human mind is unable to comprehend. The hardship the speaker faces is rather an existential one: his methods – using contemplation as a “telescope”, likening his relationship with God to warfare, and the ways by which he aims to overcome the distance between himself and the divine – prove inadequate in the face of “such a vast extent” (9). *The Temper (I)*, then, portrays the struggle of a Christian directed by his own desires and erring nature. The human soul seeks guidance to become worthy of God’s grace; it tries to gain knowledge from experience, falls down from the highest of places, and breaks a little, quivering in the face of magnanimity. For the persona of the poem, this struggle encompasses the whole universe, from the realm of the angels to the realm of dust.

As Helen Vendler asserts, the adverb “there” in the last line brings the moment of resolution (40) that the speaker has been searching for. He experiences a mystical union in which God becomes all-permeating, and His love (line 27), not the speaker’s mind is the agent which overcomes boundaries. Experience and observation become insufficient as divine and human love meet, and the structure of the line seems to suggest that the latter had been derived from the former:

Thy power and love, *my love* and trust,
Make one place ev’rywhere. (27-28; my italics)
This love is the catalyst or the bridge through which the vastness between God and man is annihilated, where micro- and macrocosm merge. The word is repeated two times both for emphasis and for signalling the difference between them; it connects the previously unattainable power of God to the frail temperament of man, and it unravels the deeply spiritual nature of all places, and the presence of this love “ev’rywhere”.

**The Fleet Astronomer**

*Vanitie (I)* is perhaps the most expressive of the six texts which feature the image of the astronomer in “The Church” – the speakers of the previous poems assessed the stereotypical figure of the astronomer through the filter of spiritual knowledge, and concluded that seeking for worldly truth only leads to confusion and produces a general derailment in one’s spiritual welfare. The astronomer, however, has not been condemned outright; as *The Temper (I)* shows, human temper in general can produce the feeling of alienation via building illusionary constructs, and although *The Agonie* alludes to the problem, it remains quite subtle in these matters as well. The deduction of the architecture of the sky seems to be inherent to anthropocentric imagination. The ones who seek God might also follow the pattern of the astronomer, as the speaker of *The Temper (I)* did, and think that God might only be attained by being “ racked” by Him, by exceeding the limitations of being human, and by overcoming the obstacle of vastness that the “fou’rtie heav’ns” present. However, as the speaker’s sentiments in *Vanitie (I)* will also show, these endeavours might not be as fruitful as intended; on the one hand, they keep up the illusion of a human-centred world in which not only the constellations, but also God acts according to human standards, confined in the architecture of the mind. These standards arise from imagination and the extrapolation of the structures (architectural and otherwise) that one sees around oneself – and since God is the most High, He resides, as other representatives of power, at some unattainable location. This image is augmented by the sense of His magnitude – God cannot be contained in human ideas of dichotomy as existing inside or outside Creation. Yet these thoughts and imaginary patterns have so far proven to be either unreal or unimportant, and God’s omnipresence (and more specifically, the permeating power of His love) is asserted in both of the previous poems.

The futility of human strife which aims to overcome something which is ultimately not an impediment is the focal point of *Vanitie (I)*. Imaginary constructs and ephemeral goals
are ridiculed in the wittily eloquent descriptions of the speaker. The figure of the astronomer appears in the first line, and his description follows the pattern established so far:

The fleet Astronomer can bore,
And thred the spheres with his quick-piercing minde:
He views their stations, walks from doore to doore,
Surveys, as if he had design’d
To make a purchase there: he sees their dances,
And knoweth long before,
Both their full-ey’d aspects, and secret glances. (1-7)

The speaker continues his enumeration in the same manner: he moves on from the astronomer to the “diver” (yet again evoking the image of the adventurer-geologist, cf. The Agonie), and the “chymick” (or the figure of the alchemist, who somewhat serves as the missing link between the astronomer looking up and the diver seeking the secrets of the deep). John Jewel’s Treatise could yet again be cited at this point, as the horizontal direction following the extremes of the known universe is yet again discernible – it is not only the astronomer, the diver and the alchemist who are trying to “meet arms” with God (cf. The Temper (I)), but the speaker as well. The scope of the poem inherently (and perhaps quite ironically) follows the same grandiose goals that the pursuers of the knowledge of the new philosophy try to attain; by showing the particulars of the different disciplines, he yet again encourages the reader to imagine the process of search, to build a “temple,” an elaborate mental structure, and finally, to tear this structure down in the last stanza.

These three stanzas all paint a dismissive picture of the pursuers of the new science. The “fleet Astronomer” is shown as casting a man-made image on the sky: he “bores” and “threads” the spheres, much like the seamstresses who fashion clothes or embroider an image according to their own fancy and design. The scattered nature of the “spheres” is inherently shown in the metaphor, as it is only the mind of the observer which quite invasively orders them – they are not shown to present a unity or a pattern by themselves. According to Strier, the verb “designed” in the fourth line also implies the imaginary nature of such an observation (Love Known 85); it may seem indeed, for a brief moment, that the object of the verb might be “it”, i.e. “the spheres”. This image is supported by the previous line, which
describes the process as if it happened in a city, on the streets; these are the imaginary architectural constructs the previous poems warned us about, as they project something onto the sky which is not there. In this vein, not only the doors, but the image of a spherical universe can also be put under scrutiny: if man designs the “architecture” of the whole universe, are not the spheres part of that conceit as well? The “real cosmos” does not feature doors or stations, nor does it show yarns of trajectories. The yarn holding the spheres together “look much like strings transfixing the heavenly bodies” (Rickey 63), a common representation of the planetary motions on contemporary diagrams. These diagrams might represent the destructive nature of human intervention in that they are visual representations of the projection of human ideas onto the heavens. The planets move and the spheres exist (if they do at all) regardless of humans tracing their trajectories and boundaries and marring the celestial landscape with threads which physically do not exist. While Donne’s anatomist complained about the astronomers “tearing” (257) the heavens up, Herbert’s speaker sees the problem in tying together something which is naturally not there.

In a quite ironical reading, the astronomer makes the objects of the celestial landscape into his whores. He “walks from doore to doore” (3), an image which Wilcox interprets as a customer walking outside of a brothel, and surveys the women available (308). The speaker indeed prognosticates that the astronomer is to “make a purchase there”, i.e. he is to appropriate the spheres to himself – the image conveys that the act of observation innately contains the right for possession. Without entering a gendered discussion on objectification and appropriation, the sense of the astronomer’s attention moving from one celestial object to another, only staying for enough time to “see their dances”, then moving on to other endeavours implies not only lust, but also gluttony. The planets are not portrayed as the handiwork of the divine creator, and thus their observation and understanding becomes little more than a sport. The aim of the whole process is to tell the aspects (i.e. “the relative positions of the heavenly bodies as they appear to an observer on the earth's surface at a given time” *OED* 4) and the glances (i.e. flickers) of the planets. Thus, the astronomer in the poem only focuses on appearances: trajectories, movements, and aspects. Similarly to a person who frequents a brothel, he would deduce the patterns of the resident prostitutes, yet they will not share their secrets of the depths of the personalities: the astronomer, looking at the night sky, can also note the patterns of the planets, but nothing more. While lusting for knowledge, and gluttonously surveying the ever so different aspects of the celestial motions,
he overlooks the knowledge of an essence, a deep understanding which cannot come from a “quick-piercing” and “fleet” mind.

Does this, along with the previous readings, mean that astronomers are to be condemned, and that the new science does more harm than good? Marjorie Hope Nicolson concluded so in her *The Breaking of the Circle* (100). Yet I agree with John Spencer Hill (32), who rejects Nicolson’s assessment, and deems that Herbert was not to be seen as a reactionary against the new science. Hill rather sees *Vanity (I)* as a reaction against the “self-sufficiency” of astronomy (33), and thinks that Herbert only spoke up against the superficial astronomers, for whom the study of the sky was the only pleasure and aim of their lives, and against those who took astronomy for the key of absolute knowledge. The previous narratives seem to justify Hill’s argument; first of all, it is not only the astronomers who are severely criticised, but all other ardent pursuers of the new knowledge as well. Secondly, the trinity of adjectives assigned to the three “professions” in the current poem also assert a particular type of astronomer, diver and alchemist – these figures are “fleet”, “nimble”, and “subtil”. All these denote the wit, dexterity, and skill of the characters, but can also be regarded in their ironic vein, in which all three adjectives maintain their meaning of “superficial, fickle, and cunning”. Thus it is only those astronomers, divers and alchemists who solely seek a prize that are criticised in the poem. The astronomer wants to submit the celestial motions to his own patterns and images; the diver looks for an unattainable “pearl” (10) in order to win the hand of the lady he desires; and the “Chymick” wants to strip the world naked in order to arrive at full understanding, yet he fails to acknowledge dignity and decency in the process.

John Donne’s *Ignatius His Conclave* is also set against these practitioners of the new science, and it seems that yet again a parallel arises between the sentiments of the two authors: the *Ignatius* also condemns only those who are so engulfed in attaining absolute knowledge by the use of the telescope and the discernment of the heavens that they cannot see their soul withering in the process. It is a narrow-minded approach to knowledge, not the new science which is criticised here. To illustrate one of the possible sources of this mindset, Wilcox (*Poems* 307) cites a passage from Augustine’s *Confessions*: “men go on to search out the hidden powers of nature (which is besides our end), which to know profits not, and wherein men desire nothing but to know” (10.55). However, John Jewel was a much more immediate source to the thoughts that the last stanza of *Vanity (I)* articulates:
What hath not man sought out and found,
But his deare God? who yet his glorious law
Embosomes in us, mellowing the ground,
With showres and frosts, with love & aw,
So that we need not say, Where’s this command?
Poore man, thou searchest round
To finde out death, but missest life at hand. (22-28)

The “fleet astronomer,” as the irony of the last line demonstrates, cannot see that real knowledge only comes after death and that imminent salvation is within reach. Jewel’s words echo in the question of the 26th line, who said that

Yee enlarge and lay out with many wordes, how harde a matter the knowledge of the Scripture is, and meete onely for a fewe learned men. You say the Scriptures are harde, who may open them? There is no evidence or triall to be taken by them: they are fit onely for a fewe learned men, they are in no wise fit for the people. Thus saide Iulian an Heretique.

But God himselfe, and the auncient Fathers of ye Church said otherwise. God saith in Deuteronomie,

Deut. 30. (sic)

this comandement which I commande thee this day, is not hid from thee, neither is it farre of. It is not in heauen that thou shouldest say, who shall goe vp for vs to heauen and bring it vs, and cause vs to heare it, that wee may doe it? (207)

This form of knowledge cannot be attained by studying the telescope and mathematical tables, or by calculating planetary motions. Even though man can become almost prescient through these calculations, as he becomes able to predict the images one may see on the sky, yet for the speaker, foreknowledge, worldly riches and a thorough understanding of nature do not seem to be quite so appealing. Ultimately, the end of all search should be God’s love, who provides all that is observable; instead of looking for the ephemeral objects and material laws in nature, one should “survey” the secrets of “his deare God”. The last line reasserts the dichotomy of worldly and spiritual knowledge: while the former brings “death”, the latter means “life”, which is equated with God’s love, also inherent in all corners of the world. It
is a “law / [which] embosomes us” (23-24), superior to the fragmented and specific laws of one’s environment. And since He is life itself, God’s law applies to humanity not only in this existence in matter, but even after death, while the laws of the world might be altered and definitely cease to exist after one’s death. God’s law thus cannot be derived solely from the superficial knowledge that the study of the world provides – it comes naturally, and it is to be understood by the soul rather than the intellect.

**Breaking the Spheres**

Helen Wilcox asserts that “though referring indirectly to astronomy [...] and to theological argument, the poem’s [Divinitie’s] chief source is biblical, as asserted in the straightforward Gospel commands in line 17-18 (Matthew xxii 37-40; xxvi 41; vii 12)” (468). In her edition of the poems, line 17 and 18 are indeed in italics, stressing their centrality in an almost proverbial manner. However, Wilcox does not assert which edition of the poems stresses these two lines such, and whether this typographical highlight was only later added to the poems, or already existed in the original manuscript. However, page 128 of the 1633 edition (which may be taken as the first printed edition) shows that the italics appeared in the original conception as well – whether through authorial or editorial decision is impossible to conclude. As the two lines paraphrase biblical commands, it might well be that they are only part of the printing tradition which distinguished the words of the Bible from other, worldly texts by printing them in a different font. However the typography was conceived in the author’s mind, the source of the text is definitely biblical, yet its focus, I argue, definitely tends towards the astronomical. The image of the astronomer is not directly described, however, the whole narrative weighs on the false images (even idols) the observers create. The focal point lies in the dichotomy of obscurity and clear understanding, “darke” and clear knowledge. Along with *The Agonie* and *Vanitie (I)*, the current text also prefers spiritual experience over mundane understanding. Richard Strier even goes as far as asserting that the poem is an outright attack on reason (*Love Known* 45). I believe that the main problem in the text lies yet again in artificial and thus obscure human constructs, the patterns on the sky that one claims to discern. The poem opens with the following, openly ironical statement:

“As men, for fear the stares should sleep and nod,
And trip at night, have spheres suppli’d;
As if a starre were duller than a clod,
“Men” are yet again accused of conjuring false, self-centred images. In the Ptolemaic system, the spheres were the concentric “containers” of different qualities which held up the different realms of the universe. In Christian thought, the problem of the spheres had been a topic of discussion for a while (cf. Grant 178-179), since the maintenance of such a perfectly ordered system took considerable effort after the understanding and discovery of “irregular”, non-spherical celestial motions (Crane 28-30). By the time Herbert’s poems were written, however, the Ptolemaic system had already been in decline for almost a century, which did not entail that it still did not have several followers. With several emendations and intricate geometrical and mathematical calculations, the Ptolemaic system was managed to be maintained. However, Herbert’s speaker does not seem to be preoccupied with the specifics of the impossibility of a spherical universe; he rather ridicules the image of an anthropocentric universe, in which human constructs hold up the stars. The stars are not “dull” per se, but part of the divine creation, in which each participant has its allocated place and purpose. In *Man*, these very stars “have us to bed; / Night draws the curtain, which the sunne withdraws” (31-32) because the world is ordered such, not because men made the stars into their own attendants. It is the vanity of these “men” (the astronomers and their followers) to assert that they are the ones who constructed the whole universe, since they do not have any proof of the actual existence of the spheres, and, more importantly, do not have the sufficient faith to trust that the positions of the stars on the firmament might be maintained by other means than those one experiences on earth. The universe of Herbert’s speaker is anthropocentric not because men fashioned it such, but because of the care and grace of God. These men also seem to take the stars to be “duller then a clod” (3), i.e. they imagine them needing the directions, trajectories and “sewing” (cf. *Vanitie (I)*) in order to change their locations. A “clod”, a man of not too high intellect (OED 5) also “knows his way without a guide” (4) – if God gave a dull man the sufficient authority to be autonomous, who are the astronomers to take away the self-sufficiency of the stars?

This fragmented understanding is criticised in *Divinitie*, and its application to “the other heav’n” (i.e. the transcendental heaven as opposed to the worldly heaven, the sky; the seat of God) proves to be the ultimate and most fatal conceit. “Reason triumphs and faith lies by”, concludes the second stanza, which seems to be the ultimate condemnation of those who neglect their faith in order to attain mundane knowledge. However, one must not forget
that the subject of the first stanza has been “men”, and not “astronomers”; thus it would be false to claim that men, a general subject, entails astronomers, a specific group of subjects. It is rather important to claim, however, that the speaker does not solely focus on astronomer, but on all men who became so engulfed in the tenets and methods of reason that they start to apply these logical albeit constructed systems onto matters of faith. The similarity between Donne’s anatomist and Herbert’s speaker can yet again be traced, this time in the anatomical metaphor of the second stanza: “Divinities transcendent skie: / Which with the edge of wit they [i.e. men] cut and carve” (6-7). The statement, when applied solely to the astronomers reads as follows: “these people try to apply their methodology to the nature of God, and to faith; they think they know so much as to construe spheres, trajectories, to segment the sky and draw maps of what they see. They fashion everything according to their own methodology”. However, when applied to “men”, the reading of the sentence is altered as follows: “men generally tend to believe in an anthropocentric universe, i.e. that one’s environment operates according to human standards, needs, and customs. Because of these false ideas, they tend to fashion their own faith according to their own ideas, and not according to God’s; they rely on their own reason, which is mundane as opposed to ‘transcendent’ (line 6)”.

The spheres are described as human constructs, which implies the fatal anthropocentrism of both the astronomers and men of the “old science”, who err by being confined to the structures of their own mindset. The stars need not be guided: they are not a simpleton (a “clod”). Why would stars, which are certainly closer to the transcendent realm than our created and corrupted world, need supplies designated to them by human hands, human measurements, human ideas? The realm of the stars – whatever and wherever that is – might not confine to earthly laws, implies the speaker of the poem, and even in his sarcasm, he touches upon quite an important phenomenological subject. Does human perception intrinsically alter all observed phenomena? And if one is so prone to their own constructs, is it foolery to observe and discern? The phrase “just so” at the very beginning of the second stanza implies that, as explained in the first four lines, it is only the self-centred mental frame of man which “cuts and carves” (7) something which is as out of comprehension’s reach as

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46 Incidentally, this is also a metaphor which evokes the very mundane act of butchering an animal and/or simply purchasing meat from a butcher.
God’s nature is\(^ {47} \). As mentioned earlier, the metaphor alludes to the obsession with dissection starting from the second half of the 16\(^{th} \) century in Italy, which swept swiftly across the continent, resulting in an even more pronounced interest in previously unobservable phenomena. To accentuate its influence, in 1609 these ventures culminated in the invention of the microscope, while in 1628, Harvey’s findings of the circulation of blood were published in Latin (although in lieu of an exact date of writing it is impossible to tell whether Herbert was familiar with the latter idea at all). The workings of nature were tirelessly sought; Pliny’s *Naturalis Historia* was translated into English in 1601, and detailed etchings became more and more available for those interested, among them Edward Topsell’s bestiaries in the first decade of the century, though Hooke’s *Micrographia*, the most comprehensive and most innovative of all such atlases, was only published in 1665, after Herbert’s death. Thus, by the time *The Temple* was published in 1633, the extent of such anatomising, detail-centred knowledge might already have appeared an uncanny and perverse epidemic, since anatomical theatres were fairly widespread, quite well-known, and often fetishized. Though the Book of Nature provided one with knowledge on God’s works, the methods of the new science deviated from the allocated pattern, and highlighted the shortcomings and discrepancies of the Book (Harrison 15-20). Dissection and systematising threatened only with confusion and dissolution. In close connection to anatomising ventures, the faculty of wit seems to be the central concept in *Divinitie*; it is with wit’s edge that men dissect both heavens (7). This seems to imply two distinct notions of knowledge: the original 13\(^{th} \)-century reading of the Book of Nature in accordance with the Scripture (Harrison 70-73), and the 17\(^{th} \)-century keen thirst to understand the inner workings – not to know God, but to know *nature* and *phenomena*. Naturally, the process had been a gradual one; but as the new notion of an observable and knowable universe became more and more prominent, so new methods, such as Galileo’s mathematics-based one in *The Assayer*, begun to appear.

Curiosity, in itself, is not a sin; the teachings of the Son of God had also aimed at knowledge acquisition. Jesus answered and welcomed all questions; he entered in dialogues, explained complicated notions. He infused the wine – his blood, the communion between man and divine – with knowledge (9-10), yet his “doctrine” was, and still is “cleare as heav’n, from whence it came” (16). The sermons of Jesus are the proto-examples of the

\(^ {47} \) Cf. the often-cited warning in Isaiah 55:8-9: “For my thoughts are not your thoughts, neither are your ways my ways, saith the Lord. For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts” (KJV). Despite this warning, both theologians and astronomers strive to analyse each part of the transcendent realm.
Christian aspiration for knowledge; they concern earthly matters in a transcendent light. This transcendent aspect is exactly what is contrasted with the mindset of the new pioneers; they forgot that while reading nature, they ought to seek answers with divinity in mind. The wit of these seekers did not only “cut and carve” the transcendent realm, but it was the same “wisdome” which “jagg’d [Christ’s] seamesse coat.” This picture of ornamenting an otherwise plain garment is a picturesque representation of the previous idea of men projecting their own patterns onto the sky. These patterns may correspond to human ideals, but Christ’s garment used to be “seamlesse,” a unified whole, not something which needed to be cut, or, as Vanitie (I) asserts, “threaded” (2). The knowledge which God offers is not neatly catalogued. It is quite simple and clear, “as dark as day!” (19), and it is only the vanity and eager curiosity of men which tend to overcomplicate things. However, definitions, questions and divisions led to the defilement of a unity. Jagged clothes were also quite popular in early modern fashion (Wilcox Poems 470), thus the speaker may also pass judgement on his contemporaries, who get lost in fashionable ornaments, and get lost in the maze of patterns both in terms of their clothes and in their equally fashionable pursuit of knowledge.

Yet the speaker of the poem goes as far as presenting the quintessence of his preferred form of knowledge as a triad of perhaps the most often cited Biblical statements: “Love God, and love your neighbour. Watch and pray. / Do as ye would be done unto” (17-18). This trinity is declared to be the absolute basis of human existence; the stripped and naked essence of life. These are the plain answers to the “Gordian knots” (20) of the new century. Continuing his ironic tone from the first two stanzas of the poem, the persona then describes these simple statements as “dark instructions; ev’n as dark as day” (19), unsolvable, beyond comprehension. This mockery shows that similarly to God’s creation, God’s Word also need not be overcomplicated and overanalysed by flawed human intellect, which cannot transcend its own boundaries. The Blood of Christ saves (21-24); the Word of God tells us everything we need to know (cf. the previously cited passages of John Jewel’s Treatise). Try as one might, the intricacies of Creation are never to be untangled (as opposed to the Gordian knots of man’s intellect); it only keeps the mind preoccupied and takes away from divine contemplation and service to the Lord.

What shall men do then? The answer is as simple as the triad of commandments mentioned previously. Yet this imperative might prove to be more complicated than it first appears. The casting away of the epicycles had already begun with the introduction of
unstable spheres, and the appearance of the Copernican idea of the universe – all almost eighty years before the poem was written. The idea of a heliocentric universe emerged partly because the Ptolemaic construct proved to be too intricate, and overly calculated; the courses of the planets and the “fixed stars” could not be sufficiently determined by maintaining the perfect, circular motions. Disposing of the spheres is a natural consequence of the disbelief in epicycles: with the total revaluation of heavenly orders, the carefully constructed spheres become redundant, yet the ideas of the “old philosophy” still appear in Herbert’s poetry. So the one who believes in the saving powers of the Blood of Christ is instructed to erase all this and trust the Lord, however, the most pressing question stands: what remains after? On an intellectual level, quite possibly utter confusion, and the centuries-long guessing game. However, to dispose of all intellectual and bodily crutches (cf. the quite surprising “staffe of flesh,” an oxymoron in the penultimate line) and mental images also enable faith to truly become a guiding principle. True to the premise of the poem, there are no further guidelines as to how exactly one may attain faith, how to love, and how to watch and pray. Yet the speaker does not seem to be quite as concerned with these questions; instead of reason and discernment, the focal point of the universe becomes “faith alone”, the inspired capacity of the soul, the transcendent touch in the human frame, which finds it way, without the confines of the intellect, not to the stellar realm, but to true heaven.

The Search for God’s Space

The last of the five “astronomer-poems” in my selection, The Search somewhat alters the tone, and I argue, the character of the speaker. The text is written in a form of a lament and a prayer, in the first person singular, directly addressing God in the second person. Compared to this, only one of the previous poems, The Temper (I) has God as its addressee. Other addressees in the previous poems were all human: the general “them”, as in The Agonie; “man” and the three pursuers of worldly knowledge in Vanitie (I); and “men” along with the general “you” in Divinitie. These three pass judgement on the practices of the “astronomers” in a broadly defined sense, while The Temper (I) and The Search both highlight a shortcoming of the speaker himself. It is as if the astronomer himself would speak in these poems, while the previous three are texts which speak about the astronomer – the main difference is between the perspective of the sinner and the perspective of the pastor. The perspective of the sinner is also prominent from the lines which condemn the speaker’s previous practices. In The Temper (I) the speaker tried to employ the astronomers’ tools in his search for God, and approached the vastness between him and God as an observer would
approach the planetary motions on an especially cloudy evening. His pleas were concerned with his own inability to bridge the distance between God and him, although by the end, God’s love convinced the observer to cease his telescopic observations, and acknowledge that God is not somewhere far away, above the spheres, but everywhere.

*The Search* also seems to be written from this perspective, and Herbert uses quite a few astronomical metaphors yet again to stimulate one’s imagination, and through these mental images, convince the reader to imagine God as an entity in the sky whose face is hidden by the “eclipse” (31), the stars as keyholes to heaven (15), and regard the whole experience as being encaged by the immensity of the distance between heaven above and the earth below (49-50). This poem is in one regard the ultimate conclusion to all previous narratives; these sixty lines describe absolute alienation and the futility of seeking God anywhere, with the last stanza describing the ultimate effects of His love.

God is looked for explicitly in “the skie” (5), and nowhere else. The feeling of an immeasurable distance between the speaker and God naturally spurs him to imagine the one place God had fled where he cannot ever follow. The sky could mean the transcendental realm of heaven (cf. *OED* 4), however, the poem likely features the noun in both its primary and secondary senses: God might be above the spheres, somewhat physically in the sky; and he might be in heaven, if taken fully in its transcendental, non-locational sense. With his “eies”, however, the speaker is most likely to search for God as he did in *The Temper (I)* – by contemplating the structure of the universe, and by trying to read the Book of Nature. His first detailed description of his failure comes in the following three lines:

And yet the sphere
And centre both to me denie
That thou art there (6-8)

These lines above, however, do not concern the “new philosophy”, but refer to the “old” Ptolemaic system, in which the centre was the Earth, surrounded by spheres, among which the uppermost (crystalline one) was usually equated with God. The speaker, then, is not lost in the new heliocentric system, but fails to read God’s presence in his surroundings in the old one. Hill argues that the stanza explicitly concerns “the Cusaean paradox of the infinite sphere” (33), and the speaker’s “search” is directed towards the understanding of the
centuries-long statement on the nature of God. In Hill’s argument, God is the entity in whom “East and West touch, the poles do kisse, / And parallels meet” (43-44), precisely because the speaker is still in a geocentric world. The Cusaean paradox originates from a 6th or 12th-century compilation on God’s nature, written by anonymous authors. In the Liber XXIV Philosophorum, or the Book of the 24 philosophers, the second statement reads as follows: “Deus es sphera infinite cuius centrum est ubiquae, circumferentia vero nusquam,” which is conventionally translated as “God is an infinite sphere whose centre is everywhere and whose circumference is nowhere”\(^48\). Although the text seems to follow the hermetic tradition, its influence is undeniable\(^49\), especially considering the afterlife of the second statement. Grant argues that the sentence maintained the name of the “Cusaean paradox” precisely because it was Nicolas of Cusa in the 15th century who applied the statement to space (139). However, he also asserts that the above statement and Cusa’s ideas were never explicitly transferred to scholastic/geocentric discussions of space, as the philosophers were rather concerned with an extracosmic void space beyond the world (140). Hill might stretch the boundaries of interpretation by applying a paradox which was not explicitly used to Ptolemaic spatial depictions, since the appearance of the words centre and sphere does not immediately entail that the poem refers to infinite centres and infinite circumferences. The later section on the meeting of parallels also does not convince me to consider the Cusaean paradox, or any of the theologico-scientific ideas of the age. The fusion of opposites and parallels only entails the might of God, from whose perspective nothing is impossible, since His will is without any constraints. Hill, however, is right when he asserts that the speaker is “abandoned not in the infinite reaches of the Copernican space, but in the closed cosmos of the old astronomy” (34). This speaker, still in the “old world”, is as concerned with the vastness of space as his “more modern” contemporaries were. The example of Herbert’s speakers shows, then, that vastness does not equal infinity, and the uneasiness resulting from the exploration of space is not directly connected to the new cosmology, but rather to the new methodology of the age.

\(^{48}\) The Liber does not yet have an official printed translation, however, Markus Vinzent’s website has the most thorough online English translation available: [http://markusvinzent.blogspot.co.uk/2015/02/liber-xxiv-philosophorum-book-of-24.html](http://markusvinzent.blogspot.co.uk/2015/02/liber-xxiv-philosophorum-book-of-24.html) (accessed on Oct 20 2017).

\(^{49}\) One of the most prominent appearances of the thought is in Dante’s Divine Comedy, where in the last canto of Paradise the Holy Trinity is depicted using the same metaphor of the centre and its circumference. In Durling’s poetic translation the text reads as follows: “In the profound and clear Subsistence of the / deep Light I saw three circles, of three colors and / of one circumference, / and one seemed reflected from the other like a / rainbow from a rainbow, and the third seemed / fire breathing equally from both” (Durling, Canto 33; 115-120).

In Singleton’s prose translation we read “magnitude” instead of “circumference”.

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So far the speaker’s reaction is quite similar to that of Donne’s anatomist, who is as fazed by the “old” Ptolemaic space as he is by the Copernican one:

We think the heavens enjoy their spherical, 
Their round proportion embracing all, 
But yet their various and perplexed course, 
Observed in divers ages, doth enforce 
Men to find our so many eccentric parts

[…] 
And in those constellations arise 
New stars, and old do vanish from our eyes (251-255; 259-260)

The general feeling related to the sentiments above is that one may never know anything for sure. The mental constructs, or “vanities” of men may only lead to illusions, an overly anthropocentric universe, which is constructed by the human observer, and not created by God. Spiritual knowledge might have been attained in the “old system” by reading the Book of Nature and following the doctrine of signatures, however, there is an underlying sense that these, too, are only vanities and mental constructs. Originating from medieval thought and persisting until the first few decades of the early modern era is the idea of the “two books” which one must read in order to see the empirical world and the world of Scripture as a unity.\(^50\) The speaker’s problem, then, is not the unravelling of the paradox nature of God, but His absence from a world which should, in each and every part, reflect His presence. Yet the speaker knows that the problem lies in his own perception of nature, since he says the following:

Yet can I mark how herbs below 
Grow green and gay, 
As if to meet thee they did know, 
While I decay.

\(^50\) On the particulars of the relationship between the new science and the Book of Nature, see the previous chapter and the Introduction of Peter Harrison’s *The Bible, Protestantism and the Rise of Natural Science.*
Yet can I mark how stares above
Simper and shine,
As having keyes unto thy love,
While poore I pine. (9-16)

The third and fourth stanzas are focal to the argument of the poem: on the one hand, they prove the idea that the fault is in the speaker’s perception, not in nature per se; and on the other hand, they showcase the same horizontal direction (accentuated by the use of alliteration and parallel structures) that the previous poems so often criticised. The speaker looks down, below his feet, and he sees the herbs, which are also bearers of the divine plan through the doctrine of signatures. Through their transcendental connection, according to Paracelsian medicine, they might even serve as an ailment for human beings. These herbs are depicted as lush and thriving precisely because they somehow “know” that by growing they meet their divine creator. The lines may offer two (interrelated) interpretations: firstly, that the plants grow because they know that they are part of the Book of Nature, and thus they fulfil their specific purposes; and the second interpretation is more in line with Hill’s argument, namely, that these plants grow happily because they somehow feel that God, in His infinity, is amongst them – that nature is infused with the presence of God. This presence or purpose, however, is not felt by the speaker, and he “decays”. He is, ultimately, condemned to observe from the outside due to his inability to integrate himself into the organic unity of God’s creation. After this observation, the speaker looks to the sky, and sees the pure light of the stars, as if they were bathed in the divine light; or, moving one step further, there is a sense in the stanza which may see the stars as small “keyholes” through which the speaker may peer somewhat beyond the firmament, and see glimpses of the divine light that he cannot attain otherwise – a sentiment very similar to the narrative of The Temper (I). He can only “pine” at the light, but cannot decipher it. Even though he (metaphorically) observed all corners of the world – the things below and the things above – his observations were not conclusive; these two stanzas refer, albeit very sketchily, to the previously described attempts of knowledge acquisition.

The returning of the speaker’s sighs, Wilcox observes, are quite close to the descriptions of Noah sending out a dove after the Flood (Poems 558). These pleas are to no avail perhaps because there is a “new fabrick” (25) made, a new creation, a new world with
its new inhabitants. So far Herbert’s speaker had not dwelt on the possibility of multiple worlds, though the idea was a quite popular one starting from the rumours surrounding the telescopic observations of Galileo in 1609. Lunar travels and different descriptions of multiple worlds were produced, and though Francis Godwin’s later, more prominent *The Man in the Moone* was only published in 1638, Kepler’s *Somnium* had already appeared and influenced English fiction by the time Herbert’s poems were written. Giordano Bruno, who spent some time in Oxford and London around 1584, was also a great advocate of the idea of “innumerable worlds”, and his ideas were greatly disseminated in England (Campbell 114). Perhaps influenced by these narratives, Herbert’s speaker imagines that God’s “presence” and attention are occupied by the new inhabitants of a new world, which is quite an unexpected resolution to the problem of His absence. Based on theological arguments, the speaker might have imagined that God forsook his creation because of anger, disappointment, or as a punishment; or, as Donne’s *The First Anniversary* asserts, because of the trespassing of men. Yet the first thought of the speaker is to turn to a different creation – perhaps the idea that God would abandon his creatures did not comply with the idea of God’s infinite love. Or perhaps the text tries to lure us again into the idea that when God *seems* far away, He truly *is* far away; the exact location, whether above the spheres or in a different world does not seem to be of importance, but the vastness of space between His location and man’s is focal. God’s face is “eclipsed” in the next stanza (31). Eclipses, one must not forget, happen from a relative perspective; when the Sun is eclipsed, it is only due to man’s relative position on Earth; God’s face is only hidden from the point of view of the observer. This image yet again raises the question of the mental structures one projects onto the sky, and onto one’s surroundings in general.

Metaphors of the geometrization of space appear in the last six stanzas, I believe, not because the speaker needs to make sense of the cosmological systems and the resulting mathematical/physical concepts, but because empirical knowledge, as seen in the previous poems as well, tends to “intrench” (37) the seeker, and creates an unnecessary and man-made vastness (distance) between God’s love and the observer. Though God’s ways are not our ways (cf. Isaiah 55:8-9), and his will “passeth thought” (38), it does not pass the capacities of the soul. Though it is true than God’s perspective is so far removed from the human one that human concepts of physicality and geometry do not apply,51 and this could

51 “Thy will such a strange distance is, / As that to it / East and West touch, to poles do kisse, / And parallels meet” (41-44).
make all human conceptualisation into nought, the “barres [and] lengths” (49) might not be the result of the closed Ptolemaic space, as Hill argued (35). The speaker never mentions – not even on the level of allusion – the “new”, eighty-year-old concept of the Copernican universe, which would offer the possibility of an open cosmos and the relativization of lengths he desires. Not that the open cosmos would draw the observer closer to God; the universe would still remain immense (as Copernicus believed), if not infinite (as Bruno asserted). These stanzas do not point to the spheres and the cosmos, but rather to the “barres” of one’s own mind. All maps of the sky, as well as the maps of the earth are a result of human categorisation and observation; and though we, as 21st century readers know that this categorisation might prove quite useful in everyday matters, for the speaker they take away the simple assurance with which God’s love should be accepted. That God cannot be seen in nature and on the sky does not entail that He is away; it only entails that the observer fails to see Him. Thus when, in the last two stanzas God “turns” (53) towards the speaker, he experiences the ever-permeating closeness, a form of mystical union, in which “two [become] one” (60). Strier’s assertion is quite correct when he says that (Love Known 238): “mercy, not physical closeness, is what brings God ‘near,’” but paradoxically, the speaker must end his search in order to attain this mercy. As long as he tries to find God in the vastness of his surroundings, in the categories and patterns of the empirical mind, God is going to evade him. It is in the unconscious growth of the plants and the natural twinkling of the stars that God can be found; He is where His love is accepted.

The physical reality of one’s surroundings cannot be disregarded. The uncertainty of the images shown by the telescope remain as part of the discussion as the spherical structure of the previous cosmological system does. However, ultimately each structure that one projects onto the sky and onto their surroundings, the patterns and the architecture that one discerns from their empirical observations are innately human. The true “church”, the structure that Herbert is trying to build with his poems (which serve as its bricks and cornerstones), is God’s love. In contrast to this, the astronomers strive to build a new “church” in the sky, a construct which engulfs and occupies the imagination and energies of the observers. However, what Herbert’s speakers point at is that these constructs, as well as the inner constructs of Herbert’s poetry, are all products of human imagination, and the final lines almost always negate the imagined buildings and the deductive, logical expectations of the mind. The temple that the astronomers build is vanity, and in this sense, Herbert can be seen as an iconoclast, disregarding not the icons of the church, but the icons of the mind.
Vastness here is not explicitly linked to infinite spaces of the Copernican cosmological system, but it is a result of the categorisation and analysis of one’s surroundings. The new methodology and the never-ending thirst of knowledge both help in the construction of these false architectures not only on the night sky, but also in one’s soul. These are the structures which alienate God from man, and emphasise His unattainable, transcendental, far-removed aspects. Herbert’s speakers show that these human images cannot be compared to the transcendent structure of God’s love, which is communicated through the sacrifice of Christ, beyond all human constructs.
### IV. Scrying Atoms: Henry More’s Trust in Knowledge

**An Invocation of Infinity**

Henry More is known as one of the most well-connected figures of 17th-century England. His most famed correspondents include René Descartes and Robert Boyle; his influence on Isaac Newton’s conception of space is the topic of several papers.52 While conversing with these influential thinkers from England and from the continent, More had also been quite prolific in his own endeavours for almost four decades. And although his *Democritus Platonissans* (1646)53, the main subject of the current chapter, is only a brief digression in the overall narrative of his oeuvre, both its implicit and explicit treatments of knowledge acquisition purport a unique intellectual achievement. The poem’s programme failed to subsist in its original form, perhaps due to More’s later (and quite forceful) rejection of his own tenets. Yet I argue that the *Democritus*’ methods54, in the intellectual context of its time, stand as a viable alternative to the empirical approach. Although the method of the *Democritus* will fall in line with what the poems of the previous chapters advocated, the analysis does not claim that there was a unified methodology or framework in which these speakers operated. Moreover, what one sees in the *Democritus* might not fall as far from the post-Newtonian worldview as one would first believe, however, the aim of this chapter is precisely to focus on subtle differences and their metaphysical implications.

Through charting the infinity of space, the speaker of the poem ponders both on specific physical phenomena (e.g. the constitution of the meteors’ tails: “Meteors are routs / Of wandering starres,” 84.7-855), and their universal consequences. The constant shift between wide and narrow focal points allows the speaker to constantly (re)evaluate his musings. His method easily accepts the possibility of error, and this acceptance is a vital link

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52 This influence has been largely limited to Newton’s early definition of space as God’s *sensorium* in the past ten years. See e.g. Henry, J. and Mcguire, J. “Voluntarism and Pantheism: the Sensorium of God and Isaac Newton’s Theology”. *The Seventeenth Century*, 2017, pp. 1-26, which examines the layers of meaning behind Newton’s *sensorium*, an often-debated quasi-neoplatonic concept which he formulated before the *Principia*; Jacquette’s “Newton’s Metaphysics of Space as God’s Emanative Effect.” *Physics in Perspective*, 16.3 (2014): 344-370, which deals with the same concept; Gorham’s “God and the Natural World in the Seventeenth Century: Space, Time, and Causality.” *Philosophy Compass* 4.5 (2009): 859–872, which contextualises Descartes’ tenets in the light of More’s and later, Newton’s understanding of causality, arguing that the latter was influenced by “Gassendi and More” (868). See also Jasper Reid’s *The Metaphysics of Henry More* (2012), where More’s relationship to Newton is one of the focal points throughout the book.


54 The title of which is already a juxtaposition of the materialistic and the transcendental realms, the Platonising and the Cartesian philosophies, which I’ll analyse later in the chapter.

55 I use the following indication of passages throughout the text: [stanza].[line number(s)].
between the so-called “non-scientific” and “scientific” methodologies. Due to the text’s intrinsic need for revaluation, often even verification of its statements, the “non-scientific” nature of this poem is destabilised, even denounced through meticulous reading. When, in the first five stanzas, the speaker explains and then immediately disproves his ground for writing (and then starts again), he may appear to the reader indecisive at best, a dilettante at worst. He is similar to a “silver trumpet” in that he becomes empty once he has served his purpose: “for ‘tis of force and not of a set will” (4.1). The poet as a medium transmitting divine inspiration is an overused fallacy; here, however, the speaker highlights a crucial methodological concern which justifies his attitude:

   Ne dare my wary mind afford assent
   To what is plac’d above all mortall skill (4.2-3)

These lines align with the previous poems’ sentiments in that an absolute “opinion” (OED 4) or “proposition” (OED 5) cannot be passed on the matters concerned. Both sensory and mental impalements overshadow the quest for singing “th’ infinitie … of Time, of Space” (4.6-7), and the speaker asserts his humility before attempting to examine the transcendental design. I argue that his strife for the truth is irrevocably transparent and honest at all stages of its development; moreover, his method is akin to the one behind general empirical enquiries in that the speaker constantly questions his own assertions. Throughout the course of his analysis, the speaker examines different theories related to the exact meaning of infinity in connection with space and time. He lists several paradoxes, which then he aims to disprove using deduction. Nevertheless, the speaker is often overcome by awe, and in those moments the mind “sayes and unsays, do’s she knows not what” (46.5). That Henry More was also willing to revaluate his own ideas is also apparent from the following example: the 1647 edition of the Democritus starts with the rewritten ending of Psychathanasia, the original of which condemned, with a prophetic zeal, all those who claim the infinite extension of the physical universe. Similarly to his fellows both in philosophy and in the empirical sciences, both the speaker and More are constantly questioning, moreover, are ready to refute their erroneous statements when a more feasible alternative appears.

However, unlike the implications of the previous two chapters, the intellectually untamed mind is taken as a vessel for divine inspiration. Even before it displays its findings, the poem surprises by negating Jon Jewell’s idea that “the knowledge of these things is harde, it is vncertaine” (209). The speaker seems to remain wary of the limitations of the human mind and the unattainable entirety of knowledge – clearly articulated three years later by More in his letter to Descartes –, yet takes the argument for infinity to be an inspired act, not an act of vanity. While Jewell asserted that “fewe are able to reache [an understanding of natural phenomena]. It is not fit for euery man to vnderstand it” (ibid.), but More’s speaker seems to wholly disregard this mindset. The speaker lets his thoughts wander in and out in the “spacious room” of the mind (cf. stanza 1), and uses the conceit of an inspired epic to enable himself to freely express his thoughts and doubts, without the anxiety resulting from the impossibility of full transcendental understanding. He does not “dare […] afford assent,” and does not present his opinions as if they were truths: his arguments are always displayed as the results of deductive reasoning, thus, there is a possibility to attack or disprove them. His “To the Reader” plainly makes this disclaimer:

I onely make a bare proposall to more acute judgements […] For mine own part I must confesse these apprehensions do plainly oppose what heretofore I have conceived; but I have sworn more faithfull friendship with Truth then with myself. And therefore without all remorse lay batterie against mine own edifice.57

It is perhaps because of his apprehension against publishing too bold claims, or perhaps stemming from true humility, that a paragraph later this speaker calls the Democritus a “discussion,” and the instability of his observations and his thoughts is expressed his statement that he “cast in many correctives and coolers into the Canto it self”. Thus, the very beginning of the poem already shows an inclination towards the empiricist mindset in that the hypotheses it displays are required to be verified. In lieu of objective verification, all ideas expressed in the poem remain on the level of “proposals,” which, albeit possibly right, are still not to be displayed as irrefutable, divinely inspired statements.

The factors which, in the course of the five years between the two poems, led More to reconsider the infinity of space yet again are not to be discussed here. Perhaps it was his quest for the truth that he so readily refuted (for the second time) his claims concerning the infinity of time and space. As the biographical causes of this shift are not instrumental in the

57 I regard this as a paratext: the identity of its speaker is unclear, as it is halfway between the biographical author and the speaker of the poem.
general argument of the current chapter, neither will I attempt to unravel the development in More’s (or his respective speakers’) perception of transcendence and transcendental knowledge. However, as in the case of both Donne’s and Herbert’s speakers, in the *Democritus* the physical possibility of the vastness (i.e. infinite or indefinite extension) of space and its theological implications also transform one’s approach to human knowledge. Thus, the issue of methodology and knowledge acquisition will both play a central part in the analysis to follow.

**A Controversial Correspondence**

More’s comments on understanding are not limited to the *Democritus*; in fact, his intellectual influence is often praised. As Henry More was a man of lively and meaningful social connections, his statements tended to be widely heard and answered: he conducted two of his most often cited correspondences with Descartes and Boyle. The former is instrumental due to the quasi-Cartesian allegiance (perhaps even inclination) of the *Democritus*\(^{58}\), a school which More quickly abandoned. After this abandonment, he started his correspondence with Descartes, in the course of which they also exchanged opinions on the question of knowledge acquisition. However, his correspondence with Robert Boyle perhaps shows his influence more vividly. When the debate on the experiments with vacuum ensued (yet again) in the 1660s, More resolved to attack Boyle’s explanations of the phenomenon and the mechanism behind the air pump. Henry More quite resourcefully used Boyle’s own arguments against him (Shapin and Schaffer 212); his attacks aimed at the uncertainty which arose due to the spirit’s absolute exclusion from material phenomena. What perplexed More was the experimentalists’ sole reliance on the results of their experiments, which also did not assent to the embedding of experimental results into overarching narratives of knowledge; in fact, More stated that “natural philosophy’s products [are to] be used as weapons in theology” (ibid. 212). The *Democritus*, for example, demonstrated the need for a mutual transfer between small and wide focal points: the results of experiments should supplement

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\(^{58}\) For the complex evolution of More’s thought and attitude in relation to Descartes, see e.g. Agostini, Igor. “Descartes and More on the infinity of the world”. *British Journal for the History of Philosophy*, 5.5 (2017): 878-896.
transcendental, non-experimental principles, and these principles should aid in understanding smaller, more contained natural processes. As one of the experimentalist approach’s strongest adversaries, More was held of such regard that Robert Boyle, perhaps the most renowned and influential physicist of his time (before Newton in the turn of the century) saw him as a person “of so much fame, proposed with so much confidence,” that despite his vow not to engage in public debates, he answered More’s claims for fear of undermining his own work (Jenkins 154). More’s ever-permeating influence is idolised in Alexandre Koyré’s analysis as well. The More-Descartes correspondence, which took place between 1648 and 1649, appears in the fifth chapter of From a Closed World to the Infinite Universe, entitled “Indefinite Extension or Infinite Space” (110-125). Koyré’s argument rests on the understanding that Descartes, under the logical-deductive pressure of More’s arguments, had to modify his own ideas on the meaning of the word “indefinite,” and he altered the notion to mean that the world probably does not have any limits, as “it would be contradictory to posit them [i.e. these limits]” (cf. ibid. 122-124). This view has been adapted and reassessed several times since its publication, most recently by Igor Agostini’s article “Descartes and More on the Infinity of the World”. Agostini quite convincingly concludes that Descartes’ reluctance to admit the existence of a physical infinity is due to God’s omnipotence. Affirming something which is beyond human (empirical) perception may lead to the constraint of God’s powers; it is not to say that the universe is not infinite, rather God may choose to create it so. This choice also entails that God is not to be limited either by a finite or an infinite universe (Agostini 893).

The seeds of the main concerns of the correspondence are already contained in the Democritus Platonissans. Inspired by Cartesian metaphysics, Henry More had been formulating his theory of a “vital congruity” (i.e. the idea that the soul and the human body are mutually, inherently inclined towards each other) by the time Samuel Hartlib initiated contact between Descartes and him. However, before the analysis of the Democritus’

59 In Leviathan and the Air-Pump, the debate between Boyle and More is presented from a primarily „experimentalist” point of view, while Jenkins’ analysis perhaps leans towards the more new historicist approach: the first explicitly takes Robert Boyle’s methodology to be superior, which may suggest that Henry More’s approach was an innately faulty one. However, this dissertation strictly refuses to take either the side of the „experimentalists” or the side of their opponents, regardless of the fact that contemporary scientific methodology stems from the former one.

60 See also Gabby’s (pp. 20-28) detailed analysis of the correspondence, which is (arguably) still one of the most meticulous ones today.
concepts, the layers of anxiety related to vastness and perception might appear more briskly in the straightforward prose of the letters. The aim of analysing some extracts from Descartes’ answers is to show how the instability of the universal truth value of human perception is intertwined with the theoretical groundwork of post-Newtonian science. Material objects have traditionally been the primary focus of any empirical quest. The dualism of Cartesian philosophy brought an important shift in early modern European philosophy: though it outlined a complex material system, it did not disregard the importance and existence of God. Vermeir highlights the fact that More was the first one to “disseminate Descartes’ ideas in England” (Vermeir 121). Though no solid primary evidence has been found of this, their respective systems of thought appeared to be very similar at first, based on their shared assumption that matter, in itself, is not capable of movement or action (Crocker 14 note 42). The notion of “vital congruity” mentioned above reveals one of the greatest differences between the two thinkers; while Cartesian philosophy is an absolutely dualist one, thus it does not postulate a link between the two separate substances, Henry More finds his answer in proposing that matter and spirit are congruous, thus united. These two substances are innately distinct, yet they necessarily coexist; they are polar opposites, yet they operate together in this universe. Analogously, what one may observe (matter) and what lies beyond (soul) are not irreconcilable in the Democritus, as these two, in More’s universe, coexist naturally.61 Yet in the light of the argument for perception, the most important of their intellectual bouts was not the one on matter and soul. Cosmological matters are easily considered when Cartesian thought argues that any space does not exist without a material body. Henry More, on the other hand, believed at this time that there is vacuum in nature, and instead of matter, it is filled by God. Due to the overwhelming amount of information found in his immense oeuvre, More’s image of the universe is sometimes misinterpreted; based on his later works, his universe is seen by Grobet as “limited” (519), yet the sheer scope and the overwhelming amount of subject matters in the Democritus definitely disprove this claim. Though More’s speaker is not as bold as the historical person in his letters, the poem asserts, with sometimes weaker, sometimes more ardent conviction, that the universe may indeed be infinite. He asserts this most famously in the ninth stanza of the Democritus; yet before the detailed

61 See also Crocker’s early assumption (1990, p. 5) – “The Democritus was aiming to show that experimental science and metaphysics are not polar opposites”.

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analysis of the poem, it is instrumental to see Descartes’ framework in order to better understand More’s.

Towards the end of their correspondence, Descartes wrote a long and detailed letter to More, explaining his revulsion towards affirmative statements on the extension of the universe:

In my view it is not a matter of affected modesty, but of necessary caution, to say that some things are indefinite rather than infinite. God is the only thing I positively understand to be infinite. As to other things like the extension of the world and the number of parts into which matter is divisible, I confess I did not know whether they are absolutely infinite; I merely know that I know no end to them, and so, looking at them from my own point of view, I call them indefinite. True, our mind is not the measure of reality or of truth; but certainly it should be the measure of what we assert or deny. What is more rash or absurd than to want to make judgements about matters which we admit our mind cannot perceive? (5 February 1649, emphasis mine)

Descartes admits that his perception is his own, yet he naturally trusts the mind’s capabilities so that what it perceives and how it reasons must be the cornerstone according to which we can say anything about the world. If Descartes denied all meaning-making functions of the mind, he would disprove the most fundamental tenet of his own system of thought, as well as risk asserting that nothing is real – thus descending into a relativist hell. Reality and truth do not belong to the human mind, but perception and deduction do. As long as the observer is conscious of their finite point of view, they may deduce facts based on empirical evidence. But whatever is not directly experienced is not deductible, since they are only products of the imagination. Henry More answered on 11 December in the same year:

Fourth, I do not understand your indefinite extension of the world. This indefinite extension, indeed, is either absolutely (simpliciter) infinite, or only with respect to us (quoad nos). If you understand extension to be absolutely infinite, why do you obscure your thoughts by too low and too humble words? If this extension is infinite only in respect to us, it will be, in reality, finite. Indeed, our mind is not the measure of things, nor is it the measure of truth. (Tutte e Lettere 672: 2599, qtd. in Agostini 880)

It remains for the reader to decide which author committed the greater logical fallacy. More believes in the constraints of classical logic: either something is, or it is not. Either one

62 Cf. the discussion of the ocularcentric ego in the first chapter.
believes that the universe is infinite – and then it is, or one assumes that our mind only projects the image of infinity onto the universe – and then it is not. More believes, then, in the meaning-making power of the mind in different terms than Descartes does: while he agrees that the mind is not an absolute source of truth, he is also wary of the doubt which erects boundaries and overcomplicates human reasoning. The world, as it truly is, cannot be known by the mind, as only God knows everything in their entirety. Humans tend to err in their deductions. What More disregards is that the human mindset innately constrains thought, and that one cannot comprehend anything which is outside the bounds of human notions. Thus, asserting that the universe is infinite only with regards to the human observer does not mean that it is, in reality, finite; it simply means that there are not enough verifiable truths to utter a solid statement on the physical infinity of the universe.

The 1642 publication of his texts still asserted that the universe was finite. The 1646 publication of the *Democritus* starts with the emendation of the earlier *Psychathanasia*, showing that the mind is, indeed, not the measure of absolute truth. Similarly to George Hertbert’s poems, the only assumption which can still be declared for certain is that the finite nature of the human mind prohibits one from fathoming the unknowable ways of God, the infinite and/or immeasurable complexity of one’s surroundings. As the speaker of Herbert already asserted, the divine is innately strange, yet impossibly close; in More’s universe, He is everywhere. Though he cannot see through the divine’s eyes, More has a deeper trust in the capabilities of the mind’s deductive powers than his predecessors had. All distinctions are subjective and self-reflective, and they are innately constructed in a certain framework. Yet, using logical arguments, our assertions can at least be logically proved or disproved – neither of which entails that they contain or lack the truth. It is only in God’s framework where everything is impossibly close and far at the same time; our notion of omniscience and omnipotence is, ultimately, the only mode through which absolute knowledge is acquired.

**The Scientific Method**

Robert Boyle, in a different vein claims that the findings of the experimental philosophers should only be measured inside the constraints of their own framework (Shapin and Schaffer 162-163); his proposed methodology, with its strict boundaries, refused to allow for other

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standards to disrupt its established structure. Hence the contemporary rigid structures of scientific methodology also refuse to stretch for any claims which were not proven in their own framework; one cannot assert a claim based on „common sense”, or „inherited explanations”, but any and all claims should be verified using the tools of an established methodology. Hence More’s fusion of the metaphysical and the physical did not survive its own time, as the advocates of a non-comprehensive, yet safely enclosed system established their own stronghold. God’s ways cannot, by their nature, be proven by the empirical mind, thus such aspects are not to be taken into account in experimentalist investigations. If one aims at divine, universal truths, one might easily arrive at the shared conclusion of Descartes and More: that the mind cannot be the measure, nor can it be the verifying tool of these truths. However, at this point in time, both approaches could be deemed as valid descriptions of the world; moreover, both possessed strong claims and an established framework with rules which operated in a seemingly satisfactory manner. As Boyle found flaws in More’s (and other contemporaries’) reasoning, so did More find inconsistencies in the experimental method, especially when a comprehensive image of the world was concerned. Although Boyle’s experiments on vacuum were only published in 1660, the corporeal vs. spiritual debate between the two had ensued before, leaving Boyle to dismiss More’s spirituality altogether when it comes to purely mechanical phenomena (Monod 99). Thus, the one cannot, and indeed must not be deemed as “more scientific” than the other. The Democritus showcases a framework where the “natural” is seen in the speaker’s hypotheses in the image of observable physical phenomena, and “philosophy” is shown in a fusion of Classical Neoplatonism, Epicurean philosophy as understood in the early modern period, and a hint of Cartesian thought.

The “scientific” quality of the poem is yet again demonstrated by the speaker’s constant awareness of spatial relativism. The most prominent of such instances is the ode to light commencing in stanza 23, which then turns into a description of the numerical paradox of infinity. The speaker, following a Platonising fashion, equates God’s “spermatick” light to the light of any sun, which are the “heart and kernel” (24.2) of any world; as God’s emanated, life-giving rays animate lifeless matter, so does the light of the sun animate the “dull Planets” (23.8). The anthropocentrism of the previous speakers, however, are not to be found in these lines. Man is not the centre of the universe any longer; the sun which animates the earth is not the sole most important light, the human observer not the absolute axis of his world. God’s creation is boundless indeed: as one may postulate several worlds similar to
our solar system, it is only natural that these should also be animated by a sun. Consequently, one solar system is but a distant source of light to ours, and *vice versa*. While this image robs man of his distinguished status in the universe, the speaker turns this image to a hymn of divine providence (grammatically equal subjects with Nature):

> Little or nothing are those starres to us  
> Which in the azure Evening gay appear  
> (I mean for influence) but judicious  
> Nature and carefull Providence her dear  
> And matchlesse work did so contrive whileere,  
> That th’ Hearts or Centres in the wide world pight  
> Should such a distance each to other bear,  
> That the dull Planets with collated light  
> By neighbour suns might cheared be in dampish night. (stanza 23)

The speaker’s geometrization of space results in a decentralisation of the vantage point of the human observer, and the relativization of all spatial coordinates both in space and on Earth. Yet both nature and providence are behind this design: receiving the lights of an immense number of other stars not only generates life on our planet, but also on planets belonging to their own solar system as well. That their distance from each other is so carefully constructed is attributed to providence, and such all-benefitting order is ascribed to an intelligent design. Henry More is among those early thinkers who read the physical phenomena and their transcendental causes not in the light of the doctrine of signatures, consequently, his main explanation for divine involvement in physical phenomena was not a quasi-magical link. His world is not hinged on how the planets may influence people, plants, and inanimate objects in his immediate environment; his focus is rather universal. The multiplicity of other worlds and the secondary nature of those suns is not a magical, alchemical link which one may master and employ for their own purposes, but a logical fact of nature, which, at the same time, testifies of the providence of a divine mechanic.

The speaker’s agenda is quite explicitly stated in the sixth stanza of the poem:

> And what hath wall’d the world but thoughts unweigh’d
In freer reason? That antiquate, secure,
And easie dull conceit of corporature;
Of matter; quantitie, and such like gear
Hath made this needlesse, thanklesse inclosure,
Which I in full disdain quite up will tear
And lay all ope, that as things are they may appear. (6.3-9)

These lines do not only invoke the passionate reasoning of a philosopher, but are quite Biblical in their essence. The zealous tone is reminiscent of the Old Testament prophets, and the statement implies Apostle Paul’s idea of transcendental sight. The speaker’s ultimate aim is to free his understanding from the shackles of his natural framework, that of material existence. He postulates that in order to truly understand the world, one must not dwell solely on matter, deciphering its exact mechanisms and correspondences. A true Platonist, he opens the next stanza by stating that “for other they [things] appear from what they are” (7.1), and proceeds to employ transcendental geometry to prove his point. Thus, while it is important to discover the world as it is, and ascertain its exact nature, the aim of the speaker is rather a dualistic approach, which advocates the coexistence of matter and spirit\textsuperscript{64}. This comprehensive image of the universe is the only one which unravels the truth. Thus, similarly to the speakers of the astronomer-poems, here one can also see the need for an absolute change in the observer’s framework. The underlying idea asserts that it is indeed insufficient to attain knowledge using one’s readily available, inherent mental framework; that making science and the meditation on transcendental matters are to be considered as one. However, this claim also entails that the knowledge of the nature of “things” is \textit{truly} attainable during one’s years spent on earth; and it does not take death, only the destruction of the mental framework of reliance of matter to realise the true nature of the world. This is a new anatomy unlike the one executed by Donne’s speaker, as it does not attempt to rely on the material symptoms of the world, but strives to introduce a new mindset which is rid of the constraints of the easily definable.

\textsuperscript{64} The word “inclosure” also puns with the historical process of 16\textsuperscript{th}-century legal enclosures of land, a process which also incited riots that tried to “tear” these bounds.
Atoms and Nothingness

Focal to the speaker’s argument is the infinity of the universe along with its constitution by atoms. Both of these ideas naturally evoke Epicurean philosophy and Lucretius’ *De Rerum Natura* together with the mystical figure of Democritus, all of which resulted in a compound notion of Classical atomism. The idea of atomism then merged with the Lucretian notion of an infinite cosmos, as well as the upheaval of atheism among More’s contemporaries. The “To the Reader,” printed as an apology to the *Democritus Platonissans*, mentions “Epicurus, Democritus, Lucretius etc.” It would be superfluous at this point of my argument to provide a detailed history of early modern atomism in England, as its historical reception is not focal to my initial argument. Suffice to say that the Latin version of *De Rerum Natura* had been available in Britain from 1461 on (Butterfield 52), and that by the time More commenced his studies, its contents were well-known and well-debated. Since Henry More strongly believed in the idea of “vital congruity,” i.e. that matter and spirit have a natural convergence in the human being, he cannot be regarded as a follower of Lucretius. For him, both enthusiasm and materialist atheism were signs of mental illness (Reid, *The Metaphysics* 11). The outright atheistic tendencies of *De Rerum Natura* are outright expressed in the following lines:

Moreover, there is no one thing in the whole sum which is produced unique, and grows up unique and alone, so as not to belong to some kind and to be one of many like it. To begin with, cast your mind to the animals: you will find that this is so with the mountain-ranging generation of wild beasts, thus is so with the double-breed of men, so also with the dumb scaly fish and all creatures that fly. Therefore you must in like matter confess for sky and earth, for sun, moon, sea and all else that exists, that they are not unique, but rather of number innumerable; since there is a deepset limit of life equally awaiting them, and they are as much made of a perishable body as any kind here on earth which has so many specimens of its kind. If you fast to these convictions, nature is seen to be free at once and rid of proud masters, herself doing all by herself of her own accord, without the help of the gods. (*DRN*, 2. 1077-1095)

The lines above are a straightforward confession of atheism, which was a natural consequence, as well as an explicitly articulated tenet of Epicurean philosophy among some who read the poem. However, Henry More seems to use Lucretian atomism in an openly

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65 On the volatile situation of the atomism of “Democritus,” whose identity is still largely uncertain, see also Christoph Lüthy’s article, in which he argues for the heterogeneity of the authorship of texts concerning atomism, alchemy and other disciplines in the 16th century. He asserts that different ideas from different authors merged into what the historians call early modern atomism, a compound entity open to several layers of interpretation (446).
deist framework, thus he attempts to reconcile two seemingly opposing qualities. Lucretius’
text induced both atheist and pious answers: a common argument in the 16th century stated
that reading such atomist works did not render one impious, as the Church fathers also read
the ancient classics of the heathens (even if those texts were not Epicurean – the examples
include Homer, Plato, and Aristotle) (Butterfield 58). In 1607, Francis Bacon already
advocated the reconciliation of atomism at faith: he claimed that it is likely impossible “that
an Army of infinite small portions, or seeds unplaced, should have produced this order and
beauty, without a divine Marshall” (qtd. in Wilson 91). Thus the atoms, which “are ever to
be tossed about in the great void” (De Rerum Natura 2.121), Bacon argued, could only likely
be ordered by the laws prescribed to them by God, who is beyond and above the realm of
these atoms. This is only one of those examples which demonstrate that there was, then, no
direct and ultimately convincing link between atheism and Epicurean philosophy in the mind
of most 17th-century intellectuals, and the possible paradoxical nature of a divinely infused
cosmos on an atomist basis needs not be addressed. Moreover, the text likely mentions these
authorities in the introduction to avoid the accusation of a dogmatic framework, and to show
that he, similarly to scholastic philosophers and several Renaissance thinkers, also rests his
case on the back of the “ancients”66. He is an atomist, but not in the purest sense which easily
inclines towards atheism. For him, atoms are directed by a divine energy; otherwise they
remain inactive material parts, and the active element of “conspissation” (a material
thickening which draws atoms together) does not occur:

For body’s but this spirit, fixt, grosse by conspissation.
And that which doth conspissate active is;
Wherefore not matter but some living sprite
Of nimble Nature which this lower mist
And immense field of Atoms doth excite,
And wake into such life as best doth fit
With his own self. As we change phantasies
The essence of our soul not chang’d a whit,
So do these Atoms change their energies
Themselves unchanged into new Centreïties. (13.9-14.9)

There are two common elements in the last four lines of the above segment: it is a full simile which operates simultaneously with parallels and contrasts. These lines are in direct opposition with Lucretius’ ideas. The basic claims of atomism remain intact: there is still an “immense field,” albeit it is to be noted that this field is not infinite; and the swerve of atoms still result in new objects, yet the building blocks themselves remain constant. Yet Nature is no longer the sovereign and unconscious determiner of herself, as “some living sprite / of nimble Nature”67 is the force which commands the ordering of these atoms. Following Plotinus’ ideas, the speaker introduces an underlying, divine energy, a derivation of God, who is above the concept of life itself:

What is [the One], then? The productive power of all things; if it did not exist, neither would all things, nor would Intellect be the first and universal life. But what is above life is cause of life; for the activity of life, which is all things, is not first, but itself flows out, so to speak, as if from a spring. (Ennead III.8.10.)

Consequently, not only does the speaker avoid the charge of atheism, but he also evades the idea that one may completely dissolve the claims of nullibism. When following a stricter branch of Cartesian philosophy, one may have arrived at the conclusion that since matter was inherently extended, spirits cannot be taken to exist anywhere in space, as they are not extended beings. This, in turn, implied that when extended matter ceases to exist, an “essence” of the person does not stay behind, or goes to heaven or hell; such dissolution only meant that the atoms which originally formed extended matter are now to be reallocated. Here, however, the speaker implicitly negates this argument by maintaining a link between two sets of similes in the last four lines of stanza 14. The soul’s “phantasies” are its observable layer, but one’s imagination is fickle and volatile; however, this does not entail that when one thought ceases to exist, the agent which generated the thought ceases to exist as well. Similarly, when the material shape atoms took disintegrates, the atoms themselves remain “unchanged.” Micro- and macrocosm merge in this stanza as the same, physical processes which take place in nature, and which constitute the very basis of material

67 The Spirit of Nature (“hyle”) mediates between spirit and matter: it is “a substance incorporeal, but without Sense and Animadversion, pervading the whole Matter of the Universe, and exercising a Plastical power therein according to the sundry predispositions and occasions in the parts it works upon, raising such Phaenomena in the World, by directing the parts of the Matter and their Motion, as cannot be resolved into mere Mechanical powers.” (The Immortality of the Soul book 3, canto 12)
existence, are juxtaposed with the processes of the immaterial soul, the other basis of human existence.

However, the speaker’s inclination towards revaluation, and his uncompromising quest towards truth are well-expressed when he quite ardently speaks against Epicureanism:

though I detest the sect
Of Epicurus for their manners vile,
Yet what is true I may not well reject. (20.1-3)

Although the methodology by which Epicurus (as perceived by the speaker) arrived at his conclusions had been faulty, yet, following the speaker’s train of thought, he also settled on the very same ideas, i.e. the multiplicity of worlds, atomism, and the immensity of the universe. Albeit quite unusual, this sentiment is not surprising given Henry More’s inclination towards all-encompassing revision.

Though Epicureanism (sometimes confused with atomism as such) is quite ambiguously portrayed in the poem, Lucretius is even more deeply embedded into the text as it would first seem; arguably, it is not only the cosmological structure of the poem which was inspired by his ideas. The *De Rerum Natura* arguably influenced Henry More’s poetry on a structural level as well: in both works, analogy is used to explain some tenets of natural philosophy which cannot be grasped by sensory perception. This inability is either due to the vast distance between the observer and the observed phenomenon, or to their extremely large or extremely miniscule size. Other worlds could not yet be physically observed, only theorised; the resolution of the image transmitted by the telescope was barely enough to observe the crates of the Moon. The same applies to the atoms, which were not shown even under the lens of the microscope, thus remained in the realm of theory. In lieu of sight, analogy was needed to call theories to life, and to render dead explanations alive. That abstract notions can be familiarised through poetic images has already been established in the first chapter. The existence of atoms could not be empirically verifiable, nor could the “living sprite,” animating the dead field of atoms. However, descriptive images approximating the exact workings of these phenomena could be disseminated through poetry, conveying the message to the widest audience possible. That the *Democritus* aims at explanation through imagery is reinforced by Henry More’s connection to Edmund
Spenser. More is known to have imitated Spenser both in his use of archaic vocabulary, as well as in his use of structure and poetic imagery. In turn, Spenser is known to have imitated the language and the methodology of Lucretius’ *De Rerum Natura* (Passannante 194), making the poem’s pervasive influence even more structurally embedded into the fabric of the *Democritus Platonissans*. By this unification, More also strived to show how language is able to display a fusion of “classical” philosophy of nature and the innovative ideas in 17th-century natural philosophy (ibid. 195).

Henry More stood explicitly by his ideas of unification: he imagined a world where opposing qualities are reconciled in the all-encompassing “Physis,” i.e. Nature. His programme had always been deist, and his “reading” of the Book of Nature was quite different from the previous thinkers’. Whereas the physical causes of material phenomena had not been previously well-understood, the link between the divine plan and these had been a metaphysical, mystical one: one example would be the influence of the planets on medicine, as seen in *The First Anniversary*. However, the new tools furthered the understanding of the deeper physical causes of observable phenomena, thus, the mystical quality of a link between the seen and the unseen was waning. For Henry More, this link acquired a new meaning; the 1662 edition of his *A Collection of Several Philosophical Writings* contains the following statements in the preface:

Which ferociuous and weighty consid’rations lying before me, urged me with all possible care and vigour to search to the very bottom of things,\(^{68}\), that my heart might not fail me in the day of tryall ... [by the] interweaving of Platonisme and Carthesianisme so frequently as I do into these writings, I making use of these Hypotheses as invincible Bulwarks against the most cunning as most miscievous efforts of Atheisme.

...  

But that which enravishes me the most is, that we both [i.e. him and Descartes] setting out from the same Lists, though taking several wavies, the one travelling in the lower Road of Democritism, amidst the thick dust of Atoms and flying particles of Matter; the other tracing it over the high and aiery Hills of Platonism, in that more thin and subtil Region of Immateriality, meet together notwithstanding at last (and certainly not without a Providence) at the same Goal, namely at the Entrance of the holy Bible. (vi; xii)

\(^{68}\) Cf. Jewell’s treatise.
Thus, the seemingly opposing tenets of atomism and Platonism meet in the quest for reading the Book, which, for Henry More, was the ultimate aim of his philosophical speculations. Hence the study of nature is a legitimate one per se; the threatening aspect of strict atheism can only be fended off if one is well-versed in both the new theories and the old faith. What More perceived as atheism was partly a result of an extremist approach to Cartesian philosophy which emphasised the qualities and attributes of matter to the point of overshadowed the need for a spiritual counterpart. Whereas this sentiment was to be condemned, the idea of atoms constituting the universe was not; as both Bacon and More (along with several contemporaries) demonstrated, the argument for a conscious designer was prevailing. This way, although the idea of mystical correspondence between transcendent and immanent slowly subsided, the Book of Nature still remained to be read; now the observer did not look for alchemical links and celestial powers endowed in inanimate objects, but entered a more empirical plain of understanding. Atomism, then, does not limit the divine creative energy, and does not nullify transcendental discourse; it merely adds detail to the material aspect of creation.

Even Descartes thought God indispensable in the universe. As Wilson remarks, “on the metaphysical level God was the cause of all motion. He preserved a constant quantity of it in the universe, and his concourse was required to maintain the world in existence from moment to moment, lest it slip into nothingness”69 (Wilson 92). The notion of an empty nothingness is also found in the Democritus, and it was feared in the The First Anniversary. For the latter, it was a threatening end-point to all human endeavour, an all-consuming beast which ultimately renders everything unnecessary. For More’s speaker, however, the role of nothingness in creation is more complex; although the common threads between Donne, Descartes, and More are precisely to be found in their treatment of this space.

Where now this one supposed world is pight
Was not that space at first all vain and void?
Nor ought said; no, when he said, Let’t be light.
Was this one space better then all beside,
And more obedient to what God decreed?
Or would not all that endlesse emptinesse

69 Cf. Descartes, Principles, Part II, §36.
Gladly embrac’d (if he had ever trie)
His just command? and what might come to passe
Implies no contradictious inconsistensnesse. (Democritus Platonissans 49)

The speaker is closely following the narrative of Genesis, reverting to a less eloquent register. In the Genesis, original matter was “without form, and void; and darkness was upon the face of the deep” (Gen 1:2); it was only the word of God, the “sprite of nature” of the previous lines, which emulated that space. The self-sufficiency of atoms, proposed by Lucretius, is thus explicitly rejected. An agricultural metaphor is employed instead, one which regards the world as the barren earth, an “endlesse Emptinesse” (49.6), which “gladly embrac’d” the generative energy emanating from God. This life-giving spirit falls like “sweet Ethereall dew” (50.1) onto the void, signalling the great potential of this seemingly threatening vastness.

Naturally, the speaker in the Democritus has a decidedly different agenda from Donne’s anatomist, who wanted to “try / What we may gain by thy [Elizabeth’s] Anatomy” (line 60), yet never succeeded in his mission. The body of Elizabeth (and of the world) was too detailed and vast, and a lifespan proved to be too short in order to thoroughly conduct his observations. Herbert’s poems all strived to comprehend God, and bridge the distance between Him and the human finite mind. The more mundane of these characters followed suit with Donne’s anatomist, and aimed at the exact nature of the immensity of natural phenomena, and failed in lieu of discovering a comprehensive picture of the world. Herbert’s poems, however, soon asserted that knowledge is only to be attained via communion with the divine.

When seeing the world as a compilation of atoms, the speaker of Donne and of More have quite opposing conclusions. The difference lies in the concept of atoms: Donne’s world is “crumbled our again t’his atomies” (line 212). There is an underlying wordplay in Donne’s usage of the term “atome”. The word “atom” comes from the Greek “ἄτομος (adjective) indivisible” (OED etymology of “atom”), and in this sense (the one which most closely follows the original Greek meaning) cf. also “each of the particles of dust rendered visible by light; a mote in a sunbeam” (OED “atom” 7). However, an “atome” also meant “A skeleton. [In this and the allied senses the word was often reduced to atomy n.2]” (cf. OED “anatomy” 4.a) and 6.a. “A living being reduced to ‘skin and bone’; a withered or emaciated
creature, a ‘walking skeleton’”, which perfectly puns with the state of the world as depicted in *The First Anniversary*. This sense is also (erroneously) merged with the noun “anatomy”: “By confounding the initial syllable with the indef. article a, an, the English word was erroneously divided as ‘a natomy’, an atomy” (*OED* “anatomy” etymology). Also cf. 5.b. fig. “A withered, lifeless form of anything”. This way, the words atom, atome, and anatomy enter a synergy in which they simultaneously mean the building blocks of nature, disintegrated parts, and a withered skeleton. All of the above do not entail the potential building blocks of atomism (“Democritism” or “Epicureanism,” interchangeably) – all that remained for the anatomist was to examine the cadaver of the world and try to identify the exact cause of death.

Unlike the anatomist’s notion which regarded atoms rather as the lifeless form or the dissected particles of being, the *Democritus* regards atoms as pure potential, animated by the divine energy, thus, its onlook on vastness pertains a rather optimistic tone. The *Democritus*’ God is the one who has quite an active role in the universe; without him atoms are but empty matter. First, by means on emanation, God “multiplied / his own broad shade that endlesse throughout all doth lie” (10.8-9). Endlessness, unlike in the last two oevres, is not terrifying, but a quality of the divine; it is rather an all-permeating, generative energy. It is indeed the spirit, emanated from God, that “gave colour, figure, motion, and each usuall law” (12.9) to the observable universe. Order is not to be found in the “darknesse dead” (11.8), as it is only the light of the centre, God, who enables life to form on planets. Similarly to the *De Rerum Natura*, nature here also “inspired / spermatick life,” albeit “of a different kind” (11.5-6). Although the speaker does not talk about the exact nature of this other form of life, his statements reveal that the planets, the stars, and all places fit for hosting life are all animated by this central light. This image doubles as an important metaphor for the reader: without the presence of God, all material endeavours remain “cold and blind” (11.9), seemingly empty and prone to decay, as Donne’s anatomist saw. He thought this to be a result of man’s endeavours to understand the physical universe by examining each miniscule detail, disregarding the whole. However, Henry More’s speaker is not intimidated by the careful study of different segments of nature – indeed, as it has been mentioned, he ponders on the constitution of meteorites. The *Democritus* is an experiment on finding answers in a mental framework which, while isolating issues, sets the root cause of all phenomena to be the divine energy. The study of the universe is not a vain enterprise, for the universe is ultimately
equated with God. Hence, it does not distract the observer from more important, spiritual matters, but becomes a meditation per se.

The observation of such matters is all the more beneficial and reassuring for the speaker, as the boundlessness of God is contained in each atom. When studying the exact nature of atoms, one does not study material processes only; since God resides in each of them, He can directly be known via these. Naturally, the 17th century did not offer any tool which aided the study of atoms, or which made their visualisation and direct observation possible. However, study by imagination was a viable path to follow, and while this method did not give absolute, empirical assurance, it still helped the observer to understand his environment. The cognitive processes which contributed to a certain visualisation of physical processes are not to be discussed here. A central consideration of the *Democritus* is rather a fresh understanding of God’s omnipresence; the speaker advocates divine providence by transforming a seemingly heretic idea, atomism, into a quality of God. As spirit and matter, transcendent and immanent converge in More’s Platonising world view, so does the divine energy animate atoms, reconciling faith and scientific accuracy: “For in each Atom of the matter wide / The totall Deitie doth entirely won” (69.6-7).

However, that atoms contain a great potential does not entail that matter is incorruptible. Quite the contrary: following the conceit featured in *The First Anniversary*, the speaker of the *Democritus* also mourns over the disintegration of matter. Although from a universal point of view whatever dissolves will be reassembled again – such is the nature of the atoms, – the anthropocentric point of view mourns a more individual decay. Towards the end of the poem, the speaker discusses the mutability of celestial objects, referring to the appearance and disappearance of supernovas in the period. That such far-away objects should be subject to decay had been a well-known tenet by the time the poem was written; it is not the corruptibility of the supralunar realm which vexes the speaker, but the universal consequences of it. Similarly to Donne’s poem, dissolution, in stanzas 98 and 99, becomes a central concern, signalling that the human as the centre of the universe had not completely disappeared yet. The world as a woman is introduced by an image of the Last Judgement imbued with humanist allusions:

> The burning bowels of this wasting ball
> Shall gullup up great flakes of rolling fire,
And belch out pitchie flames, till over all
Having long rag’d, Vulcan himself shall tire
And (th’ earth an ashheap made) shall then expire:
Here Nature laid asleep in her own Urn
With gentle rest right easly will respire,
Till to her pristine task she do return
As fresh as Phenix young under th’ Arabian Morn.
O happy they that then the first are born,
While yet the world is in her vernall pride:
For old corruption quite away is worn
As metall pure so is her mold well tride.
Sweet dews, cool-breathing airs, and spaces wide
Of precious spicery wafted with soft wind:
Fair comely bodies goodly beautifi’d
Snow-limb’d, rose-cheek’d, ruby-lip’d, pearl-ted, star eyn’d
Their parts each fair in fit proportion all conbin’d. (98-99)

Since the potency of God is always in all atoms, the world will reborn even if completely consumed; according to Lucretius,

Certainly whenever we see the parts and the members of creatures to be made of body that has birth and forms that are subject to death, we perceive these same creatures to be invariably subject to death and birth along with the parts. Therefore, when I see the grand parts and members of the world being consumed and born again, I may be sure that heaven and earth also once had their time of beginning and will have their destruction. (5. 240-246)

In contrast with Donne’s anatomist, the speaker’s discovery of the world’s proposed end does not result in panic and an ultimate fear of dissolution. What is presented in the lines above is a rather empirical deduction following Lucretius’ lines: one may see from one’s immediate surroundings a well-known and seemingly never-ending cycle of generation and death. That the supralunar spheres are not immutable, constant, and crystalline, was already known and relatively well-accepted by the time the Democritus was written. Hence, it is only natural to assume that these realms are also under the same God-given law which one
observes on the Earth. For the Democritus’ speaker, this destruction is rather a cleansing, a casting away of the “old corruption,” hence it is a “gentle rest,” during which the old, tired parts are promptly regenerated by the sprite of Nature. Death and dissolution are thus familiarised and accepted: albeit it means the end of the individual, there is a promise in God being in all atoms to always reconstitute the world. It is a different kind of rebirth than that of the soul’s second (true) life after death, yet the two notions can, in theory, be reconciled given that matter and soul are of different nature in More’s philosophy.

A similarly nostalgic, quasi-Ovidian sentiment appears when the first men are idolised over the generations to follow; as the end of times is nearing, so do these generations become more and more worn, and corrupt. The earth has the feminine personal pronoun, fashioning it into an image of an elderly woman, who, in her prime, possessed all generative energy, and now is spent. The gendered approach to the earth is also shown in the frequent usage of body-metaphors, almost in the form of a blazon. Proportion, though less of a problem here than for the anatomist, is also mentioned at this point; like a young and healthy woman, the earth and its inhabitants also used to bear a body closer to an ideal, perfectly proportional look. That the original order had been disturbed is mentioned in the first chapter of the paper; however, reading these lines together with e.g. stanza 17 (and many to follow), one wonders why the speaker suddenly mourns over the loss of perfect proportion. In stanza 17, the stars are placed by the divine hand “in due distances proportionall” (17.9). This design also reminds the observer of the divine hand, without whose intervention this intelligently constructed universe could not have come into existence. The juxtaposition of the two stanzas reveal the differences between the mental framework favouring an ocular- and anthropocentric approach, and one which regards all phenomena from a universal point of view.

However, the revelatory approach of the Democritus’ speaker does not seem to stem from anxiety or bitterness but from curiosity. Strangely enough, the same seems to be the method of the often-criticised astronomer in Herbert’s poems as well. The speaker in those poems (who sometimes became the astronomer himself) aimed to tear down the walls of matter – he urged to move beyond the examination of the oceans, the alchemical processes, and the exact nature of the celestial objects, among others. In this, they both are akin to the anatomist in Donne’s The First Anniversary, as well. While More’s speaker paints an idealist framework in which strict materialism limits the understanding of free reason, Herbert’s speaker argues that the scrutiny of the natural philosopher might only lead to a diversion
from truth. What both Donne’s and Herbert’s speaker realised was that transcendence is so far removed from the observer that the scrying of “atomes” can never bridge the gap between. More’s speaker perceives the fragmentary nature of material observation as well, however, his argument seems to be built upon the hint that the material laws are an imperfect derivative of the planes beyond. Thus, one can get somewhat closer to the truth through the laws and workings of the infinite cosmos, as long as they bear in mind that absolute, undeniable understanding is impossible to reach.

*The Potential of the Infinite Darkness*

Immense night or darkness plays an important role in the speaker’s visualisation of the universe. In the 17th and 18th stanzas, quoted below, night is banished by the divine light and energy, praised extensively beforehand. However, the banishment of darkness is ambiguous mainly due to the fact that night is not explicitly evil in the *Democritus*. Plotinus’ second *Ennead* talks extensively about “hyle,” the lowest form of existence, the container in which all material objects are shaped. For More, this “hyle,” night fills the space between planets, stars, and comets (Reid, *The Evolution* 81). The speaker’s unease concerning this immense space stems not from his fear from vacua, as “hyle” is not vacuous. On the contrary, this space is full of atoms, and thus, potential. However, as it is the “lowest life,” it is the farthest away from God’s or the One’s emanating centre. Night in the poem is not evil because it is empty, or because it contains something explicitly adverse to divine providence; it is treated with unease because it had not yet realised the full potential of God. Albeit the entirety of God is in each atom, the speaker insists on the act of emanation, rendering some parts of the universe more noble, and some less. What is also notable in the following two stanzas is how the speaker treats abstract quantities; although the place where creation happens is “endlesse,” “spacious,” and “immense,” the “innumerable numbers” of God’s emanated sources of light – the suns – easily contain the infinity of this darkness:

Wherefore more boldly now to represent
The nature of the world, how first things were
How now they are: This endlesse large Extent
Of lowest life (which I styled whileeere
The Cuspis of the Cone that’s every where)
Was first all dark, till in this spacious Hall
Hideous through *silent horour* torches clear

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And lamping lights bright shining over all
Were set up in due distances proportionall.
Innumerable numbers of fair Lamps
Were rightly ranged in this *hollow hole*,
To warm the world and chace the shady damps
Of *immense darknesse*, rend her pitchie stole
Into short rags more dustie dimme then coal.
Which pieces then in severall were cast
(Abhorred reliques of that vesture foul)
Upon the Globes that round those torches trac’d,
Which still fast on them stick for all they run so fast. (17-18, my emphasis)

The adjectives used, along with the first three stanzas of the poem transform it to an epic journey through the infinity of space. This journey also brings the speaker to the walls which the materialists erected, and which do not let human reason – otherwise capable of exploring infinity – overcome that “thanklesse inclosure” (6.7). Once the speaker ascends over these walls, such images as seen above can be uttered. Although what the speaker claims was impossible to empirically prove in the early modern era, in lieu of the sufficient equipment, imagination yet again aided him in “making science”. When he examines the particulars of this “immense darknesse,” the speaker employs a methodology quite similar to the anatomist’s. However, the meticulous investigation of different segments does not result in chaos and disassemblment. Although the speaker excuses himself of omniscience in the first three stanzas, and fashions himself as a humble medium when it comes to knowledge of things unseen, the sixth stanza demonstrated that he deeply believes in the mind’s capabilities. His belief stems from his trust in the upward direction of the soul, a Plotinian idea which engages the immaterial in humans to the immaterial qualities above70. Thus the soul is naturally inclined towards the divine quality and divine knowledge. When the speaker’s soul is “up-heaved” (5.1), he distances himself from the constraints of empirical thought; thus, his exploration may continue knowing that whatever he imagines is the by-product of his mind and his soul. As the field of atoms is inspired by a more subtle energy,

70 See Plotinus, *Enneads*, VI.7.35
so is the speaker’s empirical knowledge elevated and animated through his association with a transcendent framework.

Thus, it is not the human mind which dissects the sky, as the anatomist claimed beforehand, but it is already fragmented by the “fair Lamps” of the suns (18.1). The onlook of the observer is not anthropocentric – he surveys the heavenly landscape, and concludes that the stars were placed by divine providence so proportionately in order to “rend her [Night’s] pitchie stole / intro short rags more dustie dimme then coal” (18.4-5). God dissected the sky with the light originating from Him, so that life could flourish throughout the universe. Knowing that the whole, inexplicable world is filled with God not only on the level of atoms, but also as generative light provides an assurance which none of the previous speakers experienced. That Night, the antagonist of the generative divine energy is “a little shred of the unbounded shade” is a reiteration of the focal shift in the poem. Night as a barren space is fundamentally transformed with the introduction the suns’ emanating energy as well as the establishment of an all-permeating divine potential; its segmentation renders it an isolated, non-threatening part of creation instead of a potentially negating, destructive force. The speaker demonstrated that opposing qualities can be reconciled in a universe constantly full of a generative, potent presence which is above all.

Finally, in order to eliminate the anxiety related to the emptiness of space, More’s speaker urges the reader to shift their focus from an anthropocentric to a more objective point of view. The speaker leads his argument from the micro to the macrocosm, suggesting not to underestimate the powers of God, whose creation is outside of time:

How long would God be forming of a flie?
Or the small wandring moats that play i’ th’ sun?
Least moment well will serve none can denie,
His Fiat spoke and streight the thing is done. (69.1-4)

Some fifty years ago Koyré, among others, concluded (104-109) that the fear of dissolution and emptiness all constrained God’s powers, thus eliminating the possibility of empty space, or asserting, as Descartes did, that the universe is indefinitely rather than infinitely large,

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71 See also Grant, *Much Ado*, chapters 4-6.
borders on heresy. God’s omnipotence is to be taken in the full meaning of the term; neither infinity, nor emptiness are a hindrance or an impossibility to God, but comprehending them might be such for the human observer. The “moats that play i’ th’ sun” echo the “atomes” of Donne’s *The First Anniversary*, where the word only referred to the final, dissolved state of the world. These motes are transformed while being used for tools of representation, testifying that God’s all-permeating energy persists in the smallest visible particle as well. The image connects the invisible atoms, the subject of the following lines, to their common visual representation:

And cannot He make all the World as soon?  
For in each Atom of the matter wide  
The totall Deitie doth entirely won,  
His infinite presence doth therein reside,  
And in this presence infinite powers do ever abide. (69.5-8)

The 48th stanza reassures this concept by warning the reader not to diminish God’s omnipotence by confining it to finite human thoughts: “that empty space his working can debarre” (48.9) is sacrilegious. However, as long as emptiness was equated with something evil, or a loss of something good, the visceral reaction to such statements needed to be defended. However, the above concept could bridge this space somewhat: Thomas Traherne similarly concluded both in his *Commentaries of Heaven*, and his *The Kingdom of God*, that the atom might serve as an intersection between spirit and matter, immanent and transcendent. Although the *Commentaries* were only published in 1670, rendering it closer to the age of Newton than to the early responses to the telescope, Traherne’s oeuvre is proof that the so-called scientific revolution did not naturally exclude transcendental matters. On the contrary – the “reading” of scripture and nature persisted for quite a while even after the foundation of the Royal Society, or indeed, the dissemination of Newton’s ideas. The new, seemingly more materialistic cosmology was still being transformed sixty years after the *Sidereus*.

Besides the theological claims for a benevolent universe, stanzas 40-41 present an argument from physical causes. Relying on imagination, the speaker theorises the space

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between the planets: if one were to take everything away from these spaces, the planets would still stay on their appointed courses, and measuring the distance between them would still be possible. Since “mensuration attendeth distance” (42.2-3), and distance can be applied to empty spaces, it may be concluded that (1) emptiness is not alien from nature, and (2) it is not evil \textit{per se} in the sense that it would prohibit all generative efforts. The speaker thus aims at familiarising emptiness, and while doing so, he employs the reader’s imagination as proof. The text still refrains from passing clear and concise statements, and is confined to the level of hypotheses only; either in order not to say anything about the exact, empirically non-verifiable constitution of the universe, or in order not to claim any solid knowledge on transcendental matters. In both cases, it is noteworthy how, in a treatise on divine causes, physical phenomena and natural philosophy are both focal to the original argument.

However, similarly to the previous speakers, the full knowledge of the material world is intrinsically connected to the knowledge of the divine. In a moment of ecstasy, the speaker even claims to have reached a mystical union, desired by his two “predecessors,” with God.

But as my emboldened mind, I know not how,
In empty Space and pregnant Deitie
Endlesse infinitude dares to allow,
Though it begets the like perplexitie:
So now my soul drunk with Divinitie,
And born away above her usuall bounds
With confidence concludes infinitie
Of Time of Worlds, of firie flaming Rounds;
Which sight in sober mood my spirits quite confounds. (72)

The stanza demonstrates the awe felt over the paradoxical coexistence of “empty Space” and the “pregnant Deitie”. While space has been established as not truly empty, some parts of it are still empty of the animating spirit, as they are the furthest away in the concentric progression of the divine emanation. However, in order not to restrict the powers of God, his omnipresence has also been established, filling the atoms with full divine potential; moreover, the infinity of space is deduced from the imaginative faculty, while also bearing
the idea of a non-restricted God in mind. This complex, overwhelming experience prompts the speaker to commit to the idea of the infinity of time and space, yet the encounter is abruptly interrupted by the speaker’s “sober mood”. Considering the perplexing situation with the deductive faculty, the spirit – which Plotinus previously deemed to be part of being human to be able to contemplate on the divine –, is “confounded”. The different shades of the verb signal three different levels of alienation from this transcendental encounter: the first meaning of the verb is ‘to destroy, defeat’ (OED 1.a), which implies an irreconcilable difference between mind and spirit. However, this difference on a metaphysical level cannot be applied to Henry More’s philosophy, as his idea of a “vital congruity” would not allow the two substances to be thus radically alienated. If one considers the last line of the stanza with the “materialists” of the invocation in mind, the ardeny of the opposition might be justified: it might be that the spirit’s journey is simply hindered by those who rely solely on empirical experience, and the sight of an infinite universe defeats the spirit of the observer due to the opposers of such metaphysical endeavours. A different interpretation emerges when one takes confound to mean ‘put something or someone to shame’ (OED 3); a more transcendental perspective might be taken, in which the line reads as “when I leave my ecstasy, the image I have seen humbles my spirit”. The minuteness of the human observer is accentuated in this reading, who, upon returning from his allegedly mystical experience, “soberly” realises the constraints of his material existence and his finite mind. Finally, the third reading of the line is as follows: “when I leave my ecstasy, the image I have seen confuses me (and my spirit)” (OED 4). This is perhaps the most realistic of the three meanings, as the previous lines explicitly outline the contradiction resulting from the observer’s findings. The knowledge acquired in such a trance is perhaps not easily to be translated into “sober”, materialistic-experimental knowledge, or even language per se. Hence when examining such potentially threatening phenomenon as the night or darkness infinitely stretching between and beyond the suns and the planets, the speaker’s resolution is to employ, as has been shown, both metaphysical, poetical, and experimental tools. His examinations also acknowledge the paradoxical nature of his ideas, along with the possibility of error, as does More’s disclaimer in the Democritus’ preface. The poem’s treatment of the unknown, infinite darkness becomes one of its focal experiences, as the phenomenon is transformed from the inside: through experiments animating both the transcendental, the material, and the imaginative faculties, the singular experience of an observer facing an infinite, seemingly barren space is translated into an encounter with the life-giving, benevolent divine potential.
The Mind

As the case of the rewritten text of the *Psychoathanasia* suggested, revision had been a viable path to follow. Having tried one approach, the speaker admits his argument was not “impregnable strong,” and with a dauntless leap, he moves on to a new plane. However, when it comes to poetic vision, Henry More was simultaneously a man of great caution and of great imaginative daring. His attempts – at least in the *Democritus* – are burdened by the epistemological anxiety resulting from the vast difference between human hypotheses and divine mystery. As the previous section on his “sober mood” demonstrates, even the mystical ascendance of his soul through divine inspiration leaves a part of him which retains doubt. Previously, his narrative in the invocation testifies of an awareness of the limitations of his own ability to attain certain (“empirical”) knowledge of the heavens. It is in this uncharted territory of space, a strange and perplexing plain where his mind imagines meeting the divine energy which is immensely different, yet unmistakeably familiar to him; it is a pure energy unlike the decaying human body, yet all atoms contain it in its entirety. Thus, through a blend of a quasi-mystical ecstasy and deduction from physical causes, he desires, similarly to Herbert, to bridge the vastness between the finite human and the infinite other. As I was considering the speaker’s struggles with his surroundings, I was reminded of Géza Kállay’s reading of Wittgenstein’s philosophy and the role of the I. He concludes his investigations thus:

My consciousness, however, is ‘too close to me’ to be reflected on because it is the means of reflection itself […] the very movement of consciousness is always already moving from the First Person to the Third-Person-out-there, and then immediately back to the First Person: I cannot reflect on anything while simultaneously not ‘having the I’, myself […] what reality is also depends on the degree of closeness, of intimacy I am with the thing I observe, I feel, I sense. (Kállay 5)

And although my analysis is not concerned with a Wittgensteinian reading of Henry More, the lines above might still help illuminate the speaker’s relation to the mind as a tool of observation. While a certain degree of empirical knowledge is attainable, the human factor remains part of the equation. The empiricist programme can be realised only to the extent of a self-contained, plausible, human system; an absolute and independent knowledge outside of the boundaries of the human mind’s finite viewpoint is rejected both by Kállay and by the previous poems. Therefore, Donne’s anatomist sees the world disintegrate when he concludes that one’s surroundings is nothing but finite matter. The reason the astronomer is
lost in Herbert’s poetry is since upon attempting to attain a solid understanding of the world, he is forced to acknowledge his finite, human mind. Thus, when Henry More wrote his letter to Descartes, and when he wrote the Democritus shortly before, he remained cautious of the truth value of human observations precisely due to the inevitability of returning to the “First Person”.

There is a perplexing juxtaposition in the speaker’s agenda. The first five stanzas appear to advocate a decidedly subjective point of view, and this framework persists in a few other stanzas as well (e.g. 17, 26, and 72), but the general tone of the poem is that of an objective treatise. That the sixth stanza promises to unravel the mysteries lying beyond the framework of materialism is a seemingly subjective promise, however, its result is promised to be the objective knowledge of transcendental matters. The speaker employs his own mental framework, i.e. a fusion of (Neo-)Platonism and atomism, while maintaining the apologetic nature of his endeavours. However, his claims cannot be either verified or falsified, as the only “objective,” “third-person” viewpoint would be of an almighty observer, God, and for this reason, the mind also cannot be the “measure of truth”. God is a privileged observer not only due to tradition, but due to the fact that He is placed outside of the opposition of qualities; for Herbert’s speaker, He was unattainable because He could not be confined to any human notions and frameworks. In contrast to this view on the deity, for Donne’s anatomist God simply became lost in the myriad small details of the world. In the Democritus God is somewhat beyond and inside; He is entirely in the atoms, however, atoms at that point of time only existed in one’s mind. It might not be surprising, then, that when one examines their tools of observation in the period, the most important ones to consider, besides any optical device, would be one’s own mind and senses. Unless one believes in a transcendental sight, which, as the previous two chapters already demonstrated, are to be obtained after death, when all sensory experiences will be (un)mediated through a divine focal point, one cannot claim to possess full, and absolute knowledge of everything. Before the fallacy of radical relativism might engulf the reader of the Democritus, however, the attention must be drawn to Kállay’s disclaimer, which states that this form of critical examination only happens when one is attempting to examine their own reason/mind, which he describes “as if I tried to grasp myself with myself, as if a mirror wished to mirror itself” (5). Thus, when Henry More employs the first person singular as a frequent focaliser, he does it consciously, and in line with his claims in the preface: the subjective experiences of the speaker are always open to refutations, and the frequent jumps between examples from
different angles aim at eliminating this liability as much as humanly possible. However, the following analysis will show that the thorough examination of things unseen (without the aid of an “objective” machine) is known by the speaker to be problematic, and the process often leads to perplexing results, as the objects of interest are, in Kállay’s words, not “intimately” close to the observer.

As the last stanza of the poem demonstrates, although the explicit difference between God and his creatures is present throughout the poem, the exploration of the heavens is not fully hindered by the (physical and metaphysical) vastness between transcendent and immanent – similarly to his vital congruity, the world cannot be understood as dualist, as everything is melded into everything else. However, the final conclusion, either by convention and caution, or by true, inner conviction, reiterates the instability of full knowledge:

And here by curious men ’t may be expected
That I this knot with judgement grave decide,
And then proceed to what else was objected.
But, ah! What mortall wit may dare t’ areed
Heavens counsels in eternall horror hid? (107.1-5)

“Areed” in the quote is an ambiguous verb which displays all hues of the speaker’s impediment: it simultaneously means “to declare by supernatural counsel” (OED I.2), i.e. to claim that the steps the speaker went through were, without a doubt, divinely inspired, and thus consist of the whole truth; but the verb also means “to declare” in a more general sense (OED I.3), where the element of preaching the truth comes in a quasi-prophetic, yet more mundane context. The poem ultimately presents a frame of disclaimers: similarly to the invocation, the speaker here simply cannot dare uttering statements of such weight without maintaining the possibility of human error – his own subjectivity; yet his statements continue to hold as hypotheses. More’s science is not undermined by its need for verification, because the text seems to realise that all science needs absolute (non-human) verification. This is in stark contrast with what Oresme advocated when he trusted the imagination: More appears to be humbler than to say that reason’s ability to imagine infinity verifies the possible existence of infinite spatial extension. The Democritus arrives at this conclusion through different means than only those of the “old cosmology,” and the “new science”: the speaker
fuses the methods of the anatomist in *The First Anniversary*, and those of the astronomer in Herbert’s devotional poetry. He employs meticulous categorization and thorough analysis while maintaining a more spiritual, intuitive understanding – and all the while he remains aware of the limitations of the mind, and the impossibility of attaining omniscience as a human being. When read as a whole, the poem maintains a “congruity” not only between mind and body, but between observable, immediate experiences, and imaginary, postulated phenomena as well (cf. Reid 23).

*Paradoxes, Ecstasy, and the Sublime*

Although the speaker never claims to have possession of an all-encompassing knowledge on extra-terrestrial matters, the fifth stanza demonstrates that the vastness of space can indeed be explored solely by the mind’s capacities to temporarily “leave” the body:

An inward triumph doth my soul up-heave  
And spread abroad through endlessse ’spersed aire.  
My nimble mind this clammie clod doth leave,  
And lightly stepping on from starre to starre  
Swifter then lightning, passeth wide and farre,  
Measuring th’ unbounded Heavens and wastfull skie; (5.1-6)

The divine inspiration the speaker mentions also evokes a dream-like vision in the fifth stanza, which “up-heaves” (5.1) the speaker’s soul. Being freed from its bodily confinements, the soul can now “measure […] th’ unbounded Heavens and wastfull”73 skie” (5.6), yet again a feat that both Donne’s anatomist and Herbert’s astronomer both failed to accomplish. The former complained of the shortness of time and the inherent anthropocentrism of all such ventures, while the latter (especially the speaker of *The Temper (I)*) failed to bridge the distances between the immensity of God’s spaces and the claustrophobic confinements of the environment available to the human senses. It is the soul, skipping “from starre to starre” (5.4) and not the telescope, his eyesight or any mathematical calculations, which enables the speaker to derive some knowledge of the unbounded sky.

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73 I am not entirely sure whether More puns on the double meaning of vast (explained in the Introduction), as the archaic spelling too closely mimics the word “wasteful”; however, I believe that the context does not provide any justification for the more grim meaning of the adjective.
The mind can do what no other bodily and sensory instruments could, and though it has to be severed from the body, this is not a description of seeing sicuti sunt only after death, but rather a sight only attainable in a different state of mind. There is, however, an element of uncertainty in the speaker’s reliance on his dream-like vision, which subsides, and then slowly disappears towards the middle of the poem’s narrative. Henry More had always been wary of the truth value of any imagined scene, as imagination for him was “‘an inner sense’ responding to the impulses received through the senses from the body and the external world’” (Crocker, *Mysticism* 147). Although imagination could also host divine inspiration, as the speaker of the *Democritus* claimed, it remains to be a faculty most often fuelled by the finite senses. Thus, failing to revaluate the images shown leads to an over-reliance on imagination, which, in turn, leads to “enthusiasm,” towards which More had a great aversion. This form of enthusiasm appears when the “proper relationship between soul and body” is disrupted, thus, imagination, following sensory impulses, undermines the higher quality of logic and reason (Crocker, *Mysticism* 148). Hence the previously established doubting and evaluative approach of the speaker is justified by the author’s antagonism towards an overly transcendental reasoning which is not established in physical causes or immediate, material logic.

However, as with the notion of a “congruity,” the speaker aims to provide a comprehensive semi-duality in his narrative. A more “grounded” thinking, according to Plotinus, may lead to another form of enthusiasm; that of the “doers,” or strict empiricists:

Men, too, when their power of contemplation weakens, make action a shadow of contemplation and reasoning. Because contemplation is not enough for them, since their souls are weak and they are not able to grasp the vision sufficiently, and therefore are not filled with it, but still long to see it, they are carried into action, so as to see what they cannot see with their intellect. (*Ennead* III.8.4.)

Hence, what is meant by “intellect” is also undermined by an over-reliance on material experiment. From this vantage point of the contemplative mind is the aim of the poem in the sixth stanza derived: the speaker’s programme set against the “corporature” (6.6) of the previous philosophical systems. He criticises those strands of Aristotelian and Cartesian philosophies in which the role of matter becomes too focal, and argues that the world is “wall’d” by these “thoughts unweigh’d / In freer reason” (6.3-4). These passages also confirm the idea that knowledge is not at all closed off from the speaker, as the possibility
of inspired contemplation, a form practiced by Christian thinkers as well, is in theory available for all who seek the experience. It is a narrow path, however: imagination, easily confused with contemplation in practice, might obscure a more elevated form of logic, and experiments might hinder one from obtaining a more transcendental experience. The contemplative mind has already been assessed when examining Herbert’s astronomer-poems; however, what is unique in the *Democritus* is the poem’s linear progression which ultimately alters the speaker’s experience. I have started my analysis with the last stanza of the poem, which, if compared with this relatively early poem in the 107-stanza-long narrative, provides an apparent shift in the speaker’s tone: while the invocatory stanza celebrates the soul’s freedom from the body’s confinement, the 107th stanza closes this treatise by advising great caution. This, of course, might be a result of the political-intellectual climate of More’s time, however, the language of the speaker is rather invocative of the later experience of the “sublime”. His seminal enthusiasm is first dampened by a need for physical, deductive reasoning, then, ultimately, by a vision of the Last Judgement, commencing in the image of “heavens counsels in eternal horror hid” (107.5). This “horror,” however, is not necessarily the frightening, debilitating phenomenon of today, rather “a feeling of awe or reverent fear (without any suggestion of repugnance); a thrill of awe, or of imaginative fear” (*OED* 4.). This is the fear of God, commencing in the speaker’s assessment of the paradoxes of an infinite space of infinite potentials and infinite, inhabitable, seemingly hostile “shreds”. Edmund Burke entertained the theory of magnitudes which trigger the feeling which is labelled as a delight in distress, the experience of the sublime; it happens if “[terror] does not press too close” (42), to which he adds that “greatness of dimension is a powerful cause of the sublime” (66). In contrast to this, a dismissive interpretation of the sublime induced by fantasies can be traced to Longinus’ *On the Sublime*, which describes the process as follows: “passages in which, carried away by enthusiasm and emotion, you imagine you are actually seeing the subject of your description, and bring it before the eyes of your audience” (qtd. in MacKisack 320). The latter definition entails that the catalyst of the sublime feeling should indeed come from external, immediate sensory perceptions, rendering the experience, in Henry More’s framework, nothing more than the overexcitement of the senses. Burke’s sublime, however, goes beyond immediate experiences, and presents Milton’s description of hell as an example (cf. MacKisack 322), thus highlighting the otherworldly, non-sensory experience of the sublime. Though the latter

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74 See e.g. Meister Eckhart, Nicholas of Cusa, and the influential anonymous work of *The Cloud of Unknowing*, among others.
work was written more than 150 years later than the Democritus, the speaker’s progress points rather to Burke’s understanding; even more so, as the infinity of space and the infinity of potential contained in an atom cannot properly be understood, much less experienced through sensoria.

Hence, the sublime is one of the central metaphysical encounters in the poem, frequently described when contemplating the infinite number of solar systems. The speaker is taken aback by the sheer number of planets, suns, moons, and other celestial objects, which are all a result of his inspired, trance-like journey through the universe: “In this huge endlesse heap o’rewhelmed, drownd, / Choak’d, stifled, lo! I lie, breathlesse, even quite confound” (32.8-9). His “mortall penne” (31.9) is insufficient; neither human notions, nor even imagination can quite reach the scope of the diversity of those planets. In the wake of the early modern theory of multiple worlds, which became especially widespread after the telescopic observation of the Moon in 1610, a surge in fantastic literature of lunar journeys ensued. Though I have not analysed any of these pieces here, the highly influential Fictions of the Cosmos written by Frédérique Aït-Touati is only one of the myriad of publications on the effect of the lunar journeys on thinking and popular genres, even on astronomy; Kepler’s Somnium is one of the most prominent of such examples, merging, as the Democritus does, science and literature, empiricism and metaphor.

As the flora and fauna of the different worlds could only be described using the imagination, so can spatial paradoxes be visually rendered by pictures and metaphors. Trying to decipher space results in “restlesse thoughts” which “walk in [the speaker’s] boundlesse mind” (2.1;3). The latter quotation inherently equates the human mind to the infinity of space, albeit the poem fails to follow with an exact description of the mind’s capabilities. Boundless, naturally, could foreshadow the sixth stanza, which discusses the constraints of an empiricist mindset, as the speaker’s mind might only be “boundless” in a sense that it rejects the “inclosure” (6.7) of materialist philosophies. Perhaps the adjective displays an analogy between the mind and the universe in terms of their infinite possibilities: the intellectual capabilities of a person, aided by imagination, or perhaps divine inspiration, might result in material and intellectual inventions. These thoughts, which are trying to find absolute truth in the infinity of the mind’s space, “[have] a turn or two, go out, although unbad” (2.5) and “their presence doth possesse [the speaker] till they out again” (2.9). Ideas

and understanding seem to be established as volatile at the very beginning, an idea which is in line with Jewel’s sentiment, the anatomist’s doubt, and the warnings of the speakers in Herbert’s poetry. Although a seeming paradox, human thoughts seem to be easily lost in the boundlessness of the mind; boundlessness possesses a dual meaning, as it is associated with fickle and finite nature which is prone to fancies, together with a limitless, free mode of knowledge. The aim of the speaker here is decidedly not to lay out a stable system to keep – it seems unlikely that his feeble mind can do so. Thoughts are easily lost in the “spacious room”, as the astronomers of Herbert were lost in the boundlessness of their ambition and the immensity of God, and as the anatomist was lost, after trying to “read on every part” (*The First Anniversary* 436-437) in the “incomprehensibleness” (*The First Anniversary* 469) of the world and Elizabeth. Towards the middle of the poem, the mind even loses its boundlessness:

But farre aboven

Furhter then furthest thought of man can traverse,

Still are new worlds aboven and still aboven (59.6-8)

Hence there is a limit to the previously boundless mind and imagination. Albeit these lines are to testify to the mightiness of God, they destabilise, even degrade the “space traveller” soul in the process. Since the speaker embarked on a journey of absolute unity of body and spirit, his resolve employed a methodology which simultaneously proves hypotheses using theological/mystical, and empirical examples. This framework, however, soon brought him to confusion – the following analysis will show that while the 26th stanza takes infinity as a fact, showcasing a quasi-sufficient proof for it, the 47th stanza is already one of absolute confusion. It seems that with the “marriage” of the spiritual and the material qualities, together with the persistent mathematical and theological paradoxes deriving from the notion of infinity, the speaker would be closer to the confusion of Donne’ anatomist than to a divinely inspired scientist. Paradoxes, so it seems, cannot be resolved by faith and inspiration alone: what the *Democritus* unfolds is a universe where physical regularities, laws, design persist, but which has a greater, yet unknown potential than humanly imaginable.

The paradoxes of the poem may all be traced back to the opposition between human empirical experience and transcendental, inspired imagination. This conflict has been apparent throughout all layers of the *Democritus*; it surfaces in the constraints of knowledge,
the theoretical problems concerning a contemplative mindset, and, as in the case of all previous oeuvres, in the restrictions of human sensoria. Imagination, an extension of one’s limited bodily experience, is not fully reliable either, as it may overextend, misinterpret, or even spoil what is taken to be a divine, full, objective form of knowledge. Even without paradoxes, the speaker’s unsteadiness concerning his ecstatic experience further deepens the reader’s doubt in an absolute, resolved narrative. Henry More was so devoted to finding an absolute truth that in 1656 he started an extended debate with Thomas Vaughan, who at the time was a leading “theomagus,” or occultist. Although his writings were of an alchemical focus, he was also interested in the natural philosophy of his day. However, unlike Henry More, his interest was not at all indebted to empiricism nor any observable results. This marriage of alchemy and science spurred More to write thus: “The Fundamentals of Science should be certain, plain, really, and perspicuous to reason; not muddy and imaginary as all your discourse is” (Monod 43). Vaughan’s kind of imagination is deceitful precisely due to its absolute detachment from earthly, observable empirical causes; although More’s *Democritus*, as we have seen, also employs the faculty of imagination, it does not let imagination transform what had been observed. Rather, More’s philosophy sees these two as intertwining, and adding up towards a fuller form of knowledge. The same paragraph also refers back to the humility established during his correspondence with Descartes, when it explains the root cause for More’s aversion towards Vaughan’s tenets: “For in this present page & the former, setting aside your superstitious affectation of Trinities & Triplicities, which teach a man nothing but that you are a very fantasticall and bold man, and lift at that which is too heavy for you” (*Enthusiasmus Triumphatus* 22). That one’s own imagination should serve as a basis for any universal claims is superfluous, even outright heretical for More. According to him, Vaughan discredits his own system by unquestioningly following the “trinities & triplicities” of his fabricated system, whereas these cannot be always found in nature, during the course of any observation. His reasoning thus becomes completely detached from reality, similarly to *The First Anniversary*’s observers, who have their “net thrown / upon the heavens” (279-280); it is Vaughan’s own system which is forced upon creation, falsely interpreting its causes and phenomena. Interestingly, More was becoming more and more conservative as time went by. Perhaps due to the irreconcilable paradoxes resulting from the image of infinity in the *Democritus*, or perhaps as a result of several other factors, he says the following in 1651: “Falsehood and Imagination is infinite; but Truth is one” (*The Second Last of Alazonomastix* 193). The *Democritus* is already struggling with the delicate balance between assumption and truth, and with the role of imagination in
attaining knowledge which is otherwise inaccessible. It seems that in less than ten years after its publication, Henry More decided not to balance between two seemingly irreconcilable modes of knowledge acquisition, but committed to keep his mental distance from anything outside the realms of scripture, ancient, established knowledge, and modern empirical observations.

The 26th stanza is a direct proof for the paradoxes resulting from imagination: an early version of Olbers’ paradox is introduced by the speaker (Reid, The Metaphysics 61), claiming that should the universe be infinite, the night sky would always be bright due to the infinite amount of stars emitting light. The paradox has been entertained by Kepler in 1610 as well, in his response to Galileo’s Sidereus. In the Dissertatio cum Nuncio Sidereo he concluded that “in an infinite Universe the stars would fill the heavens as they are seen by us” (Kragh 81), thus rejecting the idea of an infinite universe posed by the telescopic observations of the Sidereus. That the Democritus should feature the paradox as one of the most often discussed ones also testifies of the intellectual climate of the age; the axis of this paradox still lies in the conflict between the image transmitted by a man-made tool, and the general empirical experience of the observer with the naked eye. It seems that the relevance of the Sidereus did not fade even after almost four decades of its publication.

The poem also entertains the paradox concerning the corporeal extension of the universe (stanzas 35-37), and the mathematical paradox of the division of infinity (stanzas 44-47). This latter one is based on the common problem of the mathematical divisibility of the entirety of any infinite space. If one were to accept an infinite space, the problem of how to divide that into smaller parts would arise; the division would not only yield to an infinite number of parts, but those segments would also be infinitely large. This numerical paradox may be linked to the mathematization of nature, which culminated in Newton, but had already started with Galileo, and, indirectly, by medieval scholars. Goldenbaum mentions Henry More in her explanation of the phenomenon:

This enthusiasm for the new geometrical method [whose pioneers were e.g. Hobbes, and Spinoza] in close connection with the mathematization of nature stirred up resistance. The aversion of theologians – as well as of Christian philosophers such as Henry More, Locke, Kant, and the German idealists – against the geometrical method was not a result of their deep mathematical insights. Rather it was due to their fear of necessitarianism as well as of hubris. They feared that the geometrical method, with its claim to provide knowledge as certain as that of God (adequate ideas), would lead to the claim of human “omniscience.” (276)
That Henry More’s speaker would disregard the paradox in the 48th stanza by directing the reader’s attention to God’s unbounded nature and omnipotence is a testament to his reluctance towards solid answers given outside the realm of scripture. He is so devoted to his own argument that the last two lines of the 48th stanza seem to be not at all connected to the previous, quote perplexing problem. Rather, the speaker questions whoever his imaginary opponent – the reader, or his contemporaries, – and accuses them that, when they propose that empty spaces are not possible, since it would go against God’s nature, they are rather mitigating God’s powers. This argument, albeit not a part of a logical flow, reassures the (scriptural, long-standing) proposition that God is omnipotent, and, indeed, nothing is impossible for Him. This, while a great theological addition, does not resolve the above paradox in an empirical-experimental framework. The speaker’s is a different kind of science, one which still accepts spiritual explanations without falling into the trap of “enthusiasm,” i.e. the projecting forth of things and connections which are not there. Were nature to be known on a purely mathematical-geometrical basis, the threat of determinism would arise, based on the strict logic and causality in nature. Hence, while Henry More accepted mathematics as an inherent mental framework, he did not accept its a priori existence in nature, as an objective, independent mechanism which is the same for God as for man (Goldenbaum 279).

The stanzas on the paradox of infinite divisibility also concern the mind’s capabilities; the 47th stanza states that infinite emptiness and an infinite number of bodies filling the space available both “gall” the mind. However, there cannot be a perfect balance between empty and full spaces, since the universe is boundless: either assumption leads to the conclusion that there is an infinite amount of each; even if one presumes a perfect 50-50 division between empty and full, in the end the universe equally contains an infinite amount of empty and an infinite amount of full space. This, in itself, is a paradox which the speaker entertains. What the speaker’s explanations usually lead to is the idea that inconsistency is not a falsifying factor for any such hypotheses, since God himself is boundless: the “wide and wast Vacuity […] lies even equall with the Deity” (45.1;3). The speaker admits that the “perplex nature [of infinite space] well mans brains might turn, / And weary wits disorder and misplace” (65.4). Goldenbaum also mentions the tendency between the “Christian thinkers” of the age which accepted an independent geometry in nature, yet believed that their limited mental capabilities cannot reach the heights of such sacred and complex system
(278). However, all paradoxes of the *Democritus* are ultimately resolved by the equation of God with space. The “weary wits” who “disorder and misplace” the universe based on their limited observations are reminiscent of Donne’s anatomist, who found that “tis all in pieces, all coherence gone,” since men “strive to bring [themselves] to nothing back”. Since the paradoxes are a result of the human framework, they might not exist outside of one’s learned and self-imposed walls. For Henry More’s speaker, the solution is the destruction of the walls of “corporeality,” but its replacement with a quasi-Neoplatonic system only substitutes one set of walls with another. The paradoxes do not disappear entirely with the “freer reason,” but they are rather understood as a natural result of the meeting point between man’s reason and God’s immense might. God is space, hence both are infinitely capable of everything imaginable – and beyond.

Even though Descartes and More did not agree on fundamental tenets in their correspondence, an excerpt from Descartes’ first letter summarises the speaker’s sentiment above:

> For my part, I know that my intellect is finite and God’s power is infinite, and so I set no limits to it; I consider only what I am capable of perceiving, and what not, and I take great pains that my judgement should accord with my perception. And so I boldly assert that God can do everything which I perceive to be possible, but I am not so bold as to assert the converse, namely that he cannot do what conflicts with my conception of things – I merely say that this involves a contradiction. (Descartes to More, 5 February 1649; qtd. in Agostini 893)

When Agostini analyses this passage, he asserts that “the barring of a move from the level of the perception to the level of the reality is not the barring of a move from pseudoevidence to truth, but from evidence to truth” (894). What the *Democritus*’ speaker implies and Descartes explicitly communicates is the following: even though one might perceive the physical workings of the universe through mediated and non-mediated sight, the ontological leap between my perception and the absolute, objective, “bird-eye” truth of God will not necessarily coincide. Yet rather than despairing of the meaninglessness and instability of one’s surroundings, one should not discard their observations as innately false – these observations, however, should be regarded with caution. While they are real, their interpretation might not be true to a higher, more comprehensive reality. Since God’s might coincides with the observer’s power of perception, yet exceeds it at the same time, it is only natural that what the speaker sees as paradoxical is a result of his lack of all-encompassing
understanding. The last great paradox, the Final Judgement is resolved not by deduction, nor by a balanced congruity of material and the transcendental reasons. Rather, one of the last stanzas of the poem passes an ultimate judgement on the mind’s limitations:

For the small spheres of humane reason run
Too swift within his narrow compast brains.
But that vast Orb of Providence contains
A wider period; (103.2-5)

The “spheres,” which in an astronomical context would refer to incredibly large expanses, are here punned with the spherical shape of the human head (and brain). These spheres denote certain limitations, and they are always to be understood as impenetrable demarcation lines. The human head is also such a container, confining the brain to a static place. Metaphorically, these confinements are to be understood on the level of thinking: that one is human naturally denotes limitation and finiteness. These constraints are not only spatial and mental, but temporal as well; Donne’s anatomist highlighted the minuteness of human existence from a celestial perspective, thus drawing attention to the futility of human attempts at celestial observations. Yet God’s mind works differently: it encompasses a “wider period,” enabling the divine observer to “think” in a framework fundamentally different from ours. Albeit More officially proclaimed the absolute quality of time only in 1655 (Thomas 16), it is almost a natural consequence of his logic in the Democritus to do so. Should God be omnipotent, omnipresent, and outside the scope of time, his creation, with infinite number of atoms containing the infinite potential of divine power, and infinite worlds, the universe would naturally be able to renew itself in an infinite number of times. The vastness of the divine “Orb,” in the meaning of the perfect, and all-encompassing geometrical shape, is contrasted with the “narrow” framework of men. Not only does this shape represent infinity – as circularity has no beginning and end point –, but the orb can be divided to several, smaller spheres, signalling that human intellect can only ever bear a shred of the comprehensive knowledge of God.

The Eye

It is only fitting that speaker employs epic devices in the Democritus; the whole quest if of epic magnitude, moreover, it may be argued that the poem, with its more than hundred
stanzas, is of epic length. The first stanza, an invocation, starts thus: “Hence, hence unhallowed ears & hearts”, the speaker exclaims, shunning the mental framework of materialist thinking, then invoking the “pregnant Muse” (1.6). Yet before he starts his exploration of the celestial realm (which, instead of being a triumphant quest, eventually becomes an ever-doubting, balancing act between reality and fancy – much like the ordeals of Ulysses), he asserts an important limitation to his journey: the truth value of any utterance may only be verified once the Muse flies back with them, and “turns them to the sight / of the eternall World” (1.8-9). It is only the “sight” (1.8) of the transcendental realm which may finally judge the theories presented; for they are only theories, and the speaker, as it has already been established, is equally wary of the possibility of error, and the hubris of the finite human mind to project its own limitations onto the divine framework.

That the speaker should stress the importance of sight is highly intriguing: there is a contrast between the transcendental sight of the first stanza, and the unsettling, uncanny “sights” of the second. In the latter one, these “strange sights do straggle in my restlesse thoughts” (2.1), which is especially worrisome given that the previous two lines (i.e. the last two lines of the first stanza) used sight as something that would validate the speaker’s inspired experiences. That sight, however, is not the speaker’s, but an unappropriated, independent one, bearing, on the one hand, the meaning of “my propositions will not amount to anything unless the eternal world observes and approves of them,” and, on the other hand, the meaning of “my propositions will not amount to anything unless they are contextualised in the ‘glory bright’ of the ‘eternall World’”. Both renderings have a common denominator in that they require any knowledge to be intrinsically connected to the transcendental realm, meaning that anything the speaker proposes has to have at least a dual basis: the material and the transcendental. Not only does this disclaimer fend off anyone accusing the speaker of atheism, it also discards the methodology of those “unhallowed ears” who are conducting and showcasing their observations exclusively in the framework of matter. Yet, as the case of the double nature of imagination has already shown, the inspired validation by a supernatural power (on in a supernatural context) does not render all other concerns naught: the second stanza further destabilises the infallible nature of the human observer by using the noun “sight” dismissively. These “strange sights” are phantasms which appear in one’s “thoughts,” and which come and go as they please. Reading these two “sights” together, perhaps one may conclude that human sight is inherently shunned, while a divine sight is praised. However, this chapter will show that this was not the case: the Democritus surprises
the reader by featuring several instances of a positive attitude towards human eyesight and observation.

The mind cannot be the measure of truth, if, by truth we understand pure, unobstructed, clear knowledge. However, such form of knowledge cannot be obtained; the soul may temporarily rid itself of the body and enter a state of ecstasy; this happens in stanzas 4-6, when the soul skips from planet to planet (5.4). But this state can only be regarded as an inspired one, not as an absolute transformation, thus it may only be enough for the observer to have a preliminary understanding of another mindset, one he obtained after demolishing the constraints of corporeal, Aristotelean philosophy which hinder many of his contemporaries to embrace the infinite extensions of the universe, as well as the divine energy which maintains and animates it. Hence, the speaker employs allegories throughout the course of the poem. As Gorman argues, “with its fragmentary claim to and knowledge of truth, the human condition can be understood as an allegorical mode of being” (153), meaning that the human mind has to use analogies and allegories, which Gorman defines as “the embodiments of ineffables that are at the heart of physical life, paradoxically both beyond and held open to sensorial perception” (151). Lacking sufficient tools for more extensive observations, the human mind has to extrapolate from what it perceives in its perceivable surroundings. This process results in a myriad of thoughts, imagined landscapes, fantasies about other worlds and what a meteor’s tail contains exactly. More’s congruity ensures that the spiritual and the mortal are never quite separate from each other, and that opposing qualities may be reconciled. His poetic images reassure this idea as well: as the paradoxes of the previous chapter have shown, his “truths” are always incomplete, leaving the reader perplexed, sporting seemingly irreconcilable polar opposites. Yet the world reveals itself by extrapolation, meaning that if nature displays any unity of apparently opposing qualities, then the whole of creation might follow the same pattern, designed by the same engineer – God, the divine essence, or however the entity is termed. Hence, what is seen in our corporeal existence is not to be sacrificed on the altar of idealism, but rather to be examined, and incorporated into one’s line of deductive reasoning, all the while maintaining the natural humility which comes from an understanding that, on the one hand, one’s knowledge may always be fragmentary, and, on the other hand, that all such endeavour should be conducted while keeping “the eternall World” in mind. It is to be seen how the allegories and analogies of the *Democritus* are closely intertwined with the act of observation and the eye.
Albeit almost a decade after the Democritus’ publication, More is going to use the eye in 1655 as a tool for what was the first instance of the argument from design, i.e. the justification of the existence of God based on the intricate workings of observable, natural mechanisms. Yet he only regarded the eye’s “number, the situation, the fabrick”; not its connection to the mind or its trustworthiness either mechanically or projectively (Riskin 356). The above argument does not demonstrate the eye’s “goodness” or “usefulness” in the context of human observation, yet it is a definite divergence from Donne’s anatomist and Herbert’s seekers; how the eye is constructed reflects on the existence of a divine mechanic, a perfect craftsperson who constructed the instrument in the most efficient way possible. Hence, human eyes are not inherently faulty – they might be unable to reach beyond a certain distance, they might have degenerations, but their inherent structure is perfect. Albeit it cannot be claimed that More had already had the same idea whilst writing the Democritus, the poem’s mostly positive treatment of eyesight strongly suggests this conclusion. Hence, there are several points in the course of the poem which describe the observation of physical reality in positive terms.

Invoking Origen, the 75th stanza verges on the threshold between the immanent and the transcendent. Here eyesight is not directly used for the observation of the night sky, but rather for interpreting scholarship. In order to establish his own argument, the speaker exemplifies the ancient writer as someone who had the “piercing sight,” an inner, inspired quality, to discuss the cyclical nature of the birth and decay of new worlds:

But thou, O holy Sage! with piercing sight  
Who readst those sacred rolls, and hast well tride  
With searching eye thereto what fitteth right  
Thy self of former Worlds right learnedly dost write (75.6-9)

The lines also read as an invocation of the muse, making it intrinsically connected to the first stanza, whose heavenly muse was also operating with sight. As Origen’s sight likely refers to a mental quality, rather than his actual eyesight, “the sight / of the eternall World” merges even more so with the meaning of these lines. Origen’s invocation shows that the speaker wishes to attain the same sight he possesses; an evaluative tool which finds the truth in the confusing, overwhelming whole. Since the transcendental sight of the first stanza is also presented as a guide which separates truth from fancies, one may assume that this, on a
smaller scale, may also happen inside a person, on earth, while he is alive in their material body. By the 75th stanza the speaker has already evaluated at least eight different hypotheses, including paradoxes, assumptions based on allegory, and objections. These pieces of information, according to the implications of the text, can only be handled by this transforming sight, which finds the hidden, the beyond: the transcendental truth behind corporeal phenomena. As Origen was reading the “sacred scrolls” “with piercing sight,” one must read their environment with the same inspired, evaluative mindset, whose transcendental counterpart awaits beyond the realms of bodily existence.

Unlike The First Anniversary, the present poem does not condemn the astronomers’ sight. The 77th stanza considers two of the most widely documented supernovas of early modern England: called Tycho’s (1572) and Kepler’s (1604) stars, respectively. While looking for an answer to their seeming mutability – both of their appearances lasted for one or two years only – the speaker establishes a basis for his future claims:

Both [of the celestial objects] bigger then the biggest starres that are,
And yet as farre remov’d from mortall eye
As are the furthest, so those Arts declare
Unto whose reaching sight Heavens mysteries lie bare (77.6-9)

That the two new objects are enormous in size yet immensely far away from the Earth is the basic paradox of this section. What is perplexing in the light of the previous two chapters is that the astronomers’ claim is taken for granted: the speaker does not doubt the validity of their observations, and the following five stanzas also lack any stern remark or irony. Such a trust in the “new astronomy” might simply result from the almost half a decade between the Sidereus and the Democritus. Although the verb “declare” might signal a hint of doubt, the context of the last two lines seem to eliminate that ambiguity as well. What the speaker observes in this stanza is not that the world is decaying, or that man’s endeavours somehow mar their surroundings, but a genuine sense of progress; astronomy is a tool which draws “Heavens mysteries” closer – these being the physical mysteries, such as the magnitude and distance of celestial objects, not their transcendental counterparts. It is not eyesight, nor the astronomers’ tools which are problematic in the speaker’s quest for truth, but imagination – i.e. the postulations on what cannot physically be observed.
It is an empirical fact, however, that one’s physical surrounding may appear distorted to the eye. However, this deception may always be corrected by reason and logic. From optical illusions, through vast distances, to vacuum, the speaker always finds an answer to these seeming inconsistencies, unlike their mental counterparts: when it comes to unobservable, theoretically postulated paradoxes, the speaker is more prone to simply change the subject, or acknowledge his lack of ability to solve the problem. The 60th stanza is explicit proof for the speaker’s trust in human eyesight:

An hint of this we have in winter-nights,
When reason may see clearer then our eye,
Small subtil starres appear unto our sights
As thick as pin-dust scattered in the skie.
Here we accuse our seeing facultie
Of weaknesse, and our sense of foul deceit,
We do accuse and yet we know not why.
But the plain truth is, from a vaster hight
The numerous upper worlds amaze our dazzled sight.

Reversing Donne’s argument, the speaker concludes that what may appear a “foul deceit” is reality which one’s mind cannot or does not want to acknowledge. Upon looking at the sky, the observer may find small, barely noticeable, bright spots in between the ones which are clearly noticeable. The speaker claims that these dots are stars, to whom other “attending” planets are attached, proving that the universe is indeed infinite, containing an infinite amount of solar systems. The stanza is a warning not to be afraid of optical illusions, as observation with the naked eye is not just a physical act, but it happens simultaneously with interpretation. Thus, one’s reason may augment sheer physical reality; since, for the speaker of the Democritus, everything is pointing towards the existence of an infinite universe, it is only natural that his reason accepts what he sees. The 62nd and 63rd stanzas explain the methodology with which eyesight is transformed into a trusted tool:

Yet I’ll be bold to say that few or none
But deem this globe even to the bottome made
The ontological divide between appearance, perception, extrapolation, and truth is eloquently put in these eight lines. Since many physical phenomena are yet to be empirically observed, one frequently makes assumptions and postulates hypotheses on the workings of their own surroundings. One such example is what the Earth looks like. Donne’s anatomist already pondered on the vast spaces which may lie below the earth, equating it to hell, then dismissing the idea completely. More’s speaker does not have any such reservations; he merely uses the example to show that human reason works closely together with sight, and that where one fails, the other may serve better. This might read as a logical fallacy, as the speaker takes an isolated instance and, relying solely on an analogy based on occurrence, generalises his own experience by employing parallels between two different observations. However, effective or not, the speaker knows that this is the methodology by which humans operate. The stanza’s argument rests on the opposition between practical considerations and theoretical guidelines: although one can see the myriad small specks, distant stars with one’s naked eye, yet the infinity of the universe is denied based on theological or philosophical dogma. More’s speaker encourages the reader to trust this God-designed tool, the eye, when reason confuses him; with this, he encourages a synergy between empirical observation and logical-spiritual extrapolation, and, following Henry More’s emerging idea of a vital congruity, he hints at the idea that these two different methods may work the best together, as spirit and body do. Eyesight might be faulty; reasoning and imagination might also misinterpret certain phenomena. An ideal methodology fuses the data received by the eye and the inspired, yet logical conclusions emerging in the mind, all the while shunning existing preconceptions of what the world should be: what one has to be wary of is not illusion, but the over-enthusiastic use of imagination.
A Tool and a Hindrance

The paradoxical dualities of the *Democritus* may hinder the reader from constructing a linear narrative of the text; whereas sight became a valuable tool towards the middle of the poem, and it is instrumental in augmenting reason embedded in false dogmas, the *Democritus* begins on quite different terms with it. As everything, sight is also one of the inexplicable phenomena in nature; and as the other phenomena displayed so far, it is also something which is more than it seems. The duality of the speaker’s (and More’s) system inherently bears the impossibility of full understanding, as the transcendental, hidden nature of any such phenomenon is even less mapped than its physical aspects. The “sprite of Nature” which is present everywhere, and which generates everything that exists in this universe, is a factor which destabilises the *Democritus*’ world. Hence, as it has been explained, it is only through analogies that this “hidden realm” might be understood, consequently, any interpretation made by any inspired or non-inspired thinker is non-verifiable.

The speaker’s aim, which he stated in the sixth stanza, does not only concern the deconstruction of materialism and “corporature”, but also the display of things *sicuti sunt*, as they are. “For other they appear from what they are” (7.1), asserts the speaker one line after his prophetic revelation, and explains that it is due to our viewpoint and lack of perception that one cannot see the infinite number of “things” (celestial bodies), or their transcendental mechanisms for what they are. The question of parallax (i.e. the altered placement of the same celestial object by two different observers due to the angle enclosed by their two lines of sight) and of heavenly revolutions are displayed in the seventh stanza as the two main reasons for this quasi-optical illusion. Appearance is deceptive not only due to the observers’ innate and unquestioned preoccupation with material structures, but it is suggested that these material structures can produce such preoccupation in the mind of the observer because of one’s heavy reliance on eyesight (in the bodily/physiological sense). It is only God who is able to reside everywhere and comprehend the whole of the universe “without all defect” (8.2). Although sight is generally considered to be a valuable tool in one’s observations, the beginning of the poem warns the reader of false interpretations.

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76 I.e. the “tearing up” of the “thanklesse inclosure,” philosophies with materialists tendencies (6.7-8).
77 Henry More names his trinity as “Ahad, Aeon, [and] Psyche,” “The One, Eternity, [and] Soul”, respectively (8.4). However, as Reid also pointed out, these three bases of More’s Plotinian, inspired universe were easily equated with the three persons of the Christian Holy Trinity (Reid, *The Metaphysics* 83). In order to maintain a concise language throughout my dissertation, and due to the fact that the aim of the current chapter is not to explain the metaphysics of Henry More in detail, I use his terminology for the hypostases and the conventional terminology of Christianity interchangeably.
resulting from sensory data. The stark contrast between what God is able to see and what human beings claim to understand through eyesight yet again becomes focal in the explorations of the heavens. As if echoing the speakers of his (intellectual) predecessors, the speaker of the *Democritus*, in stark contrast with his later statements, asks the crucial question of trust:

Wherefore who’ll judge the limits of the world  
By what appears unto our failing sight  
Appeals to sense, reason down headlong hurl’d  
Out of her throne by giddie vulgar might.  
But here base senses dictates they will dight  
With specious title of Philosophie,  
And stiffly will contend their cause is right  
From rotten rolls of school antiquitie,  
Who constantly deny corporall Infinitie.

Human sight is depicted as “failing,” and the senses to which it transmits its data are “base” (9.5). The people who rely on the absolute truth-value of eyesight are “vulgar” (9.4), ordinary (cf. *OED* 6.c and 9.a). More’s speaker follows on Oresme's argument which asserted reason’s priority over the senses, and argued that since the human mind and logic can imagine the existence of true infinity, the lack of our finite existence should not prohibit one from arguing for the infinite extension of space (Grant 119). What his contemporaries used as a counterargument became Oresme’s own weapon against them; similarly, More’s speaker opposes the “common folk” who rely too heavily on material appearances and do not yield to the free moving qualities of the mind. The “inclosure” of the sixth stanza is not only a metaphysical barrier, but also incorporates the notion of the “world’s walls” in the fifth stanza. The deductive logic in these two stanzas implicitly mock the claim of those who reject the infinity of space on the basis of the mind’s “fancy,” and argue that only imagination can construct this infinity. In the *Democritus*, these thinkers of “corporature” become the ones whose mind construes the “fancy” of the “world’s walls”, and which “judge[s] the limits of the world,” an act of hubris which results, according to the logic of the speaker, in false constraints. Both the prose introduction and the invocation of the poem already assured the reader of the non-canonical status of the work, labelling it as a simple “discourse,” and
not as a revelatory work of some absolute truth. However, this disclaimer did not exclude the possibility of presenting a certain form of the truth; the one which happens to oppose the standing order of the “vulgar” (common) thinkers. So, while both More and his speaker are aware of their own limitations, they also shift toward a Neoplatonist reading. However, one has to be wary of the bias presented in the current and the following stanza; while the physical observations of the night sky presented in the 62nd and 63rd stanzas are claimed to be valuable tools in justifying the speaker’s own argument, the similar (albeit non-specified) observations of his opponents are shunned under the pretence of being faulty. If one’s sight in inherently “failing,” does it mean that the image of innumerable small stars, nestled between the ones which are more readily observable, is an illusion also? Both observations are empirically valid: one cannot observe the infinity of the universe, and one may sometimes see small stars otherwise invisible to the naked eye. The speaker distinguishes the two solely by the “progressive” nature of the resulting thoughts. Whereas his observations, together with his understanding of the image of the divine lead to an image of an infinite universe, his opponents rest their “Philosophie” on their lack of sight rather than what they can actually observe.

If this were the case, then the tenth stanza would yet again undermine the previously explained framework. While the speaker condemns his contemporaries for extrapolating from what they do not see, yet his God also hides from plain sight, both actually and metaphorically. Following the Platonising conventions, matter becomes a “phantasie” (10.3), and God the giver of “Life and Energie” (10.6). God as the giver of life is not an especially peculiar notion, however, God as a “shade” (10.9) is. Even more disturbing might be the image where this shade of God is the one which is dispersed (emanated) everywhere, and which animates the dull and mutable matter in the universe. It is not “light”, a common denominator of God and the Plotinian One (I. 3. 2.) which is mentioned first, but His endless shade. Though the next stanza describes God’s essence as “liquid fire” (11.2), his emanation consists mainly of the shade which His light casts. There is a certain sense of mysticism imbued in the descriptions of the divine animating power not only due to the heavily Cabbalistic and Neoplatonic hues of the imagery, but also due to the close proximity of the discussion on “faulty” eyesight. I believe that God is primarily depicted as a shade for three main reasons: (1) since His emanation can always be qualitatively less than his

\[78\] 1 John 1:5: “God is light, and in him is no darkness at all”; Jesus declares that “I am the light of the world” (John 8:12).
concentrated essence, what remains of His fire is only a shade; (2) He is transcendent, above everything, and indescribable; in biblical passages, He often hides in from human sight\textsuperscript{79}, hence the mystical depiction; (3) human eyesight requires light to function optimally, yet when it comes to outer space, the eye physically (and quite necessarily) lacks the sufficient amount of light during the course of the observation (as it happens at night-time). Hence, there is yet another metaphorical layer present, as the human eye lacks the concentrated essence of the divine light; what one may see is not God’s wholeness but His reduced, darkened appearance. This is an ultimate proof for one’s inability to grasp any phenomena in its entirety: as the purest form of God is pure essence, He is naturally out of the scope of one’s natural limitations. However, it is through the workings of sight that corporeal life appears to be corporeal, yet one fails to observe that free moving spirit lies beyond everything. As the observers in Plato’s Republic are deceived by the passing shadows on the wall of the cave, the observers of the universe (as it appears to the eye) are also “prisoners [who] would deem reality to be nothing else than the shadows of the artificial objects” (515c).

“Phantasies” are not only present in the human mind, but also in one’s immediate and wider environment, as everything which is mutable and “conspissated” is solely a “phantasy”. However, it is life itself, the animating spirit of matter which remains unchangeable: as long as there is divine energy present in the world, the “Atoms” remain “unchang’d” – as there is the same divine spirit operating in human beings, one’s perception might change without their essence being altered. Imagination, as it has already been established, derives its images from sensory perception, i.e. what one’s material body receives from the material world. Thus, when one changes their opinions on something physically observable, it does not entail that the person’s essence also necessarily changed. With the popularity of the anatomical theatres, there developed a confusion on the workings of the mind and the soul in the period, which was addressed both by Descartes – who attempted to determine the functions assigned to the different parts of the human brain – and Henry More, who focused on the effects of phantasms and imagination, induced by bodily experiences, on the mind (Vermeir 14-16)\textsuperscript{80}. Without considering the issue of cognition in detail, the speaker of the Democritus resolves to establish an absolute axis, which is, quite logically, the part of the human entity closest to the divine essence: the soul, existing in a

\textsuperscript{79} See e.g. Deuteronomy 31:17; Ezekiel 39:23; Hosea 5:6; Isaiah 45:15; Job 34:25.

\textsuperscript{80} The scope of this problem exceeds the thematic limits of my dissertation. For a detailed analysis on Descartes’ and More’s ideas, see Vermeir’s study.
congruity with matter. Since it is a constant, unchanging, both inside and outside of the world, not only does it evade alteration upon the changing, external circumstances, but it also refuses to act as a “looking-glasse” (15.3):

And as our soul’s not superficially
Coloured by phantasms, nor doth them reflect
As doth a looking-glasse such imag’rie
As it to the beholder doth detect (15.1-4)

The soul does not absorb anything from the changing world outside; similarly to the Neoplatonic, divine centre, it acts as an absolute, stable axis for human existence. Thus, the speaker concludes, appearances not at all excite the soul. Human beings appear in the mirror only in their corporeal form, and their personalities, virtues, sins, thoughts can never be reflected by it. When one looks at the night sky, and attempts to decipher its natural causes and motions, they only look into a mirrored image, the corporeal “phantasm” of the spiritual truth; they see the shadows on the wall of the cave, yet fail to see, with their mental eyes, the transcendental plain, and the animating spirit inside and behind. The speaker’s solace, albeit never fully articulated in the narrative, is that however paradoxical his observations might be, his spiritual essence will remain untouched by whatever he does or does not see. Unlike Donne’s anatomist, dissolution is not an imminent threat: what may now only be grasped as a fusion of spirit and matter will, in its pure form, reveal the full potential of its spiritual causes.

How the speaker rejects the materialists’ observations, who do not see beyond the natural scope of their eyes, yet accepts his own observations, which opens infinity and organically incorporates spirituality into nature, is a picturesque example of the arbitrary nature of human perception. A practical consideration of this relativity is explained in the 24th stanza, in connection with the relativity of the position and the function of our sun. Since the universe is infinite, he postulates that there need to be an infinite amount of solar systems as well, meaning that our sun serves as a secondary star elsewhere. Henry More held heliocentrism from 1642 on (Thomas 15), and his change of perspective is shown in the distinguished position of the Sun as the “heart and kernel” (24.2). Due to their fixed position, humans may only perceive the Sun in a certain way: from a certain vantage point and a certain perspective. The implied accusation of the stanza, when read together with the
preceding arguments, is that the materialist observers fail to consider this when interpreting what they had seen. The speaker’s observation becomes superior because, in his inspired state, he can move more freely between different vantage points. The reader may yet again be reminded of the allegory of the cave, where the observers are “able to look forward only” (514b), as they are “prevented by the fetters” (ibid.). The same happens when the fetters of “corporeality” weigh the astronomers’ minds down, and the secondary nature, whether practical or the spiritual, of what they see evade their understanding. Whatever is perceived in the universe is only arbitrary appearance whose “true workings” might only be perplexing due to the faulty exchange between corporeal objects (here celestial objects) and the corporeal vantage point (our eyes and physical position in the vastness of space).

The third line of the following excerpt has already been used as an illustration of the speaker’s ability and willingness of revaluating his own conclusions. Albeit it does not explicitly concern eyesight, it is nevertheless central in the speaker’s definition of sight:

For all once minded such perplexity
It doth create to puzzled reason, that
She sayes and unsayes, do’s she knows not what.
Why then should we the worlds infinity
Misdoubt, because when as we contemplate
Its nature, such strange inconsistency
And unexpected sequels, we therein descry? (46.3-9)

The lines above are central to the speaker’s argument not because they try to conclude whether the infinite space is filled with bodies of is vacuous, but because they admit that such conclusion is impossible to reach. One’s mind can change quite rapidly in the process, leaving the “perplexity” ultimately unresolved. Yet contrary to the speakers of The First Anniversary and Herbert’s astronomer-poems, the mind’s bafflement is not seen as an impediment in the continuation of the search. Indeed, the walls that reason encounters do not act as signposts for stopping and turning back to more “earthly matters”. The speaker has warned of this phenomenon already: the invocation explains that the fullness of experience only belongs to God who resides everywhere, and any observer knows that the vantage point they take is arbitrary and anthropocentric. However, one must not cease their
explorations, but rather try to take a new vantage point. What the speaker does, then, after admitting his temporary defeat, is to list ever more arguments for the infinity of space: he tries mathematics, faith, deductive logic, and the seemingly simple faculty of imagination to try and comprehend the strange nature of an infinite universe. Inconsistency is not a falsifying factor, and the solution for its limiting effects is to remove the “vizard” (47.5), the mask (OED 2a) from the face of the world, and observe it – free from the constraints of matter-centred thinking, but with a sight beyond.

This sight can be reached by a perfect union with God. The idea, at least in Henry More’s case, is to be traced back to Plotinus, who asserts that “we must say that life in a body is an evil in itself, but the soul comes into good by its virtue, by not living the life of the compound but separating itself even now” (I.7.20). “The piercing eye of truth” (52.3) is the mode of seeing which lays everything “wide ope” (52.4), and fulfils the prophecy of the sixth stanza. However, this experience of disregarding matter and attaining the sight of truth may only occur if one “thaw[s] at this celestiall fire” (52.6): that is, if one becomes one with the One, God. All barriers must be melted: not only the materialism which separates the observer from the infinity of space, but also the inherent distinction between the transcendental and the corporeal, the divine and the human. Herbert’s speaker could not bridge the infinite distances between himself and the vastness of God for this very reason: and he also gravitated towards the idea of a mystical union with God for the very same reason More’s more Neoplatonic mind does. It seems that one needs to melt into (even if temporarily) the sole observer who is “the key of all his works” (52.1), because this is the only way to “make one place ev’rywhere” (Herbert The Temper (I) 28).

The Telescope

It may perhaps seem strange that, in a poem arguing for the infinity of the universe, the telescope only makes its first appearance in the 84th stanza. Nevertheless, the instrument is only referred to three times throughout the text, and seems to be a more natural, organic part of contemporary science than in the previous two oeuvres. Henry More was born five years after the dissemination of the instrument, and almost four decades passed between the publication of the Sidereus and the Democritus. The two comets of Tycho and Kepler, which, respectively, caused great conundrums in the previous century were historical events, and the discovery of any new celestial object became a necessary step in the furthering of the empirical sciences. These new astronomical discoveries, however, were nothing compared to the three big celestial events of the previous hundred years. While “Tycho’s comet”
entered natural history as simply the Great Comet of 1572, and had proved the existence of
decay and changeability in the supralunar sphere before the emergence of Galileo’s telescope
in 1610, even “Kepler’s comet,” which appeared in 1604 and did not induce a similarly
intense response. What was common in the two occurrences is that although both are “bigger
then the biggest stares” (77.6), they are still almost immeasurably far, and, in lieu of an
optical instrument with a sufficient magnitude, they could not properly be observed. That
the sky holds more objects than naturally observable became common knowledge, whether
fully believed or not, somewhat shifted the scientific focus: the sceptics turned to optical
theory, the supporters continued their explorations, and the emerging empiricists begun to
specialise and observe the particulars of selected phenomena, i.e. how vacuum works or how
blood flows in the body. The “reaching sight” of the astronomers could, by the time of the
Democritus, scry some of the particulars of these celestial objects. Since the infinity of the
universe could not be observed either by the naked eye or by this instrument, the speaker
mostly resolved to employ logical and mathematical proof, together with his observations
and his inspired, spiritual understanding of God in his attempt to undermine all doubts
concerning his hypothesis. However, when it comes to his proof for atomism, and an ever-
changing, mutable universe (which allows for endless generation), the speaker uses the
telescopic observations of meteors, which are known both to be “above the Moon” (83.2)
and to dissolve or disappear after a certain period of time.

With the “Optick glasse” some of these celestial objects may be followed through
their duration of appearance. It is with the help of this mediated image that such an
augmentation provides that the exact nature of meteors might be described “without all
contradiction” (84.6). At this point the speaker introduces a quasi-scientific treatise on the
composition and movement of meteors, and all the while he integrates such a material
phenomenon into his “bigger picture”; this analysis is focal because the speaker does not
separate natural philosophy or empirical science from metaphysical and ontological
discussions – one’s inspired knowledge of the transcendental realm reinforces the observed
phenomena present in the material realm, i.e. meteors are picturesque representations of the
process how atoms are known to change whilst their centre, animated by the “spirit of
Nature”, remains unchanged.

And that these tayls are streams of the suns light
Breaking through their near bodies as through clouds.
Besides the Optick glasse has shown to sight
The dissolution of these starrie crouds.
Which thing if ’t once be granted and allow’d,
I think without all contradiction
They may conclude these Meteors are routs
Of wandring starres, which though they one by one
Cannot be seen, yet joyn’d, cause this strange vision (84)

The speaker’s proposition is that the tails of meteors constitute of “a cluster of small starres” (83.8), which started to dissolve due to the natural process of the weakening of matter. These clusters, then, are blown by the “Ethereall winds” (90.4), always away from the Sun, thus, they form the shapes which are also observable by the naked eye. While the initial argument would prove that the universe is not constant – as matter never is, – the lengthy section on meteors suggests that the speaker would rather put forth his own hypothesis of the constitution of a meteor’s tail. Thus, not only is he justifying the mutability of matter in a spiritual framework, but he does so in an empirical one, while simultaneously focusing on the physical properties of these unknown celestial objects. The “Optick glasse” is introduced here with some reservations: although it would serve as solid proof for the speaker’s claims, as it “has shown to sight / the dissolution of these starrie crouds” (84.3-4), yet the mediated image has to be “granted and allow’d” (84.5). The relative clause in the beginning of the fifth line (“which thing”) may simultaneously refer to the telescope itself, and the image it shows; I believe that the ambiguity serves the speaker’s purpose in that both of these had been considered to be treated with a certain intellectual caution. However, he soon dismisses all such concerns, and proceeds with his analysis of the celestial physics concerning the transmission of light through these cloudy tails. That the speaker would so soon ignore the problem of the telescope shows that he truly believes in a synergy of empiricism and spiritual, Platonising thinking; for a “pure” Neoplatonist to base his argument on a material tool mediating material phenomena is not readily acceptable. This way, however, the congruity of the Democritus’ philosophy, with its holistic approach, yet again aims to address almost all major oppositions regardless of their innate philosophical inclination.

Once the telescope has been established as an aid, “that experiment with the Optick glasse” becomes “the greatest argument of all I deem” (91.1-2) to prove the mutability of the constitution of meteors. Since material truths can more readily be obtained, all theoretical
reasoning becomes secondary to the image the speaker saw. The logic applied here is quite similar to the speaker’s unaided observations of the night sky, where he managed to see the innumerable small specks immensely far away, in spite of their theoretical and/or theological impossibility.

But that experiment of the Optick glasse
The greatest argument of all I deem,
Ne can I well encounter nor let passe
So strong a reason if I may esteem
The feat withouten fallacie to been,
Nor judge these little sparks and subtile lights
Some auncient fixed starres though now first seen,
That near the ruin’d Comets place were pight,
On which that Optic instrument by chance did light.

Nor finally an uncouth after-sport
Of th’ immense vapours that the searching fire
Had boyled out, which now themselves consort
In severall parts and closely do conspire,
Clumper’d in balls of clouds and globes entire
Of curdled smoke and heavy clunging mists;
Which when they’ve staid awhile at last expire;
But while they stay any may see that lists
So be that Optick Art his naturall sight assists. (91-92)

That empirical observation is the one “withouten fallacie” (91.5) is a significant endorsement of the “Optick Art”. Although the speaker lists a few other alternatives to his interpretation, his picturesque descriptions together with the telescope-mediated images of the sightings prove his point. The second half of the 92nd stanza reads both a faithful description and as an analogy; the speaker sees “balls of clouds,” “curdled smoke and heavy clunging mists,” not blackness, destruction, or uncanny images. Unlike the “ancient fixed stars,” the meteors on the sky change like the weather does: they are not in an entirely alien, eternal realm, on
the contrary: their appearances are very similar to the well-known British landscape in the
colder months. The similarity brings the celestial objects closer to everyday experience, and,
at the same time, renders them more natural, more acceptable. Their “expiration” in the 7th
line familiarises the experience even more, as earthly phenomena also fade quite similarly
to the vapours of the comets’ tails: this is a welcome mutability, as out of the disassembled
atoms, new constructs may emerge.

For the speaker of the *Democritus*, then, both eyesight and augmented sight bring
their objects of observation closer; the two conclusions he could draw were that, on the one
hand, the distant celestial objects are not mere products of illusion, and, on the other hand,
that their study aids rather than undermines an image of the universe filled with divine
energy. In the *Democritus’* world the existence of invisible atoms presupposes the infinite
generation and inevitable decay of these objects, and, somewhat reclusively, the empirical
proof for newer and newer, mutable celestial objects suggest the very same. Yet, with the
geometrization of the divine, and with the spirit of nature filling all atoms, giving them
generative energy, spurring them to rearrange in new forms, there is another benefit of
scrying what the atoms do in space: instead of reading the limited, anthropocentric
phenomena of the Book of nature, man may be able to read the “greater tome,” or at least
some other manifestations of such creative and omnipresent power. The notion of the divine
is detached from the anthropocentric ego, and although the limitations of ocularcentrism are
still to be considered, man is able to contemplate the divine through the immeasurable
expanse and richness of space, and the never-ceasing cycle of generation and dissolution.
Thus, in the *Democritus’* world, celestial phenomena become suggestive of the divine nature.

*The Divine Aesthetics*

One of the most picturesque depictions of the paradoxical nature of a dualist universe is what
John Spencer Hill labels as “the Cusaean paradox” (33). The notion of a sphere whose centre
is everywhere and circumference is nowhere was established to have been disseminated
rather via the *Liber XXIV Philosophorum* than Cusanus himself, moreover, the second
chapter also argued that this quasi-geometrization of God inspired an analogy between
abstraction and non-abstract physical space. Neither of the above hypothesis of God, nor the
exact geometry of outer space could be verified by empirical tools, or rather there had been,
for a long time, no innate need to surpass the mere theoretical considerations of any concept.
It was Kepler who first aimed at a description of the “true physical constitution of the
universe” instead of merely metaphysical or apparently over-calculated descriptions
(Hatfield 100, my emphasis). The *Democritus* manages to display both approaches, as it aims at a simultaneous description of physical phenomena and their metaphysical nature. The “Cusaean paradox” has already been entertained in the analysis of Herbert’s *The Search*, where it was concluded that albeit there are certain hints to the persona’s use of the concept, it does not constitute a stable and central part of the poem. In contrast to this, the 8th stanza of the *Democritus* explicitly features the Liber’s paradoxical geometrical concept of God, however, in the poem this geometrization of the divine will only serve as an illustration for the previously established concept of a God residing in atoms. Through what line and succession of influence did Henry More incorporate the idea into his own universe is not to be discussed; the following chapter will rather investigate how the different attributes of God are completing the congruity of the *Democritus*’ world.

The 8th stanza reaffirms what had already been established before, namely, that full knowledge is only accessible for God, who is naturally omnipresent:

> But totall presence without all defect  
> ’Longs onely to that Trinitie by right,  
> *Ahad, Æon, Psyche* with all graces deckt,  
> Whose nature well this riddle will detect;  
> A Circle whose circumference no where  
> Is circumscrib’d, whose Centre’s each where set (8.2-7)

The names assigned to the Trinity are partly inspired by Gnostic and Hermetic traditions; Reid explains the “Ogdoas” as such:

More called the first three levels ‘Ahad’ (or alternatively ‘Atove’), ‘Aeon’, and ‘Psyche’. These were, respectively, The One (or The Good), Eternity (Mind), and Soul. But, of course, although it might have suited More to express himself in Platonic (or, as we would say, Neoplatonic) terms, he was additionally a Christian. Consequently, he was keen to explain that these three hypostases were identifiable with the three persons of the Holy Trinity. The next four levels in the Ogdoas were then ‘Semele’, ‘Arachne’, ‘Physis’ and ‘Tasis’, which More explicated as Imagination, Sense-perception, Nature and Extension respectively. Finally, at the very bottom, there was ‘Hyle’ (Reid, *The Metaphysics* 83)
Albeit Henry More was very specific about his own framework, the Democritus conspicuously omits a frequent use of this terminology. Perhaps it is a matter of focus – as the text is a treatise for the infinity of space rather than the metaphysics of Henry More’s Neoplatonic universe, – or perhaps a turn towards more specific examples, but only Psyche is ever referred to again in the 12th and 13th stanzas; her “garment” is the one which acted as a starting point for all following creation; it is pure, elemental matter ready to be animated by the “sprite of nature”. This might not be accidental, as the general focus of the Democritus is to show the immense creative energy of a universe where humans, as observers, do not have the longevity and the tools to observe the full cycles of creating and dissolution. Due to spatial and temporal disproportions between the human and the divine viewpoints, the poem resolves to employ analogies and paradoxes, but most often both. What the descriptions of God affirm throughout the poem is, in Hill’s words, “the fullness of reality is expressible only in such paradoxes as that of the infinite sphere” (Hill 54). The paradoxes concerning the infinity of space were concluded to remain unresolved, thus maintaining the unreachable, incomprehensible transcendental quality which lies beyond all phenomena, as one cannot fully understand what is “beyond” of the material appearances in a dualist universe. Another paradox concerning the divine is whether anything could be added to or subtracted from His essence: since God is omnipresent in the poem’s universe, the speaker may question whether He is truly everything, or whether matter is a separate entity, too lowly to be called God:

All is resolv’d int’ one absurdity,
The grant of something greater then infinitie.

...  
Joyn now the world unto the Deity.
What? is there added no more entitie
By this conjunction, then there was before? (33.8-9; 34.4-6)

Albeit the speaker refuses to answer his own questions, and starts to entertain a different concept of the divine, perhaps this is a paradox which does not need to be resolved. In order to say anything about the divine nature, one must rid themselves of the singular, anthropo- and ocularcentric (not to mention egocentric and materialistic) focus which is a somewhat natural part of human existence. However, as the previous two chapters demonstrated, this
is only possible either after death, or in a mystical union with God. However optimistic the
speaker of the *Democritus* may seem, he can only partially denounce his previous
frameworks; albeit he may enter a spiritual mode of contemplation, and may even utter
material and spiritual truths about the universe, there is still a “big picture” somewhat always
out of reach. The text implicitly explains its elusion of an all-encompassing theory of the
universe: space “lies even equall with the Deity” (45.3). God in omnipresent everywhere in
His entirety, and His power is above the distinction between form and idea: He is able to
create an infinite amount of worlds (stanzas 49-50). The *Genesis* says that the “the earth was
without form, and void” (1:2) the poem’s universe was also “vain and void” (49.2), and it
was the spirit of God, or the spirit of nature, a lessened, emanated portion of this power,
which animated the barren and vast darkness. Since God is “unbounded, measurelesse, all
Infinite” (47.2), it is only natural for the speaker to assume that He does not limit Himself
by necessitating the existence of a finite space with finite possibilities. Claiming the opposite
would indirectly constrain the scope of God’s powers as well. Due to this God-infused
universe cannot ever be fully known: matter without the divine is meaningless in the
speaker’s world, and the world is presented in partial observations as well as inspired
analogies.

Such an analogy is the infinite goodness of the divine shown in the 51st stanza. As a
sun is the axis of all solar systems (possibly sustaining life, giving warmth, encouraging
growth as ours does), so does God provide the “inexhausted Good” which fuels these suns
(51.7). As the planets revolve around the sun “like reeling moths around a candle light”
(51.4) so do people gravitate towards the light and goodness of God. This analogy is
especially focal to the chapter’s argument, as it shows how the “upper layer” of empirical
science can be peeled back, revealing the other half, i.e. the spiritual counterpart to an
empirically observable phenomenon. One of the main feats of the poem is how it quite
picturesquely argues that God’s creative and sustaining energy cannot be compared to any
other observed law in nature, as any comparison would happen in our own, created
framework – yet all the while it upholds the innately scientific, empiricist methodology and
with that, the belief in partial understanding.

If onely for this world they [the stars] were intended,
Nature would have adorn’d this azure round
With better art, and easily have mended
This harsh disord’red order, and more beauty lended. (54.6-9)

One of the last empirical arguments of the poem teaches the reader that the stars are not ordered according to man’ mind, aesthetic and wishes, but they are the life-giving suns mentioned above, nourishing another planets with another living beings on them. The “disord’red order” which one’s eyes see – and which is ordered only according to human imagination, as Donne’s anatomist already noted – is not absolutely out of reach, nor is it something the speaker finds himself anxious about. The speaker does not cease his explorations, but stops assuming the exact divine intent behind phenomena: he may describe what he sees and/or deduces, but he cannot tell why exactly they came into existence. That even observable physical causes cannot be fully explained is a natural part of the poem: as mankind accumulates more and more knowledge, they build a bigger and more complex system. What one does now know yet, one might well understand later on, as long as they are conscious of their position as an observer, and acknowledge that the world is not ordered according to human wishes:

But what’s within, uneath is to convey
To narrow vessels that are full afore. (53.1-2)

Being “full afore” here is rather in its latter meaning of “open to the knowledge of (esp. God)” (OED 3b), and not so much the more literal “before” (OED 2). It is a mindset rather than a physical location, or even the state of seeing everything as is. It is rather subduing the ego and immediate experiences, and remaining open for any knowledge of a universe created by an unbounded, unknown, limitless entity. As with everything, “all-discovering Time” (93.9) may prove or disprove one’s hypotheses, as it did with this poem as well, even while its author was alive. The Democritus’ holistic approach comprising of empirical science and intuitive mysticism resulted in a universe of paradoxes; but it also resulted in a universe of endless generation, infinite possibilities, and an unceasing triumph over dead, barren matter.
V. Conclusion

The three oeuvres each had their distinctive ideas, ranging from zealous to affirming to desperate, about a communion with God, yet they possess one shared trait: facing the uncertainty of “new space,” they chose to seek a solution in verse. In the axis of uneasiness about divine and material space, knowledge acquisition, and the reliability of the eye and the telescope, a man-made tool for observation, this dissertation aimed at assessing a mode of “making science”. Similarly to the great “science makers” of the age, these poets also aimed at producing knowledge by universalizing their non-reproducible, personal experiences, as well as by evaluating established methodology and knowledge through questioning them. Even if solutions were not found, or were not what had originally been expected, there is an unspoken triumph in the existence of these poems; they are proof that in spite of what one may construe the universe to be, creation is possible, moreover, the final product can be “eternized” for centuries to come, as the famous “One day” poem of Spenser’s *Amoretti* wishes. “Art,” Grady comments, is “a repository for what has been lost in the great ruptures of modernity destructive of a unified world and depriving it of intrinsic meaning and worth” (78). Indeed, Donne’s anatomist wished to conserve some of the remaining unity in the “swan-song” of the world; Herbert constructed a temple, a sanctuary out of his poems, and destroyed it in an iconoclastic moment to show that only God’s word and presence remain; finally, More united a world of confusion in his poetry, reconciling the paradoxical and the isolated fragments of knowledge through metaphor and analogy. Each of these speakers faced the threat of disintegration through the images shown by the telescope which became a corundum to be explained, which was attempted in a verse form poetically and aesthetically to a differing degree. This is sometimes a literal dissolution, as in the case of Donne: bodily existants disintegrate, illness takes the ripest of fruits, and along with these material tragedies, the self disintegrates in the light of the ever-changing, chaotic heavens, both of which were previously thought to be immutable and constant. It might be a loss of meaning and coordinates: Herbert’s poems destroy their own “temple” the same way the “new astronomy” destroyed the image of the supralunar realms, and mourn the loss of focus of the believers who seek answers for empirical questions, rather than transcendental ones, in their own, constructed place of idolatry. Donne’s astronomer, in a similar vein, goes as far as to postulate the absolute loss of all relations and coordinates on the level of the micro- and macrocosm. For him, the broken hierarchy in society mirrors the anarchy of the night sky, as well as the loss of a divine influence in the universe as such. Thirdly, the fear of
disintegration may be understood as the fear of absence of life and coherence, as in the *Democritus Platonissans*: where the generating energy of God is absent on the level of atoms, there is a horror so unimaginable as to surpassing all other threats; there is no true nothingness, only a state so far removed from the “spermatick” light that no life may sprout in the dead matter. Nothing is the fulcrum of these oeuvres, and how the speakers wrestle with the concept shows the response of the human mind to something immensely greater than itself.

Besides disintegration, the second unifying topic in the three oeuvres is the concept of vastness. That all three poets chose to respond to the threat of nothing prompted by the concept of a vast and unknowable universe shows the natural synergy of the “vast-waste” pair, presented already in the Introduction. Seeking certainty of knowledge, they all considered the images shown in the telescope, and reacted to these images which opened the universe to immense width and breadth. The anthropocentric teleologies of the speakers diminish when there are empirically confronted by their own minuteness. They see that either there are an immense amount of other planets and people, thus they are only a tiny fraction of creation; or that the human mind is so limited that it may disregard everything it had known thus far, and remain in a state of un-knowledge, waiting for a state when it, as a soul, would be able to observe everything in its entirety. This denial of previously acquired knowledge leads to an idea of knowledge as mutable and inherently erroneous: who is to say when the next discovery will disregard what is at the moment the most up-to-date form of knowledge? How will one ever be satisfied or understand even the smallest bits, when the connections and their surroundings are so immense as to be incomprehensible?

Still, the speakers seek God through the vastness of space. For the anatomist, it is space and the loss of relations it represents which bars him from reaching God; for the astronomer in Herbert’s poetry, the immensity of space and the unthinkable disproportion between God’s “mind” and man’s is what persuades him to shun all empirical attempts at obtaining knowledge; and More’s speaker soars in an ecstatic state, apparently free from the confines of materialism, his own mind, and finally, paradoxes, to find God in an ambiguously holistic, incomprehensible space which refuses to yield to human reason. Except for Donne’s anatomist, all of them find God at the very end. The initial question of the dissertation was whether “the outer space encountered visually after the dissemination of the telescope is potent, filled with life and generative energy, or barren, testifying of destruction and dissolution – and most importantly, whether these investigations of the fabric...
of space lead one closer or, on the contrary, away from seeing the whole as God sees: *sicuti sunt*, as they truly, entirely are.” The first half of the question – whether the interpretation of what the observers see is potent or barren – can be answered individually, in the context of each respective oeuvre. Donne’s anatomist was said not to have reached God at the very end of his investigations: it was also mentioned that the space presented in the poem is in shambles, without any apparent governing force save for dissolution and chaos. His space became so due to the anatomist’s inability to process all images and data in a given amount of time. Allegedly, observing the sky is similar to anatomising a human body precisely due to these two factors: first, the shortness of time, and secondly, the sheer complexity and amount of information. Thus, the world is presented as a disconnected chaos of arbitrary information, each isolated fragment disconnected from the other, though easy to consider in isolation. The world’s ever-changing living beings die before they accomplish anything, the human body decomposes before it could be understood at all, and the objects on the sky move forward or perish before their function could be properly observed. The speaker focuses on how much the seekers of knowledge do not understand and have not seen yet. Herbert’s poems also dismiss the new investigations which disregard the whole and focus too intently on the particulars, yet, on the other hand, space appears as only mildly threatening in these texts. The focus shifts from the loss of divine order to the idea that this order could not have been perceived at all: there is a vast disparity between human and divine understanding which inherently falsifies each attempt at explaining natural phenomena (or any perceived phenomena, for that matter).

Herbert’s poetry highlights the mystical closeness of God, which cannot be attained through empirical understanding: the Book of Nature does not help the observer. As in the case of *The First Anniversary*, seeing through God’s eyes is the only true method of knowledge acquisition; moreover, the two poems are also similar in that they both advise against the use of the telescope, as the instrument only anchors the observer in the material, and steers them away from the true, elevated sight. These two instances show that whether space is taken as threatening or as fairly neutral, the speakers may choose to warn against its study, as in the light of its vastness, the endeavour may be seen as vain, or even outright wasteful. Henry More’s space, on the other hand, is full of light and generative energy: his God is not outside of creation, but in its very atoms. Thus, the study of space becomes the study of God; and the more one knows of this vastness, the closer one may get to the knowledge of God. More’s speaker took the dissolution found in Lucretius’ *De Rerum
Natura, which Donne’s anatomist feared religiously, and transformed it into an endless cycle of generation and death: and since spirit and matter are not wholly apart, the observer may instinctively possess a substantial amount of knowledge of God – the vital congruity of body and spirit is the proof that the desired union with God is not forty spheres, a striking distance away, as Herbert’s speaker suggested. Although God’s pure essence cannot be attained in one’s bodily existence – this had not been claimed by the other texts either – his unconstrained, endless nature is there if one looks behind appearances. The telescope becomes a handy instrument in understanding one aspect of the divine creation, yet the speaker knows that space will always be paradoxical, since God’s nature is also beyond the constrains of the human mind.

This is not exactly ‘science’ as understood today: not the quasi-detached entity with its own language, culture, and framework. Yet it is, somehow, if one takes science to be the incessant exploration of what is beyond, and while this exploration was mostly empirical by the early modern period, its theoretical aspects never fully ceased to exist. Theology influenced this exploration throughout many centuries, as did the Hermetic framework, alchemy, “chymistry,” medicine, geography, and later on the myriad of theories which fuel the basic axioms of our world. Literature was one of the tools used for processing information, to persuade, and, most importantly, to understand. How the cognitive aspects of this process work is not this dissertation’s due to answer; but that they worked, and this should be considered as part of this unity which is comprised by the seen, the felt, and the postulated, is. The “makers” of science had been, for a long time, aware of this holistic unity. Poets were, as demonstrated, also conscious of the world and knew that what they experience, along with the hypotheses concerning one’s immediate and far removed environment, impacts them as individuals. Poetry and what later evolved into the basis for scientific thinking we know today both had the same high personal stake in understanding the world, and they parallely, often together and using the same or at least similar methodologies attempted to make sense of the world. I claim that science, at least in the period this dissertation concerns, was as personal as poetry – and simultaneously, as public as any literary text.
Appendix

The Emblems

Figure 1. Andrea Alciato’s Emblemata, Leyden, Officina Plantiniana, 1591. Emblema CIII.

http://hdl.handle.net/10111/EmblemRegistry:E031631
Figure 2. Justus de Harduwijn, Goddelijke wenschen, 1629, Tresoar of the Fries Historisch en Letterkundig Centrum, shelf number A 563

http://emblems.let.uu.nl/ha1629014.html#pi
Figure 3. "Freudenblick", J. M. Dilherr, Freudenblick des Ewigen Lebens. Nuremberg, 1652.
George Herbert: The Agonie

Philosophers have measur’d mountains,

Fathom’d the depths of seas, of states, and kings,

Walk’d with a staffe to heav’n, and traced fountains:

But there are two vast, spacious things,

The which to measure it doth more behove:

Yet few there are that sound them; Sinne and Love.

Who would know Sinne, let him repair

Unto mount Olivet; there shall he see

A man so wrung with pains, that all his hair,

His skinne, his garments bloudie be.

Sinne is that presse and vice, which forceth pain

To hunt his cruell food through ev’ry vein.

Who knows not Love, let him assay

And taste that juice, which on the crosse a pike

Did set again abroach; l then let him say

If ever he did taste the like.

Love in that liquour sweet and most divine,

Which my God feels as bloud; but I, as wine.
George Herbert: The Temper (I)

How should I praise thee, Lord! How should my rhymes
Gladly engrave thy love in steel,
If what my soul doth feel sometimes,
My soul might ever feel!

Although there were some forty heav'ns, or more,
Sometimes I peer above them all;
Sometimes I hardly reach a score;
Sometimes to hell I fall.

O rack me not to such a vast extent;
Those distances belong to thee:
The world's too little for thy tent,
A grave too big for me.

Wilt thou meet arms with man, that thou dost stretch
A crumb of dust from heav'n to hell?
Will great God measure with a wretch?
Shall he thy stature spell?

O let me, when thy roof my soul hath hid,
O let me roost and nestle there:
Then of a sinner thou art rid,
And I of hope and fear.
Yet take thy way; for sure thy way is best:

Stretch or contract me thy poor debtor:

This is but tuning of my breast,

To make the music better.

Whether I fly with angels, fall with dust,

Thy hands made both, and I am there;

Thy power and love, my love and trust,

Make one place ev'rywhere.
George Herbert: Vanitie (I)

The fleet astronomer can bore
And thred the spheres with his quick-piercing mind:
He views their stations, walks from doore to doore,
    Surveys, as if he had designed
To make a purchase there; he sees their dances,
    And knoweth long before
Both their full-eyes aspècts, and secret glances.

The nimble diver with his side
Cuts through the working waves, that he may fetch
His dearly-earnèd pearl, which God did hide
    On purpose from the venturous wretch;
That he might save his life, and also hers
    Who with excessive pride
Her own destruction and his danger wears.

The subtle chymic can divest
And strip the creature naked, till he find
The callow principles within their nest:
    There he imparts to them his mind,
Admitted to their bed-chamber, before
    They appear trim and dressed
To ordinary suitors at the door.
What hath not man sought out and found,
But his deare God? who yet his glorious law
Embosoms in us, mellowing the ground

With showers and frosts, with love and awe,
So that we need not say, “Where’s this command?”

Poor man, thou searchest round
To find out death, but missest life at hand.
George Herbert: Divinitie

As men, for fear the starres should sleep and nod,

    And trip at night, have spheres suppli'd;
As if a starre were duller then a clod,

    Which knows his way without a guide:

Just so the other heav'n they also serve,

    Divinities transcendent skie:
Which with the edge of wit they cut and carve.

    Reason triumphs, and faith lies by.

Could not that Wisdome, which first broacht the wine,

    Have thicken'd it with definitions?
And jagg'd his seamlesse coat, had that been fine,

    With curious questions and divisions?

But all the doctrine, which he taught and gave,

    Was cleare as heav'n, from whence it came.
At least those beams of truth, which onely save,

    Surpasse in brightnesse any flame.

Love God, and love your neighbour. Watch and pray.

    Do as ye would be done unto.
O dark instructions; ev'n as dark as day!

    Who can these Gordian knots undo?
But he doth bid us take his bloud for wine.

Bid what he please; yet I am sure,

To take and taste what he doth there designe,

Is all that saves, and not obscure.

Then burn thy Epicycles, foolish man;

Break all thy spheres, and save thy head.

Faith needs no staffe of flesh, but stoutly can

To heav'n alone both go, and leade.
George Herbert: The Search

Whither, O, whither art thou fled,
    My Lord, my Love?
My searches are my daily bread;
    Yet never prove.

My knees pierce th’earth, mine eies the skie;
    And yet the sphere
And centre both to me denie
    That thou art there.

Yet can I mark how herbs below
    Grow green and gay,
As if to meet thee they did know,
    While I decay.

Yet can I mark how starres above
    Simper and shine,
As having keyes unto they love,
    While poore I pine.

I sent a sigh to seek thee out,
    Deep drawn in pain,
Wing’d like an arrow: but my scout
    Returns in vain.
I tun’d another (having store)

    Into a grone;

Because the search was dumbe before:

    But all was one.

Lord, dost thou some new fabrick mold

    Which favour winnes,
And keeps thee present, leaving th’ old

    Unto their sinnes?

Where is my God? what hidden place

    Conceals thee still?
What covert dare eclipse thy face?

    Is it thy will?

O let not that of any thing;

    Let rather brasse,
Or steel, or mountains be thy ring,

    And I will passe.

Thy will such an intrenching is,

    As passeth thought:
To it all strength, all subtilties

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Are things of nought.

Thy will such a strange distance is,

As that to it

East and West touch, the poles do kisse,

And parallels meet.

Since then my grief must be as large,

As is thy space,

Thy distance from me; see my charge,

Lord, see my case.

O take these barres, these lengths away;

Turn, and restore me:

Be not Almighty, let me say,

Against, but for me.

When thou dost turn, and wilt be neare;

What edge so keen,

What point so piercing can appeare

To come between?

For as thy absence doth excell

All distance known:

So doth thy nearenesse bear the bell,

Making two one.
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