The Apologetics of Thomas Chalmers

The influences, methods, and effects of chalmers' rebuttals to objections to christianity

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THE APOLOGETICS OF THOMAS CHALMERS:
THE INFLUENCES, METHODS, AND EFFECTS
OF CHALMERS’ REBUTTALS
TO OBJECTIONS TO CHRISTIANITY

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ABSTRACT

Scholarly investigations of the works of Dr. Thomas Chalmers (1780-1847) primarily focus on his pastoral ministry and role in the formation of the Free Church of Scotland, passing over his apologetic and theological endeavours. Consequently, the contents and methodologies of Chalmers’ arguments have not been thoroughly researched. This study critically analyses Chalmers’ Christian defences; asserting that the single most influential factor in his apologetic arguments is the presupposition of humanity’s innate tendency to expect nature’s constancy. Chalmers’ writings, sermons, and journals serve to demonstrate that his arguments for the existence of God, creation, inspiration of Scripture, and miracles are anchored in this metaphysical belief. As written, his works have the goal of refuting the theistic objections offered by David Hume (1711-1776), and within that goal, he modifies the then existing natural theological arguments to conform to his philosophical views. This research reveals that Chalmers’ apologetic arguments, which reflect the prevailing approach of Natural Theology, contain numerous distinctive rebuttals to Hume’s theistic objections and have marks of similarity to the approaches of numerous modern natural theologians, classical apologists and intelligent design advocates.

Additionally, while popular in his day as a Christian author, this research identifies Chalmers’ verbose style of writing, limited technical acumen and the decline of Natural Theology as principal causes for his anonymity amongst academic apologists. Hence, the intended side effect of this research is to shed light on Chalmers’ apologetics; providing keys to deciphering the density of his writings, making them more accessible to modern researchers.
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PART I: INTRODUCTION

PRELIMINARY ISSUES: RESEARCH OVERVIEW

The field of apologetics is vast, possessing roots going back to the pre-Socratic and Greek philosophers of Socrates, Plato, and Aristotle (Sennett, Groothuis 2005, 21; Sproul et al 1984, 65; Sedley 2007). The New Testament itself is replete with defences of the Christian faith. Throughout the centuries, myriads of writings on Christian apologetics have come down from early Church Fathers, the Middle Ages, Reformation, and succeeding centuries. Consequently, there is a mountain of historical works offering various proofs and defences for Christianity. Not only is there a mountain of apologetic works, there is a mountain of analyses of these works, adding to the complexity of historical apologetic research.

However, when it comes to the celebrated nineteenth century Scottish minister, author, and professor Dr. Thomas Chalmers (1780-1847), there are few detailed and comparative critiques of his apologetics; and no systematic analysis of how the foundation upon which his works are based impacts his thinking. Pursuant to that, this dissertation is a study of the apologetics of Thomas Chalmers, with focused attention on analysing and demonstrating the influence his philosophical presupposition (the belief that the human mind possesses innate tendencies) has on his methods and their similarities to works of modern researchers.
CHAPTER ONE: Background, Literature Review, and Structure

Background

On the morning of 31 May 1847, Dr. Thomas Chalmers, “the greatest of living Scotchmen” (McCrie 2007, 527) was found to have passed peacefully in his sleep. The public outpouring at his funeral was something seldom seen in Edinburgh, as the procession of mourners stretched for mile after mile, and as one chronicler said, it was “amid the tears of a nation, and with more than kingly honours” that this Scottish divine was laid to rest (Hanna 1852c, 591-593).

This humble minister of the Word of God, who disliked publicity, praise, and popularity (Oliphant 1893, 76-78), left behind a wealth of written works that cover a diverse range of subjects from pauperism, education, church government, evangelism, and missions, to philosophy, theology, and apologetics. At times, he even waded into the arenas of public policy, economics, and natural science. He has been referred to as the “mainspring of the whole evangelical movement in the Scottish church” (McCrie 2007, 526), and “the greatest spiritual force Scotland saw in the nineteenth century” (Murray 2006, 75). His contributions to Scottish Protestantism cannot be understated, and it is reasonable to rank him second only to John Knox (1514-1572)\(^1\) in religious importance\(^2\).

For all his dedication to the ministry and years of theological effort, Dr. Chalmers is primarily remembered for two things: being the man at the centre of the

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1 Some works indicate Knox’s birth to be 1505 (McCrie 2007, 33). Iain Murray (2006, 33) points to a seventeenth century manuscript saying Knox died at 57, being misread 67. The error continued until 1904, when Hay Fleming, using corroboration from a letter sent by Peter Young to Bezae in 1579, established Knox to have died at 57, making his date of birth about 1514.

2 Knox has been called the seminal figure in the Protestant Reformation in Scotland (Murray 2006, 11).
1843 Disruption culminating in the establishment of the Scottish Free Church, and his pastoral work on missions and social issues like pauperism and education. However, Chalmers was more than a church organizer and champion for the needs of the poor. He was an active apologist of formidable intellect with an evangelical zeal that motivated him to spread the Gospel (Murray 2006, 77).

Nonetheless, it is reasonable to say that Chalmers is far from being the best-known British apologist of the early-nineteenth century; that position belongs to William Paley (1743-1805), the prince of British Natural Theologians (Paley 2006, ix; Dembski 1999, 71). Today, it is Paley⁴, not Chalmers, who comes to mind when reflecting on the giants of British Natural Theology⁴.

While Paley’s name is the one remembered, Chalmers, during his lifetime, did not go without apologetic recognition. He first burst onto the scene in 1813 with the publication of an article entitled “Christianity” in the Edinburgh Encyclopaedia. In 1817, Chalmers, then the minister at Tron Church in Glasgow, published the work Astronomical Discourses (1850). In this work, he lays out the premise that the vastness of the universe has no satisfactory explanation outside the creative powers of the Almighty (1850). His publication of Astronomical Discourses was tremendously successful, going through nine editions, resulting in 20,000 copies, in less than a year (Hanna 1852a, 97-99). In May 1817, Chalmers presented these sermons in London amid considerable enthusiasm, and as British Parliamentarian William Wilberforce wrote in his diary, “all the world is wild about Chalmers” (Hanna 1852a, 111).

³ Paley popularized the watchmaker analogy, in which the world is likened to a watch and, therefore, requires a designer identified as God (Paley 2006).
⁴ This can be seen by making an inspection of references in the apologetic and theological works of noted modern day apologists, such as Alvin Plantinga, James Swinburne, Nicolas Wolterstorff, William Alston, William Lane Craig, James Sennett, and Donald Groothuis, as examples (Sennett 2005, 10), and noting that Paley’s, not Chalmers’, name appears prominently.
Throughout the next 30 years Chalmers would author an apologetic essay for the *Bridgewater Treatises*\(^5\) (1853), republish his encyclopaedia article as *The Evidence and Authority of the Christian Revelation* in 1814 (1817), refine the work again in 1836 as *On The Miraculous and Internal Evidences of the Christian Revelation* (Hanna 1852a, 98; Hanna 1850, 372; Chalmers 1836a), produce a two-volume work *On Natural Theology* (1835a; 1835b), and assemble his views on apologetics and systematic theology in a work entitled *Institutes of Theology* (1849b; 1849c), published posthumously.

His works profoundly influenced the students who sat under him at St. Andrews and Edinburgh Universities, and were often praised by his contemporaries for being of the highest calibre (Murray 2006, 76-79; Hanna 1850, 371-372).

Even with this praise, Chalmers’ status as a first-rate apologist was short lived. In little more than 10 years after his death, his writings were rarely read (Murray 2006, 77). Today, few of his works are in publication, with little written of his apologetic endeavours, and even fewer references to the arguments or recognition of their similarity to modern apologists. These days, it is safe to say that Chalmers’ apologetic prowess is essentially forgotten, at least outside Scotland.

In total, then, *it is the apologetic efforts of Dr. Thomas Chalmers to defend Christianity, during the first half of the nineteenth century, which forms the overarching context of this dissertation.*

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\(^5\) The *Bridgewater Treatises* were a series of eight works, published from 1833-1840, by various authors commissioned by the trustees of the will of the late Rev. Francis Henry, Earl of Bridgewater (died February, 1829) to publish works *On the Power, Wisdom, and Goodness of God, as manifested in the Creation*. Dr. Thomas Chalmers wrote the first volume entitled *On the Power, Wisdom, and Goodness of God, as Manifested in the Adaptation of External Nature to the Moral and Intellectual Constitution of Man* (Chalmers 1853).
The early years of the nineteenth century posed significant challenges for theologians; marking the transition from The Age of Enlightenment\(^6\) to the Scientific and Industrial Revolution\(^7\) (Addinall 1991). Up to this time, many of the apologetic proofs for the existence of God formulated by Thomas Aquinas (1963) and Anselm (Clark 2000, 205-206) held sway. However, with the advent of Empirical Philosophy during The Enlightenment, many came to believe it was impossible to know anything meaningful about God. Furthermore, early-nineteenth century scientific discoveries began to lend credence to hypotheses that the world and life came into being via exclusively natural mechanisms.

With that backdrop, this research presents a thorough investigation and analysis of the contents and methodologies found in Chalmers’ nineteenth century apologetic arguments. This study investigates and analyses: the reasons for Chalmers’ adoption of the belief that humanity has innate expectations of nature’s constancy; the supportability of that presupposition; the guiding influence it has on the construction of his arguments; the effectiveness of those arguments to the challenges of the times; the similarity his arguments have to modern-day apologetics; and reasons for his theological anonymity. Specifically, the topic of this research is *a detailed analysis of the foundation and methods of arguments found in Chalmers’ apologetics, including assessments of their validity, similarity to modern efforts, and reasons for anonymity.*

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\(^6\) The Age of Enlightenment is a term given to the development of Western philosophy and cultural life centred on the eighteenth century. The dates for The Enlightenment are not exact but can roughly be considered to have started around the mid-seventeenth century encompassing Descartes’ *Discourse on the Method* in 1637, Newton’s *Mathematical Principles* of 1687, and Britain’s glorious revolution of 1688 and ending with the French Revolution in 1789 or the Napoleonic wars from 1804-1815 (Hill 2004, 24).

\(^7\) Dates beginning with the late-eighteenth or early-nineteenth centuries are typically given for the start of the Industrial Revolution (Hill 2004).
Literature Review

The vast majority of writings about Chalmers’ life and ministry are biographical or focus on his efforts in ecclesiology, missions, and pastoral theology. The works that offer assessments of his theology and apologetics present only overviews or focus on a narrow aspect of his endeavours. None of the writings that engage in Chalmers’ apologetics demonstrates how his ever-present foundational thread of humanity’s innate expectation of nature’s constancy serves as the starting point and guides the construction of all his arguments, or attempts to relate his methods to contemporary works.

Literature about Chalmers’ Theology

An early analysis of Chalmers’ apologetics is found in the 1842 North American Review. It contains a critique of his treatise On Natural Theology, but it focuses its entire attention on the teleological argument from design. The reviewer considers Chalmers’ work to be nothing more than an attempt at resurrecting Paley’s argument from the objections developed almost a century earlier by David Hume.

The reviewer makes no mention of Chalmers’ education, life experiences, or predilections, instead concentrating on Chalmers’ style of writing. The article comments that Chalmers’ work is verbose and excessively filled with alliteration making it unsuitable for serious academic consideration. The review states, “his style is often incorrect, and almost always verbose and tumid, and, amidst a wilderness of words, the reader is sometimes at a loss how to find any meaning whatever” (1842, 357).
Further works from the nineteenth century are equally vacant in their analyses of Chalmers’ apologetics. William Cunningham, a contemporary of Chalmers, bases his mid-nineteenth century theological lectures on Chalmers’ 1814 *Evidences*, but leaves his predecessor virtually unmentioned in his treatment of Historical Theology (1878; 1863).

James McCosh, in his work *The Scottish Philosophy* (1875), dedicates one chapter to Chalmers’ philosophical orientation. McCosh’s primary objective is to demonstrate that Chalmers is a Common Sense philosopher in the Reid-Beattie-Stewart tradition. He claims that Chalmers was instrumental in formulating a “reconciliation between the philosophy and the religion of Scotland” (1875, 393). While it is true, Chalmers synthesizes aspects of religion with philosophy, McCosh claims too much. He, as will be shown, has a distinctive evangelical mind-set and considers Natural Theology and the use of Common Sense Philosophy to have over extended their reach. Thus, it cannot be, as McCosh claims that Chalmers’ theology is merely a synthesis between religion and philosophy.

Beyond this aspect of McCosh’s work, there is no critical analysis of Chalmers’ apologetic writings. He is focused on providing an anthology of Scottish Philosophy of which Chalmers serves as an example. He does not delve deeply into Chalmers’ background and influences, leaving open the question of what inspired Chalmers’ views.

Alexander Campbell Fraser, a former student of Chalmers, in his 1894-1896 Gifford lectures, presents a few comments regarding Chalmers’ writings, but does not explore his teacher’s foundational premises (1899, 127-129). In his retrospective biography of philosophy he praises Chalmers for having “diffused a fresh glow” by way of presentation “of intellectual light and spiritual life through the frozen
orthodoxy of Scotland” (1904, 63). As with Cunningham, Fraser neither identifies nor assesses the seminal position Chalmers’ views on humanity’s innate expectation of nature’s constancy has on his colleague’s apologetic works.

The most extensive surveys of Chalmers’ theology, as well as his apologetic writings, are in two doctoral dissertations. The first, a 1949 work entitled Theology of Thomas Chalmers by Wade Prichard Huie, Jr. (1949) the other, bearing the same title, is the 1966 doctoral thesis of Daniel F. Rice (1966). Both works function as surveys of the entirety of Chalmers’ theological writings, with Rice completely unaware of Huie’s prior effort.

Huie begins his dissertation with a biographical sketch, in which he identifies, as do other researchers, Chalmers’ scientific predilections as playing a contributory role in his theological outlook. Huie writes, “Scientific interests were quite indicative of a frame of mind that would inevitably give direction to his method of theology” (1949, 92).

Huie frequently mentions the presence of eighteenth century religious Moderatism, but does not postulate how this, as well as other facets of Chalmers’ education, religious experiences, adherence to Common Sense Philosophy, and the dominance of Natural Theology is synthesized in Chalmers’ theology and apologetic methods.

Huie, in his presentation of Chalmers’ teleological design argument, mentions that Chalmers believed the human mind is in possession of innate tendencies. However, he does not explore the origins of this presupposition, nor does

8 Moderatism is a complicated view that could be said to favour, above all else, a social gospel having marks of religious tolerance, so as to avoid ‘evangelical enthusiasm.’ A detailed look at Moderatism will be presented in Chapter 3 of this research.
9 Coming from the Greek word τέλος meaning to show designed purpose or having an end in mind.
he identify how it serves as the cornerstone and guiding influence in the development of this and other arguments.

Huie’s review of Chalmers’ theology is just that, a review. He offers no detailed or critical assessment of their merits or errors and provides no comparison to Chalmers’ contemporaries. Huie does not examine how Chalmers’ writings fit within the theological views of the then current 1940s, nor does he provide an analysis of the foundational ideas that shaped the exact nature of Chalmers’ arguments. Huie himself says his work uncovers “no great discoveries,” but is instead focused on providing a general survey of Chalmers’ theology, with the goal of shedding light on one who at that time was only remembered for his pastoral and ecclesiological efforts (1949, vi). Considering the unpublished nature, and lack of subsequent references to Huie’s work, we can conclude his goal of shedding light on Chalmers was not successful.

Rice, after completing his doctoral work, published two articles based on the contents of his dissertation. Surprisingly, neither of these articles refers to his own dissertation, nor to Huie’s prior efforts. The first article, *Natural Theology and the Scottish Philosophy in the Thought of Thomas Chalmers* (1971, 23-46), and the second *An Attempt at Systematic Reconstruction in the Theology of Thomas Chalmers* (1979, 174-188) offer the most penetrating literary analyses of Chalmers’ theology and influences currently available.

The first article, *Natural Theology and the Scottish Philosophy in the Thought of Thomas Chalmers* (1971, 23-46), comes closest to considering the question being explored in this dissertation. Specifically, the impact Chalmers’ views on Natural Theology and Common Sense Philosophy have on his theological and apologetic outlook. Rice describes Chalmers as being a product of the times,
thoroughly committed to both Natural Theology and Common Sense Philosophy. He claims that Chalmers felt an antagonism between excessive philosophising and true theology. According to Rice, while Chalmers “did appropriate much of the Common Sense philosophy for his own use,” he argued against “a form of religious expression so congenial to it” (1971, 24). Rice’s article identifies Chalmers’ evangelical mindset as the reason he places barriers on the excessive use of Natural Theology and Common Sense Philosophy in theology. For Chalmers, Scripture must remain the bedrock of theology, since philosophy and natural reason alone cannot bring the sinner to redemption.

This article also highlights the evangelical slant of Chalmers’ theology, while at the same time taking into consideration his education in Common Sense Philosophy and Natural Theology. According to Rice, Chalmers’ evangelical barriers “brought him into direct conflict with the humanistic rationalistic temper of the Moderate-Common Sense synthesis” (1971, 46). It is precisely this conflict that is represented in Chalmers’ desire to develop a new form of systematic theology that Rice investigates.

While Rice addresses the relationship between Chalmers’ evangelical motives, formal education, and theological views, he does not provide extensive analyses of the contents of his apologetic works. His purpose is to demonstrate that Chalmers was different from the then normative Common Sense theologian, having a decidedly evangelical orientation toward his work. He does write that the “belief in both the constancy of nature and the moral constitution of the mind are the leading convictions with which Chalmers approaches the subject of Natural Theology, and his dependency on the Scottish philosophy here is indisputable” (1971, 35). However, neither in this article nor in his dissertation, does Rice expound upon or
demonstrate exactly how Chalmers uses this presupposition to underpin and guide his apologetic arguments. In short, his works are ostensibly descriptive.

In the second article, *An Attempt at Systematic Reconstruction in the Theology of Thomas Chalmers* (1979, 174-188), Rice focuses on Chalmers’ departure from the traditional structure of presenting systematic theology, as found in the works of Calvin and Turretin. Rice points out that Chalmers’ attempt to approach systematic theology from humanity’s sinful nature and need for redemption, as opposed to the traditional approach of considering the person and nature of God, was born out of a desire to approach theology inductively rather than deductively.

Rice states:

Systematic theology, according to Chalmers, ought to be grounded firmly on the prior work of Scripture criticism. Convinced that the systematic enterprise should further one's understanding of the Bible, he felt that traditional theological systems had failed in their proper theological task. Desiring to restore the relationship between theology and Scripture, Chalmers sought to replace the mathematico-deductive approach with an inductive method in his program of theological reconstruction. It was his conviction that the inductive method serves as a procedural safeguard against a false starting-point in theology by eliminating speculative philosophy as the determining factor in shaping Christian theology (1979, 176).

Rice indicates that Chalmers’ scriptural orientation does not imply he begins with the doctrine of Scripture but that his desire is to avoid Natural Theology’s

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10 While the organizational structure of Calvin is not identical to Turretin, Rice means to say that Calvin was the first in the Protestant Reformed tradition to systematize theology (Rice 1966, 111-155).
temptation to speculate on Christian doctrines. According to Rice, Chalmers’
systematic theology is anthropological, but not anthropocentric, as it retains
dependence on the Bible. He writes, “In this measure Chalmers is openly adopting
an anthropological point of reference in his systematic theology” (1979, 187).

Throughout Rice’s treatise, he identifies Chalmers as being heavily
influenced by Baconian induction, Natural Theology, and Common Sense
Philosophy. Additionally, Rice states, “Chalmers’ motives conform to his
evangelical orientation, and the shift he seeks to effect towards an evangelical
perspective” (1979, 178).

Rice provides a linkage to Chalmers’ background and influences with his
theological thinking. He does not, however, delve into the contents of Chalmers’
theology or provide detailed critiques of his apologetic arguments. Instead, Rice
addresses Chalmers’ unorthodox ordering of the topics of Christian doctrines. His
objective, therefore, is to determine if Chalmers’ order of teaching theology is an
improvement on tradition. A question Rice answers by writing, ‘Chalmers’ efforts
were a colossal failure” (1979, 188).

Peter Addinall, in his book Philosophy and Biblical Interpretation (1991),
offers the most recent work to give space to Chalmers’ theological works. In this
work, Addinall is writing about the conflict that existed in nineteenth century
theology’s efforts to retain adherence to Natural Theology amidst growing
challenges from philosophy and scientific discoveries. Addinall conjectures that the
philosophy of Immanuel Kant would have saved theology from what he considers
the bankrupt apologetic attempts of Natural Theology by avoiding Cartesian dualism.\footnote{Cartesian dualism is the distinction and challenges of related experiences and knowledge between the mind and body, and vice versa, named for the philosopher Rene Descartes (Addinall 1991).}

Addinall dispenses with the apologetics of Natural Theology and documents the philosophical challenges of overcoming David Hume’s (1711-1776) formidable sceptical empiricism in earlier chapters. In so doing, he eliminates the need to address Chalmers’ body of work directly. In his chapter on Chalmers, Addinall concentrates on demonstrating that Chalmers’ works are just another effort to reclaim the apologetics of William Paley (1991).

Like Huie, Rice, and McCosh, Addinall does not critically analyse Chalmers’ vast body of apologetic efforts, nor does he describe how Chalmers’ foundational beliefs dictate the construction of his arguments. He presumes Chalmers’ arguments are another form of Natural Theology, a position he summarily rejects as a working premise.

In the works cited above, the view of humanity’s innate expectation of nature’s constancy, and how it underpins and guides the direction of Chalmers’ apologetics, are noticeably absent. These works give no detailed critiques of Chalmers’ apologetic treatises, do not examine their effectiveness, nor do they compare them to modern works of Natural Theology. Chalmers’ writing style is identified, in one work, as a reading impediment, but no roadmap or hints are given to assist the reader in manoeuvring Chalmers’ works.


**Literature about Chalmers’ Life**

Having looked at assessments of Chalmers’ theology, we now turn our attention to studies that focus on Chalmers’ life, background, experiences, and influences.

James McCosh, during Chalmers’ last year of life, provides the first biography of Chalmers, writing *A tribute to the memory of Dr. Chalmers* (1847), which serves to commemorate the work of Chalmers as a pastor, professor, and leader of the Free Church.

Of the works that survey Chalmers’ life, none is more valuable than the four-volume effort by Chalmers’ son-in-law William Hanna (Hanna 1852c; Hanna 1852a; Hanna 1850; Hanna 1852b). Hanna’s *Memoirs of the life and writings of Thomas Chalmers* are the definitive Chalmers biography, blending occasional comments with extensive excerpts from Chalmers’ own journals. It is essentially a biography that gives all the necessary names, dates, and places of the key events in Chalmers’ life, often in Chalmers’ own words.

The first volume focuses on Chalmers’ early life; volume two on Chalmers’ ministry in Glasgow, volume three encompasses his teaching career at Saint Andrews and the University of Edinburgh, and volume four deals with Chalmers’ life in Edinburgh and contains his involvement with the establishment of the Free Church. Hanna himself says he has “done little more than select, arrange, and weave into a continuous narrative those materials which his family already possessed” (1850, v). While offering no commentary or assessment of his own, Hanna’s work remains indispensable in the study of Chalmers’ life. It is from these four volumes that the most extensive picture of Chalmers’ education and influences are extracted.
Joseph Gurney’s *Chalmeriana* is a collection of sayings and personal conversations with Chalmers (1853). Isaac Taylor’s *Dr. Chalmers’ Works and Posthumous Works* (1856) provides a bibliographical review of his life’s works. He enumerates Chalmers’ writings but does not delve into the influences or effectiveness of these treatises. Norman Walker writes of Chalmers’ life in his works *Thomas Chalmers: his life and its lessons* (1880), and *Chapters from the history of the Free Church of Scotland* (1895), with the former exhorting the book’s readers to emulate Chalmers’ zeal for the gospel. Charles Watson’s biographical work, *In Memoriam*, highlights Chalmers’ pastoral work (1884), and William Blaikie dedicates one chapter to Chalmers’ eloquence as a preacher in his book *The Preachers of Scotland* (1888).

The biography by Margaret Oliphant, entitled *Thomas Chalmers, preacher, philosopher and statesman* (1893) is complimentary of Chalmers’ value and contributions to Scottish church life. While the title contains the word philosopher, Oliphant does not delve into the specific contents of Chalmers’ philosophical or theological works. Instead, the biography provides dates, names, and places, much like Hanna. When the work does add comments, they are restricted to the impact and effectiveness of Chalmers with respect to his pastoral work. Like the other biographies, Oliphant mentions that Chalmers was highly influenced by his love of science. However, the work does not focus on how this influence manifests itself in the style of Chalmers’ writings or his apologetic thoughts. The book, published nearly 50 years after Chalmers’ death, is more of a tribute to the man than a critical analysis of his contributions to theology.

In the twentieth century, Charles Henderson considers the lasting effects of Chalmers’ work on the Scottish church in his article *A half century after Thomas*
Chalmers (1900, 49-63). Adam Philip writes of Chalmers’ work with the Free Church and his evangelical zeal in *Thomas Chalmers, Apostle of Union* (1929). Hugh Watt elaborates on Chalmers’ leadership in the establishment of the Scottish Free Church, in his book *Thomas Chalmers and the Disruption* (1943a, 363), and the brief work by William Mackay written on the 200th anniversary of Chalmers’ birth, entitled *Thomas Chalmers: A Short Appreciation*, functions as a memorial piece for the Free Church of Scotland (Mackay 1980).

Stewart Brown’s 1982 biography *Thomas Chalmers and the godly commonwealth in Scotland* (1982) is considered by some to be the best biography of Chalmers since Hanna. Brown provides an extensive biographical treatment of Chalmers’ life, and while biographical in composition, he has a particular objective: to assess whether Chalmers’ vision of a godly commonwealth in Scotland was achieved.

To this objective, Brown concludes that Chalmers failed in his efforts. He writes:

Chalmers failed to realize his vision of the godly commonwealth. His life was, in one sense, a tragic disappointment. He lived long enough to witness the collapse of the Church Extension campaign of 1838, the breakup of the Establishment in 1843, the rejection of his social ideal by the majority of the Free Church by 1845, and the failure of his final interdenominational Church Extension campaign by 1846. After his death in 1847, his godly commonwealth vision faded rapidly from the public imagination, lost amid the sectarian controversies of the later nineteenth century, and overshadowed by the new materialistic visions of capitalism and State socialism (1982, 378).

16
While unflattering in its assessment of Chalmers’ achievements, Brown, nonetheless, points out that, in striving for his ideal, Chalmers did make valuable and continuing contributions to pastoral matters like education (1982). In summary, Brown’s biography is focused on the life of Thomas Chalmers and his lasting pastoral contributions to the church in Scotland. He provides no technical analysis of Chalmers’ theological writings and views, and when he does mention them, he agrees with others in commenting that mathematics, Natural Theology, and Common Sense Philosophy play a pivotal role in Chalmers’ works.


What all these works have in common is a presentation of Chalmers’ life, illuminating his penchant for science, missions, church organization, and pastoral matters. Each book plunges more deeply into Chalmers’ pastoral ministry than his theological treatises. The 1843 disruption of the Church of Scotland plays a key role
in each author’s treatment of the life and works of Chalmers. Those that survey or write about Chalmers’ technical works provide surveys or overviews; none provides a thorough critique or even attempts to relate Chalmers’ education and background to his apologetic methods and choice of subjects.

**Historical Literature of Chalmers**

In an area that could be called topical historical works, various aspects of Chalmers’ influence on missions, education, pauperism, and religion in other countries are investigated.

Again, in Charles Henderson’s *A half century after Thomas Chalmers*, the focus is “to bring into notice certain essential principles of missionary enterprise which were clearly set forth, powerfully enforced, and experimentally demonstrated by Chalmers” (1900, 49-63). George Shepperson, in *Thomas Chalmers, the Free Church of Scotland, and the South* (1951, 517-537) is only interested in Chalmers’ perception by slave holding states of the American south. He concludes that Chalmers’ moderating tone regarding slavery served to reduce tension in some circles. He writes that Chalmers “emerges as a symbol, at once of Scotland and of a less radical form of Presbyterianism than the New School seemed to many Americans, and in particular to a relatively isolated group of Scots and Presbyterians in the southern states” (1951, 537). Sydney Ahlstrom’s 1958 article *Continental Influence on American Christian thought since World War I* (1958, 256-272) attempts to consider Europe’s theological influence on America after World War I. Ahlstrom does not focus on Chalmers specifically. Instead, he looks at the link between various European schools of thought and American theology. Ahlstrom is
interested in the growing divide between liberal and fundamental theology in America. He attempts to demonstrate that European thinking and professors, such as Chalmers, have influenced the American church. More recently, Mark Noll in his article *Thomas Chalmers in North America* (1997, 762-777) writes on Chalmers’ impact on the American church, focusing, as most do, on his pastoral activities.

**Literature Review Summary**

This literature review confirms the earlier position that no detailed analyses of Chalmers’ apologetics, in light of his background, have been undertaken. The biographies written about Chalmers’ life outline his background and influences but do not provide critiques of his theology. Authors who have analysed Chalmers’ theology are not extensively concerned with his formative background or provide only an assessment of a narrow slice of Chalmers’ endeavours. The most extensive reviews of Chalmers’ theology, the doctoral dissertation of Huie and the works of Rice, survey Chalmers’ writings, yet offer few keys to aid in understanding Chalmers’ arguments.

Taken in the balance, it is clear there has never been a thorough analysis of the contents of Thomas Chalmers’ principal apologetics, as well as an assessment of his works in light of his formative background. Additionally, when one considers the recent resurgence of interest in Natural Theology\(^\text{12}\) (Craig, Moreland 2009, 683), Intelligent Design\(^\text{13}\) (Sennett, Groothuis 2005; Dembski 1999; Craig 1984; Behe

\(^{12}\) Natural Theology is an attempt to answer questions of the nature and the character of God by examining the evidences found in nature.

\(^{13}\) “Intelligent Design (ID) is three things: a scientific research program that investigates the effects of intelligent causes; an intellectual movement that challenges Darwinism and its naturalistic legacy; and a way of
1996; Johnson 1993), and Creation Science in the latter half of the twentieth century, there is a compelling reason to again look at apologists from the past. Taken together, the relative absence of detailed analyses of Chalmers’ influences, apologetics, and a renewed interest in evidential apologetics indicates that this research has the potential to be beneficial for both historical and practical apologetics.

**Structure of This Research**

A thorough investigation of Chalmers’ apologetics found in his sermons, articles, and books published between 1811 and 1847, as well as posthumously, will ensure attainment of the dissertation objectives. A significant data source comes from Chalmers’ memoirs, which demonstrate a mind excited by scientific enquiry, at the same time possessing a deep concern for evangelism (Hanna 1852c; Hanna 1852a; Hanna 1850; Hanna 1852b). Chalmers’ rebuttals of David Hume’s criticisms of the proof of theism by appeals to design, and arguments against the existence of miracles, constitute a significant portion of this research (Chalmers 1835a). Chalmers focuses heavily on Hume’s writings, calling him the “infidel” and believing that other theologians’ rebuttals to Hume were lacking in completeness. He considers his defence of the design argument and miracles to contain ideas of marked originality, a claim that will be investigated. In addition to the works of Chalmers, this research will identify aspects of Chalmers’ thinking that resemble the apologetic efforts of modern researchers.
The structure of this work is as follows:

Part I: Introduction: Contains this and Chapter 2.

Chapter 2: Chalmers’ Apologetic Anonymity. Renewed interest in classical Christian defences indicates that detailed analyses of historical works will benefit the field of historical and practical apologetics. Chalmers, during his time, was considered a theologian of exceptional skills. Nonetheless, his works have rarely been referenced or studied in the years since his death. This chapter explores the reasons for his theological anonymity.

Part II: Influences and Apologetic Foundation.

Chapter 3: Influences on Chalmers’ Apologetics. This chapter presents a biographical look at Chalmers’ life with focused attention on his upbringing, education, and interests, as well as the major influences on his apologetic thinking. Specifically, this chapter will explore those aspects of Chalmers’ background and education, like his love of mathematics and training in Natural Theology and Common Sense Philosophy that most heavily influenced his apologetic outlook, and led to the adoption of his apologetic foundation.

Chapter 4: Chalmers’ Apologetic Foundation. This chapter provides a detailed analysis and critique of the methodological ramifications, and supportability of Chalmers’ foundational presupposition that humanity has an innate expectation of nature’s constancy.
Part III: Chalmers’ Apologetic Arguments.

Chapter 5: Chalmers’ Design Analogy. This chapter presents an extensive analysis of Chalmers’ rebuttal of Hume’s objection to the teleological argument found in Chalmers’ writings. Chalmers’ use of innate expectations in the development of his argument, the arguments validity, effectiveness, and similarity to modern efforts will be assessed.

Chapter 6: Chalmers’ Defence of Design. This chapter contains a detailed critique of Chalmers’ attempts to demonstrate that the world, in fact, does show marks of having been contrived for a purpose. As in chapter 5, Chalmers’ use of innate expectations in the development of his argument, the argument’s validity, effectiveness, and similarity to modern efforts is analysed.

Chapter 7: Chalmers’ Defence of Miracles. This chapter analyses Chalmers’ defence of miracles found in his *On the Miraculous and Internal Evidences of the Christian Revelation* and *Institutes of Theology*. Chalmers is again refuting David Hume’s works, and his rebuttal will be compared to Hume’s arguments. After reviewing Chalmers’ defence of miracles, this chapter presents a critical analysis of the success of his endeavours, with identification of the presence of his foundational presupposition, and similarity to modern efforts.
Part IV: Summary of Findings and Conclusion.

Chapter 8: **Summary of Apologetic Findings.** This chapter brings together all aspects of Chalmers’ works, life, and times in which he lived, so as to evaluate his place in the annuls of British Natural Theology. This chapter will look at the influence Chalmers had on other educators, theologians, ministers, and missionaries.

Chapter 9: **Conclusion.** This chapter recaps the discoveries and documents the results and conclusions of the various questions answered during the evaluation of the research topic.

Appendix: **The Remainder of Chalmers’ Apologetics.** The appendix outlines other aspects of Chalmers’ apologetics, which focus more on reasoning and evidence for Christianity found residing within the mind and human conscience.
Throughout history, nations commemorate the importance of their historical figures by erecting memorials. In this, Scotland is no different, memorializing Dr. Thomas Chalmers on the intersection of Edinburgh’s George and Castle Streets; his effigy stands facing south toward the castle. Chalmers shares this George Street honour with Albert, Prince Consort to Queen Victoria; William Pitt, Prime Minister; King George IV; and Henry Dundas, 1st Viscount Melville (Mackay 1980). We have the views of James Denny, who calls Chalmers Scotland’s “greatest man since Knox” (Huie 1949, 261), and Hugh Watt, who says he is the “greatest of modern Scottish churchmen” (1943a, vii). Walker, McCosh, Hanna, and Philip call Chalmers “the chief Scotsman of his time” (Walker 1895, 20), “the greatest representative and noblest specimen of living large-hearted, catholic-minded Christianity” (McCosh 1847, 5), “the greatest teacher of Theology our country has ever seen” (Hanna 1852c, 420), “the greatest Scotchman of the century” (Walker 1880, vi), and “One of nature’s notables” (Philip 1929, 16). All of this indicates that Chalmers is worthy of the nation’s respect.

Chalmers’ impact in turning nineteenth century Scottish churches from mediocrity and indifference to spiritual vitality were so significant that Dr. C.H. Waller, one-time Principal of the London School of Divinity, told his students “that the nearest approach that he knew of in the history of the Church universal to apostolic conditions of faith and living was what was to be seen in the Free Church of Scotland in its early days” (Macleod 1974, 263).

These honours and statements are indicative of the pedestal on which Chalmers is placed by his fellow citizens and contemporaries. Today, he continues to
be respected by the Scottish people, being praised in the recent historical work of Iain Murray (2006, 403). Nonetheless, Chalmers’ fame and reputation has long since outlived his writings. The remarkable response recorded in his earlier authorship far surpassed the use of his later writings, especially his theological and apologetic works.

An examination of any number of works in philosophy, Natural Theology, apologetics, and Christian Dogmatics, published since his death, reveals limited space given to Chalmers’ thoughts. His colleague in establishing the Free Church, William Cunningham, bases his mid-nineteenth century lectures on Chalmers’ *Evidences*, but later leaves his predecessor virtually unmentioned in his treatment of Historical Theology (1878; 1863). Campbell Fraser’s references to Chalmers’ theological views, in his 1894-1896 Gifford lectures, are usually in a critical vein (1899, 127-129). He does praise him for having “diffused a fresh glow of intellectual light and spiritual life through the frozen orthodoxy of Scotland” (1904, 63), a comment based on Chalmers’ method of presentation, not content. Regarding Chalmers’ apologetic efforts, Fraser writes that he “failed to find in the lessons of Chalmers the expected satisfying settlement of perplexities of religious thought” (1904, 63). Occasional references to singular points in Chalmers’ theological writings are made by such luminaries as Charles Hodge (2003), McLeod Campbell (1869, 61), John Stuart Mill (1843, 42), Alexander Bruce (1897, 123), and James Denney (1917, 297). However, none of them mention the theologian in any great light.

Reflecting something of Chalmers’ impact on the New World, James McCosh, Charles Hodge, and Henry Smith (Smith 1884, 496-575), find some of his distinctions helpful, especially in the field of Natural Theology, as it relates to the
Genesis account of creation\(^{14}\). In the twentieth and twenty-first centuries, references to Chalmers’ works become even more rare, with a brief reference by McGrew and McGrew in their analysis of the statistical basis for proving miracles (2009, 631), and, as described earlier, in the works of Huie (1949), Rice (1971, 23-46; 1979, 174-188), and Addinall (1991).

Taken as a whole, there is little evidence of there being any significant influence of Chalmers’ academic works on succeeding generations of theologians and apologists. Consequently, it is fair to say that today, his contributions as a theologian and apologist are essentially forgotten (Murray 2006, 403; Huie 1949, 261-279). As it is the aim of this dissertation to analyse critically Chalmers’ apologetics, it is first necessary to investigate the principal causes for his theological anonymity. The following sections unveil the results of that analysis, discerning three principal causes for the lack of attention his academic works have produced.

**Reason 1: His Literary Style**

First, the limited scope and duration of Chalmers’ apologetic influence are due to his style of writing.

Chalmers rarely wrote simply to convey some fact or piece of information. His desire was to stir, motivate, and awaken the emotion. When reading Chalmers’ apologetic works, this motivation becomes obvious. The writings, which have the aim of defending Christianity, have a clear tone of a sermon; fashioned to stir and lift the readers’ emotions, as well as convince (Huie 1949, 260-279).

\(^{14}\) With discoveries from the field of geology, indicating an ancient Earth, it became increasingly necessary for Natural Theology to propose alternative ways of interpreting the first few verses of Genesis 1. Views such as the day-age and gap theory came to the forefront, as possible explanations of the difference between the biblical narrative and scientific discovery.
The desire to reach the readers’ emotions is evident in his works, and is demonstrated in the following composition, delivered at St. Andrews’ Divinity Hall around 1798-1799.

How different the languor and degeneracy of the present age from that ardour which animated the exertions of the primitive Christians in the cause of their religion. That religion had then all the impressive effect of novelty. The evidences, which supported its divine origin, were still open to observation. The miracles of Christianity proclaimed it to be a religion that was supported by the arm of Omnipotence. The violence of a persecuting hostility only served to inflame their attachment to the truth, and to arouse the intrepidity of their characters. Enthusiasm is a virtue rarely produced in a state of calm and unruffled repose. It flourishes in adversity. It kindles in the hour of danger, and rises to deeds of renown. The terrors of persecution only serve to awaken the energy of its purposes. It swells in the pride of integrity, and, great in the purity of its cause, it can scatter defiance amid a host of enemies. The magnanimity of the primitive Christians is beyond example in history. It could withstand the ruin of interests, the desertion of friends, the triumphant joy of enemies, the storms of popular indignation, the fury of a vindictive priesthood, the torments of martyrdom. The faith of immortality emboldened their profession of the gospel, and armed them with contempt of death. The torrent of opposition they had to encounter in asserting the religion of Jesus, was far from repressing their activity in his service; they propagated it with zeal; they devoted their time and their fortune to its diffusion.
Amid all their discouragements, they were sustained by the assurance of a heavenly crown. The love of their Redeemer consecrated their affections to his service, and enthroned in their hearts a pure and disinterested enthusiasm. Hence the rapid and successful extension of Christianity through the civilized world. The grace of God was with them. It blasted all the attempts of opposition. It invigorated the constancy of their purposes. It armed them with fortitude amid the terrors of persecution, and carried them triumphant through the proud career of victory and success (Hanna 1850, 34-35).

Chalmers’ style of writing, at times masks his thinking, making his works too verbose and repetitive for the academic apologist. A review of his writings On Natural Theology by the North American Review of 1842 says this of Chalmers. “His style is often incorrect, and almost always verbose and tumid, and, amidst a wilderness of words, the reader is sometimes at a loss how to find any meaning whatever” (1842, 357). In this same treatise, Chalmers dedicates nearly 200 pages for the setting down of preliminary material. In these pages, he frequently repeats his underlying assumptions, with varying degrees of elucidation, sometimes, as the review notes, to the point of reader fatigue (1842, 357).

The result is that the reader of Chalmers’ works can become lost. At times, his works read as though they are dictated and in need of editing. They often lack a coherent or recognizable structure, and are seemingly contradictory amidst his efforts to explain.

As an aside, it was Chalmers’ love of words that made it impossible for him to preach extemporaneously, though he tried on numerous occasions (Hanna 1850, 318-352). Chalmers, when preaching, preferred, for reasons of evangelical interest,
to repeat an idea using numerous illustrations. He was always searching for the right phrase, to ensure that the most uneducated member of the congregation could understand the meaning of his message and be uplifted in emotion. For this reason, Chalmers found it necessary to preach from a prepared manuscript (Hanna 1850, 318-352), and he carried his style of writing sermons into his theological and apologetic works.

This love of words has had a lasting effect on Chalmers’ legacy as a theologian. It is this love of words, which, as some say, makes his works laborious to read. Watt describes the effect of Chalmers’ writing as “that billowy rhythmic cadence which, in the spoken word, was to prove so moving to the minds and hearts of his hearers, but which in cold print, appears cumbersome and lumbering” (1943a, 17-18). Thus, his style of writing, which was so effective in the pulpit, posed problems for the acceptance of his technical writing, and is identified as a reason Chalmers is essentially unknown as an apologist and theologian (Murray 2006, 75-79).

In addition to his style of writing, Huie claims that Chalmers is an example of quality being the victim of quantity. Huie elaborates that few men have ever spread their interests and activities so broadly. An inevitable result of attempting to be an expert in so many fields is certain narrowness in each. When writing on a subject, he often chooses just two or three authorities, or as in the case of the design argument, one conclusion derived from his own experimental schemes, and bases all his discussions on these alone (Huie 1949, 262-265).

Not only were his interests spread across a vast expanse of subjects, but also his writings on these subjects were extensive. Academic reviewers eventually panned Chalmers’ style of writing as excessively illustrative, and lacking academic precision. Consequently, the wide scope of his intellectual efforts, coupled with a
soaring imagination and a verbose and bulky style of writing, contributes to the lack of technical exactness. These characteristics place Chalmers’ writings beyond the reach and accessibility of most people and contribute to the reasons his apologetic and theological works have been ignored by researchers.

Reason 2: His Limited Critical Approach

The second limitation, to the wider acceptance of Chalmers’ apologetic works, grew out of the tendency in his personality to be more receptive than critical in his research. Though he was ahead of his time in the pastoral application of his theology toward the needy, intellectually he was regulated by contemporary thought. He did not question the generally accepted Newtonian mechanical view of the universe, and readily incorporated preliminary findings of modern geology, especially those that aided his Gap Theory view of Genesis (Addinall 1991; Huie 1949; Rice 1979, 174-188).

His conception of the mind’s intellectual progress and humanity’s acquisition of knowledge is in accordance with the Scottish school of philosophy. This causes Chalmers to avoid a priori methods of apologetics, even though elements of his design argument incorporate a priori reasoning. The applications and implications of biblical higher criticism are, according to his contemporary Rev. Isaac Taylor, beyond his grasp (1856, 1). Instead, he uses geology to explain his eisegesis of Genesis. Campbell Fraser points out that his own conception of the relation between science and religion, by ascribing finality to the contemporary findings of science,

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15 The eighteenth century Scottish school of philosophy is also referred to as Common Sense Philosophy, and will be addressed in the subsequent chapter.
were dated before his works were printed (1899, 127-129). In Christian theology, Chalmers accepted the substance of what had been handed down from the past, and exercised his critical faculty primarily in matters of restating previous works by modifying their form and presentation (The North American Review 1842, 356; The New York Review 1837, 137). Thus, Chalmers’ restricted academic approach limited his audience, causing many theologians to dismiss his activities.

Reason 3: The Diminishing Credibility of Natural Theology

Thirdly, Chalmers’ apologetic writings came at a time when Natural Theology was increasingly challenged by scientific discoveries. By the time the eight Bridgewater treatises were published, the ideas of Paley, Reid, Butler, Buckland, and other Natural Theologians, of the eighteenth and early-nineteenth centuries, had been recycled so often that scholars and scientists paid them little attention. The Bridgewater treatises themselves were soon mocked, being called the “Bilgewater treatises,” being equated to water found in a sinking ship (Desmond, Moore 1991, 219).

Professor Charles Babbage wrote a critique of all eight treatises, “cheekily entitled the Ninth Bridgewater Treatise” (Dembski 1999, 76; Babbage 1837). Babbage, by distancing the designing power of God from the fixed laws of nature, rebuked Natural Theologians for attempting to identify the characteristics of God by what was seen in nature. According to Babbage, an omniscient God does not need to work contrivances into the world. Instead, all things happen exactly as planned by the hand of God. For Babbage, the illustration he believes proves the point came from his recently invented calculating machine (1837).
This distancing of God from the laws of nature, according to Dembski, soon made Natural Theology an invalid enterprise “succumbing instead to a positivist view of science” (1999, 79). Neal Gillespie identifies the regulating principle of the laws of nature as contributing to the decline of Natural Theology (1979, 146). As long as design was upheld, then there was a need for a designer. However, when God was nothing more than the first originator of the laws of nature, then scientists soon postulated that these laws could perform the act of design, and it was no longer a scientific activity to be concerned with their origin.

When the growing positivistic view of science met with developing evolutionary theories, emanating from Darwin’s *Origin of Species*, agnosticism was born (Dembski 1999, 79). Agnosticism, as originally coined by Thomas Huxley, in 1869, states that a person is an agnostic if they hold “that the existence of anything beyond and behind material phenomena is unknown and (so far as can be judged) unknowable, and especially that a First Cause and an unseen world are subjects which we know nothing” (Oxford University Press 2002).

With agnosticism, scientists could avoid the reproachful term atheist and operate under the spectre of social correctness. As science became increasingly agnostic, in the 1870s, methodological naturalism became the regulating principle of science. This had the effect of banishing Natural Theology from scientific consideration, relegating it to the arena of a non-scientific pursuit. Once banished from the field of science, Natural Theology retreated to the backseat of theological enquiry. By the late-nineteenth century, scientific Natural Theology was essentially moribund (Sennett, Groothuis 2005; Dembski 1999; Craig, Moreland 2009, 683).
Summary of Chalmers’ Apologetic Anonymity

Taken together, it is not difficult to understand why Chalmers’ apologetic writings had minimal impact on succeeding generations. His verbose style of writing, limited technical acumen and the growing agnostic movement in science caused Chalmers’ works to languish on library shelves (Huie 1949, 265).

As mentioned in chapter one, however, recent renewed interest in empirical apologetics, Intelligent Design, and Natural Theology makes it valuable for the study of historical and practical apologetics to embark on critical analyses of the works and methods of apologists from other eras. To this end, the next part of this research focuses on assessing and analysing the foundational academic, theological, and philosophical orientations and presuppositions of Thomas Chalmers, all necessary for identifying keys to unlocking the density of his writing and rendering his works accessible.
PART II: INFLUENCES AND APOLOGETIC FOUNDATION

CHAPTER THREE: Influences on Chalmers’ Apologetics

Our study of Chalmers’ foundational apologetic presuppositions, prevalent in all his theological works, begins with a sketch of the primary influences on his thinking. Of note are his predilection for mathematics and science, evangelical outlook, training in Natural Theology, and adherence to Common Sense philosophy, all of which contributed to shape his Christian defences.

Chalmers’ Predilection for Math and Science

Chalmers begins his work on *Natural Theology* writing:

This science hath its objects that are ascertained by observation – and, apart from these, it hath its Ethics, in virtue of which it can assign the moral relations that subsist between these objects. The facts of the science are just as distinct from the ethics of the science, as the facts of Natural Philosophy are from the mathematics of Natural Philosophy (1835a).

In his *Institutes*, he makes an even more pointed comment pertaining to his belief in the importance of mathematically oriented scientific inductive reasoning:

Give me the truly inductive spirit to which modern science stands indebted both for the solidity of her foundation and for the wonderful elevation of her superstructure, and this, when transferred to the study of things sacred, and consistently proceeded on, would infallibly lead, in the investigation, first of the credentials, and then of the contents of
revelation, to the firmer establishment of a Biblical Christianity in the mind of every inquirer (1849b, 270-271).

In these statements, Chalmers unabashedly proclaims that the study of theology can infallibly proceed along the same grounds as any mathematical enquiry, as long as it is guided by the scientific method of Baconian induction. In order to understand Chalmers’ conviction in the veracity of these statements, it is first necessary to investigate his educational upbringing, which reveals a picture of a man captivated by the elegance of mathematical logic.

During his first two years at St. Andrews, Chalmers made no significant progress in his education or his thoughts of the ministry; rather he was more interested in games than books (Hanna 1850, 22). Later in life, Rev. Miller, a schoolmate of Chalmers, would write that Chalmers “was at that time very young, and volatile, and boyish, and idle in his habits, and like the rest of us in those days, but ill prepared by previous education for reaping the full benefit of a college course.” Miller writes that Chalmers’ “time must have been occupied (as mine was) in boyish amusements, such as golf, foot-ball, and particularly hand-ball” (Hanna 1850, 22).

It was during his third session that his interest in education changed, as he would undergo his “intellectual birth-time.” It was at this time that the study of mathematics captivated him; it was at this time that a science, which he “had so strong a natural affinity” for, took hold of him (Hanna 1850, 23), and the hold mathematics gained, according to Oliphant, Huie, and Rice, would remain throughout his life (Oliphant 1893; Huie 1949, 3; Rice 1971, 25).

16 Baconian Induction is named for Sir Francis Bacon (1561-1626), who articulated the scientific or inductive method in his 1620 work *Novum Organum Scientiarum*. 35
His interest in mathematics was awoken principally by the teachings of Dr. James Brown (1764-1838), who excited Chalmers’ thirst for knowledge. It was Dr. Brown who Chalmers remembered as the most influential academic teacher in his life, writing some years later to Dr. Brown’s widow, upon the news of his former teacher’s death:

I cannot adequately express the deep emotion which I felt on receiving the melancholy intelligence of Dr. Brown’s death – one of my most respected and earliest friends, and of whom I have often said, that of all the professors and instructors with whom I have ever had to do, he is the one who most powerfully impressed me, and to the ascendancy of whose mind over me, I owe more in the formation of my tastes and habits, and in the guidance and government of my literary life, than to that of all the other academic men whose classes I ever attended (Hanna 1850, 25).

Chalmers considered mathematics to be “one of the very best instruments of intellectual training” (Hanna 1850, 25). It aroused and absorbed his every waking thought while at school. Although numerous other subjects were part of the St. Andrews’ curriculum, none captured his passion. It was mathematics, and especially geometry with its succession of steps, theorems, and proofs, which held his attention as most beneficial for training the mind (Hanna 1850), an influence evident in the structural organization of his later apologetic works.

In the summer of 1799, the 19-year-old Chalmers completed his divinity studies at St. Andrews. Desiring to enter his chosen ministerial career, to have the income required to continue studying mathematics, he asked for and received an exemption from the 21 years of age rule, and was licensed to preach the gospel in the
Church of Scotland (Hanna 1850, 43). Before embarking on the preparatory task of providing pulpit supply, something Chalmers considered an interruption to be dreaded (Hanna 1850, 51), he spent the following two winters studying mathematics under Dr. William Playfair (1759-1823), Chemistry under Dr. Black, and learned the deeper nuances of philosophy under the tutelage of Dr. John Robison (1739-1805) and Dugald Stewart (1753-1828), at the University of Edinburgh (Huie 1949, 7).

It was during these Edinburgh winters that Chalmers became thoroughly immersed in the philosophy of Common Sense, and developed an immovable adherence to the Baconian method of scientific induction. The logical structure of the Baconian scientific method blended well with Chalmers’ love of mathematical proofs, developed during his school days.

Eventually, Chalmers would find himself in need of steady income, making it necessary to obtain a ministerial position. In 1801, a school friend informed him of a soon to be vacant position, as a ministerial assistant at the Parish of Cavers, in the Scottish border area of Teviotdale (Oliphant 1893, 20). Chalmers, believing that his scientific skills had progressed enough to enable him to consider becoming a professor, felt it high time to begin paying his own bills. He applied for and was summarily accepted for the position at Cavers, initiating his ministerial career in July of that year (Hanna 1850, 62).

No sooner had he began his work at Cavers than the opportunity he sought above all else became available. In early 1802, Dr. Brown was appointed to a professorship at Glasgow, leaving the mathematical assistantship at St. Andrews vacant. This, along with the possibility of obtaining the recently vacated ministerial position at Kilmany, just a few miles from St. Andrews, presented “a situation too congenial to Mr. Chalmers’ taste for him not to desire it” (Hanna 1850, 67).
For Chalmers, ministerial and theological pursuits were yet to dominate his thoughts. The church was nothing more than a vehicle in which to obtain a steady income. “To fill the mathematical chair” at St. Andrews was, as Hanna writes, “the high object of his ambition. To this the assistantship at St. Andrews might prove a stepping-stone” (Hanna 1850, 67). With this thought in mind, Chalmers quickly applied for and was accepted as the new mathematical assistant at St. Andrews, with classes commencing in November 1802.

He completed his work at Cavers “dispensing as necessary” his ministerial duties, and focused the majority of his time on preparing for his entrance into academia (Hanna 1850, 67). On 2 November 1802, just before classes began, Chalmers set about securing the Kilmany ministerial post. He informed the local presbytery of his deep desire to obtain the Kilmany pastoral position, and that his work at St. Andrews would not interfere with his religious responsibilities. The presbytery took no time in determining the matter, and unanimously elected Chalmers to succeed Rev. Cook. At this stage of life, the 22 year-old Chalmers was content. He firmly believed he could comfortably pass his days teaching mathematics at St. Andrews, while enjoying the additional income supplied by the Kilmany parish (Hanna 1850, 69).

Chalmers proved to be an extremely popular teacher among the students at St. Andrews, succeeding in implanting them with a love for the subject. Unfortunately, his enthusiasm for the beauty of mathematics and conviction that people of learning should master the subject created problems for the university. Rather than proceeding at the pace mandated by the college, Chalmers would remain on a particular subject until every student had a firm grasp of the material. When, at the end of the session, the school reviewed Chalmers’ class, while finding they
uniformly possessed mastery of some of the material, they had not covered the entire curriculum. During the review, it became clear to Chalmers that the school was dissatisfied with his efforts, although he considered the dissatisfaction motivated out of jealousy for the enthusiasm he had instilled in his students. Nonetheless, the school decided not to renew Chalmers to his post for the next academic year (Hanna 1850, 73-77).

Many people would have been crushed by the loss of their lifelong dream. However, Chalmers was undaunted, and he went about setting up his own private mathematics classes at St. Andrews, for the express purpose of removing the stain from his name. Initially, he was met with opposition by the establishment, but gradually St. Andrews was won over, and turned its opposition to enthusiastic applause (Huie 1949, 12).

Chalmers’ rival lectures were such a tremendous success that he resolved to continue teaching. In 1804, he focused on offering rival classes in chemistry, which again were enthusiastically received. Feeling vindicated, Chalmers did not return to St. Andrews for a third term, instead taking his chemical lectures to the working people of his Kilmany parish (Huie 1949, 12). In doing this, Chalmers developed a reputation for being something of an oddity among ministers. A most intriguing story is given by Hanna, who quotes an older woman in the congregation saying to another “our minister is naething short o’ a warlock” (1850, 104).

For the next several years, Chalmers continued his pursuit of academic recognition; attempting to make his mark through literary writing. In the early 1800s, the nation was in grips of concern regarding the military onslaught of Napoleon Bonaparte. Chalmers took his turn at economics, writing a scientific treatise analysing the nation’s resources and determining them to be sufficient, should
Britain be isolated. The treatise, entitled *An Enquiry into the Extent and Stability of National Resources* (1808), reflects Chalmers’ attention to detail in attempting to analyse Britain’s national resources via the scientific method.

By the summer of 1811, Chalmers, who, after a long illness, had undergone an awakening in his religious convictions, changed his views on academia as a career, desiring instead to throw all his efforts into the ministry. Mathematics, as a career, had been replaced by religion as the subject of his writings. Huie points out that the subject of religion assumed new importance for Chalmers, and in some respects, his life could be said to resemble that of Blaise Pascal, a mathematician from another era who also made the transition from the walks of science to the higher walk of faith (Huie 1949, 15-16).

Although he turned from pursuing a scientific career, his writings, now dedicated to the cause of Christianity, continued to reveal a mind schooled by science, making liberal use of scientific induction. Examples of his scientific mind are displayed in his 1813 publication of “Christianity” in the *Edinburgh Encyclopaedia*. This work was independently published in 1814, as *The Evidence and Authority of the Christian Revelation* (Chalmers 1817), only to be expanded and republished again in 1836 as *On The Miraculous and Internal Evidences of the Christian Revelation* (Hanna 1852a, 98; Hanna 1850, 372; Chalmers 1836a). These works make extensive use of the scientific method of examining evidence and probabilistic reasoning in an effort to prove the existence of miracles for the defence of the authority of Scripture.

In 1817, Chalmers, then the minister at Tron Church in Glasgow, published a work entitled *Astronomical Discourses* (Chalmers 1850), which was taken from a recently concluded series of sermons reassuring Christians that astronomical
discoveries, far from being prejudicial toward belief, should instead increase one’s faith in the necessity of an omnipotent God who could bring about the complexity found in the universe (1850).

Later in life, Chalmers’ works on *Natural Theology* (1835a; 1835b), his contribution to the *Bridgewater Treatises* (1853), and his final publication of systematic theology entitled, *Institutes of Theology* (1849b; 1849c), would reflect an effort to use mathematical logic, probability, and recent scientific discoveries from the field of geology, as tools to support the Christian faith.

Throughout Chalmers’ apologetic writings, there is a clear undercurrent of mathematics and illustrations from science. In his works on *Natural Theology*, he spends the first few chapters building the case that the relationship between God and ethics, is the same as the relationship between measured objects and the abstract formulas of Geometry (Chalmers 1835a). According to Rice, the ever-present influence of mathematics in Chalmers’ works is evident in the “persistent use of the analogy between the relationship of the scientist to nature as God's ‘work’ and the theologian to Scripture as God's ‘word’” (1979, 181).

At times, Chalmers strays from the direct subject, much as he did when teaching at St. Andrews. In so doing, it must be realized that he is attempting to ground his apologetics on the hard truths of science and the logic of the scientific method. This is because he believes, as is documented by Huie and Rice, in the necessity of facts, analysed via the scientific method of induction, as the best form of argument upon which Christian defences can be made (Huie 1949, 53-54; Rice 1966). Being cognizant of Chalmers’ love of science, readers will find it more palatable to discern the author’s arguments. Yet, mathematics and the scientific method are not the only influences evident in Chalmers’ works; his devotion to a
thorough evangelical outlook must be recognized as Chalmers’ motivation and serves the reader in better understanding Chalmers’ writings.

Chalmers’ Evangelical Orientation

Upon entering St. Andrews in 1791, Chalmers found himself thrust into a religious situation, which Hanna says was “overrun with Moderatism” (1850, 26).

The rise of the movement in Scotland which historians call Moderatism is said, by James Buchan, to have begun “at the Revolution of 1688-9 which re-established the Presbyterian Church in Scotland” (2003, 58). It was at this time “the new King William III made a plea for tolerance.” At the Scottish General Assembly of 1690, King William said, “we never could be of the mind that violence was suited to the advancing of true religion, Moderatism (emphasis added) is what religion enjoins, neighbouring churches expect from you, and we recommend to you” (Buchan 2003, 58-59).

The Moderatism that King William advocated was principally one of religious tolerance toward differing views, and with it an aversion, and at times an outright disdain, for ‘religious enthusiasm,’ which was equated to fanaticism. William’s motivation was one of a monarch seeking to ensure there was peace between Scottish Presbyterians and Episcopalians, thereby reducing internal strife and the potential for civil war throughout the realm (Buchan 2003, 58-59).

This disdain for ‘religious enthusiasm’ can be seen as an outgrowth of England and Scotland’s utter exhaustion with religiously motivated wars. Going back to the Reformation, the British Isles had been embroiled in nearly two hundred years of international conflict, civil wars, and repeated persecutions of one religious
faction by another. By the late-seventeenth and early-eighteenth century, tolerance of religious views were gaining not only in public opinion, but were also being taught at divinity schools (McCrie 2007; Murray 2006, 403; McCosh 1875; Rice 1966, 1-55; Buchan 2003; Broadie 2001; Broadie 1997; Hill 2004).

It was not long before cries for religious toleration infiltrated theology so that Moderatism, as Daniel Rice writes, was a scheme of Christianity, which “excludes both the laxity and unconcern of the infidel, and the fervour and zeal of the evangelicals. In the eyes of the Moderates, evangelicalism in all forms was indiscriminately identified with ‘enthusiasm’. Moderate theology, then, was essentially rationalistic, moralistic, and – above all – ‘moderate’” (1971, 33).

Reflecting the Enlightenment preference for order, rationality, and social progress, the moderate ethos came to dominate the Church of Scotland from the mid-eighteenth to the early-nineteenth centuries. Moderates’ believed it was possible, through philosophical reasoning, to deduce from nature the laws governing the world, and thereby influence the proper ordering of society (Brown 1982, 44-46). Their approach to Christianity, consequently, was to begin with the human mind, focusing on religion as opposed to theology. By beginning with the mind, there developed an intimate relationship with philosophy in general, and Scottish Common Sense in particular (called the Moderate-Common Sense synthesis) (Clark 1963, 190-318).

This approach to religion sought to restore, according to the Moderates, a much needed balance, according to their perception, of the excessive application of Calvinism and the Westminster Confession of Faith. Reflecting this mood, the eighteenth century minister John Witherspoon aired the Moderate concern about the doctrines contained within the Westminster Confession:
The Confession of Faith, which we are now all laid under a disagreeable necessity to subscribe, was framed in times of hot religious zeal; and therefore it can hardly be supposed to contain any thing agreeable to our sentiments in these cool and refreshing days of moderation. So true is this, that I do not remember to have heard any moderate man speak well of it, or recommend it, in a sermon, or private discourse, in my time (Kidd 2004, 504).

Consequently, the prevailing emphasis of Scottish ministers was to focus on works and grace, reason and revelation, and charity as well as salvific certainty. While not going against the actual letter of the *Confession*, Moderatism was focused on practical expressions of Christianity, seeking to soften the most difficult to aspects of Calvinism, mainly predestination (Clark 1963, 190-318; Kidd 2004, 504-506; Sher 1985, 325).

Richard Sher states that the ideology of the Moderate literati falls within six tenets: "Presbyterianism, Scottish nationalism, Stoicism, civic humanism, conservativism, and enlightenment" (1985, 324). The Moderates, according to Clark, Sher, Kidd, and McIntosh, were staunchly conservative and generally supportive of the system of clerical patronage (Clark 1963, 190-318; Kidd 2004, 503; Sher 1985, 320-340; McIntosh 1998, 2). Although the Moderates may have wished to reform parts of society, the social hierarchy and Kirk were held to be essentially sound. Thus, “the Enlightenment ideals adopted by the Moderates meant measured progress, not revolution; stability, not ferment; the conservation of traditional values, not their subversion” (Smitten 1986, 580-583).
To add to these views, John Macleod, in unflattering words, describes Moderatism as “a nebulous philosophy of life that yawned over divinity of any other kind than a little apologetic reading” (Macleod 1974, 210-211).

Moderatism can be said to be somewhat unconcerned with the drama of redemption. Instead, it focused on affirming the reasonableness of religion and morality from a rationalistic and humanistic perspective. It was predominantly an anthropocentric religion that found common ground with Natural Theology; being heavily influenced by Scottish Common Sense Philosophy; less theological than it was philosophical (Rice 1971, 33).

Chalmers himself was of the Moderate view during the early years of his ministry. He denounced the works of Methodist John Newton, Puritan Richard Baxter, and nonconformist Phillip Doddridge from the Kilmany pulpit. Before 1809, he says of these luminaries’ writings, “they are no favourites of mine” being books in which people might learn “fanaticism” (Hanna 1850, 111-112 & 156-158). Instead, Chalmers, before his religious awakening of 1811, had a decidedly anthropocentric and works based view of salvation, preaching, “let us tremble to think that anything but virtue can recommend us to the Almighty” (Hanna 1850, 157). Chalmers believed that people’s religious affections should be tempered. “Thus shall we exemplify the real manner of the Christian service, which consists in gratefully adoring the Supreme Being, and in diffusing the blessed influences of charity, moderation, and peace” (Hanna 1850, 158).

Chalmers, however, was to undergo a radical change of mind that moved him from the Moderate to the Evangelical camp in 1811. His transformation began on 16 December 1806 when his brother, George, died. This was the first death of a close member of the family, an event that clearly had a deep impact on the young minister.
18 months later, in the summer of 1808, his sister Barbara, who had been tending the manse at Kilmany for him, died of consumption (Hanna 1850, 147). In June 1809, Chalmers’ uncle, Mr Ballardie died while kneeling in prayer. When news of his uncle’s death reached Kilmany, Chalmers was sick in bed having contracted a severe illness upon his return home from General Assembly in Edinburgh (Hanna 1850, 158-159).

Chalmers’ illness confined him to his bed for the remainder of the year, kept him from his pulpit until late spring of 1810, and affected his health for over a year. Three members of his family had died in close succession, and he was now sick, believing he was next (Hanna 1850, 160-161; Huie 1949, 15). Because of these events, religion assumed a new and more prominent aspect in his life. He would write to a friend:

My confinement has fixed on my heart a very strong impression of time; an impression which I trust will not abandon me though I again reach the heyday of health and vigour. This should be the first step to another impression still more salutary, the magnitude of eternity. Strip human life of its connection with a higher scene of existence, and it is the illusion of an instant, an unmeaning farce, a series of visions and projects, and convulsive efforts, which terminate in nothing. I have been reading Pascal’s Thoughts on Religion: you know his history; a man of the richest endowments, and whose youth was signalized by his profound and original speculations in mathematical sciences, but who could stop short in the brilliant career of discovery, who could renounce without a sigh all the distinctions which are conferred upon genius, and resolve to devote every talent and every hour to the
defence and illustration of the gospel. This my dear sir, is superior to
all Greek and to all Roman fame (Hanna 1850, 161).

Realizing that his time on earth was fleeting in comparison to eternity, he
dedicated himself anew to the ministry. From this moment on “every thought of his
heart, every word of his lips, every action of his life, he would henceforth strive to
regulate under the high presiding sense of his responsibility to God” (Hanna 1850,
163).

While Chalmers had still not returned to the Calvinistic teachings of salvation
by grace he learned from his father, the change in his dedication to his ministerial
calling was immediately apparent. No longer did he preach on living a virtuous life;
instead, he preached on the themes of death and salvation, elaborating on the
shortness and insignificance of human life and the overwhelming reality of eternity
(Murray 2006, 83; Huie 1949, 18). A letter written to the parishioners of Kilmany
some years later exemplified Chalmers’ transition from the Moderate to the
Evangelical camp.

Here I cannot but record the effect of an actual though undersigned
experiment, which I prosecuted for upwards of twelve years among
you. For the greater part of that time I could expatiate on the
meanness of dishonesty, on the villainy of falsehood, on the
despicable arts of calumny . . . It never occurred to me that all this
might have been done, and yet every soul of every hearer have
remained in full alienation from God . . . I made no attempt against
the natural enmity of the mind to God . . . And it was not till I got
impressed by the utter alienation of the heart in all its desires and
affections from God; . . . it was not till I took the scriptural way of
laying the method of reconciliation before them, that I ever heard of any of those subordinate reformations which I aforetime made . . . You have at least taught me that to preach Christ is the only effective way of preaching (1815, 40-43).

While the change in his ministerial work was abundantly apparent, the greatest change, his understanding of the atonement, was taking place quietly. Chalmers’ final departure from Moderatism is seen in his journals as taking place sometime between March 1810 and August 1811. In these journal entries, one reads of the efforts by which he attempts to obtain personal sanctification. They begin, with Chalmers believing that he can be saved by the power of his own will, and conclude with a delighted resignation to the Reformed Calvinistic doctrine of salvation by grace.

Below are excerpts from his journals, revealing his concern for mastering personal imperfections.

27 March 1810. “I should never laugh in such a way as to irritate the sore. This is often done with the view of transferring the humiliation from yourself to the opposite party” (Hanna 1850, 170).

3 April 1810. “I spoke with too much contempt . . . I should restrain myself from all conversation that borders on the malicious and the satirical” (Hanna 1850, 171).

9 April 1810. “I got into a violent passion . . . in the morning . . . Gracious Heaven! Look down with pity on the errors of a poor and benighted wanderer” (Hanna 1850, 171).

16 April 1810. “Erred egregiously this evening in venting my indignation . . . Oh, how far short both of the elevation and the charity
of Christian principles, to be so much disturbed by little injuries which are offered to our pride” (Hanna 1850, 173).

1 May 1810. “After dinner felt a tendency to annex ridicule to absent characters. This unchristian practice must be kept down” (Hanna 1850, 175).

12 September 1810. “Erred in speaking unfavourably . . . and though zeal for what I conceive the humility of the evangelical views entered into my criticism, this only disguises the fault, without justifying it” (Hanna 1850, 186).

25 December 1810. “I am making head against the soreness of my temperament to what is irksome, though still far and very far from perfection. O God, may I feel the authority of Thy law” (Hanna 1850, 190-191).

Huie and Hanna call the commencement of Chalmers’ personal search for “divine approval” as the single greatest change in his spiritual awakening (Hanna 1850, 162-164; Huie 1949, 15-18). The journals reveal his failed efforts at self-justification. The change in his theological convictions are first seen taking place on 23 February 1811, when he writes that he believes himself to be “on the eve of some decisive transformation in point of religious sentiment, I contemplate with interest everything that bears upon a subject so important” (Hanna 1850, 204).

Fifteen years later, Chalmers would write to his brother Alexander and explain that his religious transformation came during his illness while reading William Wilberforce’s *Practical View*, Scott’s *Force of Truth*, and the Bible. These helped him understand the reality of human inability, and to “elevate . . . to the
standard of the Divine requirement” (Hanna 1850, 195). He continues in the letter to Alexander writing:

> I am now most thoroughly of the opinion, and it is an opinion founded on experience, that on the system of – Do this and live, no peace, and even no true and worthy obedience, can ever be attained. It is believe in the Lord Jesus Christ, and thou shalt be saved. When this belief enters the heart, joy and confidence enter along with it. The righteousness which we try to work out for ourselves eludes our impotent grasp, and never can a soul arrive at true or permanent rest in the pursuit of this object. The righteousness which, by faith, we put on, secures our acceptance with God, and secures our interest in His promises, and gives us a part in those sanctifying influences by which we are enabled to do with aid from on high what we never can do without it. We look to God in a new light, we see Him as a reconciled Father; that love to Him which terror scares away re-enters the heart, and, with a new principle and a new power, we become new creatures in Jesus Christ our Lord (Hanna 1850, 193-194).

Chalmers’ understanding of the atonement, from February to August 1811, would undergo a complete transformation. In the end, he would recognize that the death of Christ is the true and proper sacrifice for sin. He records the results of his awakening in a letter written to a friend on 28 August 1811 that he now considered himself a true Christian.

> Viewed as an experimental Christian, I am still in my infancy. I have not yet reached that repose of heart which, in the beautiful language of one of our prophets, is termed quietness and assurance forever. But
I am deceived if I am not feeling my way toward it; and I have to attest, that the ground is never firmer under my feet than when I rest my confidence in Christ, and make Him all my redemption and all my righteousness (Hanna 1850, 244).

The remainder of his ministry in Kilmany was profoundly impacted by his joyous marriage to Miss. Grace Pratt and a newfound love of preaching the gospel. Soon people began crowding the church, and his fame as a preacher spread (Mackay 1980). In 1814, Chalmers accepted a call to become minister at the famed Tron Church in Glasgow, and then in 1818, he transitioned to Glasgow’s new St. John’s Parish Church. It was at St. John’s that Chalmers formalized his ideas on pauperism, and became thoroughly involved in education, the poor laws, and visitation; a passion that would remain with him for life (Oliphant 1893, 96-150).

In 1823, much to everyone’s surprise, Chalmers left Glasgow to take up the position as Professor of Moral Philosophy at St. Andrews. His primary reason for changing course, at the age of 43, was again evangelical in its calling, as Iain Murray quotes from Chalmers’ letters. “I am more and more confirmed in the belief that a chair in a college is a higher station on the field of Christian usefulness, than a parish anywhere in Scotland. Could one acquit himself rightly of his duties as a professor, it is incalculable the good which might be done to the guides and the clergy of our next generation” (2006, 88).

After St. Andrews, Chalmers took up the post as Professor of Divinity at Edinburgh University, in 1828. He remained there until 1843, when the disruption of the Church of Scotland over patronage resulted in 470 ministers of the evangelical persuasion, including him, walking out of the Assembly and establishing the Free Church of Scotland. Chalmers was soon in charge of the Free Church College,
exercising his duties with as much vigour as a man half his age (McCrie 2007, 555-568; Hanna 1852c; Murray 2006, 109-119).

Even at the end of his life, Chalmers remained committed to teaching a life giving evangelical gospel message. He would frequently converse with friends or write letters of encouragement dealing with the subjects of God’s sovereign election, the atonement, and the free offer of the gospel (Murray 2006, 118-119).

The end came on 31 May 1847. Having gone to bed early the night before, Chalmers was found in his bed, having passed away in his sleep. Oliphant writes these words of Chalmers’ passing: “thus peacefully, nobly, and quietly this great servant of God…was released from the life burden. A more beautiful ending no man could desire” (1893, 255).

Chalmers had the intellect of a scientist and philosopher, yet his desire was for the gospel. He was schooled in Scottish philosophy; however, he did not allow it to dictate his theology. He was a believer in the value and necessity of Natural Theology, but his evangelical orientation would not allow it to replace God’s Revelation found in Scripture. He had seen and tasted Moderatism, but was awakened to the necessity to preach and teach the gospel as a full-fledged evangelical.

It is this picture of Chalmers, which is ignored by his critics. True, his theological writings do not meet the expectations of academic rigor. His motivation is always evangelical, and his goal is to lift and stir the soul. His methods of argumentation are dominated by his love for science, and devotion to Natural Theology and Common Sense Philosophy; nonetheless, his concern for evangelism is constantly evident in his illustrative style of presentation, a style that has unfortunately removed his works from the arena of serious academics.
When the 11-year-old Chalmers arrived at St. Andrews in 1791, Natural Theology, which harmonized with the religious Moderatism of the day, was all that was taught in the divinity schools and universities of Scotland (Oliphant 1893, 5). Furthermore, it was a generally held principle that if one was to engage in a meaningful and credible defence of the Christian faith, this depended a great deal on the strength of arguments one could make from Natural Theology (Rice 1971, 31-34). Considering this situation, it comes as no surprise that Chalmers – a product of his age – was an advocate of Natural Theology.

It should be pointed out that Chalmers did not give much thought to other monotheistic religions like Judaism and Islam when considering Natural Theology. He was mainly concerned with atheism and antitheism, and used Natural Theology as a tool to further his arguments.

The details of Chalmers’ education in Natural Theology are scant, but it is clear he studied Joseph Butler’s *Analogy* (Butler 1900) and William Paley’s *Evidences* and *Natural Theology* (Paley 2006; Paley 1855). The justification for this conclusion is that by 1803-1804, during his private lectures in mathematics and chemistry at St. Andrews and again to his parishioners in Kilmany, Chalmers drew heavily from the works of these men (Hanna 1850, 151-152). Hanna writes, “In selecting Christian evidences, he was neither influenced by any novelty in the subject, nor any change in his conviction regarding it. His faith in the divine origin of Christianity had been early established, and the evidence on which that faith rested had years before been carefully investigated” (1850, 152).
Hanna goes on to provide a detailed description of Chalmers’ conviction of the merits of Natural Theology (i.e., Christian evidences), and in particular his praise of the works of Paley:

The best and most elementary treatises on the evidences of Christianity . . . in which England, I believe has taken the lead of all countries in Christendom. The work of Paley is excellent. It will do more than instruct; it will interest and delight you; it will prove an effectual antidote against infidel opinions (Hanna 1850, 106).

Regarding Chalmers’ estimation of Joseph Butler, we have this.

Of the truth of Christianity he (Chalmers) had a firm and unwavering belief. He unhesitatingly believed that the Scriptures are the Word of God, and that the Christian system is divine. In this conviction he had firmly established at an early period of life, by reading Bishop Butler’s *Analogy of Natural and Revealed Religion*. He told me that it was Butler’s *Analogy* that made him a Christian (Hanna 1850, 155).

Chalmers believed that Butler’s work was a leading instrument in convincing him of Christianity’s divine origin (Huie 1949, 14-15). Huie also writes, “according to his conception of Christianity before the Kilmany awakening, anyone who accepted as true that divine origin of Christianity was a Christian” (1949, 15).

Joseph Butler, who Chalmers praised, is most famous for his *Analogy*, an important work of Christian apologetics in the age of controversies over eighteenth century Deism. Butler’s work concentrates on drawing a general analogy between the principles of God’s government (His goodness, justice, etc.), as set forth in the Bible, and those that can be observed in nature (both animal and human). Butler claims this analogy drives to the conclusion that the heavenly and the earthly author
of this similarity are the same, namely, the God of the Bible. Butler's arguments draw heavily on the cumulative effect of evidence for faith, using probabilistic reasoning via the inductive method in an effort to demonstrate to the unbeliever the truthfulness of the Christian faith (Butler 1900).

Chalmers also drew inspiration from Paley’s *Evidences* and *Natural Theology*, as can be seen in his own apologetic works in defending miracles and his efforts to refute David Hume’s objections to the design argument for God’s existence. Paley made extensive use of analogies, as did Butler, to develop a cumulative case for Christianity, hoping that the volume of evidence would overwhelm the sceptic.

Paley’s work *Natural Theology* begins with the famous watchmaker analogy. Of the watchmaker, Paley writes that if a stone were to be encountered while walking across a heath, one might think it had always been there. However, if a watch were found on the ground, the precision and intricacy of its parts, would surely lead to the conclusion that the watch had not happened by chance but had been made by an intelligent designer. The remainder of Paley’s book looks at such examples as human anatomy, the plant and animal kingdom, and astronomy. He then employs the watchmaker analogy, drawing the conclusion that the world is like a great clock, being made by an intelligent designer who is the wise and benevolent God of the Bible (Paley 2006).

From both Butler and Paley, Chalmers gained inspiration to make use of the method of analogy and the cumulative influence of evidence, which he employs

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17 This analogy is so closely associated with Paley that he is thought to have invented it. However, William Derham, nearly a century earlier, popularized the analogy in his Boyle lectures, the analogy which had been known to Boyle himself even earlier (Dembski 1999, 74-75).
extensively in his *Natural Theology*, *Institutes*, *Bridgewater Treatise*, and *On the Miraculous and Internal Evidences of the Christian Revelation*.

At the beginning of the 1700s, British theologian Samuel Clarke (1675-1729), developed an *a priori* or cosmological\(^\text{18}\) argument for the existence of God, providing his own version in a work entitled *A Demonstration of the Being and Attributes of God* (Clarke 1998). Scottish Common Sense Philosophers, with their emphasis on experimentation, turned a negative eye toward Clarke’s work. This attitude is reflected in Chalmers’ own work *Natural Theology* (1835a, 99-120). He says of Clarke, “Natural Theology in the hands of some of its expounders has not had justice done to it; and this has aggravated the views of many respecting its impotency and its blindness” (1835b, 358-359).

Clarke’s work was not his only point of departure from the entire sphere of Natural Theology. Natural Theology had been developing along rationalistic lines for so long that it was at times difficult to distinguish it from a Deistic form of natural religion. Natural Theology had lost its connection to revelation, attempting to demonstrate the trinity, humanity’s sin nature, and God’s remedy for humanity’s condition from nature (Sennett, Groothuis 2005).

Chalmers, after his transition to evangelicalism, vehemently disagreed with this extension of Natural Theology beyond its proper scope. He was convinced that Paley had gone too far in claiming that God’s moral attributes could be discerned via an appeal to evidence found in nature (Smith 1979, 61).

Specifically, Chalmers writes, “the theology of nature sheds powerful light on the being of God; and that, even from its unaided demonstration; we can reach a considerable degree of probability, both for His moral and natural attributes” (1835b, 18).

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\(^{18}\) Cosmological arguments are arguments for a first cause, since all effects have antecedent first cause, thus the world must have a cause.
416). Natural Theology, according to Chalmers, “when it undertakes the question between God and man, this is what it finds to be impracticable. It is here where the main helplessness of nature lies” (1835b, 416). This helplessness is in the basic message of the gospel, which can be found, as Chalmers writes, only in the specific revelation of the Bible.

It is baffled in all its attempts to decipher the state and the prospects of man, viewed in the relation of an offending subject the state and the prospects of man, viewed in relation of an offending subject to an offended sovereign. In a word, its chief obscurity, and which it is wholly unable to disperse, is that which rests on the hopes and the destiny of our species. There is in it enough of manifestation to awaken the fears of guilt, but not enough again to appease them (1835b, 416-417).

As a product of the times, Chalmers was an advocate of Natural Theology. His advocacy can be found in all his apologetic works, as most of his arguments are attempts to rehabilitate or improve upon traditional arguments from the past. He considers it necessary to begin his systematic theology with a lengthy treatment of Natural Theology, which again attests to the importance and emphasis he places on these views (Chalmers 1849b; Rice 1971, 23-46). However, Chalmers refuses, as indicated by Rice, to consider Natural Theology as providing the answers to the human condition, maintaining the place of Scripture as the only avenue to lead the inquirer to faith (1966, 198-209; 1971, 23-46).
Common Sense Philosophy’s Influence on Chalmers

With respect to Chalmers’ philosophical outlook and its influence on his apologetics, his St. Andrews’ studies provided him with an education in the leading philosophical movements of the late-eighteenth century. They began with an introduction to the Enlightenment rationalism of Descartes, Spinoza, and Leibniz, which placed abounding faith in the power of speculative reasoning to discover ultimate truth (Huie 1949, 33). Chalmers would be taught that rationalism’s emphasis on the power of human reasoning created a point of departure for the materialism of Godwin (1798) and Baron d’Holbach (1820), which sought to understand the laws of nature via human reasoning ending with the view that nature was the source of all truth.

D’Holbach’s belief that only the laws of nature are authoritative for guiding humanity is evident in his words “O Nature: sovereign of all beings: and ye, her adorable daughters, Virtue, Reason, and Truth: remain forever our revered protectors; it is to you that belong praises of the human race, to you appertains the homage of the earth. Show us then, O Nature” (1820, 519). The extreme mechanistic materialism of the French school19 left Chalmers contemplating the possibility that all reality, both moral and physical, was meaningless (Rice 1971, 27-29).

Faced with such outright naturalism, Chalmers was concerned that the Christian position was severely compromised and that God was rendered unnecessary in a world of materialistic and mechanistic perfection (Huie 1949, 8). It would be some years later in his treatise on Natural Theology that Chalmers would

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19 This school is named for eighteenth century French philosophers, like d’Holbach who espoused belief that the laws of nature and the material of the universe were all that were necessary to explain questions concerning life.
warn readers of d’Holbach, stating that the “gorgeous generalizations on nature and truth and the universe . . . make tremendous impression on the unpractised reader” (1835a, 163).

Into this mix of doubt, Chalmers was also introduced to the empirical views of Locke, Berkeley\(^2\), and Hume, which arose to combat rationalism and stood opposed to materialism. Empiricism held that all knowledge arises outside the mind, and enters via experienced perceptions in which the mind is a passive recipient. However, Chalmers thought that Hume’s empirical writings, if not checked, could throw the unsuspecting person into the depths of complete scepticism (Huie 1949, 34).

James Beattie’s work *An Essay on Truth* (Beattie 1807, 473), which Chalmers studied during his two winters at Edinburgh University, provided him with an alternative to his philosophical quagmire. It was from Dr. Robison’s explanation of Beattie that the Scottish School of Common Sense Philosophy was presented as an alternative to French materialism as espoused by Godwin and d’Holbach, and Humean scepticism (Huie 1949, 8-9; Rice 1971, 28-34).

From Beattie, as well as from the writings of other Common Sense Philosophers (i.e., Thomas Reid (1710-1796), Adam Ferguson (1723-1816), Thomas Brown (1778-1820), and Dugald Stewart (1753-1828)), Chalmers was able to obtain a philosophical perspective that was scientific, yet not fixated on empirical evidence alone. Furthermore, Chalmers was comfortable with Common Sense Philosophy, as it held to absolute truths, which pointed to God, as opposed to the mechanistic materialism of the laws of nature.

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\(^2\) Berkeley’s form of empiricism emanated from his maxim *esse est percipi* (to be is to be perceived.) His so-called extreme empiricism maintained that things only exist by being perceived, or by doing the perceiving. Berkeley’s empiricism would later become known as subjective idealism (Clark 2000).
It was during the eighteenth century that the Scottish school of philosophy arose to combat epistemological scepticism. Thomas Reid, one of its leading proponents, wrote, “no man in his senses could believe” that all knowledge only comes via observation and external truths (1892, 82). As Reid conjectures, if there are any truths to be found, they depend on experience and reflection as the only vehicle by which they are discovered. The cure for such scepticism was the founding of knowledge on a concept called common sense, where common sense is the basic principle universally at work in belief and human reasoning (Graham 2009).

The Scottish School of Common Sense Philosophy that Chalmers learned and applied in all his apologetics can be understood as being based on three principles.

**OBSERVATION:** All enquiries proceed by the method of induction (McCosh 1875, 2). In induction, premises are tested via extensive experimentation and observation so that conclusions can be analysed and results stated in terms of probability, which yield statements like the conclusion is highly probable (Geisler, Feinberg 1980, 57). The Scottish school, according to McCosh, was the first philosophical method “avowedly and knowingly to follow the inductive method, and to employ it systematically in psychological investigation” (1875, 3). Hence, practitioners of Common Sense Philosophy placed considerable store on evidence and observation from experiments. To this principle, Thomas Reid writes, “wise men now agree, or ought to agree in this, that there is but one way to the knowledge of nature's works; the way of observation and experiment” (1892, 71). Observation and experience alone are not the sole characteristics of the Common Sense School; else, it becomes another expression of empiricism. Instead, the Scottish school employs reflection and common sense.
**REFLECTION:** Common Sense Philosophy “employs self-consciousness as an instrument used in observation” (McCosh 1875, 4). According to McCosh, the instrument employed in analysing, understanding, and drawing conclusions about observations is the human consciousness. He writes that the Scottish philosopher “strenuously maintained that we can know what our perceptions, and judgments, and feelings, and wishes, and resolves, and moral appreciations are, not by the senses or the microscope, not by chemical analysis, or the estimation of vital forces, but solely through our inward experience revealed by consciousness” (1875, 5). Contrary to the method employed by Descartes, in which all is doubted in order to find an ultimate truth, the Scottish school holds that human consciousness is “that faculty by which we perceive truth” (Beattie 1807, 17). This element of the Scottish school encouraged serious and extensive introspection, or self-reflection, to arrive at the truth that was presented in observation. Hence, Common Sense Philosophy trusted the human mind to discern truth when presented with the data and facts of observation. In essence, Reid, Beattie, and other Common Sense Philosophers maintained that the truths discovered in the mind would never contradict observation (Rice 1971, 29-31).

**COMMON SENSE or INNATE TENDENCIES:** “By the observations of consciousness, principles are reached which are prior to and independent of experience” (McCosh 1875, 6). This principle is called by Reid “common sense” and is natural, original, and necessary to the human mind. With other Scottish philosophers, they are *a priori* principles called senses (Hutchinson), which reside in the very constitution of the mind; by others, they are called fundamental laws of human thought (Stewart) or simple and original intuitions (Brown) (McCosh 1875, 6). Regardless of the terminology, all members of the Scottish School concur that
there are laws, principles, or powers of the mind, whether they be called common
senses, innate tendencies, or intuitions, which are fundamental and innate to the
mind and are found to be resident at birth. While Common Sense Philosophy looks
down on the early efforts of extreme rationalism, medieval scholasticism, and the
use of a priori reasoning, it does advocate a belief in an a priori common sense
inherent in the human mind (McCosh 1875, 6-7).

These three distinguishing marks of the Scottish Philosophical School (i.e.,
Observation, Reflection, and Common Sense) endeared it to the religious
temperament of Moderatism found in Scotland in those days. Common Sense
Philosophy embraced Natural Theology, which was a hallmark of Moderatism. It did
not go to the materialistic extremes of the French school, which placed all truth in
the impersonal laws of nature. The Common Sense School held that the human mind
at birth was endowed with certain innate senses, which allowed for the stamp of God
on humanity, and blended with the moralizing preaching of Moderatism. With its
belief in innate common sense, the epistemological view of the tabula rasa21 (i.e.,
blank slate), which leads to scepticism, was avoided. Finally, with its emphasis on
induction and self-introspection, Common Sense appealed to those who preferred the
scientific method.

It was in the Scottish School that Chalmers discovered what he believed to be
the proper philosophy of knowledge. A discovery which led him to agree with
Beattie’s definition of truth, being that which “the constitution of our nature
determines us to believe” (1807, 26), and which is “something fixed, unchangeable,
and eternal” (1807, 17). Beattie’s definition implies that common sense is the basis
of perceiving self-evident truths and is the standard for truth. He surmises that reason

21 Tabula rasa is the epistemological belief that at birth a person’s mind is blank, not having any a priori
knowledge or concept of ideas, which is held to derive only via experience and observation.
cannot help but arrive at these truths, because the evidence upon which reason reasons is ultimately intuitive (1807, 27ff). For Chalmers, this definition of truth is compatible with his faith, finding its source in the God of the Bible. Additionally, the philosophy of Common Sense was highly adaptable, not needing a replacement, as Chalmers moved from being a religious Moderate to an evangelical, by the end of 1811.

Rice considers these two thrusts to have a noticeable bearing on Chalmers’ theology. The first supported Chalmers’ contention that truth was objective, which protected one from the materialistic views of the French school and the scepticism of Hume’s empiricism. This is demonstrated in Chalmers’ adherence to innate human tendencies. The second thrust comes from the obvious question, in what, or where do innate tendencies originate; the answer being in God, which is supported by a theistic and ethical orientation, as opposed to atheism (1971, 30).

In reading Chalmers’ theological and apologetic works, one can detect the heavy influence of Common Sense Philosophy. This influence is evident in the undertone of the contention that within the constitution of the mind, there are underived principles operating that guarantee the credibility of our experiencing and knowing. This belief, which Chalmers calls innate tendencies, is the foundational hallmark of his apologetics. The conviction that people are born with innate orientations of the mind undergirds all his Christian defences, which is readily on display in his largest apologetic works On Natural Theology; On the Miraculous and Internal Evidences of the Christian Revelation; On the Power, Wisdom, and Goodness of God as Manifested in the Adaptation of External Nature to the Moral and Intellectual Constitution of Man; and Institutes of Theology.
In each of these treatises, Chalmers employs the belief that humanity has an innate tendency or common sense belief in the constancy of nature, which is itself always constant. He writes:

The striking accordance is, that there should be such an expectation deposited in every bosom; and that from every department of the accessible creation there should be to this expectation the response or the echo of one wide and unexpected fulfilment (1835a, 125).

Every apologetic argument of his begins with this assumption and is referred to time and time again. In short, this presupposition is the heart and soul of Chalmers’ apologetic arguments. Furthermore, the harmony between reality and expectation that he believes cannot conflict is always joined in Chalmers’ apologetic thinking, readily detected in the following words:

In the instinctive, the universal faith of Nature’s constancy we behold a promise. In the actual constancy of Nature, we behold its fulfilment. When the two are viewed in connexion, then, to be told that Nature never recedes from her constancy is to be told that the God of Nature never recedes from his faithfulness (1835b, 166-167).

Even with Chalmers’ appreciation of Common Sense Philosophy, he was aware of its tendency to blend with moderate religiosity, creating a Moderate-Common Sense synthesis (Rice 1971, 33). Taken together, the Moderate-Common Sense theology, which was moralistic and rationalistic, degenerated into an anthropocentric form of natural religion unsuitable for Chalmers. As such, Chalmers rejected the full-scale use of Common Sense as a framework for Natural Theology, writing that it “is quite overrated by those who would represent it as the foundation of the edifice. It is not that . . . Christianity rests on its own proper edifice, and if,
instead of this, she be made to rest on an antecedent natural religion, she becomes weak throughout” (Chalmers 1835b, 399). Chalmers’ rejection of an absolute dependence on Common Sense Philosophy comes to light in his later years. It is then that he places an increasing apologetic emphasis on the self-evidencing power of the Holy Spirit on the mind of the inquirer to lead them to faith; yet, even with his increasing appreciation for the work of the Holy Spirit, Chalmers never drops his dependence on innate tendencies from the equation.

Summary of Influences on Chalmers’ Apologetics

Considering the above analyses, it is fair, then, to say Chalmers’ apologetics fit within the sphere of nineteenth century Natural Theology. It is also clear that his Christian defences avoid a priori techniques, requiring the application of evidence and inductive reasoning, which is to be expected coming from a person with a predilection for science and mathematical reasoning. Finally, this analysis has identified Chalmers’ Common Sense belief in innate human tendencies, and in particular, the belief that the human mind has an innate expectation of constancy in nature, as the foundational presupposition prevalent in all his apologetic works. It is precisely this assertion that will be critiqued, explored, and analysed in depth in the next chapter.
CHAPTER FOUR: Chalmers’ Apologetic Foundation

The preceding chapter identified Chalmers’ belief in innate human tendencies as the foundation upon which his apologetic arguments progress. This chapter provides a detailed description and critique of Chalmers’ view that the constancy of nature is an innate tendency in the human mind.

Innate Expectation of Nature’s Constancy

At the commencement of the fourth chapter of Chalmers’ book *On Natural Theology*, he writes, “the doctrine of innate ideas in the mind is wholly different from the doctrine of innate tendencies in the mind” (1835a, 121). For Chalmers, an advocate of the Scientific Method, Natural Theology, and Scottish Common Sense Philosophy, there is a distinction to be made between innate ideas, which he says are like aboriginal concepts of nature and its objects (1835a, 121), from innate tendencies, expectations, instincts, intuitions, or common sense – depending on which Common Sense Philosopher is being followed – which “may lie undeveloped till the excitement of some occasion have manifested or brought them forth” (1835a, 121).

Chalmers gives this one reference to the concept of innate ideas in *Natural Theology*, making it difficult to determine his precise understating or definition. However, in his final life’s work *Institutes of Theology*, he indicates his complete devotion to the Scottish School, which accepts innate tendencies, not innate ideas. He writes, “let me intimate once for all, that I have no confidence even in the general doctrine of innate ideas, and can see no evidence for the human mind having the
innate idea” (1849b, 54). Chalmers, by this statement, is unequivocally agreeing with Thomas Reid, and other Scottish philosophers, that all philosophies of ideas, from Plato to Hume, are in error (Broadie 1986, 153).

In the Scottish School, Reid accepts that humanity has ideas in the ordinary sense, but he prefers to use the term common sense, writing, “all knowledge and all science must be built upon principles that are self-evident; and of such principles every man who has common sense is a competent judge” (1880, 422). In Reid’s work Common Sense he writes the “work of the mind is not carried on by deliberate acts of mature reason, which we might recollect, but by means of instincts, habits, associations, and other principles, which operate before we come to the use of reason” (1892, 75). He postulates that acts or operations of the mind are founded on basic and innate common sense principles that need no proof. In his Essays on the Intellectual Power of Man, as documented by Broadie, Reid writes, “To think of a thing and to have thought of it . . . to conceive a thing, and to have a conception, notion, or idea of it, are phrases perfectly synonymous. In these phrases, the thought means nothing but the act of thinking . . . and the conception, notion or idea, the act of conceiving” (Broadie 1986, 155).

Thus, for Reid, and for that matter the entire Scottish School, of which Chalmers is committed, there is no such thing as an idea, innate or otherwise, which is separate, distinct, or mediates between the mind and the object being perceived. In this, the Scottish School differs from the philosophy of ideas, as found in the views of Plato, Locke, and numerous other philosophers. The act of thinking, as Reid contends, takes place directly in the mind; hence, an idea is merely the result of the mind in the act of thinking, and the basic building blocks of all human thinking are
innate common sense instincts, or as Chalmers calls them, innate tendencies or expectations (Broadie 1997, 73-116; Broadie 1986, 153-157).

The following illustration from *Natural Theology* is perhaps the best vehicle through which to grasp Chalmers’ concept of innate tendencies.

In a newly formed mind, there is no idea of nature or of a single object in nature – yet no sooner is an object presented, or is an event observed to happen, than there is elicited the tendency of the mind to presume on the constancy of nature. Let an infant for the first time in its life, strike on the table with a spoon; and, pleased with the noise, it will repeat that stroke with every appearance of a confident anticipation that the noise will be repeated (1835a, 121).

With these words, Chalmers states the foremost difference between ideas and tendencies from his perspective. Ideas, according to Chalmers, are full-fledged conceptualized notions about nature and its objects; whereas tendencies are merely the untrained or untutored orientation of the human mind to presume upon, to expect a recurrent sequence, and in Chalmers’ example, he is referring to the expectation of constancy in external nature.

However, merely stating a belief in humanity’s innate tendencies is, for Chalmers, insufficient for the application of the principle. He believes it is essential to demonstrate the supporting evidence of a principle that stands opposed to those of the empirical philosophers, of which Hume is foremost in his mind. To that end, Chalmers continues, returning to the illustration of the infant repeating his premise before elaborating on the evidence. “It counts on the invariableness wherewith the same consequent will follow that same antecedent . . . these two terms make up a sequence – and there seems to exist in the spirit of man, not an underived, but an
aboriginal faith, in the uniformity of nature’s sequences” (1835a, 121). Generally, this would be sufficient to consider the point made, yet, Chalmers, as is typical with his style of writing, elaborates on the point.

Our expectation of the constancy of nature in all time coming, because of our experience of that constancy in all past time, is not a deduction of reason – but an immediate and resistless principle of belief in the human constitution . . . It is an underived and intuitive belief, and not a belief that we reach by a succession of steps – and is, as far as we can discern, as strong in infancy as it is in mature and established manhood (1835a, 136).

The view of humanity’s innate expectancy of nature’s constancy comes directly from his St. Andrews’ professor, Dr. Thomas Brown. According to Brown, as Chalmers writes, people’s predisposition “to count on the uniformity of nature is an original law of the mind, and is not the fruit of observation” (1835a, 123). Furthermore, Chalmers notes that Brown says, “there is no more logical dependence between the propositions that a stone has once fallen to the earth and a stone will always fall to the earth” (1835a, 123). Chalmers is not alone in his belief in innate tendencies, as Rice indicates; it was the dominant philosophy of the mind in Scotland’s colleges, at the end of the eighteenth through the early-nineteenth centuries (1966, 56-110). Additionally, Tim McConnel and Mark Noll ascertain Common Sense as the controlling philosophy taught by Old Princeton22 divinity professors Archibald Alexander (1772-1851), Charles Hodge (1797-1878)23, A.A.

22 ‘Old Princeton’ refers to the consistent theological approach used at Princeton Theological Seminary from its founding in 1812 until the death of its last great exponent, Benjamin Breckinridge Warfield, in 1921, and the departure of J. Gresham Machen in 1929, due to the influx of liberal theology (McConnel, 2003, 648).
23 Charles Hodge (1797-1878) in his Systematic Theology writes, “innate knowledge is meant that which is due to our constitution, as sentient, rational, and moral beings. It is opposed to knowledge founded on
Hodge (1823-1886), and B.B. Warfield (1851-1921) (McConnel 2003, 647-672; Noll 1983).

Chalmers’ illustration of the child and the spoon is his way of explaining and providing evidence for his belief that the human mind has an innate tendency (i.e., is predisposed) to expect order, or more specifically causal relationships in nature. By contrast, his main literary opponent, David Hume, maintains, “All arguments concerning existence are founded on the relation of cause and effect, that our knowledge of that relation is derived entirely from experience” (2004, 26-27). Hume, although not denying the law of causality, does not believe in innate tendencies; the philosopher instead holds that it is through experience, and experience alone, by which the mind is presented with a sequence of terms always conjoined that it is first able to reason about the concept of causality. He writes:

First, it seems evident . . . men learn many things from experience, and infer, that the same events will always follow from the same causes. By this principle they become acquainted with the more obvious properties of external objects, and gradually, from their birth, treasure up a knowledge of the nature of fire, water, earth, stones, heights, depths, &c., and of the effects which result from their operation (2004, 81).

This emphasis on experience as the source of all knowledge is unquestionably necessary in Hume’s empirical philosophy, for he believes (as does John Locke) that the human mind at birth is a blank slate and that it is through experience, and experience alone that people are able to formulate thoughts or experience; to that by ab extra instruction; and to that acquired by a process of research and reasoning” (2003, 191).
Hume in his *Enquiry* writes, “but though our thought seems to possess this unbounded liberty, we shall find, upon a nearer examination, that it is really confined within very narrow limits, and that all this creative power of the mind amounts to no more than the faculty of compounding, transposing, augmenting, or diminishing materials afforded to us by the senses” (2004, 12). Again in the *Enquiry*, he writes, “all inferences from experience, therefore, are effects of custom, not of reasoning” (2004, 34). In his *Treatise of Human Nature*, Hume writes that the workings of the human mind “are nothing but a bundle or collection of different perceptions . . . The mind is a kind of theatre, where several perceptions successively make their appearance” (1978, I.iv.6).

Contrary to Hume, Chalmers, in his discussion of innate tendencies, forwards the notion “this instinctive expectation of a constancy in the succession of events is not a fruit of experience; but is anterior to it” (1835a, 122). Chalmers maintains it is not experience that places the initial belief of causal events in the mind, but the mind’s proclivity to expect causal sequences, which precedes experience.

Chalmers believes that experience, instead of implanting or causing the instincts in the mind, refines humanity’s unbridled innate tendencies. “The truth is that experience, so far from strengthening this instinct of the understanding as it has been called, seems rather to modify and restrain it” (1835a, 122). Thus, in the illustration of the child, further experiments serve only to modify the child’s initial tendency to expect the same noise no matter the nature of the surface being struck.

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24 Hume’s belief in *tabula rasa* (i.e. the mind being a blank slate at birth) can be witnessed by the interested traveller, as Hume’s memorial statue, in Edinburgh’s High Street, depicts the philosopher wearing a toga holding a blank tablet.
Chalmers, however, does not always use the information that experience brings to the mind natural tendencies in a modifying or restraining sense. At times, he considers experimentation’s positive contributions to the mind’s storehouse of knowledge writing, “the truth is that experience teaches” (Chalmers 1835a, 123-124). His elaboration on the value of experimentation is that it modifies and restrains innate tendencies in one paragraph and teaches in the next adds some degree of confusion, creating the appearance he has a conception of ideas more similar to Plato or Descartes. This is not at all the case; the point is that experimentation, being intrinsic to the inductive method and one of the three pillars of Common Sense Philosophy, plays the role of assisting our understanding of the exact nature of causal relationships. The expectation of causality he believes is innate, but the information gained by experience serves to refine humanity’s expectations.

In keeping with Chalmers’ desire to explain, in differing shades, we present once more his effort to describe the exact nature of the ‘schooling’ obtained by experimentation. This is done by returning to the illustration of the child, which we have left holding the spoon.

The child who elicited a noise which it likes from the collision of its spoon with the table would, in the first instance, expect the same result from a like collision with any material surface spread out before it – as if placed for example, on the smooth and level sand of a sea-shore. Here the effect of experience would be to correct its first strong and unbridled anticipations – so that in time it would not look for the

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25 As one reads Chalmers’ works, it becomes evident that he does not write concise philosophical treatises. His repetition of illustrations in slightly different words is more adapted to sermon making than academia. However, his point is usually clear, even if his language becomes less consistent than one would like.
wished for noise in the infliction of a stroke upon sand or clay or the surface of a fluid, but upon wood or stone or metal (1835a, 122).

To state it again, the hypothesis from this illustration is “the office of experience . . . is not to strengthen our faith in the uniformity of nature’s sequences, but to ascertain what the sequences actually are. The effect of experience is not to give the faith, but to the faith to add knowledge” (1835a, 122). The faith Chalmers speaks of is the inherent expectation that nature will behave in an orderly and predictable fashion; knowledge is merely refining this expectation.

Admittedly, the difference between possessing innate causal expectations and the need for experience to not only refine but also discover causality is more complicated in practice than in theory. One can consider a person who has never seen nor heard of the Aurora Borealis (i.e., Northern Lights); for this person, the reality of the experience will initially defy understanding. For the uninitiated, the reality of that first experience of the Northern Lights may bring about a temptation to close one’s eyes thinking that they did not see what they thought they saw, but after opening them again, they find that the lights are still in the cosmos. After repeated observation, the expectation of the appearance of the lights is formulated, after experience and not prior to the event, as Chalmers would maintain. This is just one example, which points out that not all causal relationships are so easily identified as being innately intuitive. Many causal relationships, in fact, do require observation, even if only to demonstrate their existence. Chalmers, however, ignores this complexity, reflecting, as some would say, a less than academically rigorous exploration of the alternatives. Instead, he focuses on the one example that demonstrates his point.
That point being, the child, which after the first experience of the sound made while striking its spoon on the table does not need a second, then a third, and even more trials before it begins to develop the belief in causal relationships. The child is in possession of the faculty of expecting causal relationships even before a sequence is presented. The child expects the future to be the same as the past, even after the first delightful experience of making noise. To this he writes, “the great object of repetition in experiments is not to strengthen our confidence in the constancy of nature’s sequences – but to ascertain what be the real and precise terms of each sequence” (1835a, 122-123).

Thus, says Chalmers, experimentation is indispensable to scientific enquiry. It is for this purpose that experiments are so varied – for in that assemblage of contemporaneous things amid which a given result takes place, it is often not known at the first which of the things is the strict and proper antecedent – and it is to determine this, that sometimes certain of the old circumstances are detached from the group and certain new ones added, till the discrimination has been precisely made between what is essential and what is merely accessory in the process (1835a, 123).

The ultimate purpose, then, of experimentation is for determining the precise sequence of events, the actual cause and effect in a sequence of nature’s workings, not for implanting into the mind the expectation of that sequence. This is demonstrated by the illustration of the child with the spoon. The child expects nature to be constant after the first experience of the noise made by accidentally striking the spoon on the table. Successive experiments on different surfaces do not implant the expectation of the noise, but provide information regarding the exact noise provided
by the collision of the spoon with different surfaces. Subsequently, the child learns to determine the exact cause and effect associations, but not the initial expectancy of nature’s constancy regarding noise emanating from the collision of two objects. The following summarizes Chalmers’ hypothesis. “This predisposition to count on the uniformity of nature is an original law of the mind, and is not the fruit of our observation of that uniformity” (1835a, 123).

**Common Sense Philosophy Today**

As mentioned, Chalmers shares common ground with numerous Scottish contemporaries\(^{26}\) and Old Princeton theologians. However, the growth of naturalistic evolutionary thinking fostered by the publication of Darwin’s *Origin of Species* (1859) called into question these assumptions. After Chalmers’ death, Scottish philosophy came under pressure from Kant’s transcendentalism, German Idealism, and growing scientific materialism. The resulting situation led to an emphasis on empirical observation within the Scottish school. By centuries end, common sense, and the belief in innate tendencies, had largely collapsed (McCosh 1875; Graham 2011).

Kant (1724-1804), in his *Prolegomena to any Future Metaphysics* (1783) deplores Common Sense Philosophy and its view that the mind can have epistemological access to the ontological level (Brun-Rovet 2002, 495). Kant’s twelve categories come into play after the mind is excited by observation and, after reflection, assembles the perception into ideas, but it does not have ontological

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\(^{26}\) James McCosh, in his *The Scottish Philosophy* (1875), presents an anthology of Scottish Common Sense philosophers and theologians identifying no fewer than twenty early-nineteenth century contemporaries of Chalmers who held to common sense principles, including innate tendencies.
knowledge of the subject. Common Sense, on the other hand, presumes that the mind’s innate tendencies render truth accessible after reflection (Brun-Rovet 2002, 495-510).

Chalmers, in reviewing Paley, gives a single indication he had read something of Kant. He writes of Paley, “it would be curious to have ascertained how he would have stood affected by the perusal of a volume of Kant” (1835a, 277). He offers no further comment and makes no more mention of Kant in all his writings. Addinall, with his belief that Kant’s philosophy would have changed theology for the better notes, “Chalmers has for a moment forgotten about ‘collocations’ and glimpsed a view which would have revolutionized British thought if it had been fully appreciated” (Addinall 1991, 111). Aside from these notes, there is no further comment by Addinall or Chalmers regarding Kant’s philosophy.

Prophetically, former professor of logic at the University of Aberdeen, Alexander Bain (1801-1903), writes that it would not be until psychology had penetrated the questions of the mind that philosophy would return to the question of innate tendencies, and Common Sense would again be studied.

We are, at the moment, in the midst of a conflict of views as to the priority of Metaphysics and Psychology. If indeed the two are closely identified as some suppose, there is no conflict; there is in fact, but one study. If, on the other hand, there are two subjects, each ought to be carried on apart for a certain length, before they can either confirm or weaken each other. I believe that in strictness, a disinterested Psychology should come first in order, and that, after going on a little way in amassing the facts, it should revise its fundamental assumptions . . . I do not see any mode of attaining a correct
Metaphysics until Psychology has at least made some way upon a provisional Metaphysics (1903, 38).

Today, innate tendencies are again a subject of research, undertaken by such disciplines as psychology, genetics, early child development, linguistics, ethics, philosophy of the mind, etc. Common sense or innate tendencies are now denoted as pretheoretical\(^{27}\), prephilosophical intuitions\(^{28}\), or properly basic beliefs\(^{29}\), and are taken seriously in academic circles. In apologetics, J.P. Moreland, in his argument for the existence of God from consciousness, documents the failed efforts naturalists take to root prephilosophical intuitions in strictly physical evolutionary processes (2009, 282-343). Mark Linville (2009, 391-448) and Alvin Plantinga (1993), working from the ideas of Nicholas Wolterstorff (2000), construct a moral argument for the existence of God, in which they argue the belief is warranted as it is properly basic (i.e., “is the product of a belief-producing mechanism that is truth-aimed and functioning properly in the environment for which it was designed” (Linville 2009, 391-448)).

Twentieth century philosopher of language, Noam Chomsky (the father of modern linguistics), was one of the earliest secular scholars to study innate tendencies. Chomsky considered innate cognitive tendencies to be the distinguishing characteristic of human linguistics, a position not widely held in the social sciences of the 1950s (Van Den Berghe 1990, 173-185).

\(^{27}\) Notions that are so basic and so much a part of the human mental equipment that if we think at all, we are sure to use them (Sire 2004, 79-80).

\(^{28}\) Philosophers differ in their thoughts regarding the nature of prephilosophical intuitions to believe certain things. However, the traditional view takes them to be cases of first-person direct awareness of a relevant intentional object reported by way of the phenomenological use of ‘seem’ or ‘appears’ (Moreland 2009, 326).

\(^{29}\) A properly basic belief is that which arises spontaneously and noninferentially given our constitution and is warranted, even though it may fail to measure up to the exacting standards of epistemic justification (Linville 2009, 416).
From a historical perspective, much of twentieth century social science, according to Van Den Berghe, turned its collective backs on nature’s contribution to humanity. Van Den Berghe cites Durkheim, Radcliffe, Brownian, Watson, Boas, Mead, Benedict, Weber, Tonnies, Simmel, Parsons, and Merton as giants in sociology who found common ground in Locke’s notion of the *tabula rasa* (Van Den Berghe 1990, 177-178). The reasons given by Van Den Berghe, as well as Pinker, several years later, are that twentieth century sociologists took refuge in nurture and denied any possibility of the genetic or natural element in human knowledge and behaviour. The refuge the position of nurture gave was that it safeguarded them against the spectre of racism, sexism, and classism, at once placing their research in the realm of political acceptability (Van Den Berghe 1990, 178; Pinker 2004, 1-2).

According to Van Den Berghe, sociologists and behavioural psychologists, because of Chomsky’s work, no longer think in terms of heredity vs. environment, nature vs. nurture, and instinct vs. learning (Van Den Berghe 1990, 178), which oversimplifies the situation. The reality is that genetic research has shown that nature is still strongly involved in all aspects of human knowledge and behavioural development, so much so that Pinker writes, “no one today believes that the mind is a blank slate . . . all behaviour is the product of an inextricable interaction between heredity and environment” (Pinker 2004, 3).

Van Den Berghe’s work on evolutionary sociology, Hale and Reiss’ treatise on innateness of primitives principle, and Pinker’s early child development research are a few examples of recent efforts by behaviourists and psychologists to include innate factors in the social and behavioural sciences (Van Den Berghe 1990, 173-194).

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30 Nature means that the human species has certain innate tendencies present at birth versus Nurture, which claims that our environmental experiences determine human character and knowledge.
In the end, Pinker says, “the human brain has been called the most complex object in the known universe. No doubt hypotheses that pit nature against nurture as a dichotomy . . . will turn out to be simplistic or wrong” (Pinker 2004, 13).

Nonetheless, the trend in favour of innate tendencies is not entirely positive. Interestingly, one such criticism comes from within Christianity, as twentieth century presuppositional apologist Cornelius Van Til (1895-1987) objected to the common sense view of innate human tendencies. He writes, “there seems to be . . . something in the way of a common sense philosophy which the natural man has and which, because intuitive or spontaneous, is, so far forth, not tainted by sin. It appears, however . . . that the ‘common notions’ of men are sinful notions” (1955, 85). Van Til’s concern stemmed from his theology, postulating that common sense ran contrary to the Reformed doctrine of total depravity. Van Til, as well as his student Greg Bahnsen (1948-1995), felt common sense under-emphasized the effects of the fall (McConnel 2003, 647-672; Van Til 1955, 84-85; Rosenthal 2002).

Van Til’s rejection of Common Sense Philosophy put him at odds with the Princetonian tradition of the apologetics of McCosh, Hodge, and Warfield. He was sceptical of the Scottish school’s stress on obtaining facts via observation, the use of induction, and the acceptance of inherent human rationality. According to Van Til, knowledge can only begin with truth revealed in Scripture. Assuming that humanity retains the ability to interpret facts requires human interpretation rather than mere reinterpretation, and leaves understanding vulnerable to autonomy and the resultant uncertainty of subjectivism. Specifically, Van Til comments on Warfield’s view of inspiration, writing:

185; Pinker 2004, 5-17; Hale, Reiss 2003, 219-244; Pinker 2002, 560; Pinker 1997; Pinker 1994).
The only way in which Warfield’s view of the Bible and its inspiration can be defended is by pointing out that it is and has to be presupposed in order that there be any intelligible human predication—whether for or against the truth of it. It is therefore futile when men seek to attack this view and it is equally futile when men seek to defend this view by means of argumentation which assumes its negation—human dependence or autonomy. When men argue about the phenomena of Scripture as though these phenomena were intelligible in terms of themselves, apart from the revelation of God, before they approach the problem of its divinity or inspiration, then their attack or defense is nothing but a beating in the air. To assume autonomous self-interpretation is to negate the necessity of special revelation. The phenomena of Scripture are what they are because they are a part of the redemptive work of God in the world. Again, when men start their discussion of Scripture as a whole and of its inspiration in particular after studying the phenomena outside Scripture, they may defend or they may attack but to no avail because the whole battle is a battle in a vacuum. The phenomena outside, as well as the phenomena inside Scripture are what they are as part of the plan of history in which God has ordered his work of redemption (Van Til, 1967, 22-23).

While it is clear Van Til disparages the entirety of Common Sense Philosophy, there is a vagueness in his treatment of innate tendencies or common sense notions in his writings. In general, he refers to the Scottish School’s full orbed concept of human ability to rationally determine truths based on reflection of
observed data. He refers to the *Book of Romans* as indicating that humans have an innate awareness of God, thus serving as a type of common or innate knowledge (Van Til 1955, 85-88). It is doubtful that someone of Van Til’s intellect did not understand the Scottish Common Sense concept of innate human tendencies (for to reject innate tendencies entirely could be argued to require acceptance of the *tabula rasa*); instead it is considered more likely that Van Til only concerned himself with the subjective ramifications of the full implementation of the Scottish Philosophy, not the concept of innate tendencies.

Van Til aside, the trend of modern researchers indicates that the belief in the existence of innate tendencies should not be dismissed as antiquated thinking. Thus, Chalmers’ Common Sense foundation of innate tendencies continues to have apologetic merit. Unfortunately, as Thomas Reid explains, the complete and proper identification of these innate tendencies continues to be difficult to obtain in principle.

Could we obtain a distinct and full history of all that hath past in the mind of a child, from the beginning of life and sensation, till it grows up to the use of reason – how its infant faculties began to work, and how they brought forth and ripened all the various notions, opinions and sentiments which we find in ourselves when we come to be capable of reflection – this would be a treasure of natural history, which would probably give more light into the human faculties, than all the systems of philosophers about them since the beginning of the world (Reid, Sneath 1892, 75).
After completing the treatment of, what Chalmers calls, the first law of human understanding, in his work *Natural Theology*, which, as mentioned, has roots in the writings of Thomas Brown and Thomas Reid (Reid, Sneath 1892), Chalmers shifts his focus to his corresponding second law, again learned from the Scottish School. The second law is the belief that humanity’s innate expectancy in the constancy of nature is in every situation harmoniously met by nature’s corresponding constancy.

Without this second law, Chalmers maintains the first law would make no sense, and knowledge would be impossible. “Were it not for this man should forever remain a lost bewildered creature among the appearances around him – and no experience of his could in the least help to unravel the confusion” (1835a, 124). By saying this, Chalmers and Hume are found to be in complete agreement, for Hume, in like manner, states that without nature’s constancy “we should never, in that case, have attained the least idea of necessity or of a connexion among these objects” (2004, 63).

Hume writes that belief in the constancy of nature is a matter of undisputed fact.

Thus it appears, not only that the conjunction between motives and voluntary actions is as regular and uniform as that between the cause and effect in any part of nature; but also that this regular conjunction has been universally acknowledged among mankind, and has never been the subject of dispute, either in philosophy or common life (2004, 68).
Chalmers, like Hume, asserts that the truth of nature’s constancy is demonstrated by the fact that experience has, as far as anyone knows, left no exceptions. Since, “throughout all the phenomena in creation we find no exception to the constancy or uniformity of sequences” (1835a, 156). With more detail he states, “nature though stretched on a rack, or put to the torture by the inquisitors of science, never falters from her immutability; but persists, unseduced and unwearied, in the same response to the same question; or gives forth, by a spark, or an explosion, or an effervescences, or some other definite phenomena, the same result to the same circumstances of combinations of data” (1835b, 165-166). Chalmers then proceeds to give examples of the constancy of nature. Heat melts ice, gravity always pulls an object down, orbits of the planets are regular; these are just a few natural examples he enumerates (1835a, 139-140).

Chalmers’ statement of his second law of understanding is not articulated as succinctly as his first. Instead, he provides lengthy expositions of God’s magnificence in the created order. Consequently, the best way to grasp his second law is by presenting an extended excerpt from his articulation of nature’s constancy, harmoniously meeting every expectation of humanity.

We have experimental evidence of this in our anticipation of nature’s constancy being so fully realized. This anticipation is not the fruit of experience, but is verified by experience. It is an instinct of the understanding; and that it should have been so met and responded to over the whole domain of creation is like the testimony of a concurrent voice from all things inanimate to the Creator’s faithfulness . . . From the instance now before us it is plain that the arbiter of our constitution, the artificer of the mechanism of our
spirits, has at least most strikingly adapted it to the constitution and
the mechanism of external things – the hope or belief of constancy in
the one meeting in the other with the most rigid and invariable
fulfilment. This is the strongest practical vindication which can be
imagined, of the unshaken faith that we might place in the instinctive
and primary suggestions of nature (1835a, 126-127).

In his desire to explain nature’s constancy harmonizing with humanity’s
expectations, Chalmers does presume the conclusion. He appeals, in the above
reference, to creation and a creator dictating this harmony, before he has shown
evidence that there is a creator, and the world is a work of creation. This tendency to
jump the gun is a result of his desire to provide additional elaboration of the point.
By way of critical analysis, had Chalmers concluded his discussion of nature’s
constancy never disappointing man’s expectation with his citation of Hume’s
agreement that all knowledge would be impossible, his argument would not have lost
any of its force.

One thing is certain, however, both Chalmers and Hume lived during a time
when nearly everyone was convinced of nature’s constancy, and neither felt any
need to go into a lengthy analysis of the obvious. Neither of them could have been
prepared for twentieth century discoveries, such as the Heisenberg Principle in
Quantum Physics, in which it is not possible to determine a particle’s future position
given its present position and trajectory (Sproul 1994, 42-52).
Summary of Chalmers’ Foundational Belief

Considering the difficulty, as Reid mentions, in absolutely and positively identifying a specific instance of an actual innate human tendency, and that nature does not always function according to Newtonian laws and theories, it would be better to call Chalmers’ two laws of human understanding, hypotheses, or propositions. Even with the difficulties identified in the presentation of his two propositions, it is not possible to dismiss them out of hand. The Nature vs. Nurture debate (i.e., Innate Tendencies vs. Experience) will continue; the constancy of nature is generally held to be a principle that operates in most situations, and recent work on properly basic or pretheoretical/prephilosophical intuitions gives additional breath to Chalmers’ assumptions. Considering these points, his apologetic foundations continue to have merit and warrant serious consideration in apologetic efforts.

It is this foundational presupposition of the human mind’s innate expectation of nature’s constancy that is found in all of Chalmers’ apologetic works. Yet, it is more than just evident; this presupposition dictates his entire apologetic method. It is precisely this finding, which will aid future researchers in analysing his apologetics. Furthermore, this finding makes it possible to discern numerous instances of previously unknown similarities between Chalmers’ arguments and those of modern apologists.
PART III: CHALMERS’ APOLOGETIC ARGUMENTS

In the preface of his work *On Natural Theology*, Chalmers indicates his driving apologetic motivation is refuting David Hume’s sceptical philosophy. He writes, “The truth is that we do not conceive the infidelity of this philosopher to have been adequately met, by any of his opponents; whether as it respects the question of a God or the question of the truth of Christianity” (1835a, xi-xii)\(^31\).

That Chalmers would dedicate his entire treatise *On Natural Theology*, and for that matter, his entire body of apologetic works to refuting David Hume’s objections to Christianity, speaks volumes of his concern for the devastating power of Hume’s writings. Furthermore, two hundred years of history have not diminished this formidable apologetic task, as evidenced by the following statements from philosophers and theologians today.

Religious belief has always had its critics, and outstanding among them was the eighteenth-century Scottish philosopher David Hume, whose critique of religion is perhaps unsurpassed for its lucidity and persuasive force (Addinall 1991, 1).

To say that Hume’s essay made an impact in the history of philosophical and religious thought is, to say the least, an understatement (Beckwith 1989, 1).

\(^{31}\) Reid, Stewart, and to some extent Paley are the philosophers and apologists Chalmers has in mind when making this statement (Chalmers 1835a).
For well over two hundred years, the intellectual defence of theism in general and Christianity in particular has been practiced beneath the looming shadow of the eighteenth-century Scottish philosopher David Hume. It is no exaggeration to say that, from his day to ours, the vast majority of philosophical attacks against the rationality of theism have borne an unmistakable Humean aroma (Sennett, Groothuis 2005, 9).

Typically, when Christian philosophers attempt to offer sophisticated defences of the faith, they are met with a rather condescending dismissal along the lines of, “Oh, well, we all know that Hume refuted such naiveté long ago” (Sennett, Groothuis 2005, 9-10).

It is in Hume’s *An Enquiry Concerning Human Understanding* (2004) and *Dialogues Concerning Natural Religion* (1990), in which some of the most influential arguments against Christianity are found. In these works, Hume discounts the validity of all arguments that appeal to design, as proving an all-powerful and wise designer, and casts doubt upon the existence of miracles, necessary in defending the inspiration and authority of Scripture.

This part of the dissertation, then, is focused on presenting a detailed critique of Chalmers’ efforts to meet Hume’s challenges. Source information is found in Chalmers’ larger works entitled *Evidences of the Christian Revelation* (1836a; 1836b), *On Natural Theology* (1835a; 1835b), and *Institutes of Theology* (1849b; 1849c). In these treatises, he presents numerous rebuttals he believes answers

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32 David Hume’s *An Enquiry Concerning Human Understanding* was first published in 1748 under the title *Philosophical Essays Concerning Human Understanding*. Yet this was even a re-write of his voluminous 1739 work entitled *Treatise of Human Nature* which, according to Hume, “fell dead-born from the press” ([1772] 2004, viii). The Enquiry was bundled with other works being reissued in 10 editions during his lifetime taking the form referenced in this research by 1772.
Hume’s objections. The following chapters focus on his most extensive arguments: the existence of God, creation, inspiration, and miracles. This research will demonstrate how Chalmers’ foundational philosophy guides his arguments, unlocking the vagueness of his writing for future readers. Additionally, previously unknown similarities between Chalmers’ arguments and those found in works of modern apologists are revealed.
CHAPTER FIVE: Chalmers’ Design Analogy

The teleological argument present in Chalmers’ mind and the one he endeavours to modify in order to refute Hume’s objections is an argument based ostensibly on Paley’s watchmaker analogy, given here for completeness.

In crossing a heath, suppose I pitched my foot against a stone, and were asked how the stone came to be there, I might possibly answer, that, for any thing I knew to the contrary, it had lain there forever: nor would it perhaps be very easy to shew the absurdity of this answer. But suppose I had found a watch upon the ground, and it should be enquired how the watch happened to be in that place, I should hardly think of the answer which I had before given, that, for any thing I knew, the watch might have always been there. Yet why should not this answer serve for the watch, as well as for the stone? Why is it not as admissible in the second case, as in the first? For this reason, and for no other, viz. that, when we come to inspect the watch, we perceive (what we could not discover in the stone) that its several parts are framed and put together for a purpose, e.g. that they are so formed and adjusted as to produce motions, and that motion so regulated as to point out the hour of the day; that, if the several parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner, or in any other order, than that in which they are placed, either no motion at all would

33 Chalmers’ argument is found in the fourth chapter of book one of his treatise On Natural Theology. Hume is identified as his main protagonist in the chapter’s very title: Of the Metaphysics which have been resorted to on the side of Theism (Mr. Hume’s objection to the a posteriori argument, grounded on the assertion that the world is a singular effect) (1835a).
have been carried on in the machine, or none which would have answered the use, that is now served by it (2006, 7)\textsuperscript{34}.

Paley continues claiming the universe resembles a watch, in that it has the appearance of having been contrived for a purpose, for an end. He concludes that as the watch must have a designer, then by analogy, so must the universe – based on the intricacy, harmony, and complexity of the world, cosmos, and its plant and animal life, and this designer is the God of theism (2006).

For the purposes of this dissertation, Paley’s design argument (PDA) is expressed using the following syllogism:

1. Teleological artefacts (i.e. displaying order and purpose) are designed by competent designers.
2. The universe displays marks of teleological ordering.
3. Therefore, the universe was designed by an extremely competent designer, specifically, the God of theism.

**Hume’s Objections to Design Arguments**

Contrary to Paley’s optimism, Hume reasons that as man has never had the benefit of observational experience of a world coming forth from its designer (sometimes called an *a posteriori*\textsuperscript{35} argument) the conclusion of a world designer is utterly unfounded (2004; 1990). Chalmers, in his apologetic rebuttal, elaborates on

\textsuperscript{34} The watchmaker analogy is most often associated with William Paley, and is found in his work *Natural Theology*, published in 1802. In this effort, Paley is responding to Hume’s objections to the design argument published some 30 years prior. In actuality, the origins of the watchmaker analogy go much further back in history, and were common coin in the seventeenth and eighteenth centuries, being used by William Derham in his Boyle lectures of 1711-1712 (Dembski 1999: 74-75).

\textsuperscript{35} *A posteriori* comes from the Latin meaning that which comes after observation, or after evidence and experience.
Hume’s objections to the design argument, purporting the following sentiments to be those of Hume.

If we have seen but once in our life a watch made, and coming forth of the hands of a watch-maker; we, in all time coming can, on seeing the watch only, infer the watch-maker. But this full experience comprehensive of both terms is wanting; it is alleged, in the question of a God. We may have had an experience reaching to both terms of the sequence in watch-making – but we have had no such experience in world-making. Had we but seen a world once made, and coming forth from the observed fiat of an intelligent Deity, then the site of every other world might have justified the inference that for it too there behoved to have been a world-maker. It is the want of that completed observation which we so often have in the cases of human mechanism that continues it is apprehended the flaw or failure in the customary argument for a God – as founded on the mechanism of nature. It is because the world is a singular effect – it is because we have only perceived the consequent, a world, and never perceived the alleged antecedent the mandate of a Creator at whose forth-putting some other world had sprung into existence – it is because in this instance we have but witnessed one term of a succession and never witnessed its conjunction with a prior term, that we are hopelessly debarred it is thought, from ever coming soundly or legitimately to the conclusion of a God (1835a, 128).
But not wanting his readers to take his words, Chalmers provides lengthy excerpts from two of Hume’s works, the *Enquiry* and *Dialogues*, so Hume’s argument can be read “in his own words” (Chalmers 1835a, 129).

It is only when two species of objects are found to be constantly conjoined, that we can infer the one from the other; and were an effect presented, which was entirely singular, and could not be comprehended under any known species, I do not see, that we could form any conjecture of inference at all concerning its cause. If experience and observation and analogy be, indeed, the only guides which we can reasonably follow in inferences of this nature; both the effect and cause must bear a similarity and resemblance to other effects and causes, which we know, and which we have found, in many instances to be conjoined with each other (Hume 2004, 114-115).

If we see a house . . . we conclude, with the greatest certainty, that it had an architect or builder; because this is precisely that species of effect which we have experienced to proceed from that species of cause. But surely you will not affirm, that the universe bears such a resemblance to a house, that we can with the same certainty infer a similar cause, or that the analogy is here entire and perfect. The dissimilitude is so striking, that the utmost you can here pretend to is a guess, a conjecture, a presumption concerning a similar cause; and how that pretension will be received in the world, I leave you to consider (Hume 1990, 54-55).
When two species of objects have always been observed to be conjoined together, I can infer, by custom, the existence of one wherever I see the existence of the other; and this I call an argument from experience. But how this argument can have place, where the objects, as in the present case, are single, individual, without parallel or specific resemblance, may be difficult to explain. And will any man tell me with a serious countenance, that an orderly universe must arise from some thought and art like the human, because we have experience of it? To ascertain this reasoning, it were requisite that we had experience of the origin of worlds; and it is not sufficient, surely, that we have seen ships and cities arise from human art and contrivance (Hume 1990, 60).

Can you pretend to show any such similarity between the fabric of a house, and the generation of a universe? Have you ever seen nature in any such situation as resembles the first arrangement of the elements? Have worlds ever been formed under your eye; and have you had leisure to observe the whole progress of the phenomenon, from the first appearance of order to its final consummation? If you have, then cite your experience, and deliver your theory (Hume 1990, 62).

Chalmers’ teleological argument only considers this objection (i.e., lack of observational experience supposedly rendering the argument from analogy erroneous) addressing Hume’s other objections in later topics. Yet, for the purposes
of completeness, the totality of Hume’s criticisms to teleological arguments, some of which Chalmers addresses in his later arguments, are presented below.

Hume’s objections to the design analogy are conveniently categorized by Stephen Davis\textsuperscript{36}, as: 1) an endless search for the designer of the designer\textsuperscript{37}, 2) any coherent universe will seem designed\textsuperscript{38}, 3) even if sound, the design argument is not a proof of God\textsuperscript{39}, 4) the existence of evil makes the design argument unable to prove a morally perfect designer\textsuperscript{40}, and 5) the design argument is based on a weak analogy\textsuperscript{41} (1997, 100-106). As cited earlier, Chalmers’ characterization of Hume’s objections correspond to numbers 3 and 5.

Todd Furman\textsuperscript{42} purports Hume has in view an argument, he calls the teleological argument from deduction (TAD)\textsuperscript{43}, stated as:

- **TD1:** The universe possesses the attributes of order and purpose.
- **TD2:** The only thing that could have caused such a state of affairs is God.
- **TD3:** Therefore, God exists (2005, 49-51).

\textsuperscript{36} Dr. Stephen T. Davis is the Russell K. Pitzer Professor of Philosophy at Claremont McKenna College in Claremont, CA, USA.

\textsuperscript{37} “Shall we satisfy ourselves concerning the cause of that Being whom you suppose the Author of nature...? Have we not the same reason to trace [the regress past the Designer to] a new intelligent principle? But if we stop and go no farther, why go so far? Why not stop at the material world? How can we satisfy ourselves without going on in infinitum” (Hume 1990, 34)?

\textsuperscript{38} “Every event, before experience, is equally difficult and incomprehensible; and every event, after experience, is equally easy and intelligible... Whenever matter is so poised, arranged, and adjusted, as to continue in perpetual motion, and yet preserve a constancy in the forms, its situation must, of necessity, have all the same appearance of art and contrivance which we observe at present... It is vain, therefore, to insist upon the uses of the parts in animals or vegetables, and their curious adjustment to each other. I would fain know how an animal could subsist unless its parts were so adjusted” (Hume 1990, 52-55).

\textsuperscript{39} Even if the argument is sound, it far from proves the God of Christianity, being that the world may have been “only the first rude essay of some infant deity who afterwards abandoned it, ashamed of his lame performance” (Hume 1990, 38-41).

\textsuperscript{40} “A mere possible compatibility [between the misery in the world and divine goodness] is not sufficient. You must prove these pure, unmixed, and uncontrollable attributes from the present mixed and confused phenomena [that is, from the evidence of design that we observe in the world], and from these alone” (Hume 1990, 69).

\textsuperscript{41} “In places Hume suggested that the universe is more like an organism (say, a plant or animal) than a machine. Furthermore, Hume said, the universe is absolutely a unique thing; nothing else is like it. So no argument based on comparing the universe to something else can be convincing. Finally, we observe only a tiny spatio-temporal speck of the universe. How far can we infer the need of a designer from that kind of sample” (Davis 1997, 104)?

\textsuperscript{42} Dr. Todd M. Furman is a Professor of Philosophy at McNeese State University, Lake Charles, LA, USA.

\textsuperscript{43} TAD stands for the deductive form of the teleological argument (Furman 2005, 49-51).
According to Furman, when Hume writes, “It is only when two species of objects are found to be constantly conjoined, that we can infer the one from the other; and were an effect presented, which was entirely singular, and could not be comprehended under any known species, I do not see, that we could form any conjecture of inference at all concerning its cause” (2004, 114-115), he is accusing the TAD theist of offering evidence that is categorically inappropriate for the conclusion – which Furman calls the “evidence error” (2005, 50). According to Furman, Hume’s objection to teleological arguments, in this case, is that we have no evidence to allow one to attribute to the cause of the universe anything more than what is minimally sufficient for the realization of the effect. Hence, the cause of the universe in TD3 need not be a singularity, need not continue to exist, and need not possess theistic traits of omniscience, omnipotence, and goodness (2005, 50-51).

Furthermore, Furman describes Hume’s writings as indicating that TAD suffers from “begging the question” and drawing erroneous conclusions, in which the theist is guilty of “jumping the gun” or being an “eager-believer” (2005, 51).

James Madden maintains Hume is commenting on an inductive form of the argument (2005, 151-154). He labels this the classical teleological argument (CTA), which is similar to Furman’s inductive variation, and is as follows:

1. Certain natural phenomena clearly have feature F (e.g., teleological ordering or intrinsic finality).

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44 Furman’s errors of begging the question, jumping the gun and evidence error can, with some analysis, be shown to essentially encompass Davis’ five Humean objections.

45 Dr. James D. Madden is a Professor of Philosophy at Benedictine College in Atchison, KS, USA.

46 TI1: It has been observed that objects that possess order or purpose – e.g., a pocket watch – have artificers. TI2: It has been further observed that these artificers must, by necessity, be smart enough and powerful enough to have conceived of and produced the artefacts. TI3: The universe is like a pocket watch in that it possesses both order and purpose. TI4: Therefore, the universe must have an artificer smart enough and powerful enough to have conceived of the universe and to have produced it. TI5: The only being smart enough and powerful enough to have conceived of and produced the existent universe is God. TI6: Therefore, God exists (Furman 2005, 49-52).
2. It is highly improbable that F be caused by something other than the God of orthodox theism.

3. Therefore, it is highly probable that the God of orthodox theism exists (2005, 154).

Madden’s assessment of Hume’s critique of the CTA is that he believes an error, which he designates the insufficient error objection (IEO), exists in step two. He deems it to be Hume’s chief objection to the CTA (Madden 2005, 156). Specifically, the IEO comes down to the fact that even if it can be proved that the world is designed, this in no way implies there is a single designer, and certainly any attempts to claim that the designer is an omniscient, omnipotent, and perfectly good God goes beyond what can be inferred. The IEO claims that a valid design argument does nothing for the cause of belief in a monotheistic deity. Madden’s IEO, like Furman’s evidence and jumping the gun errors encompass much of the Humean objections categorized by Davis. James Sennett\(^47\) has his own terminology for Hume’s theistic objections, designating Madden’s IEO “Hume’s stopper”, placing it at the feet of all apologetic arguments in Natural Theology (2005, 83).

Addinall attributes Hume as objecting to the construct: “all watches are made by someone; the world is like a watch; therefore the world was made by someone”\(^48\) (1991, 45-46). He points out that this argument ‘begs the question’\(^49\) committing an error in the second premise. Addinall writes, “the conclusion is already contained in the minor premise . . . the second premise unfortunately asserts precisely that which is in question. Is the world like a watch?” (1991, 45-56)\(^49\).

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\(^47\) Dr. James F. Sennett is a Professor of Philosophy at Brenau University in Gainesville, GA, USA.

\(^48\) In Latin, the fallacy of begging the question is called *petitio principii*, or assuming a proposition that requires proof without proof (Clark 1985, 14-15).

\(^49\) In critiquing this argument, and for that matter all forms of design arguments, Addinall goes on to say “even if it is true” (speaking of the second premise) “that the world is created, this truth cannot stand as the valid conclusion of the design argument” (1991, 45). Addinall’s conclusion is puzzling, for if the second premise (i.e.,
Noted philosopher and theologian Alvin Plantinga considers the teleological theist Hume is combating is following a conjunction, containing the following statements:

1. The universe was designed.
2. The universe was designed by exactly one person.
3. The universe was created *ex nihilo*.
4. The universe was created by the person who designed it.
5. The creator of the universe is omniscient, omnipotent, and perfectly good.
6. And the creator of the universe is an eternal spirit, without body, and in no way dependent upon physical objects (1974, 83-84).

Plantinga writes, “Perhaps the teleological argument gives us a smidgen of evidence for (1); but it does nothing at all for (2) through (6)” (1974, 84). Plantinga further articulates, writing, “Hume’s criticism seems correct. The conclusion to be drawn, I think, is that the teleological argument . . . is unsuccessful” (1974, 84). Plantinga’s analysis of the CTA, therefore, can be categorized as another form of IEO, Hume’s Stopper, evidence and jumping the gun errors, and Davis’ five categories.

What these theologians have in common with Chalmers is recognition that Hume’s objections to PDA, TAD, or CTA type analogies are formidable. First, one cannot presume, assuming the premises are correct, these arguments prove more than the minimal cause needed to produce teleological ordering. Second, the absence of experience makes the analogy from human contrivances to a world designer

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the world is a teleological mechanism) is true then there is nothing wrong with the construct; which according to William Lane Craig is legitimate in “it must be noticed that this type of argument is actually valid. The conclusion follows from the premises by strict logic” (1984, 15).
problematic; for “when we infer any particular cause from an effect, we must proportion the one to the other, and can never be allowed to ascribe to the cause any qualities but what are exactly sufficient to produce the effect” (Hume 2004, 105).

The conclusion to be drawn from both Chalmers and modern apologists is that strictly Paleyan or classical forms of design arguments have difficulties in light of Hume’s objections, and are, therefore, as Chalmers contends in need of resuscitation.

Chalmers’ Design Argument by Analogy

Admittedly, Hume’s objections to design arguments are formidable. Chalmers recognizes the obstacles, and offers his rebuttal by concentrating, initially, on Hume’s objection that there is insufficient evidence to substantiate the analogy. He leaves the question of the nature of the designer – God – and evidence for design to be articulated with additional apologetic arguments, employing a cumulative approach. The theistic teleological or design argument Chalmers develops turns on a distinction between what are essential and accessory qualities of antecedents and consequents in processes of inference. He develops a modified form of Paley’s design argument, incorporating his foundational presupposition, which he believes places it on firm philosophical grounds making his argument succeed where others have failed.
Chalmers’ Contention the Analogy is Improperly Used

Chalmers begins his rebuttal by commenting that the design inference has generally been disparaged by those in support (e.g., Reid and Stewart) and against (e.g., Hume) as they consistently misrepresent the proper form of the analogy. He writes, “These philosophers would have us to infer a designing God from the works of nature, just as we infer a designing mind in man not from the works of man but from man in the act of working” (1835a, 133). Chalmers’ critique is that in order for analogies to hold properly they must be, well, ‘analogous.’ His statement can be interpreted as: any attempt to prove a world designer by considering the consequent (i.e., the world) cannot use knowledge drawn from observing people in the act of designing. This error in analogy is demonstrated in the following construct:

1. It is known that objects such as watches, houses, etc. are designed by intelligent people because of observational experience.

2. The world shows marks of having been designed.

3. Therefore, the world was designed by an intelligent being.

Clearly, 1 uses evidence of having known and observed objects being designed; whereas 2 has access only to the final consequent, the world. Therefore, there is insufficient evidence to make the connection between 1 and 2, thus 3 cannot be maintained and the analogy is guilty of committing the evidence error. Chalmers is entirely correct; therefore, in saying the above construction of the design argument is invalid.

As quoted earlier, Chalmers is adamant that basing the design argument on the watchmaker analogy, at least as constructed above is spurious logic. He maintains that in order for an analogy to be valid, and thereby defeat Hume, it must
be based on like-for-like relationships. Therefore, it cannot be claimed that there is a world designer based on the analogy that watches or houses are designed, if it is necessary to see people in the act of designing, because the observer never has the opportunity of seeing a world designer in the act of designing.

**Chalmers’ Design Argument Based on Essentials**

To resolve this error, Chalmers employs his foundational belief in the mind’s expectation of nature’s constancy to develop causal relationships from limited knowledge. This belief is articulated numerous times, and comes to light in his insistence that it is necessary to focus on the essential not the accessory qualities of antecedents and consequents.

He begins his rebuttal to Hume proposing an analogy he believes uses proper logic.

Now the proper analogy is to view a piece of human workmanship, after it is completed and may be seen separately from the man himself; and to compare this with the workmanship of nature viewed separately from God. We take cognizance of the former as the work of man, just because in previous instances we have seen such work achieved by man. This consideration proceeds altogether upon experience; and what we have now to ascertain is, in how far experience warrants us to conclude a designing cause for the workmanship of nature. We hold that this conclusion too has a strict experience for its basis (1835a, 133-134).
Chalmers’ words may not sound significantly different from the design inferences presented earlier, which fail due to evidence error. He still depends on knowledge gained from having witnessed people in the act of designing, to designate someone as, in fact, being a watchmaker. However, he claims he will not use people in the actual act of designing within the internal framework of his analogy. Additionally, while his words “workmanship” and “God” in the above reference may be taken to mean he assumes teleological ordering in nature by the God of theism without proof, they are, in fact, a result of his expressive style of writing. Chalmers takes great pains, in other places, to demonstrate purposeful ordering in nature after the argument is presented, and during its construction, he is careful not to attribute to the intelligence behind nature’s ordering the name of God.

The details of Chalmers’ argument begins when he returns to the watchmaker, and asks one to consider a specific watchmaker (the antecedent), which we will designate D_{w1} (where D_{w1} = the first instance of a designer, who is known to have made a specific watch), and the associated watch (the consequent), designated T_{w1} (where T_{w1} = the first instance of a teleological object, a watch, which is made to better illustrate Chalmers’ thinking.) Chalmers asks that all the characteristics of this specific watchmaker, D_{w1}, be analysed.

Concerning D_{w1} he writes:

Now, on looking first to the antecedent, there is room for distinguishing between the proper and the accidental. It were wrong to say of this antecedent, that it comprises all the particulars which meet and are assembled together in the person of the watchmaker. It has nothing to do, for example, with the colour of his hair, or the quality of his vestments, or with the height of his stature, or with the features
of his countenance, or with the age and period of his life. The strict
and proper antecedent is distinct from one and all of these particulars;
and may be said to lie enveloped, as it were, in a mass or assemblage
of contemporaneous things which have nothing to do with the
fabrication of the watch (1835a, 141-142).

The point he makes is there are certain characteristics of a watchmaker not
necessary to the making of watches. Chalmers believes there is a minimal, an
essential set of characteristics in the person of this specific watchmaker important to
making a watch. Not all the accessory characteristics (e.g., his age, size, features,
etc.) of the watchmaker’s personage constitute the essentials of being a watchmaker.
The only characteristics according to Chalmers, which are important in describing
the watchmaker in view is it has “a purposing mind – putting itself forth in the
execution of a mechanism for the indication of time, and possessed of competent
skill and power for such an execution” (1835a, 142). We will say $D_w^e$ refers to the
essential characteristics of the first watchmaker and $D_w^a$ refers to the same
designer’s accessory characteristics, such that $D_w = D_w^e \cup D_w^a$ (i.e., the union of
the essential and accessory characteristics of the first watchmaker.)

Chalmers continues saying:

The next watchmaker may differ from any he had ever before seen, in
a multitude of particulars – in age, in stature, in dress, and general
appearance, and a thousand other modifications which it were endless
to specify. Yet how manifestly absurd to look for another consequent
than a watch because of these accidental variations. It is not to any of
these that the watch is a consequent at all. It is solely to a purposing
mind, possessed of competent skill and power – and this was common both of the first and the second watchmaker (1835a, 142-143).

Here, then, is his point of distinguishing between essentials and ancillaries; it enables him to illustrate that the essential characteristic of a watchmaker is a purposing mind in possession of the skills and power to execute its design. Using this information, Chalmers quickly seizes the opportunity to expose what he believes to be the first of Hume’s logical errors in his many arguments against Christianity.

The next time that we see a watchmaker addressing himself to his specific professional object, there is little probability that we shall see in him the very same assemblage of circumstantial that we ever witnessed before in any other individual of his order. And yet how absurd to say that we are looking to a different antecedent from any that we ever before had the observation of – that, just as Hume calls the world a singular effect, we are now beholding in this new watchmaker the operation of a singular cause – and that therefore it is impossible to predict what sort of consequent it may be, that will come out of his hands (1835a, 143).

Chalmers uses the word singular in the previous reference as an allusion back to the subtitle of this chapter: Mr. Hume’s objection to the a posteriori argument, grounded on the assertion that the world is a singular effect. Hume’s objection to the design inference, as Chalmers quotes, is that the world is a singular effect; it is one part of a sequence with the antecedent of the world’s forthcoming being unobserved. No other worlds are available for analysis and comparison to help in building the case for a designing influence. The world being singular means that humanity has no basis for making an inference of its cause. This is as Hume requires
when he writes, “but how this argument can have place, where the objects, as in the present case, are single, individual, without parallel” (1990, 60). Causal inferences cannot, as Hume writes, be based on a singular effect. “Even after one instance or experiment where we have observed a particular event to follow upon another, we are not entitled to form a general rule, or foretell what will happen in like cases: it being justly esteemed an unpardonable temerity to judge of the whole course of nature from one single experiment, however accurate or certain” (2004, 57).

Chalmers believes this is precisely the situation of the first watchmaker $D_{w1}$. “It is true that there are many circumstantial things in and about the man which, if we admit as parts of the antecedent, will make up altogether a singular antecedent” (1835a, 143). As he contends, based on Hume’s own insistence, one would have to declare the first watchmaker $D_{w1}$, is, in the strictest sense a singular cause. Furthermore, every watchmaker would themselves be singular causes (e.g., $D_{w2}$, $D_{w3}$, etc.). Based on this, Chalmers argues that there is no ground for expecting a watch to come forth from any watchmaker. According to Hume’s own hand, Chalmers believes that one is barred from ever foretelling the future, as there is never sufficient evidence. By this line of reasoning, Chalmers believes he has found a logical error in Hume’s reasoning. He is taking Hume’s own argument to the reductio ad absurdum, saying that not only have we never seen a world being made, we have never seen anything other than a single instance of a human artefact being made. Therefore, Chalmers states that Hume’s scepticism prohibits all knowledge, as everything is a singular effect.

After going down Hume’s path of scepticism, Chalmers brings the reader out of the dead-end in Hume’s philosophy, saying again that in the essentials of the antecedent “there is no singularity. There is a purposing mind resolved on the
manufacture of a watch, and endowed with a sufficient capacity for the achievement of its object” (1835a, 143). By focusing on the essentials, Chalmers maintains that the design analogy can continue, as there is sufficient evidence to expect a result from a purposing mind in the manufacture of a watch.

To put Chalmers’ idea into mathematical language, he is saying that if the intersection of an infinite number of watchmakers is considered, in which only the characteristics essential for designing are considered, then the minimal set of essentials would be $D^e_w$ (a purposing mind resolved on the manufacture of a watch, and endowed with sufficient capacity for the achievement of its object.) Mathematically, this can be expressed as:

$$\cap_{i=1}^{\infty} D^e_{wi} = D^e_w.$$ 

Chalmers is not finished with his assessment of Hume’s error, as he next turns his gaze to the watch.

What is true of the antecedent is true also of the consequent. There may be an indefinite number of accessory and accidental things, associated with that which is strictly and properly the posterior term of the sequence . . . There is the colour of the materials, there is the species of metal – each of these and of many other things apart from that one thing of form and arrangement, which indicates the work and contrivance of an artist . . . When looked to, therefore, in this general and aggregate view, it may be denominated a singular effect. Yet who does not see that the inference of a designing cause is in no way spoiled (1835a, 143-145)?
Just as in the case of the watchmaker, Chalmers draws attention to the fact that the first watch ($T_{w1}$), just as with the designer, is, if all its accessory attributes are considered, also a singular effect according to Hume’s definition. Furthermore, being a singular effect, per Hume’s insistence, there would be no basis in which to infer that this watch was contrived. This line of reasoning can be carried on to any number of watches issued from another or even the same watchmaker, and it matters not whether the watchmaker was caught in the act of watch making. It remains true, if one follows Hume’s ideas to their extreme conclusion that each watch is a singular effect, and each watchmaker is a singular cause. Thus, Hume’s philosophy, as Chalmers writes, disallows drawing inferences in even this situation, and is flawed in its logic.

As in the watchmaker, Chalmers says it is absurd to think that man is so blind not to distinguish between what is essential and what is accessory in watches. With this, Chalmers comments, “were the things with their existing properties presented before me in a confused mass, the inference of a designing cause would instantly vanish. It is the arrangement of things, obviously fashioned and arranged for the measurement of time, that forms the sole consequent” (1835a, 144). Thus it is not the mere shape, size, and composition of the parts that are the telling factor, but “in a watch it is the adaptation of rightly shapen parts to a distinctly noticeable end, the indication of time – which forms the true consequent to the thought and agency of a purposing mind in the watchmaker” (1835a, 143-144). The watch, and for that matter, other watches are clearly recognizable as works of contrivance because they have a purpose, a distinct and noticeable end.

As a whole it may be singular – but there is that in it which is not singular. There is the collocation of parts which has been exemplified
in all other watches, and on which alone the inference is founded . . .

In the effect, the strict and proper consequent is the adjustment and adaptation of parts for an obvious end (1835a, 145).

Chalmers has made what he considers the crucial correction to the design inference in removing from view the specifics of the watch. Hence, he is now looking at \( T_{w1}^e \), the essential characteristics of the first watch. By focusing on the essentials, he notes he has hit upon the proper way forward. “But it should be further understood that for the purpose of inferring design, it is not necessary that the end of the arrangement in question should be some certain and specific end. It is enough to substantiate the inference that the arrangement should be obviously conducive to some end – to any end” (1835a, 145-146). To use the same symbolic language as before, the general characteristics of all watches are that they are an adaptation of parts for the purpose of telling time, which is discovered by taking the intersection of all possible watches to arrive at the irreducible essentials of a watch \( T_w^e \).

Mathematically, the construction is as follows:

\[
\cap_{i=1}^{\infty} T_{wi}^e = T_w^e
\]

Now, Chalmers has been dealing with watches, something contrived for a specific end. By focusing on the essentials, he can say that it does not matter what the end is, so long as the contrived object was designed for some end.

But though we should lop off, as it were, the measurement of time or this specific end from each of these terms; and substitute in its stead an end generally, or a whatever end, the inference of an intelligent adaptation would still hold good. The consequent then would be a
mechanism adapted for a *whatever end* (and that end to be learned from examination of the mechanism itself); and its counterpart antecedent would be an intelligent adaptation for *that whatever end* (1835a, 146).

The legitimacy of removing a specific purpose from the inference, and substituting any purpose is intricate. For this reason, Chalmers goes to great length to explain his reasoning, placing particular emphasis on the difference between the definite and indefinite article.

All this might be provided for in the reasoning, by laying proper stress on the distinction between the adaptation of parts for *the* end, and the adaptation of parts for *an* end. The latter, in fact, is the only essential consequent to the antecedent of a purposing mind . . . By taking this distinction along with us, we come to perceive how far the argument of final causes may be legitimately extended . . . The truth is that it is not the particular end either of the one machine or the other, which leads to the inference of an intelligent maker – but the inference rests nakedly and essentially on this, that there is adaptation of parts for any end at all . . . The definite article is always comprehensive of the indefinite, so that whenever there is the end, there is always an end (1835a, 147-148).

The direction Chalmers is taking, after obtaining a generic watchmaker and watch, now takes shape. He no longer considers himself constrained to keep his attention on watches and watchmakers. He incorporates the mathematical concept of an intersection, again looking at an infinite number of purposes so that a specific purpose can be replaced, without loss of generality, with any purpose. In other
words, he takes the intersection of the essentials of all possible purposes, originally just a watch (or the w subscript) in $D_w^e$ and $T_w^e$, and arrives at $D_e$ and $T_e$ (the essentials of any designer and the essentials of any teleological object.) With the mathematical concept of an intersection in place, Chalmers’ inference, based on his analogy of the watch, can be extended to any object of contrivance. “But we contend that, in all sound logic we are warranted to extend the inference farther – not merely to a second watch but to a second machine of any sort, though its use or the end of its construction was wholly different from that of a watch” (1835a, 147-148).

Chalmers has developed a unique construction based on the mathematics of the infinite intersection of essentials, yet he must address the issue of incorporating experience, before proceeding to the final statement of his construct. “And thus it is that we do not even require a special experience in watch-making to warrant the application of this argument from final causes either to this or to any other machines whatever . . . whether it be a gun-lock or a cotton-mill or a steam engine or a musical instrument” (1835a, 149).

This constitutes Chalmers’ direct refutation of Hume’s requirement that it is necessary to observe the world being designed before a causal inference can be made. His logic is to construct an argument based on essentials not on accessory particulars, thereby removing singularities. He alludes to the reality that there are a host of works of human contrivance that have never been personally witnessed. For example, no one doubts that a person designed a music box, or that ancient peoples erected the pyramids and Stonehenge. The inference that these are works of a purposing mind is, according to Chalmers, still valid, because the essential tell-tale signs of having been produced for an end are still discernible. It is enough, then that people have seen some machine or other contrivance adapted not just for the end but
also for numerous, for any, for an end, and that is sufficient to infer that the designer was a purposing mind.

Chalmers omits identifying or describing the process by which the tell-tale signs of teleology are determined. The subject of recognizing design in particular is presented in *Natural Theology’s* subsequent chapters, in which he refutes Hume’s claim that the world might be eternal; in like manner, this question will be undertaken in the next chapter of this research.

From what has been presented, Chalmers’ break with Hume emanates from his belief that humanity has innate tendencies, one being the ability to expect causal relationships, even in absence of direct experience. Having experienced, like the child and spoon illustration, cause and effect relationship between a purposing mind and a contrivance for a purpose in at least one situation, Chalmers maintains people can infer the antecedent, a purposing mind, for some singular effect, so long as the core essential – teleology – is discernible. Thus the singular effect, the world or universe, so long as it can be shown to be teleological must have an antecedent cause, which, in Chalmers’ estimation, is a purposing mind in possession of the skills and power to execute its design. This conclusion he expresses as such: “If we can thus infer the agency of design in a watch-maker, though we never saw a watch made – we can on the very same ground infer the agency of design on the part of a world-maker, though we never saw a world made” (1835a, 151).

Chalmers dedicates the next few pages of this chapter in *Natural Theology* to the task of addressing any lingering doubts he believes may still be raised. The specific doubt he has in mind remains Hume’s insistence that evidence of a world being designed must be produced before any design analogy is valid. To this objection, Chalmers, at first blush, shockingly writes that he concedes the point. “We
concede it to our adversaries, that, when reasoning from the posterior term or consequent to the prior term or antecedent of a sequence, both terms must have been seen by us in conjunction on former occasions – else we are not warranted to infer the one from the other of them” (1835a, 151).

For the reader inexperienced with Chalmers this may seem like a major concession. However, Chalmers’ point is that the abstraction from a specific watchmaker to a purposing mind resolves the issue. He maintains that the argument, as constructed, enables evidence from non world-making experiences to be admissible as analogous evidence. The mind, he claims, expects nature to behave in a constant manner; therefore, one observation of a purposing mind contriving an artefact for an end is sufficient experience for the mind to be awakened to its innate tendency and presume upon all contrivances requiring a designer. Furthermore, since nature never disappoints human expectations of constancy – at least according to nineteenth century science – all contrivances will have a designer. He argues the two go together and neatly resolve Hume’s objection.

As expected, Chalmers restates the objection to the design argument by those who agree with Hume, writing, “they tell us that we cannot argue from a world to a God – because the world, if an effect, is a singular effect – that we have no experience in the making of worlds” (1835a, 151). Again, to ensure that the objection is clearly articulated Chalmers writes, “in the case of God and the world we have only one term of the sequence before us. We see the world – but we have never seen God; and far less have we seen Him employed in the formation of a world” (1835a, 153).

Ignoring for now the assigning the name of God to the designer, Chalmers contends he has demonstrated that doubters have ignored the distinction between
what is essential and what is accessory; “they overlook the distinction between what is essential in the consequent, and what is merely circumstantial therein; and it is here that the whole mistake lies” (1835a, 151).

The distinction, then, between essentials and ancillaries forms the bridge, which enables the analogy to proceed. “But both in the mechanism of the world, and in the innumerable products wherewith it teems, do we see the adaptation of means to desirable ends – and this we have seen emanated and brought forth in many hundreds of instances by a purposing mind as its strict and proper antecedent” (1835a, 153). Human experience, therefore, is not lost, since people have experienced innumerable works of contrivance by a purposing mind. “It is because we have had manifold observation, and observation inclusive of both terms of the sequence, that from one term in the present instance even that adaptations which nature offers to our view, we infer the other term even a designing mind, at whose will and by whose power and wisdom they have been effectuated” (1835a, 153-154).

Chalmers’ analogy, as he sees, is sound since it is based on his two laws of human understanding (that humans have an innate expectation of nature’s constancy, and nature never disappoints in meeting those expectations). He returns to these laws as he presents his summation.

We are led by the constitution of our minds to count at all times on the uniformity of nature – and it is an expectation that never deceives. We are led to anticipate the same consequents from the same antecedents or to infer the same antecedents from the same consequents – and we find an invariable harmony between the external truth of things and this inward trust of our bosoms (1835a, 155).
These laws, therefore, are applied to his defence of the design argument by saying:

Throughout all the phenomena in creation we find no exception to the constancy or the uniformity of sequences – and it were truly marvellous if the great phenomenon of creation itself, offered the only exception to a law, which, throughout all her diversities and details, she so widely exemplifies – or if, while in every instance along the world’s history of a produced adaptation we find that there have been contrivance and a contriver, the world itself with all the vast and varied adaptations which abound in it, instead of one great contrivance, is either the product of blind necessity, or some random evolution of unconscious elements that had no sovereign mind either to create or to control them (1835a, 156).

This is the final piece of Chalmers’ analogy. Humanity is conditioned by its nature to expect a designing mind when presented with a work of contrivance. Additionally, there is no instance of nature having disappointed any person’s innate expectations. All works of contrivance are designed by a designing mind; this is a constant fact of nature that knows of no exceptions, according to Chalmers. Therefore, when it comes to inferring a designer to the world from the evidence of a contrived world, there is no reason to believe that this is the only exception.

Having completed, to his satisfaction, a defence of the design argument, Chalmers concludes by saying, “it is thus that we hold ourselves to be abundantly schooled and that too on the basis not of a partial but of a full experience, for the inference of a God” (1835a, 153). “It is thus then that we would meet the argument by Hume, of this world being a singular effect” (1835a, 157).
Putting the elements of his rebuttal together, with the exception of his having, at times – jumped the gun and labelled the designer God – Chalmers’ design argument by analogy can be constructed using the following syllogism.

1. Contrivances for \textit{an end} are designed by a purposing mind in possession of the skills and power to execute that design.
2. The universe was contrived for \textit{an end}.
3. Therefore, the universe was designed by a purposing mind in possession of the skills and power to execute that design.

Presenting Chalmers’ design argument, using the above syllogism, is an accurate representation of his work. Additionally, it should be understood that embedded in this analogy is the necessity to consider only the essential attributes of the designer and contrivance. With this in mind, Chalmers believes he has refuted and exposed the logical failings of Hume’s philosophy.

\textit{Critical Analysis of Chalmers’ Design Argument}

Critically analysing each step in Chalmers’ rebuttal reveals it does not make significant improvements upon the errors of his predecessors. Step 1 would be acceptable if it stopped with “contrivances for an end are designed.” This, according to Michael Behe, is essentially Paley’s initial step, which he says has never been refuted (1996, 211-216). Behe’s statement comes from the fact that the statement “contrivances for \textit{an end} are designed” is true by definition; forming a valid initial premise. Chalmers presumes “a purposing mind in possession of the skills and

\footnote{50 “It is surprising but true that the main argument of the discredited Paley has actually never been refuted. Neither Darwin nor Dawkins, neither science nor philosophy, has explained how an irreducibly complex system such as a watch might be produced without a designer” (Behe 1996, 213).}
power to execute that design” is the only possible antecedent cause of artefacts contrived for an end. The inclusion of this clause presumes the conclusion of the premise, and therefore, begs the question.

The source of Chalmers’ error emanates from his starting condition. He begins his argument by stating, “The proper analogy is to view a piece of human workmanship, after it is completed and may be seen separately from the man himself” (1835a, 133). Chalmers’ initial condition actually commences by considering human contrivances, not some generic contrivance. A point confused by Chalmers’ own words, as he claims the opposite when he restates his argument near the end of the presentation of his analogy. Thus, in Chalmers’ construction, the nature of the designer (a purposing mind) is assumed in advance, although ignored in his summarization. When contemplating contrivances of unknown origin (the universe), Chalmers carries the assumption of a purposing mind, as the antecedent cause, forward. To state step 1 in the manner in which Chalmers actually conceives is as follows:

1a. Human contrivances for *an end* are designed by a purposing mind in possession of the skills and power to execute that design.

While narrowing one’s vision to human contrivances succeeds in making 1a true, it makes it impossible to proceed from this premise to step 3, and presume upon the nature of the designer behind the universe. To do this, is to commit an evidence error.

Step 2, as in 1, also begs the question. Chalmers assumes, without evidence, the universe was contrived for an end. He recognizes, in the next chapter of *Natural Theology*, the necessity of demonstrating this point, writing:
If Nature is clearly made out to be a consequent, then it might be admitted, that the adaptations which abound in it point to an intelligent and designing cause. But this remains to be proved; and till this is done, it is contended, that it is just as well to repose in the imagination of Eternal Harmonies in a Universe, as of Eternal Harmonies in the mind of one who framed it (Chalmers 1835a, 162-163).

In his writings, Chalmers does not inform the reader that there is a connection between this and succeeding arguments, arguments that become part of a cumulative case rebuttal to Hume. Had he made his cumulative case objective clear from the beginning, it would have been acceptable to restate step 2 thus:

2a. The universe displays numerous instances of contrivance for an end.

This construction makes the concluding step, out of necessity, a probabilistic assessment, which is in keeping with Chalmers’ mathematical bent. Chalmers even alludes to the building up of evidence to increase the probability of design by God in later chapters; however, he does not provide his readers this insight at present.

Nonetheless, the final step of Chalmers’ argument cannot be supported, even if steps 1 and 2 are modified to reflect his actual views, not his stated summation. Chalmers commits the error of insufficient evidence IEO; assuming the nature of the antecedent cause of the universe to be a mind, and not only a mind but God by name. Furthermore, the challenges design arguments have by appeals to imperfections in nature or the existence of suffering, are not at this juncture addressed.
When assessing the views of other writers on Chalmers’ apologetics, we find that Huie provides no detailed analyses of Chalmers’ design argument. Huie’s entire assessment consists of just a few sentences:

Chalmers made no attempt to develop the logical steps of an argument for God from design; his treatment dealt more with the specific difficulties that had been pointed to in the traditional teleological system. He made no attempt to delve into the systematic steps involved in the argument (1949, 86-87).

True, Chalmers does not provide a step-by-step construction of his argument, but for that matter neither does Paley. Contrary to Huie’s view, the structure of Chalmers’ syllogism is recognizable, once one realizes his philosophical underpinning and is cognizant of the author’s desire for repetition.

In Rice’s dissertation, Chalmers’ dependence on the philosophical assumption of nature’s constancy is noted, but he offers no critique as to how this presupposition influences the argument’s construction. Rice merely says, “having satisfied himself with the fact of nature’s constancy, Chalmers moves toward answering Hume’s concept of singular effect as sufficient reason to dismiss the possibility of providing adequate evidence for the existence of God” (1966, 165). Rice recognizes the importance Chalmers places on making a distinction between what is essential and what is accessory in the antecedents and consequents of the design argument. He writes that this is necessary to remove “the charge of singularity of effect upon which inferences are possible” (1966, 168).

Rice goes no further, and does not credit Chalmers for developing an intriguing method for exposing the problem inherent in Hume’s scepticism. While Chalmers’ attention to essentials does not improve the design argument, it does serve
as a legitimate point against Hume’s singularity objection. We acknowledge this point as a valuable accomplishment, a point that duly recognizes the epistemic challenges in Hume’s method of detecting causal relationships. Chalmers’ watchmaker construction, based on essentials, exposes the potential roadblock to knowledge emanating from extreme scepticism. We have not found Chalmers’ abstraction, based on essentials, to have been employed by other apologists, indicating the originality of his method, and serving as a legitimate point of argument against Hume.

Rice, unlike Huie, has no difficulty recognizing the structure of Chalmers argument (although he does not develop this into syllogistic form), yet, he provides no critical analysis, instead preferring to accept, without documentation, the notion that all Paleyan forms of design analogies are flawed. He writes, “We need not consider further the argument upon which Chalmers bases his confidence in the existence of God. In essence it is the teleological, or physico-theological, proof as distinct from the cosmological or ontological proofs . . . a predominantly uncreative position” (1966, 171). Rice summarizes his critique writing, “it is indicative of the obsession with the wisdom of God in creation in those who advocated such an apologetic, that the imperfections in nature, and the obvious suffering and agony which give rise to a serious questioning of the meaningfulness of the natural order, were blindly ignored” (1966, 174).

Like Rice, Addinall dismisses Chalmers’ design efforts without offering any notable critical analyses. In his work *Philosophy and Biblical Interpretation*, Addinall writes, “as a proof of the existence of God the argument from design is invalid . . . Even if it is true the world is created, this truth cannot stand as the valid conclusion of the design argument” (1991, 45) (a point rejected by Craig (1984, 15)).
Consequently, when it comes to Chalmers’ design argument, Addinall only offers this assessment: “he shared in the failings of the rest of the enterprise” (1991, 107). Instead of commenting on Chalmers’ apologetics, Addinall’s focus is to assess nineteenth century theology in the face of growing scientific discovery. With this as his main emphasis, Addinall concentrates his efforts on assessing Chalmers’ desire to harmonize the biblical record of creation with the growing science of geology.

In thirty pages the New York Review of 1837 attempts to give a general assessment of Chalmers’ *Natural Theology*. However, when it comes to the design argument, the reviewer is at a loss. Stating that Chalmers “assumes the expectation of nature’s constancy as a part of the constitution of the mind, and . . . the fact of nature’s constancy, as a remarkable instance of the adaptation of external nature to the constitution of the mind” (1837, 144), the reviewer proceeds to the next apologetic topic without mentioning anything regarding Chalmers’ rebuttal to Hume’s objections, or the actual construction of the design argument.

It is possible the *New York Review* author had difficulty deciphering Chalmers’ literary style, something the *North American Review* of 1842 stresses, to the exclusion of an actual review of Chalmers thinking.

Dr. Chalmers does not appear qualified in an eminent degree, either by the peculiarities of his style, or his habits of study and thought, to become a scientific writer. With a great command of words, considerable power of amplifying a subject, and, at times expressing himself with much force and earnestness, he lacks precision of statement and definiteness of views. His style is often incorrect, and almost always verbose and tumid, and, amidst a wilderness of words, the reader is sometimes at a loss to find any meaning whatever. Such
a style may be very effective in the pulpit where familiar thoughts are handled, to be amplified and set forth under every variety of aspect. The constant repetitions will enable the hearer to comprehend the general drift of the argument, and the swell of copiousness of language will fasten it upon his memory. But the inaccuracy and vagueness of such a manner are serious objections in a scientific treatise. One is often puzzled by contradictory statements, and loses sight of the chief object of inquiry, while the author is expatiating at great length on some incidental topic. But these defects might be pardoned, if they did not proceed from much confusion of thought, and a hasty manner of prosecuting an abstract inquiry. Dr. Chalmers elaborates nothing, but gives out the first draft of his arguments and peculations, pretty much in the order in which they first occurred to him. Consequently, there is no proportion between the parts, but a crude mass of materials is presented, which, if duly worked over, might be found to maintain many sound remarks, and some trains of reasoning and reflection, followed out with considerable success (1842, 356-357).

This chapter, therefore, presents the most complete critique of Chalmers’ teleological design analogy, undertaken. The research demonstrates that Chalmers’ rebuttal fails to address satisfactorily the objections developed by David Hume, some 70 years earlier. Twice he begs the question and commits an evidence error in the syllogism’s final step. Yet, Chalmers’ mathematical construction based on essentials is a legitimate argument for exposing the problems inherent in Hume’s contention that the world is a singular effect. Thus, in keeping with the writer of the
North American Review, there are aspects of Chalmers’ construction “if duly worked over, might be found to maintain many sound remarks, and some trains of reasoning and reflection, followed out with considerable success” (1842, 357). It is precisely this that the next portion of this chapter will address, demonstrating that certain aspects of Chalmers’ thinking contain similarities to ideas developed by apologists in the later part of the twentieth century.

Chalmers’ Design Argument in light of Today’s Research

In James Madden’s contribution to In Defense of Natural Theology: A Post-Humean Assessment, he makes the assertion that a modern version of the teleological argument (MTA) developed by the intelligent design community holds promise of avoiding Hume’s objections (2005, 158-159). Madden cites William Dembski (1999), Michael Denton (1986), and Michael Behe (1996) as the principle originators of the underpinnings to the MTA, and uses Behe’s efforts in microchemistry as the example by which to assess the merits of the modern argument (Madden 2005, 158).

Madden indicates there is an important difference between the MTA and classical forms of the design argument. In short, the MTA is much less ambitious than the arguments of earlier apologists (2005, 159). The modern argument, according to Madden (in his citation of Behe) “is limited to design itself . . . it is not an argument for the existence of a benevolent God, as Paley’s was,” and “questions about whether the designer is omnipotent, or even especially competent, do not arise . . . as they did in Paley’s” (Madden 2005, 159; Behe 2003, 277).

The MTA, outlined by Madden, is as follows:
1. Certain natural phenomena clearly have feature F.

2. It is highly improbable that F can be caused by something other than an intelligent designer.

3. Therefore, it is highly probable that there exists an intelligent designer of such phenomena (Madden 2005, 160).

Where feature F is Behe’s concept of irreducible complexity\(^{51}\), defined as:

A single system composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning. An irreducibly complex system cannot be produced (that is, by continuously improving the initial function, which continues to work by the same mechanism) by slight, successive modifications of a precursor system, because any precursor to an irreducibly complex system that is missing a part is by definition nonfunctional (Behe 1996, 39).

Being less ambitious than the CTA, TAD, PDA, or Chalmers’ argument, the MTA, according to Madden, is insulated, from IEO, evidence, and jumping the gun errors, as it makes no claims about the nature and character of the designer. The MTA merely states it is highly probable that there is a designer for phenomena with

\(^{51}\) Behe’s research into the inner workings of microbiological organisms reveals numerous examples of proteins and bacteria, where the removal of a single component eliminates the possibility of life. He surmises it is impossible for a “dead” organism to mutate into a “living” entity, via Darwinian evolution. Thus, irreducibly complex phenomena must have been designed (Behe 1996). One example, Behe cites in his work *Darwin’s Black Box*, of an irreducibly complex organism is the bacterial flagellum. “The flagellum is a long, hairlike filament embedded in the cell membrane. The external filament consists of a single type of protein, called “flagellin.” The flagellin filament is the paddle surface that contacts the liquid during swimming.” “The bacterial flagellum uses a paddling mechanism. Therefore it must meet the same requirements as other such swimming systems. Because the bacterial flagellum is necessarily composed of at least three parts – a paddle, a rotor, and a motor – it is irreducibly complex.” “In summary, as biochemists have begun to examine apparently simple structures like cilia and flagella, they have discovered staggering complexity, with dozens or even hundreds of precisely tailored parts . . . As the number of required parts increases, the difficulty of gradually putting the system together skyrockets, and the likelihood of indirect scenarios plummet. Darwin looks more and more forlorn” (Behe 1996, 69-73).
feature F (2005, 160-166). Additionally, Madden makes an important admission, writing that the contribution of the MTA to theistic arguments comes to play a role only when it is employed in a “cumulative case for God’s existence” (2005, 160).

While insulated from many of Hume’s objections, the MTA is still, according to Madden, susceptible to another form of Humean objection. Madden calls this the counterevidence objection (CO) (Madden 2005, 161-162). According to Hume:

There are many inexplicable difficulties in the works of Nature, which, if we allow a perfect author to be proved a priori, are easily solved, and become only seeming difficulties, from the narrow capacity of man, who cannot trace infinite relations. But according to your method of reasoning, these difficulties become all real; and perhaps will be insisted on, as new instances of likeness to human art and contrivance. At least, you must acknowledge that it is impossible for us to tell, from our limited views, whether this system contains any great faults or deserves any considerable praise, if compared to other possible, and even real systems (1990, 105-106).

Hume’s CO claims that nature is full of apparent flaws, which belie intelligent design, and the presumed harmonious working, from top to bottom, of that design. Thus, the naysayer will claim there are enough examples of suboptimal structures, and even suffering or shall we say evil, in nature to render the MTA to be at best a 50 – 50 proposition (Madden 2005, 164-166).

The specific details of how Madden attempts to overcome Hume’s CO, within the MTA, will not be addressed at this juncture of the research, being saved

52 The proponent of CO can point to the blind spot in human vision, the structure of the human trachea, the weakness of the spine, the narrowness of the birth canal, and the presence of the infection-prone appendix as examples of less than perfect designs (Madden 2005, 163).
for a later chapter and appendix, to retain the order in which Chalmers addresses the objection.

Within the narrow view of Chalmers’ design argument; there is one remarkable similarity to modern research, which has not been previously identified. The similarity we speak of is the idea of irreducible complexity, which lies at the heart of Madden’s MTA.

Chalmers’ division of the nature of consequents and antecedents into two categories (i.e., essentials and ancillaries) is, in fact, another way of arriving at Behe’s concept of irreducible complexity. True, Chalmers is analysing contrivances at a higher, not microchemical, level; yet, his argument can be applied to lower order phenomena.

He proposes to consider the intersection of the essentials of an infinite number of watches, thus, arriving at an irreducible set, or minimal construction of essentials, deemed necessary for the keeping of time. His thinking yields a situation where the removal of one essential, after the infinite intersection is taken, renders the contrivance inoperable. Mathematically, this is a minimal set of mutually inclusive essentials, necessary for enabling the intended operation of the artefact. Without loss of generality, the analysis can be undertaken, as Chalmers mentions, on the workings of a single watch, yielding the same result: an irreducible or minimal number of essentials that guarantees the operation of the contrivance.

Chalmers’ appeal to a minimal set of essentials is identical to another Intelligent Design researcher’s concept of irreducible complexity, namely Dembski’s formulation of specified complexity (1999, 10). Dembski is concerned with developing a process, by which design can be detected. He says that in order to detect design, the item under investigation must have “specified complexity” or
equivalently, “specified small probability” (1999, 10). Chalmers’ minimal set of essentials is both specified (it considers only the essentials of a contrivance) and complex (it ends in a contrivance for a purpose), thus satisfying Dembski’s definition.

Furthermore, Chalmers agrees with both Dembski (1999, 10) and Behe (1996, 72-73) regarding the importance of probability in identifying design. He writes remarkably similar words to these modern researchers, describing the overwhelming difficulty of randomly bringing together a large number of independent circumstances to reach a useful result as indicating design.

The chief then, or at least the usual subject-matter of the argument, is the obvious adaptation wherewith creation teems, throughout all its borders, of means to a beneficial end. And it is manifest that the argument grows in strength with the number and complexity of these means. The greater the number of independent circumstances which must meet together for the production of a useful result – then, in the actual fact of their concurrence, is there less of probability for its being the effect of chance, and more of evidence for its being the effect of design. A beneficent combination of three independent elements is not so impressive or so strong an argument for a divinity, as a similar combination of six or ten such elements. And every mathematician, conversant in the doctrine of probabilities, knows how

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53 “For example, if we turned a corner and saw a couple of Scrabble letters on a table that spelled AN, we would not, just on that basis, be able to decide if they were purposely arranged. Even though they spelled a word, the probability of getting a short word by chance is not prohibitive. On the other hand, the probability of seeing some particular long sequence of Scrabble letters, such as NDEIRUABFDMOJHRINKE, is quite small (around one in a billion billion billion). Nonetheless, if we saw that sequence lined up on a table, we would little think of it because it is not specified – it matches no recognizable pattern. But if we saw a sequence of letters that read, say, METHINKSITSLIKEAWEASEL, we would easily conclude that the letters were intentionally arranged that way. The sequence of letters is not only highly improbable, but it also matches an intelligible English sentence. It is a product of intelligent design” (Dembski 1999, 10).
with every addition to the number of these elements, the argument grows in force and intensity, with a rapid and multiple augmentation – till at length, in some of the more intricate and manifold conjunctions, those more particularly having an organic character and structure, could we but trace them to an historical commencement, we should find, on principles of computation alone, that the argument against their being fortuitous products, and for their being the products of a scheming and skilful artificer, was altogether overpowering (1835a, 217-218).

Although Chalmers does not connect his idea of an infinite intersection of essentials to the diminishing probability of a large number of elements beneficially assembling to produce a contrivance for a purpose, they are the same. The intersection of essentials, according to Chalmers, is for overcoming Hume’s objection to insufficient evidence in the design analogy (a construction we have indicated is valid.) As demonstrated, it is an equivalent description to Dembski’s specified complexity, and therefore can be employed to detect design, which will be shown in the next chapter.

**Summary of Chalmers’ Argument by Analogy**

As mentioned, Chalmers does not carry the concept of essentials forward in his work. At this stage, he is concerned with overcoming Hume’s objection of insufficient evidence in enabling the design analogy for the existence of God to be valid. His work fails, not because of the idea of essentials, but because his design
argument suffers from the same begging the question, evidence, and jumping the gun errors as other efforts.

The most fascinating aspect of Chalmers’ attempt is the idea of essentials, which is remarkably similar to the concept of irreducible and specified complexity of the latter half of the twentieth century. No intelligent design researcher has quoted, or is familiar with, Chalmers’ writings, which is not surprising due to the difficulty of wading through his work. Furthermore, no apologist has employed Chalmers’ work with essentials to identify the epistemic failings of Hume’s objections to design. Nonetheless, Chalmers’ ideas were clearly unique for his time, predating future efforts by nearly one hundred and fifty years.
CHAPTER SIX: Chalmers’ Continuing Defence of Design

Following the defence of the design analogy, Chalmers, in *Natural Theology*\(^{54}\), takes up Hume’s further objections to teleological arguments. There is some confusion when reading this apologetic treatise, as he does not address the entirety of Hume’s objections or give an outline of his thinking in a single location. Instead, he draws out the analysis throughout the entirety of *Natural Theology*’s two volumes, and in the *Institutes of Theology*, he presents the same arguments in reduced and reverse order, somewhat masking their apologetic originality and similarity to modern apologists.

In this portion of the dissertation, a thorough critique of Chalmers’ rebuttals to Hume’s further objections to design is presented. As with the analysis of the design analogy, these pages reveal unrecognized similarities between Chalmers’ works and those of modern apologetic efforts.

**Hume’s Postulate of an Eternal or Self-organizing World**

Immediately following his construction of the design analogy in *Natural Theology*, Chalmers addresses what he deems the first significant objection to his thinking\(^{55}\). He opens with the words, “but after all it may be asked, is the world an effect? May it not have lasted for ever – and might not the whole train of its present sequences have gone on in perpetual and unvaried order from all eternity” (1835a, 54).  

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\(^{54}\) In Chalmers’ *Institutes of Theology* the material presented in his *Natural Theology* are covered in reverse order. First he presents his reasons for believing the world is contrived, using the idea of the collocation of matter; then he transitions to his argument for a definite commencement of the present order of things, finishing with his design analogy (1849b, 73-98). Although more concise, significant detail is removed causing a diminution in their effectiveness.

\(^{55}\) This is contained in Chapter V: *On the Hypothesis that the World is Eternal* (Chalmers 1835a, 161).
This statement indicates that Chalmers understands that without establishing the world is, at a minimum, a consequent (i.e., is the effect of some cause) then efforts to demonstrate its purposeful contrivance by a designer are moot.

The specific objections now being considered are Hume’s statements that it is just as plausible to speculate that the world is eternal or fell into order by itself, as it is to say it is the result of a powerful universal deity. As it relates to these specific objections, Hume writes of eternal matter:

Instead of supposing matter to be infinite, as Epicurus did; let us suppose it finite. A finite number of particles is only susceptible of finite transpositions; and it must happen, in an eternal duration, that every possible order or position must be tried an infinite number of times. This world, therefore, with all its events, even most minute, has before been produced and destroyed, without any bounds and limitations. No-one, who has a conception of the infinite, in comparison of finite, will ever scruple this determination (1990, 92).

Regarding matter having the power to order itself, Hume continues:

For ought we can know a priori, matter may contain the source or spring of order originally within itself as well as mind does; and there is no more difficulty in conceiving, that the several elements, from an internal unknown cause, may fall into the most exquisite arrangement, than to conceive that their ideas, in the great universal mind, from a like internal unknown cause, fall into that arrangement. The equal possibility of both these suppositions is allowed (1990, 56).

Referencing Hume’s objections in his own work, Chalmers sets the direction of this phase of his apologetic thinking, writing:
If Nature is clearly made out to be a consequent, then it might be admitted, that the adaptations which abound in it point to an intelligent and designing cause. But this remains to be proved; and till this is done, it is contended, that it is just as well to repose in the imagination of Eternal Harmonies in a Universe, as of Eternal Harmonies in the mind of one who framed it (1835a, 162-163).

Modern design sceptics such as Peter Addinall pick up, as Chalmers does, on Hume’s views, writing that the fatal flaw in design arguments is that the premise that the world is designed, must be proved, being “the hinge upon which all turns” (1991, 45-46).

Other critics, such as Archie Bahm (1944, 377-382), elaborate on Hume’s objections, postulating that natural phenomena may only appear designed, when in actuality they may be accidental. Bahm takes the view that Hume’s contention is that it is not a whit more logical to say the world was designed than it is to say the world sprang to order of itself, with random patterns providing an explanation for the whole world (1944, 377).

Chalmers’ Rebuttal of an Eternal or Self-organizing World

Chalmers attempts to refute these views, and demonstrate the world (and without loss of generality the universe) is designed, begins by first seeking to prove it is not eternal. He asks the question “why not take for granted the eternity of its

56 An example of accidental design offered by numerous philosophers is the phenomena that ink drops folded in paper are symmetrical, having patterns that appear purposeful.
being, instead of supposing it the product of another” (1835a, 162). Regarding this question, Chalmers concludes there are three alternatives to the question of origins.

1. The world had **no definite beginning**, (i.e., it is eternal).

2. The world had a **definite beginning** emanating from internal causes.

3. The world had a **definite beginning** as a result of external cause(s) (1835a, 161-163).

Chalmers dispenses with the hypothesis that the material matter of the world came into being of itself via spontaneous generation (i.e., out of nothing *ex nihilo*) based on support from natural science. He writes in his *Institutes*:

Take, in connexion with this, the now all but universal faith of naturalists: first, that there is no such thing as spontaneous generation – that each animal comes from a parent of its own likeness; and that out of this established line of transmission, there is not, so far as we have observed, a known power in nature, and not any combination of powers, whether electric, or chemical, or mechanical, or of whatever description, which has yielded any product that approximated in the least to an organic creature, having the functions of life, and all those numerous collections of parts and members and vessels, of nice and curious workmanship, which are indispensable to its being” (1849b, 88)\(^\text{57}\).

Removing spontaneous generation (using the example of organic life) from consideration still leaves the possibility that pre-existing matter, as Hume speculates,

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57 In Chalmers’ day, the concept of spontaneous generation, which originated in Plato’s time, was generally held as highly improbable. It would be in 1859 that French scientist Louis Pasteur would put the fanciful idea permanently to rest (Levine, Evers 2010).
may randomly assemble or contain some power within itself to assemble. Hence, there are still three possibilities to explore, which Chalmers combines into two. The first possibility, number 1 above, is the claim that the world (or the present order of things) is eternal (i.e., had no beginning). The second possibility, which combines numbers 2 and 3 above, says the world (or the present order of things) had a definite beginning or commencement.

Before outlining his arguments against the hypothesis that the world is eternal (i.e., had no beginning), let us restate Chalmers’ initial question. “But after all it may be asked, is the world an effect? May it not have lasted for ever – and might not the whole train of its present sequences have gone on in perpetual and unvaried order from all eternity” (1835a, 161)? The phrase, “the whole train of its present sequences” emanates from Chalmers’ interpretation of Genesis 1. As an early advocate of the Gap theory, he is willing to accept the concept of the world having undergone frequent, if not infinite, renewals. As such, he allows for the possibility of eternity in matter, but not eternity of the present order of the world. Chalmers believes the present order of the world (i.e., the most recent renewal out of decay and chaos of a previous world) is that which is spoken of in the Genesis creation account. Consequently, when Chalmers speaks of a definite commencement of the world, he is speaking of a definite commencement to the present order of things.

58 Many credit Chalmers with having invented the Gap Theory. This is false, as the third century church father Origen, in his De Principiis concerning Genesis 1:1, writes, “It is certain that the present firmament is not spoken of in this verse, nor the present dry land, but rather that heaven and earth from which this present heaven and earth that we now see afterwards borrowed their names.” This indicates that some form of the theory was held in antiquity.
In his Institutes, he begins his first rebuttal to the contention that the world is eternal by appealing to the science of geology. He writes,

But instead of entering either on a metaphysical or on the historical argument for a commencement to our present world, let us see whether more palpable and satisfying indications of this might not be collected, simply by looking directly and outwardly on the scene of observation, as spread out before us. One thing is obvious, that there are causes now at work, which if not counteracted, must at length issue in the submerging of all dry land on the face of our globe under the waters of our present ocean, or in the total demolition of that platform which serves at once for the occupancy and sustenance of all the living generations of land animals (1849b, 79).

In Natural Theology, he writes similar words, stating, “we have reason to believe that it” (the world) “has not subsisted in this order from eternity” (1835a, 165), and in the same paragraph, “in the material economy we have vestiges before our eyes of its having had an origin, or in other words of its being a consequent” (1835a, 165).

Now, the reasons and vestiges Chalmers has for contending the world has not subsisted from eternity are drawn from the field of geology. Geology, especially the discoveries of Frenchman Georges Cuvier in 1813, provides the desired evidence supportive of finite world theories (Chalmers 1835a, 233-237; Huie 1949, 88).

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59 Cuvier’s work showed that there had been rises and falls in certain distinct and successive economies of nature on the face of the earth. These changes were evidenced in fossil records found in the strata of differing geological eras of the globe.
Chalmers writes that geology has given numerous theories regarding the effects of time on the material arrangement of the earth. Geology has given “one doctrine on the degradation of hills, and another on the encroachment or regress of the sea, and another on the relation between the position of the strata and the character of the fossil remains to be found in them” (1835a, 173). In the Institutes he writes, “one thing is obvious, that there are causes now at work, which if not counteracted, must at length issue in the submerging of all the dry land on the face of our globe under the waters of our present ocean, or in the total demolition and the sustenance of all the living generations of land animals” (1849b, 82). With these words, the influence of his foundational presupposition that nature behaves in a constant manner, with the constancy he is appealing to being that of geological erosion is revealed.

Chalmers argues that if the present order of the world had existed for all eternity, geological forces (primarily erosion) would have reduced the planet’s topography to rubble. Thus, geology demonstrates the world, as presently constituted, is recent, and not eternal. He is confident that Cuvier’s theories prove that platonic shifts, volcanic eruptions, and earthquakes provide plausible explanations for required periodic renewals of the earth’s topography. Additionally, fossil records of extinct species and the geological strata of the world demonstrate that the world we now occupy is a recent overlaying of previous worlds. All of these findings play into the hands of his presupposition that humanity expects nature to act in a consistent manner, and it is in geology that one finds the explanation for this particular expectation.

60 In turning to geology for answers to the question of an eternal world, Chalmers, as Huie writes, is embracing “a possible friendship between theology and the infant science of geology” (1949, 88), something Huie disparages without explanation.
He writes, “mineralogists can tell, and that on the evidence of mineralogy alone, of the wreck and the wear of older platforms, now gone by, each undergoing the same process of decay along which our present world is visibly hastening to its end, and each attesting its own station in the order of descent by the place which its ruins now occupy” (1849b, 86).

Using observations from the infant field of geology, Chalmers writes, “It is from what we behold of this process at present, and in transitu, that we infer the certainty of its future termination. But with equal confidence might we infer the certainty of its past commencement. For if it never had a beginning then at all events it could not have subsisted to the present day” (1849b, 84).

He continues this line of argument, indicating that his theory is independent, although inspired by Cuvier, of scientific theories. He writes, “our argument does not rest on . . . any one of the geological theories. It is enough, if causes of decay and destruction are at work which are now undermining the present harmony of things; and which must therefore have brought to an end any economy that may have gone before it” (1835a, 231). Then to add emphasis to the point, he continues:

We do not make ourselves responsible for any of the theories . . . For generally speaking they proceed on the rise and disappearance of certain distinct and successive economies of nature on the face of our globe – the decay or destruction of each implying the extinction of at least so many of the animal and vegetable races proper to its era. It is on this and this alone that our argument is based; and we do not need therefore, for the purpose of upholding it, to advocate any one geological system in preference to others – seeing that it rests, not on
the peculiarities of one creed, but on one article very generally if not universally to be found in them (1835a, 231-232).

Just as in his design analogy, Chalmers depends on humanity’s expectation of nature’s constancy and nature’s harmonious accommodation of that expectation to underpin his argument. The reliance on the findings from geology is to demonstrate that nature behaves in a constant pattern of erosion. Furthermore, humanity expects nature to behave in a constant manner. Thus, for Chalmers, it is rational to expect that the only explanation for the present order of the world is that it had a definite commencement, a recent time of renewal, from a previous condition of chaos and decay.

This comprises Chalmers’ effort, using the science of geology to prove the world, or more specifically the present order of things, had a definite beginning. He continues, in *Natural Theology*, with two additional arguments, one using metaphysical reasoning and the other historical testimony, to build up a cumulative case for belief in a definite commencement of the present order of the world. These will be presented in kind after each is critically assessed.

**Critical Assessment and Comparison to Modern Apologists**

Early in the nineteenth century, Chalmers’ acceptance of geological findings were not shared by all of his theological contemporaries. Huie writes that some theologians had difficulty embracing geological evidence due to challenges it created regarding the theological position of a young earth created *ex nihilo* (1949, 88). Of this tension, Hanna writes that the clergy in the earliest days of the nineteenth
century would have attempted to stifle the voice of geology had it not been for theologians like Chalmers (1850, 389-390).

As early as 1804, in a lecture at St. Andrews, and again in April 1814, in an article entitled *Essays for the Theory of the Earth* in *The Christian Instructor*, Chalmers writes that Christianity has nothing to fear from geology. In the *Instructor* article, Hanna believes Chalmers is the first Scottish clergyman “who, yielding to the evidence in favour of a much higher antiquity being assigned to the earth than had previously been conceived, suggested the manner in which such a scientific faith could be harmonized with the Mosaic narrative” (1850, 390). It is in this article that Chalmers posits the idea of the Gap theory. Others like William Buckland, soon
followed Chalmers’ lead and belief in the Gap theory, writing that he did not see geology as posing a threat to Christianity, and favoured an antiquity of the earth much greater than previously speculated (Roberts 2002).

Leaning on the Gap Theory, and evidence from geology, was sufficient to satisfy Chalmers that arguments for design could be considered alongside other theories for the commencement of the world. “Both history and observation tell of a definite commencement to the present order – or, in other words, they oblige us to regard this order as the posterior term of a sequence: and we, in reasoning on the prior term, just follow the lights of experience when we move upward from the world to an intelligent mind that ordained it” (1835a, 166).

Chalmers’ line of reasoning reintroduces the possibility of an eternal world, and thereby leaves unanswered the question of *creato ex nihilo*. Chalmers, nonetheless, points out that geology mandates the earth be recently renewed. He comments that the real question is “not whether the matter of the world, but whether the present order of the world had a commencement” (1817, 170)?

In making these statements, Chalmers bypasses the question, where did the matter of the universe originate? He focuses his apologetic efforts on the present order of things. From a critical perspective, it must be noted that geological evidence alone in no way proves a single uniform global renewal having taken place at a particular time in history. Geology does give evidence for there having been epochs of change in particular places, but it does not follow that these events were synchronized with respect to time and uniformity. Thus, geological evidence alone is

the world. He did believe in a literal six days of creation, but that was a creation of the present order of the world out of a chaotic world that pre-existed the current material economy. This view came to be called the “Gap Theory,” which considered there to be a gap of unknown time between Genesis 1:1 and 1:2. Chalmers writes that the present world came “out of the wreck and materials of the one which had gone before it” (1835a, 230). For Chalmers, the Mosaic record is a witness to events of the present material world designed out of the material of a previous chaotic structure (1835a, 228 - 258).
insufficient in answering the question; therefore, one cannot presume the present order of the world had a single commencement based on geology alone. The best one can surmise is that cataclysmic changes have occurred on the surface of the earth, but not necessarily at the same time or with global uniformity.

An additional problem with Chalmers’ reasoning is the inconsistency it creates between the belief that the effects of geology created chaos out of the previous order of things, and the reasonably ordered assemblage of fossil and sediment remains. If the world had, in fact, been reduced to a shapeless chaotic mess, then one could surmise that the fossil record would have been severely disrupted, if not entirely destroyed.

In the end, Chalmers verges on the contradictory, stating, “our argument does not rest on . . . any one of the geological theories. It is enough, if causes of decay and destruction are at work which are now undermining the present harmony of things; and which must therefore have brought to an end any economy that may have gone before it” (1835a, 231). In this, he means that his theory only depends on the fact of erosion as the constant element of nature, thus allowing for the possibility that findings beyond Cuvier can be of value.

With the exception of Buckland’s 1836 contribution to the Bridgewater Treatises (1836), continued attempts to use geological arguments, and specifically those put forth by Chalmers, failed to capture the attention of apologists in general. Eventually, with the demise of British Natural Theology, after Darwin’s 1859 Origin of Species, apologetic efforts based on these ideas were increasingly disregarded (Dembski 1999)64. Instead, it is in the area of creation science (not addressed in this

64 Even the great Princeton theologian Charles Hodge, a one-time advocate of Chalmers’ view, changed his affections to the day-age theory later in life. In his Systematic Theology, he provides no critique or even mentions Chalmers, merely stating, “some understand the first verse to refer to the original creation of the matter of the
dissertation), not apologetics, in which Chalmers’ Gap Theory continues to receive attention.\footnote{65}

While, Chalmers’ geological argument is insufficient, his appeal to science, as potentially providing support for the impossibility of an eternal world, has not been abandoned by modern researchers. Today, apologists Garrett J. DeWeese\footnote{66}, Joshua Rasmussen\footnote{67}, William Lane Craig\footnote{68}, and James D. Sinclair\footnote{69} agree there is significant empirical support for a definite commencement to the world.

These apologists note three areas where empirical evidence in support of a beginning to the universe abounds. The first is the second law of thermodynamics (i.e., entropy)\footnote{70}, second, big bang cosmology\footnote{71}, and third, the impossibility of actual infinity\footnote{72} (DeWeese, Rasmussen 2005, 127-128; Craig 1979, 101-196).

While the second law of thermodynamics and the presumed inevitability of heat death in an infinite world were once considered as fact, DeWeese, Rasmussen, Craig, and Sinclair all point out that early-twentieth century applications of Maxwell, Boltzmann, and Gibbs distributions indicate that, at microscopic levels,
thermodynamics’ second law can only be expressed probabilistically. Consequently, this implies there is always, although extremely small, a non-zero probability that a closed system will experience reverse entropy (Craig, Moreland 2009, 129-182; DeWeese, Rasmussen 2005, 127-128).

As with the second law of thermodynamics, the big bang theory has also experienced recent challenges to its near unanimous scientific acceptance. DeWeese, Rasmussen, Craig, and Sinclair all indicate that in the last thirty to forty years alternative cosmological theories, like bounce model hypotheses, require no big bang, and thus have no absolute beginning to the universe (DeWeese, Rasmussen 2005, 126-127; Craig 1980, 129-182).

While these challenges to thermodynamics and cosmology are not overwhelming, they do provide doubt to previously assumed truths. Consequently, these four researchers agree that basing apologetic works for a beginning of the universe on scientific evidence alone can be challenged (Craig, Moreland 2009, 103-129; DeWeese, Rasmussen 2005, 128-130).

Chalmers, who lived in a world dominated by Newtonian physics, predates these, as well as Darwin’s theories, can be forgiven for not knowing of potential scientific discoveries to support his position for a definite commencement to the world. What should be noted is Chalmers’ willingness and intellectual ability to consider the potential uses of scientific endeavours to support the belief of a definite beginning to the universe. In this, he resembles modern researchers in their openness to analyse developments in the scientific arena.
Having presented his argument from geology, Chalmers briefly mentions a
metaphysical argument in his *Natural Theology*, a tactic he forgoes in the *Institutes*.

He writes:

Neither, although we think it a very impressive consideration, would we insist on the argument by which it is attempted to be proved, that although the existence of each organic being can be accounted for by derivation from a parent of its own likeness—yet we are not on that account to acquiesce in the imagination of an infinitude for the whole race, as if the line of successive generations reached backward to eternity. It does seem as irrational so to conclude, as to say of an iron chain which ascends perpendicularly from the surface of our earth, and at its higher extremity was too distant for vision, that each link was sustained by the one immediately above it, and that simply if the whole had no termination each would have a support of this kind and so the whole be supported. It seems as impossible that there should be an eternal race of men or animals, as that a chain rising infinitely upwards from out the earth should hang upon nothing. If there be good reason for the belief, that there must be a suspending power for the whole chain at whatever height it may be conceived to go—there is at least the semblance of as good reason for the belief, that there must be a prime originating power for the whole race, however remote the antiquity of its origin. But even this consideration we at present shall forego—thinking as we do that the non-eternity of our
animal and vegetable races rests upon a basis of proof certainly as firm as this, and greatly more palpable (1835a, 169-170).

The central point to this argument is the perceived impossibility of an actual infinite sequence of causes with no origin or antecedent first cause. Chalmers’ illustration of a chain held vertically in place by each preceding link with no beginning support is offered up as proof. He relates the illustration of the infinite chain to the origin of plant and animal life, claiming there must be a first cause.

This is the only passing marker of his thinking in *Natural Theology*; dismissing the argument entirely in the *Institutes*, in which he writes, “instead of entering either on a metaphysical or on the historical argument for a commencement to our present world, let us see whether more palpable and satisfying indications of this might not be collected” (1849b, 82).

Chalmers quickly moves on from this metaphysical argument, although he considers it “very impressive” (1835a, 169), because of his devotion to Scottish philosophy. Typical to his thinking, he views any argument devoid of observational evidence to rank lower in apologetic usefulness. He holds Christian defences from mental reasoning alone to be less obvious than those that avail themselves of observable data, writing, “there are certain reasonings in behalf of a commencement for our present order of things which we shall here omit, and that not altogether from their want of strength, but from their want of obviousness” (1849b, 81).

*Critical Assessment and Comparison to Modern Apologists*

The argument from the impossibility of actual infinity comes from the claim that an eternal past prohibits the present. Conceptually, Craig and Whitrow state that
if one starts at today and attempts to go back in history, by the very definition of eternity or infinity, the beginning is never reached, as infinity cannot be traversed. If then, there is no beginning then how, or where in the past does one start to reach the present? Mathematically, if the starting point can never be found, then the future, or even the present cannot be determined. Hence, there is a difference between the mathematical concept of infinity and actual infinity (Craig 1979, 165-170; Whitrow 1978, pp. 39-45).

Chalmers’ adherence to the Scottish school disparages the use of arguments not requiring empirical evidence. Had he continued this line of thinking, he may have been able to find a lack of coherency in Hume’s writings. Specifically, in one instance, Hume writes of the impossibility of infinity, “an infinite number of real parts of time, passing in succession, and exhausted one after another, appears so evident a contradiction, that no man, one should think, whose judgment is not corrupted, instead of being improved, by the sciences, would ever be able to admit it” (2004, 122). Yet, in another instance Hume posits the possibility of an infinite regress to challenge the design assumption writing, “If the material world rests upon a similar ideal world, this ideal world must rest upon some other; and so on, without end” (1990, 72).

The crux of the argument from infinity comes by recognizing the difference between actual infinity and mathematical infinity. In mathematics, infinity is defined as an unending limit or sequence, designated by the symbol ∞. One can conceive of mathematical infinity but to find an example of actual infinity in the world is difficult, and, in fact, was demonstrated impossible by German mathematician David Hilbert (1862-1943).

73 For example, the limit of 1/x tends to zero, as x grows infinitely large.
Hilbert conceived of a hotel with an infinite number of rooms all occupied. Nonetheless, when a new guest arrives, the front desk merely shifts all guests down one room and puts the new guest in room 1. The hotel, while full, can always take more guests. Even if an infinite number of guests checkout, the hotel remains full. Hilbert’s paradox demonstrates that actual infinity, designated \( \aleph_0 \) does not exist (Sennett, Groothuis 2005; Craig, Moreland 2009, 683). Therefore, as Craig and Sinclair state, “since an actual infinite cannot exist and an infinite temporal regress of events is an actual infinite, we may conclude that an infinite temporal regress of events cannot exist. Therefore, since the temporal regress of events is finite, the universe began to exist” (2009, 117).

Chalmers has distant echoes of this line of reasoning in his statements, and had it been explored it may have taken the shape of modern works. Nevertheless, Chalmers refuses to consider purely a priori apologetics. Furthermore, this line of reasoning would have undermined his geological argument and gap theory, as the gap theory leaves open the possibility of infinite renewals. Instead, Chalmers shifts to another argument for the commencement of the present order of things; an argument he believes is more palpable.

**Chalmers’ Rebuttal from Historical Testimony**

Chalmers dedicates significant space, in Natural Theology, to an entirely different argument for believing the present order of the world had a beginning. He writes the proof “is of two kinds. The recency of the present order of things . . . may be learned, either from the evidence of history or the evidence of observation” (1835a, 170). In addition to observation, which is his way of referring to his
geological argument, Chalmers says that further proof the world is not eternal, or had a beginning can be demonstrated by human history. “If there had been a creation, it belongs to the order of historical events, and like any other such event might become the subject of an historical testimony – the authority of which might be tried by the rules and decided by the judgment of ordinary criticism”\(^{74}\) (1835a, 170).

Relying on human testimony, Chalmers takes a position opposite David Hume. He writes that historical records can be admitted as evidence as long as they are held to the same experimental rigor as science dictates.

There is one principle which should never be lost sight of, when investigating the Evidence of Religion, or indeed any evidence which relates to questions of fact. We mean the sound and sterling quality of that evidence which is either historical or experimental. The truth is that the historical, when good and genuine, resolves itself into the experimental. The only difference is that instead of our own observation, it substitutes the observation of others. We receive by our ears what we are assured by the diagnostics of credible testimony that they have seen by their eyes. Historical evidence has thus the character; and, in proportion as it is substantiated, should have the effect of the observational (1835a, 171).

Chalmers distances himself from Hume, maintaining, “if from the documents and vestiges of other times, there could be collected even so much as the bare fact, that, somehow or other the world had a beginning, this would make room for the argument of its having begun in the devices of a mind that had an aim and a purpose in the formation of it” (1835a, 175-176). Hume’s position on the veracity of human testimony to replace direct observation in his challenge to Hume’s arguments against miracles.

\(^{74}\) In the next chapter we will explore Chalmers’ use of the veracity of human testimony to replace direct observation in his challenge to Hume’s arguments against miracles.
testimony is clearly stated in his *Enquiry*. In that work, he maintains that it is a maxim or law of understanding, “no testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours to establish” (Hume 2004, 89).

Chalmers believes the contrary, writing that if the witness is credible, its testimony should be of more value than scientific speculations not based on evidence. “We should deem the real findings of one man to be of more value than the splendid fancies of a thousand men” (1835a, 173).

Clearly, Chalmers has a high regard for the usefulness of trustworthy historical witnesses, writing, “it is evident, that the results of theory must give way to the results of observation, should they stand opposed to each other” (1835a, 173). In this situation, the term theory means scientific or philosophical speculation not based on experimentation or observation. Again, he says, regarding the question of the commencement of the world, “we think that in the strict philosophy of the question, the geological speculations of our day should come under the tribunal, or be brought to the touchstone of authentic history” (1835a, 174).

Continuing this line of thinking, Chalmers writes that human testimony is of great value in illuminating understanding, especially when science is silent. “In the exceeding dimness of reason or of nature’s light we do feel the utmost value for all those historical notices, which serve to indicate that the world had a beginning” (1835a, 175). Furthermore, he writes that if history is ignored, then honest enquiry and solid philosophy are lost.

There is an end of all solid philosophy, if such evidence is set aside – and that, to make room for the mere wantonness of the human spirit, that would fain substitute its own creations in the place of all which
observation distinctly points out, or which history audibly tells of the creation by God. At this rate the fair domain of science is again laid open, as in the days of the schoolmen, to the misrule, the wild vagaries of unchastened imagination (1835a, 175).

By accepting historical witnesses, Chalmers is not abandoning the Scottish philosophical requirement for observation. Instead, he is stating that second-hand evidence, if reliable, is as trustworthy as first-hand experience. He separates historical events from intellectual inquiries, writing that historical witnesses, once deemed trustworthy, can be considered first-hand experience. “In questions of fact, history, when marked with the usual signatures of truth, is not only a competent, but in most instances is the best voucher that can be appealed to” (1835a, 174). More specifically, he says, “history is the vehicle on which are brought to us the observations of other men, whether the path over which it has travelled be a distance in space or a distance in time – that is, whether they whose observations it bears to us are men of other countries, or of by-gone ages” (1835a, 174-175). Therefore, Chalmers contends, “history if not direct is at least derivative observation and if rightly derived is only observation at a distance instead of observation on the spot” (1835a, 175).

Having stated that reliable historical testimony can be admitted as evidentially significant with regard to the question at hand, Chalmers continues his argument, which he articulates as follows:

All that is needed is satisfactory evidence that these indications are not from Eternity – that the curious mechanism, for example, of our bodies hath not always existed and been transmitted downwards from one generation to another by a law which hath been everlastingly in
operation – in a word that things have not continued to be as they are at present, we shall not say from the beginning of the Creation, for the fact of a Creation is that which we are now in quest of – but that they have not so been from Eternity (1835a, 176-177).

Chalmers maintains that testimony can be admitted as evidence for a beginning to the world as well as creation as long as it is deemed trustworthy. To prove the reliability of historical documents he proposes consideration of a hypothetical document:

Had there been a continuous chain of credible and well-supported testimony, passing upward through a series of approved and classical writers in Rome, and Greece, and Egypt — each reiterating from their predecessors a consistent testimony regarding a succession of patriarchs, and a flood in the early ages of the world, and a creation at the outset — their history would have been admitted to the proof . . .

If the testimonies we have for the recency of our world as now constituted, would have been so eagerly seized upon . . . had they come to us through the channel of secular or profane history — then, we are not to lose the service of them even as present auxiliaries to

75 Chalmers does not only use historical evidence in support of creation, but also in support of the existence of God. “We thus hold, that in virtue of the artificial process by which the whole argument has been conducted, there has been created what we should call an artificial scarcity of argument for the doctrines of natural religion. For there is no real scarcity. On the firm and frequent stepping-stones of a sustained history, we may rise to the observational evidence of a creation and a Creator — but, by the general practice of our guides and conductors, we are kept at the present stage of our inquiries, from entering upon this path. The fact of creation is strictly an historical one, and is therefore susceptible of being proven by historical evidence, if such is to be found. And by all the signatures of valid or incorrupt testimony, we are directed to a place and a people, among whom the registers both of creation and providence were deposited. Yet on the existence of God, as a preliminary question, these leading credentials are kept out of sight — and we are presented instead, with but the secondary or shadowy reflections of them in the oral traditions of other places and other people, or the dying and distant echoes of nations that had been scattered abroad over the face of the world. It is thus that the fundamental demonstrations and doctrines in a course of theology are made to lack of that strength which rightfully belongs to them. We go in pursuit of dim or mythological allusions, to be found in heathen writers; and should we catch at some remote semblance of the Mosaic story whether in the literature of Greeks or Hindoos, we rejoice over it as if a treasure more precious than all that we possess” (1835a: 179-180).
our cause, unless it can be shown to us in what way they have become impotent or worthless, by their having descended to us through the channel of sacred history (1835a, 177).

His comment, regarding the bias of the secular to disallow the sacred is clear to detect, just as it is equally clear that the document he claims should be admitted as evidence of a beginning exists. “Now, what we contend is, that however insensible to the force and the value of it — this is a proof which we actually possess” (1835a, 177-178). Of course, the historical testimony Chalmers says we possess is the Bible. “Now, whatever semblance may be found there, the substance of this argument is to be found in the succession of Jewish and Christian writers” (1835a, 180).

He is more than willing to open the Bible to thorough examination, as he is convinced that it is reliable and admissible as evidence for a commencement to the present order of things. His willingness to do this is necessary, as a failure to allow testing of the Bible would leave him guilty of incorporating unverifiable external evidence, called by Furman, the “Revelation ruse” (2005, 54-57). Of this Chalmers writes:

We ask no special indulgence for them. We should like them to be tested in the same way as all other authors; and, ere they are admitted as the chroniclers of past ages, to pass through the ordeal of the same criticism that they do. It is thus that we would trace by its successive landmarks, what may be called the great central stream of that history which stretches from the commencement of our existing world to the present day (1835a, 180-181).

The methods Chalmers employs to test the veracity of the Bible come by comparing its historical record with external sources, examining the stability of the
scriptural record through the ages, then considering the actual writings themselves as internal evidence.

On the side of external testimonies, he cites the work of Hugo Grotius (1583-1645) *On the Truth of the Christian Religion* (Chalmers 1835a, 177) who identifies numerous coincidences between secular and biblical histories that tend, as Chalmers writes, “to show that the most ancient tradition among all nations is exactly agreeable to the religion of Moses” (1835a, 177). While the discovery and translation of the Gilgamesh Epic were not available in Chalmers’ day, he denotes the treatise of Grotius as significant in indicating that the remains of Phoenician histories, from the accounts transmitted by ancient peoples, and traditions preserved in Greek, Latin, and Hebrew, as well as Christian writers, are vast and of extreme importance in demonstrating the trustworthiness of Scripture.

Chalmers points out that Grotius’ survey of sacred and secular writings reveals general agreement to the Bible’s account of a beginning from a state of “chaos out of which our present system was formed, the framing of animals, the creation of man after the divine image” (1835a, 177-178). He continues, for some pages, elaborating on Grotius’ work and continuing with the nearly biblical extrapolation Grotius employs. He writes that further corroboration and harmony exists between secular and sacred history “with allusions to the primitive nakedness of our race, to the innocence and simplicity and happiness of a golden age, to the history respecting Adam's fall and the great longevity of the patriarchs” (1835a, 178). From this, Chalmers turns to the task at hand, a beginning, and jumps ahead to the view of creation and other historical events from Genesis, stating that there is “almost universal tradition of a deluge – with many gleanings of ancient authorship about its minuter particulars, as the ark in which a few of our race were preserved
and other species of animals” (1835a, 179). Yet he does not end here, writing that there are resemblances in secular legends to the Bible on the subjects of the “tower of Babel and the rite of circumcision, the histories of Abraham, Isaac, Jacob, Joseph and Moses” (1835a, 180).

In this, Chalmers begins to reveal his hand in believing the reliability of the Bible.

It is well that in these shadowy reflections, there is none of that incongruity with sacred history which can affect the truth and authority of its information. But when we consider the weight and number of the immediate testimonies that we possess in support of these information, the continuity and strength of their evidence, the marks both internal and external which demonstrate the authenticity of the Bible, we cannot but regard it as a marvellous phenomenon, that inquirers should feel the satisfaction as of a stronger evidence in these hazy reflections of the truth, than when they view it in its own direct and primary radiance (1835a, 180-181).

Chalmers points out that he does not consider the Bible as being the only voice for the recency of the world, but that it is reasonable to consider the testimony of secular writings, as they support the biblical record due to their harmonious parallels. In addition to this, Chalmers considers that the recency of the world is demonstrated by the lack of any record that predates the Bible.

We are far from meaning to insinuate that, beside the direct testimony of the sacred volumes, there are not other memorials of the world’s recency which are worthy of our regard . . . There have many such vestiges been collected and appealed to, such as the recency of
science – the limited range of our historical traditions, mounting upwards to only a few thousand years – the vast capacity of the species for general or collective improvement contrasted with the little progress which they have yet made, and which marks it is supposed but a comparatively modern origin to the human family – the expansive force of population, and yet its shortness still from the territory and resources of a globe, that could accommodate so many hundreds more of millions upon its surface (1835a, 182).

He continues justifying the use of secular histories, because they have been transmitted in a similar fashion through the ages; therefore, they are admissible as evidence being delivered by similar methods. “After all, they are direct testimonies, handed down from one another in the stream of Jewish and Christian authors, which constitute the main strength and solidity of the historical argument for the historical fact of a Creation” (1835a, 183).

Having identified, to his satisfaction that secular writings ostensibly agree with the biblical record for a recent beginning to the world, Chalmers next considers the stability of the scriptural transmission over the millennia. The cornerstone of his argument being the difficulty in believing people would die as martyrs for a legend, and the ability of the Bible to withstand modification or tampering by proponents and opponents during the course of time.

In tracing the course upwards from the present day, we arrive by a firm and continuous series of authors at that period, when not only the truth of the Christian story is guaranteed by thousands of dying martyrs – but when the Old Testament Scriptures, these repositories of the Jewish story, obtained a remarkable accession to their evidence
which abundantly compensates for their remoteness from our present age. We allude to the split that took place between two distinct and independent or, stronger still, two bitterly adverse bodies of witnesses at the outset of the Christian economy. The publicity of the New Testament miracles – the manifest sincerity of those who attested them as evidenced by their cruel sufferings in the cause, not of opinions which they beheld to be true, but of facts which they perceived by their senses – the silence of inveterate and impassioned enemies most willing, if they could, to have transmitted the decisive refutation of them to modern times – these compose the main strength of the argument, for our latter Scriptures (1835a, 183-184).

He continues by considering it a great stamp of authenticity that hostile groups, Jews and Christians, have left the Old Testament in its original form, and that hostility from the Roman Empire never found the deathblow for the New Testament writings. To this, he adds that those:

Who are conversant in the practice, or who have reflected most on the Philosophy of Evidence, know well how to estimate the strength which lies in a concurrence of testimonies where collusion is impossible; and still more where one of the parties, inflamed with hatred and rivalship against the other, could almost choose to disgrace themselves for the sake of involving their adversaries in disgrace and discredit along with them. It is this which stamps a character and a credit on the archives of the Jewish history, whereof it were vain to seek another exemplification over again in the whole compass of erudition (1835a, 184).
Chalmers marvels at those who would contend that the Bible, and specifically the New Testament, is little more than lies and deception considering the hostility of the Roman world who sought its extermination. He makes no direct reference to the resurrection ruse where the apostles stole Jesus’ body from the tomb and reported he had risen from the grave. Hume addresses the idea of intentional cover-ups becoming assumed facts over the years in his critique of miracles (2004). This is something Chalmers does not combat; instead, he holds this objection as a virtual impossibility:

How, in the fierce conflicts of this heated partisanship, did not the secret break out of an imposition on the credulity of mankind, if imposition there was? – and out of this fell warfare among the impostors who were planning upon the world the miracles of the present or the memorials of the past, ought not that very effervescence to have arisen which would have swept the imposture of both religions from the face of the earth? It says everything for the truth both of the Christian story and of the Hebrew record, that they survived this hurricane; and more especially that, ere the observances of the Mosaic ritual were done away, so strong a demonstration should have been given of the national faith in those documents by which the solemnities of the Jewish religion were incorporated with the facts of the Jewish history (1835a, 184-185).

Chalmers reflects on the fact that the biblical writings have been well preserved because the people believed them to be authoritative. Hence, there was never an attempt to modify the Word in order to cast its people in a better light.
Instead, the people viewed the biblical writings in such high regard that great care was taken to ensure their accurate transmission.

These memorials of our race, which they had no interest in preserving – for, mainly, they were but the records of their own perversity and dishonour had been handed down to them by uncontrolled tradition from former ages; and were now embodied in the universal faith of the people. And when two great parties diverged however widely asunder in every article of belief – they held a firm agreement in this, the perfect integrity of at least the historical Scriptures (1835a, 184).

Because of this, Chalmers finds it essentially miraculous that the transmitters ensured that nothing was changed in the biblical writings, adding to its integrity and originality. He says, “had there been a juggle here why did not an enraged priesthood stand forth to expose it” (1835a, 184-185)?

Finally, Chalmers looks at the internal testimony of Scripture. He considers the loftiness of its writing, the harmony of its stories, and the ages and number of its authors all involved in its development. Taken together these all contribute internally to validate the religious writings of the Old and New Testaments to be accurate reflections of history.

There is a great reigning spirit by which the varied authorship of this book is so marked and harmonized – there is such a unity of design and contemplation in writings that lie scattered over the tract of many centuries – there is such a stately and consistent march from the first dawns of this singular history, towards that great evolution of the consecrated land converged and terminated – there is withal such an air of simple and venerable greatness over this earlier record – such
loftiness in its poetry – such obvious characters of truth and sanctity and moral earnestness throughout all its compositions, as superadd the strongest weight of internal testimony to the outward and historical evidence by which it is supported. This may afterwards be more distinctly unfolded – but we cannot even at this stage of our inquiries withhold all references to a Book on whose aspect there sits the expression of most unfeigned honesty, and in whose disclosures we have lessons of the sublimest Theism (1835a, 187).

Having inspected scriptural parallels to secular writings, the accuracy with which Scripture describes historic events confirmed by external sources, the integrity of its transmission through the ages, and the internal structure of its writings, Chalmers concludes that the Bible is a reliable trustworthy chronicler of history. As such, he notes, it should be admitted as evidence along with evidence from nature as a document confirming the recent organization of the world.

Now the truth of the continuous narrative which forms the annals of this wondrous people would demonstrate a great deal more than what we at present are in quest of – that the world had a beginning – or rather that many of the world’s present organizations had a beginning, and have not been perpetuated everlastingly from one generation to another by those laws of transmission which now prevail over the wide extent of the animal and vegetable kingdom. We hold the . . . Scriptures to be authentic memorials of this fact . . . we cannot forbear, amid all that is imagined about the sufficiency of the natural argument, to offer our passing homage to these . . . lights of our Moral Hemisphere (1835a, 186).
Critical Assessment and Comparison to Modern Apologists

Chalmers’ effort to use historical testimony as a surrogate for experiential evidence in proving a beginning to the present order of things is, to say the least, novel. This research found no comparable effort by other apologists to use the historical argument to contend for the beginning of the present order. Even Chalmers himself, after placing this argument first in *Natural Theology*, dispenses with the idea in his *Institutes*, preferring to use more palpable arguments (Chalmers 1849b, 79). Creation scientists use the Bible’s accuracy and reliability to argue for or against various creation accounts, but take creation as a starting position. Rice makes no mention of Chalmers’ historical argument in his dissertation or later articles. Huie offers no extensive critique of Chalmers’ reasoning; however, he does mention Chalmers appears to be unaware he was, in fact, being non-experimental (1949, 90).

Huie’s passing comment is, in fact, the most obvious critique on Chalmers’ use of historical testimony. Chalmers, as Huie writes, claims “history is the vehicle on which are brought to us the observations of other men, whether the path over which it has travelled be a distance in space or a distance in time – that is, whether they whose observations it bears to us are men of other countries, or of by-gone ages” (1835a, 174-175). This position will only work when testimony emanates from first-hand experience, which is a logical impossibility in this situation, unless the human eyewitness predates creation. Contrary to Chalmers’ argument, the collation of independent witnesses from the sacred and secular cannot resolve the dilemma. Historical testimony of the beginnings of the world must arise at some temporal
distance after the actual event, with no way of externally corroborating its origin, save the employment of religious conviction; a point not yet established.

In the end, the sceptic can always maintain that stories of creation are not based on first-hand accounts, being explained away as unenlightened humanity’s search for answers to the unknown. Thus, Chalmers’ historical argument, while frequently employed in arguments for the existence of miracles, cannot be pressed into service in this situation, which explains the absence of its use in apologetic scholarship.

As in his design and geological arguments, Chalmers’ belief in the constancy of nature, while less obvious, is nonetheless foundational to his historical construction. Maintaining that people when presented with historical testimony of past events, will accept these accounts if their integrity is established, resembles his conviction that people have an innate expectation of nature’s constancy. Furthermore, Chalmers’ outline of the reasons, both internal and external, for trusting the testimony of Scripture constitutes his assertion that nature in this situation does not disappoint that expectation. Here again is evidence that Chalmers’ apologetic approach is rooted in his belief in innate tendencies.

**Summary of Chalmers’ Argument for a Beginning**

Combined, Chalmers’ geological and historical arguments for accepting the hypothesis that the present order of things had a definite commencement do not satisfy all objections. His scientific geological explanation relies on limited investigation into the findings of the embryonic field of geology. His approach leaves open the possibility of eternity of matter, a position held by ancient
apologists. His application of the veracity of the biblical record is useful in the
defence of miracles, but is not appreciably helpful for establishing a beginning to the
world.

His treatise has elements that function as a precursor to modern apologists, but his avoidance of *a priori* methodology bars him from further investigation into the concept of actual versus hypothetical infinity. To his credit, Chalmers is willing to take notice of geological findings, as they blend with his scientific orientation. Had the findings of thermodynamics and big bang cosmology been available in Chalmers’ time, he most likely would have recognized their value for Christian defences.

Chalmers considers the first book of *Natural Theology*, containing his presentation of a modified design analogy and argument for a definite commencement of the present order of things, as complete. In the second book, he attempts to prove the beginning of the present order was purposely caused, or designed. Dividing his work, now, does interrupt the unity of the effort, which can contribute to reader confusion.

Had the argument for a commencement to the present order been positioned at the beginning of the second book, it would have been better oriented to lend support to his design analogy. As it stands, his chapter and book divisions lack cohesion, furthering the difficulty with which readers grasp the work’s potential.

Nonetheless, there is, after much investigation, a pattern emerging in his thoughts. He is attempting, by using geology and historical testimony along with material from his second and third books, to build a cumulative case for believing the world is designed. He is confident his current presentation resolves the issue of the eternity of the present order. In this, Chalmers is confident of success; he
believes he has removed the “no beginning” option from consideration, leaving only the option (or the branch of a logic tree as presented in Appendix 1, and the summary of this chapter) that the present order of the world had a beginning.

**Chalmers’ Proof the World was Designed**

In connection with arguing for a beginning to the present order of things, in his *Institutes* and *Natural Theology*, Chalmers also asks the question, just how did this beginning come to pass? Was it the result of purely random or internal processes, or was it the result of intentional design? Of the first two, he rhetorically writes that in the absence of an external designing influence, then it must be “this matter, whether an organized solid or a soft and yielding fluid congregated apparently at random” or it “must have had some properties to certify its existence to us” (1849b, 280-281). Chalmers further articulates that if these explanations can be demonstrated as nonsensical, then the verdict must be placed on the side of the hypothesis that the world’s commencement was designed, in other words, the beginning of the world “lies not in the existence of matter, neither in its laws, but in its dispositions” (1835a, 281).

The plan to refute the suggestion that the world came to order either randomly or because of some internal power is oriented as an attempt to defeat the writings of David Hume. It is Hume’s scepticism on which Chalmers focuses, considering all other atheistic efforts the result of “a mere sentimental weakling when compared with Hume” (1835a, 163).

Deciphering Chalmers’ thinking is facilitated by noting his appreciation for the use of cumulative evidence, as found in Paley and Butler. Following these
apologists’ lead, in which there are attempts to overwhelm readers with a sense of God’s majesty. Chalmers’ writings, as has been observed by others, are structured more for effect than academic precision. Therefore, to assist in understanding his writings, we point the reader to Appendix 1, with the presentation of the logic tree. Looking at the argument as presented, Chalmers’ writings, while intermixed with discussions of beginnings, become recognizable as efforts to prove intentional design in distinction to un-designed random or unknown internal processes.

**Chalmers’ Rebuttal of Un-designed Beginnings**

Before attending to Chalmers’ specific rebuttals, the continuing theistic objections to design by Hume need reviewing. Beginning with the un-designed possibility, Hume, in his *Dialogues*, offers an explanation for the beginning of the world based on infinity and randomness.

A finite number of particles is only susceptible of finite transpositions; and it must happen, in an eternal duration, that every possible order or position must be tried an infinite number of times. This world, therefore, with all its events, even most minute, has before been produced and destroyed, without any bounds and limitations. No-one, who has a conception of the infinite, in comparison of finite, will ever scruple this determination (1990, 92). Obviously, Hume’s reasoning depends on the eternity of matter, in which the present order of things is that ordering, which just so happens to be fortuitously
arranged, to support life. This is one of Davis’ points regarding design argument failings, noting that any coherent assemblage out of an infinite number of possibilities will appear designed, for no other reason than it is the universe in which we live, and there are no others to inspect for comparison’s sake (1997, 100-106). Hume further articulates this point:

Every event, before experience, is equally difficult and incomprehensible; and every event, after experience, is equally easy and intelligible . . . Whenever matter is so poised, arranged, and adjusted, so as to continue in perpetual motion, and yet preserve a constancy in the forms, its situation must, of necessity, have all the same appearance of art and contrivance which we observe at present . . . It is vain, therefore, to insist upon the uses of the parts in animals or vegetables, and their curious adjustment to each other. I would fain know how an animal could subsist unless its parts were so adjusted (1990, 93-95).

Chalmers does not directly refute the metaphysical nature of Hume’s objection. Instead, he focuses on the perceived impossibility of matter and the laws of nature coming together without a guiding principle. Specifically, his rebuttal turns on the concept of collocation, or as he prefers, dispositions. Chalmers maintains that attributing the present order of things to randomness or self-organizing matter is nonsensical, as it confuses the difference between the laws of matter and the disposition of matter (1835a, 189-279). Regarding this distinction, he expounds, “we

76 At this stage, Hume makes no mention of what actually caused the ordering of matter. Instead, he is only looking at the resultant world and remarking that we should not be surprised that it looks designed, because out of all the infinite possible combinations of matter an ordering that supports life and looks designed was bound to occur.
should not only distinguish between the existence of matter and its dispositions, but also between the laws of matter and its dispositions” (1835a, 194).

Huie writes that Chalmers, in his Bridgewater Treatise, credits Sir Isaac Newton with the germ of the idea of dispositions, quoting him as saying, “the system of nature was set in order in the beginning, with respect to size, figure, proportion, and properties, by the counsels of God’s own intelligence” (Chalmers, Cumming 1853, 28-29; Huie 1949, 90-91). Yet, it is in Chalmers’ Natural Theology, in which the concept of dispositions is offered forward as the guiding principle of the relationship between matter and the laws of nature.

Dispositions, then, are for Chalmers the chief marker or identifier of design. “In other words design is not indicated by the mere properties of matter – but by the right placing of the parts of matter” (1835a, 196). Furthermore, he considers them “the chief strength of the natural argument for a God” (1835a, 194).

The main evidence, then, for a God, as far as this can be collected from visible nature, lies not in the existence of matter, neither in its laws, but in its dispositions. This distinction between the laws and the dispositions of matter has been overlooked by theists; or at least not been brought forward with sufficient prominence. Nevertheless, it is essential, not only for the purpose of exhibiting the argument in its strength, but of protecting it from the sophistry of infidels (1835a, 191).

Chalmers provides numerous examples of the exact concept of dispositions before bringing the idea to bear in his rebuttal of Hume’s objections. The following example, taken from just one of these illustrations reveals more precisely his concept of dispositions:
The term collocation, no doubt might express by a single word that
which in this argument is contrasted to “Law.” But a better perhaps
might be found. It certainly does not comprehend all which we wish
to include in it as marking design at its first setting up. It is not the
mere placing of the parts of matter which affords decisive indication
of this, but of parts shaped and sized in a most beneficial way – beside
being endowed with the very forces or motions that were the most
suitable in the given circumstances. Beside the original placing of
Jupiter and his satellites, we must advert in the argument for
intelligence to the original direction and intensity of the motions
which were communicated to them. Beside the situation of the parts in
an anatomical mechanism, reference must be had both to the form and
magnitude of the parts. Perhaps then, instead of the collocations, it
were better, as more expressive of whatever in matter might be
comprehended under the head of its arbitrary arrangements, that we
contrasted the dispositions of matter with its laws (1835a, 193-194).

The importance he places on dispositions, concerning proving design, is
demonstrated in his Institutes. In this treatise, he does not begin with the watchmaker
analogy; instead, he argues for God from the concept of dispositions. Using
dispositions, Chalmers wades into the scientific arena, and incorporates observations
and inductive reasoning into his writings. The beneficial nature of this approach
warrants a pause for him to further comment on the weakness of Clarke’s
cosmological and Aquinas’ teleological arguments.

We do not stop to consider those arguments for the Divine existence,
which however extolled and valued in their day, have since not only
met, what appears to us, with a solid and conclusive refutation, but have been set aside by general consent as baseless and unsatisfactory. But besides this, there is another class of arguments which we feel equally inclined to discard. Besides the *a priori* there is a certain *a posteriori* style of reasoning, which to our apprehension is alike invalid and meaningless with the former. It begins with matter as an effect, and would thence reason upwards to a cause or maker for it. But then it views matter not in its beneficial adaptations, not in any of those goodly arrangements which bespeak design, and so a designer; but it views matter barely as existing, and from this property alone would it infer an antecedent mind which had summoned it out of nothing (1849b, 73-74).

Although Hume is Chalmers’ chief apologetic antagonist, when it comes to the subject of recognizing design he concentrates his attentions on the gravitational discoveries of French mathematician Pierre-Simon Laplace. He articulates that Laplace’s theory of the effect gravitational pull has on planetary motion appears sufficient to explain eternal stability in the cosmos, but does not account for the universe’s initial formation. He writes, “Laplace would have accredited the law, the unconscious and unintelligent law, that thing according to him of blind necessity, with the whole of this noble and beautiful result” (1853, 31). For Chalmers, the fortuitous disposition of matter with its laws is indispensable for explaining the initial ordering of the world. Laplace’s faith in the blind workings of gravity cannot, Chalmers continues, account for the initial ordering.

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77 French mathematician Pierre-Simon Laplace discovered that a gravitational pull was a constituent part of matter; he claimed this finding ensured the stability of the universe without recourse to divine intervention.
Laws of themselves would announce nought whatever of the hand or mind of an artificer. The truth is, that with laws and without collocations or dispositions, we should still have but a heaving, turbid, disorderly chaos – whereas it is by the collocations as adapted to the laws that the only decisive indications of counsel and contrivance are given (1835a, 194-195).

His critique of La Place’s hypothesis is that gravitational pull alone, and by extension the mere existence of the laws of nature, cannot serve as an explanation for the assemblage of the material elements of the world. This argument serves as his rebuttal to Hume, even though he is not specifically mentioned. The outworking of Chalmers’ critique is that Hume’s design objection, based on randomness, is nonsensical. He cannot conceive of a situation in which matter and the laws of nature are collocated to bring about even the slightest semblance of order. “Things must be rightly shaped and rightly proportioned; and besides, looking to laws and forces alone, one can imagine that were all the other dispositions of our present actual economy to remain as they are, a mere change in the intensity of these forces would be the occasion of many grievous maladjustments” (1835a, 192). In essence, in order for there even to be an ordering of matter in the first place, there must be something that causes matter and the laws of nature to be beneficially configured, to assemble.

Chalmers, as is his nature, repeatedly makes the point in order to emphasize the cumulative force of his position. He writes, “we can imagine all the present and existing laws of matter to be in full operation; and yet, just for the want of a right local disposition of parts, the universe might be that wild undigested medley of things, in which no one trace or character of a designing architect was at all discernible” (1835a, 195). Again, and in more detail:
Bodies may have gravitated from all eternity through the wide expanse of nature, as they do now. Light may have diffused itself by emanation from various sources with its present velocity. Fluids may have commixed with solids; and each class of substances have had the very properties which they possess at this moment. All the forces whether of mechanics or of chemistry, or even of physiology, might have been inherent in the various substances of nature; and yet in the random play of all these physical energies, nothing still but chaos might have emerged (1835a, 195).

Shifting to the notion that matter has the potential to self-assemble, we restate Hume. “For ought we can know a priori, matter may contain the source or spring of order originally within itself” (1990, 56). Then, again from Hume’s *Dialogues*, “an ideal system, arranged of itself, without a precedent design, is not a whit more explicable than a material one, which attains its order in a like manner; nor is there any more difficulty in the latter supposition than in the former” (1990, 74).

Chalmers simultaneously addresses this option with his rebuttal of random ordering, writing, “there is not one law of matter which now falls under observation of inquirers that, if unaccompanied with such a collocation as shall suit the parts of matter to each other, might not have had in the place in the random and undirected turbulence of a chaos” (1835a, 196). Using the same reasoning as he does against random ordering, Chalmers claims that without dispositions the universe would not have begun.

Laws without collocations would not exempt the universe from the anarchy of chaos. All the existent laws of the actual universe would not do it – and, were the present collocations destroyed, we see
nothing in the present laws which have even so much as a tendency to restore them (1835a, 203).

He believes both hypotheses – random ordering and self-organization – are countered by his presentation of dispositions. His arguments again demonstrate a love of science and Scottish philosophy. His views on dispositions, as in his other apologetics, are based on his foundational presupposition of humanity’s expectation of nature’s constancy being harmoniously conjoined with nature’s fulfilment. He holds that the mind innately presumes upon the existence of dispositions, as the mind needs no training, as in the watchmaker analogy, in recognizing design. He writes, “In every work of human fabrication, they are the dispositions more especially the collocations, and the dispositions alone, which announce the design” (1835a, 198). Furthermore, as demonstrated, Chalmers matches humanity’s innate expectation with the harmonious situation that no law of nature has been found that counters that expectation. Thus again, the apologetic against un-designed explanations for the present order of things emanates from his foundational concepts of nature’s constancy and the presence in the human mind to presume upon that constancy.

Confident in the power of his reasoning, Chalmers considers the un-designed option, successfully blocked. Nonetheless, for completeness sake, he includes, in his numerous apologetic efforts, positive support for the designed option, blending the affirmative with rebuttals of un-designed beginnings. It is his evidence in support of design, which this research now attends.
Chalmers’ Argument the World was Designed

As mentioned, Chalmers’ positive support for design coexists with his various un-designed rebuttals. Although, his presentations are intertwined, there are two distinct approaches recognizable in his writings.

The first supporting argument Chalmers uses for design leans upon his embryonic concept of irreducible complexity. He writes concerning the human ear, “how came such a complex anatomy into being, made up of more than ten thousand parts, the want of any one of which would bring discomfort or utter destruction on the creature” (1835a, 206). Then, turning to the human eye, much as Paley does, he writes, “what a complex and crowded combination of individual elements must first be effected, ere we obtain the composition of an eye” (1835a, 219). “Into that system of means which has been formed for the object of seeing, there enter at least twenty separate contingencies, the absence of any one of which would either damage the proper function of the eye, or altogether destroy it” (1835a, 280-281).

Chalmers further writes that the advantageous collocation or dispositions of an irreducible set of essentials belies explanations based upon the causal actions of random assemblages of components or the transmutation (i.e., evolution) of organisms.

Against randomness, he writes, “of the twenty independent circumstances which enter into beneficial concurrence in the formation of an eye, that each of them should be found in a situation of optimism, and none of them occupying either an indifferent or hurtful position – it is this which speaks so emphatically against the hypothesis of a random distribution, and for the hypothesis of an intelligent order” (1835a, 283). Furthermore, he contends, “if ever a time was, when the structure and
dispositions of matter, under the present economy of things were not – there is no force known in nature, and no combination of forces that can account for their commencement” (1835a, 225).

With respect to the transmutation of organisms, Chalmers emphatically states, “there is no transmutation of species” (1835a, 262). He cites the lack of existing subspecies or abortive efforts in the fossil record, maintaining that the pre-Darwinian theory of evolution\(^\text{78}\) has no empirical basis for support. Of this he writes,

Of almost all our living races it may be said that we do not perceive so much as a rudimental or abortive tendency to it – whereas, had there been an equivocal generation, and had our present animal and vegetable races originated in such a lucky combination as favoured their complete development, we should for one instance that succeeded have witnessed a thousand frustrated in the progress – all nature teeming as it were with abortions innumerable; and for each new species brought to perfection under our eyes, we should have beheld millions falling short at the incipient and at all the progressive stages of formation, with some embryo stifled in the bud, or some half-finished monster checked by various adverse elements and forces in its path to vitality (1835a, 262-263).

Chalmers’ second positive support for design resembles modern fine-tuning arguments, focusing on the dispositions of matter and laws of nature that establish the necessary conditions for the present economy. He points to the precision with which the laws of nature and the matter of the universe are finely tuned to make life

\(^{78}\) The idea of the evolution and mutation of species from more primitive forms had been around since the ancient Greek philosophers. These early ‘pre-Darwinian’ theories conceived of the idea of the transmutation of species, but required a guiding influence. It was Darwin who proposed the idea of natural selection as the natural mechanism that avoided the need to appeal to an external agent (Behe 1996: 37-67).
possible. From astronomy, he writes, “things must be rightly shaped and rightly proportioned; and besides, looking to laws and forces alone, one can imagine that were all the other dispositions of our present actual economy to remain as they are, a mere change in the intensity of these forces would be the occasion of many grievous maladjustments” (1835a, 192). Continuing with astronomy, Chalmers contends, “a different centrifugal influence on each planet of our system might have given to each an elongated instead of a nearly circular orbit, and the benefits of such an orbit cannot therefore be referred to collocation alone” (1835a, 193). Again, and with more specificity, “if the law of mutual attraction between its bodies had deviated by a thousandth part from that which actually obtains, the mutual disturbances which take place among the planets themselves would at length have deranged the whole economy of their movements” (1835a, 221).

Of the beneficial aspects of fine-tuning signalling design, Chalmers summarizes his views,

There is, no doubt, a certain limit, beyond which if the changes were to proceed, they would prove incompatible with life, and so expunge the specimen altogether from observation – but how comes it, that between this limit and the actual state of every existing species we see nothing awkward, nothing misplaced, nothing that admits of being mended – without one of those inaptitudes or disproportions which either a blind nature, or a sportive and capricious chance, must have infallibly and in myriads given rise to? How comes each part to be in such exquisite harmony with the whole (1835a, 268)?

For Chalmers the evidence is clear, the present order of things, to include life, cannot be the result of random assemblages or some internal power within
matter or the laws of nature. His analysis of the fortuitous and finely tuned disposition of matter with the laws of nature bespeaks of the overwhelming probability in favour of a world that is the result of design. He writes,

The chief then, or at least the usual subject-matter of the argument, is the obvious adaptation wherewith creation teems, throughout all its borders, of means to a beneficial end. And it is manifest that the argument grows in strength with the number and complexity of these means. The greater the number of independent circumstances which must meet together for the production of a useful result-then, in the actual fact of their concurrence, is there less of a probability for its being the effect of chance, and more of evidence for its being the effect of design. A beneficent combination of three independent elements is not so impressive or so strong an argument for a divinity, as a similar combination of six or ten such elements. And every mathematician, conversant in the doctrine of probabilities, knows how with every addition to the number of these elements, the arguments grow in force and intensity, with a rapid and multiple augmentation – till at length, in some of the more intricate and manifold conjunctions, those more particularly having an organic character and structure, could we but trace them to an historical commencement, we should find, on the principles of computation alone, that the argument against their being fortuitous products, and for their being products of a scheming and skilful artificer, was altogether overpowering (1835a, 217-218).
Chalmers’ affirmation of design, emanating from the concept of collocations or dispositions, is, in his estimation, the chief argument for a deity. He writes in the *Institutes*, “Herein lies the main strength of our argument for a God, as furnished by the contemplation of external nature” (1849c, 74).

In all of Chalmers’ works, he labours to argue for a beginning and purposeful design to the present order. Nonetheless, his statement of the primacy of dispositions as the foremost argument for an intelligent designer is illuminating. When one considers the volume of material he offers to the case of Natural Theology, to say that the disposition of matter with the laws of nature is the chief argument for God is to place this argument at the pinnacle of his teleological endeavours.

Both Huie and Rice identify the importance Chalmers places on dispositions in their dissertations, yet neither embarks upon a detailed critique of the methods (Huie 1949; Rice 1966, 161-164). Rice cautiously disagrees with Chalmers’ optimism, writing,

The thrust of Chalmers’ position reflects a major thread in enlightenment thought concerning natural theology. The practical impulse of the Enlightenment focused upon the purposiveness of things in the created order. This was conceived as more than mere utility. It was seen in an almost romantic sense – a marked sensitivity for the detailed workings of nature and for the ends achieved in organic structures (1966, 163).

Following this statement, Rice takes his critique no further, shifting his research to the exploration of Enlightenment thinking identifiable in Chalmers’

Chalmers’ argument in support of design in the present order of things, like his argument for a definite beginning, is rooted in his philosophical orientation. He prefers inductive *a posteriori* arguments, and relies on his presupposition regarding nature’s constancy. His use of dispositions utilizing astronomical and biological examples, which resemble the offerings of Paley and Butler (Paley 2006; Butler 1900; Paley 1855), is an attempt to build an inductive case in favour of design. He points to the lack of abortive transmutations in the fossil record, the highly specialized nature of organic structures advantageously orienting, the precision with which the laws of nature and matter are collocated, the absence of a single organizing law of nature, and the unlikely possibility of structures randomly assembling in beneficial patterns as being consistent with a world that was designed. The evidence, according to Chalmers, is as expected with the assumption of design, and, furthermore, the constancy with which nature presents this evidence does not disappoint that expectation. Consequently, it is clear that Chalmers’ reliance on dispositions reflects a methodology that is again rooted in his foundational presupposition of nature’s constancy being harmoniously satisfied by the reality of nature’s consistent behaviour.

A potential issue with Chalmers’ argument stems from jumping the gun to God, as the intelligence behind design. In all his presentations, he writes that collocations or dispositions form the chief argument for a God (1853; 1835a; 1849b). This conclusion, however, is not sufficiently supported by his argument. To
illustrate, if the premise that the present order of things had a beginning is assumed, then Chalmers’ methodology is constructed as follows:

1. The present order of things had a beginning,

2. Un-designed beginnings are highly improbable,

3. Therefore, it is more probable that the present order of things was designed as opposed to un-designed.

In this case, if Chalmers’ critique of un-designed beginnings is believed, then the most that can be inferred is that the present order of things is more likely the result of purposeful design than un-designed explanations. From this, the hypothesis that there is some sort of intelligence behind the design in question is as far as the evidence permits. To make the leap to the Christian God, or for that matter, a theistic deity, attributes more to the argument than is permissible.

While the above construction uses probabilistic language in steps 2 and 3, Chalmers is less careful in his assessment of the evidence for design. He concludes that the absence of any known scientific law, which can explain dispositions, is sufficient to indicate there is no law. He writes, “there is not one law of matter which now falls under observation of inquirers that, if unaccompanied with such a collocation as shall suit the parts of matter to each other, might not have had in the place in the random and undirected turbulence of a chaos” (1835a, 196). To assume that the lack of current discoveries implies no such law exists is to overstate the advancement of science of the 1830s, and to improperly characterize his argument as having exhausted or proven by brute force the nonexistence of any such unknown hypothetical law; in essence, it commits the informal fallacy of the argument from ignorance or silence.
While Chalmers’ logic is insufficient to be counted as a successful rebuttal of Hume, he does, as in his design analogy, and argument for a beginning offer several concepts he claims are novel for his time, and as we have discovered have similarities to works of apologists today. These novel ideas are again the concept of irreducible complexity, used in his design analogy, and the fine-tuning of matter and the laws of nature to precise values to permit life.

While neither the current microchemist Michael Behe nor the nineteenth century Thomas Chalmers invented the concept of irreducible complexity, Chalmers comes closer to Behe’s – the recognized authority on the subject – definition than William Paley does. Paley focuses on the fine-tuning and adaptation of individual parts for the express purpose of accomplishing a goal. However, he does not broach the notion of the mathematical impossibility of a minimal set of components, essential in the purposeful operation of an organism, assembling randomly, or transmutating from a lifeless structure (Paley 2006). While Chalmers’ inkling of irreducible complexity was at the macro level, it has similarities to the idea promoted by Behe. Chalmers, like Behe, recognizes that the identification of a minimal set of independent life-permitting essentials creates significant challenges for un-designed explanations. The similarities between the two are outlined in the side-by-side comparisons given in the following table.

79 In 1675, John Wilkins, Bishop of Chester, having studied first and second century writers on the nature of beginnings, writes, “Now to imagine, that all these things, according to their several kinds, could be brought into this regular frame and order, to which such an infinite number of Intentions are required, without the contrivance of some wise Agent, must needs be irrational in the highest degree” (1675, 82).
Table 6.1: Comparison of Behe and Chalmers’ Definitions of Irreducible Complexity.

| Behe: “a single system composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of one of the parts causes the system to effectively cease functioning” (1996, 39). | Chalmers: “Into that system of means which has been formed for the object of seeing, there enter at least twenty separate contingencies, the absence of any one of which would either damage the proper function of the eye, or altogether destroy it” (1835a, 280-281). |

Chalmers, like Behe, recognizes that it is not just the assembling of a minimal set of essentials that indicates design, but the proper disposition of matter with its laws, something Behe calls minimal function, which indicates intelligent design.

Table 6.2: Comparison of Behe and Chalmers’ Concept of Dispositions, or Minimal Function.

| Behe: Irreducible complexity also requires the feature of minimal function. That is, “A simple list of components of a mousetrap is necessary, but not sufficient, to make a functioning mousetrap,” the system “must have minimal function: the ability to accomplish a task in physically realistic circumstances” (1996: 45). | Chalmers: “We mean not only that the parts of matter have been placed in right correspondence to each other: but that these parts, so placed, have been rightly sized and rightly shaped, for some obviously beneficial end of the combination in question – and moreover that forces of a right intensity and direction have been made to meet together so as to be productive of some desirable result” (1835a, 259-260). |

Chalmers, as this research shows, weds the idea of dispositions with irreducible complexity to argue for the high probability of intelligent design being the cause of the world’s beginnings. Chalmers employs these concepts, much as Behe does, to argue against the contention of transmutation or the evolution of species (Behe 1996). Both Chalmers and Behe claim their arguments demonstrate
the necessity of intelligent design to serve as adequate explanations for life. Furthermore, both arguments, Chalmers’ before 1859 and Behe much later, would appear to satisfy Darwin’s statement in his *Origin of Species*, “If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous successive, slight modifications, my theory would absolutely break down” (2009, 154). Outside of these observations, there are no other substantial similarities between Chalmers’ and Behe. A conclusion that should not be surprising given the nearly two hundred year spread between their lives and the vastly different spheres in which their works are found.

Irreducible complexity is not the only concept found in modern apologetics of which Chalmers touches. In his works, he frequently ventures into a discussion of an idea that resembles the fine-tuning form of teleological apologetics found today.

Robin Collins, author of numerous articles and books on the method, defines the fine-tuning argument as the conjunction of two claims: 1) the range of life-permitting constants of physics is small when compared to the possible options; and 2) this small range is also the only range in which life is permitted (2005, 179). Regarding this, he writes, “Many of the parameters of physics and the initial conditions of the universe are balanced on a razor’s edge for intelligent life to occur” (2005, 175-176).

Collins’ argument demonstrates that the theistic design hypothesis is more probable than the atheistic single-universe hypothesis. Given this, he states the fine-tuning argument as follows:

P1: The existence of life-permitting values for the constants of physics is not epistemically improbable under theism.

80 According to Collins, the view that there is only one universe, and it is ultimately an inexplicable “brute” fact that the universe exists and is fine-tuned, serves as the atheistic single-universe hypothesis (2005:176).
P2: Because of the fine-tuning, the existence of life-permitting values for the constants is epistemically very improbable under the atheistic single-universe hypothesis.

C: Since both theism and the atheistic single-universe hypothesis were clearly not constructed merely to account for the fine-tuning data, it follows from premises P1 and P2 and the restricted prime principle\(^82\) that the fine-tuning data provide strong evidence in favour of the design hypothesis over the atheistic single-universe hypothesis (2005, 179).

The importance of the “tuning” of life-permitting values in P1 and P2 is essential to Collins’ argument. For example, he mentions that the probability of gravity randomly falling within the life-permitting range from the atheistic single-universe hypothesis is roughly \(1/10^{31}\), an “astronomically low probability,” or epistemically improbable (2005, 182). Chalmers, who does not possess the same scientific information, however, alludes to this challenge of atheistic hypotheses when he writes, “if the law of mutual attraction between its bodies had deviated by a thousandth part from that which actually obtains, the mutual disturbances which take place among the planets themselves would at length have deranged the whole economy of their movements” (1835a, 221). In the same vein, as Collins’ documentation of fine-tuned, life-permitting values in his other works\(^83\), the bulk of Chalmers’ second book of *Natural Theology*, presents numerous examples of fine-

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81 Utilizing Bayesian probability, one hypothesis is more probable than another hypothesis if the probability of the current evidence given the first hypothesis is greater than the same evidence given the second hypothesis. Being epistemically probable means that the idea or concept is not illogical, and can be judged to have a nonzero probability of being true, whereas being epistemically improbable implies the idea or concept has an extremely negligible probability of being true (Collins 2005: 177-178).

82 The restricted prime principle is an attempt to avoid counter examples by stating that the hypothesis under examination was not artificially constructed to match the evidence. In other words, the hypothesis should be constructed prior to and independent of evidence or observation (Collins 2005: 177-178).

tuned parameters. In these pages, Chalmers reviews the intricate orbits of the planets, the precise relationship of the earth to the sun, the innumerable diversity of life on earth, and the unfathomable intricacies of the human anatomy, all of which, he argues, requires the precise disposition of matter with laws specifically set within narrow limits to account for the universe and enable life. He emphatically states, “the laws of nature may keep up the working machinery – but they did not and could not set up the machinery” (1853, 15-16).

Collins goes on to address Hume’s objections to fine-tuning in his writings, identifying four potential impediments. The first is Hume’s objection that fine-tuning teleology, at its core, depends on the validity of extending an analogy, based on the human concept and idea of design, to the universe. As such, it is, according to Hume not intuitively obvious that the universe has sufficient similarities to human artefacts. Second, is the objection that fine-tuning cannot exclude explanations that do not depend on the God of theism (i.e., a committee or alien intelligence is possible). Third, is the objection that the existence of evil or sub-optimal designs allows only for a designer significantly inferior to the benevolent God of theism. Fourth, is the well-known objection coming in the form of a question, “who designed God?” (2005:183-192).

Each of these is addressed in kind by Collins, who maintains that his form of the fine-tuning argument is insulated from such objections. Chalmers, on the other hand, does not address each issue in the same structured sense. His appeal to fine-tuning is not presented as a distinct argument, but intended as an example of the validity of his concept of dispositions. Of Hume’s first objection, Chalmers design analogy and argument from dispositions serve as the rebuttals; yet, it is not connected to his fine-tuning comments. Chalmers does not appear to grasp Hume’s
second objection, jumping the gun and proposing God as the causal power behind design.

Regarding the question of the origin of God, Chalmers’ argument that the present order of things had a definite beginning renders the issue of an infinite regress of worlds and its designer moot.

Interestingly, Hume and Chalmers find agreement in believing the core issue is not the age of earthly matter, but how the present order of the world came into being. In other words, what was its cause? Hume contends that the design argument’s reliance on God (i.e., the mental world or the universe of ideas) as the first cause degenerates into the infinite sequence theory, because the question of where God comes from must be addressed.

As a further critique, Chalmers does not indicate that Hume’s very definition of causality is what makes possible the question: who caused God? If Chalmers had pointed out that causality could be defined as every effect has an antecedent cause, then he would have agreed with a long list of philosophers who contend there is no epistemological requirement that the cause of the universe be itself an effect. There is nothing illogical, as many assert, in having an eternal uncaused first cause that is not an effect (Sennett, Groothuis 2005; Sproul et al 1984; Dembski 1999; Johnson 1993; Sproul 1994, 234; Clark 2004; Woodward 2003). However, this line of reasoning would be utilizing a priori concepts, something Chalmers avoids.

Chalmers addresses the question of evil in the later pages of Natural Theology and Institutes, but in neither does he connect the discussion back to this precise construct. The third objection, the nature and character of the designer, is not covered here, being addressed in the next portion of this chapter.
Chalmers goes no further with the fine-tuning argument as a standalone apologetic. He uses the idea to add emphasis to his concept of dispositions. He does enter into the discussion and has elements that do touch on the concepts and offer rebuttals to many of the objections Collins presents. While incomplete, Chalmers does show sophistication beyond Paley, and it is interesting that again, he presents ideas that are found in modern works of classical apologetics. Of a final note, although he is rarely cited, Chalmers’ illustration of dispositions was well received by one well-known philosopher of the nineteenth century. The notable Englishman John Stuart Mill (1806-1873), praised Chalmers’ insight regarding the difference between matter and the laws of nature, writing, “the complex laws of causation are thus resolved into two distinct kinds of elements: the one, simpler laws of causation, the other (in the aptly selected expressions of Dr. Chalmers) collocations; the collocations consisting in the existence of certain agents or powers, in certain circumstances of place and time” (1843, 306).

Summary of Chalmers’ Defence of Design

Chalmers, content with his presentation of a teleological argument, in which the present order of things is shown to have a beginning and that beginning is the result of purposeful design, moves to a discussion of the nature of the designing power, a subject taken up in the next portion of this research. However, considering only Chalmers’ defence of purposeful design, it must be admitted it is unsatisfying as an effort to refute Hume.

Chalmers does jump the gun and label the designer God. His error, in presuming that the absence of a discovered unifying law of nature implies one does
not exist, is again an issue. Nonetheless, Chalmers’ incorporation of the concept of dispositions reflects significant originality in comparison to Paley’s writings. His argument has elements of irreducible complexity and fine-tuning, which has connections to modern researchers.

This research shows there is a logical connection to his argument for a definite commencement to the present order of things, something not obvious in his writings. Chalmers, as noted, intends to uplift the reader, rather than present merely academic treatises. His lack of logical structure is an impediment to their wider reading. Finally, Chalmers’ foundational philosophy of humanity’s expectation of nature’s constancy harmonizing with the fact of the constancy is on display. This underpinning, again, drives Chalmers’ thinking, directing the path of his apologetic method to focus again on the inductive implementation of Common Sense philosophy.

While the connection is not specifically articulated, the latter chapters of his Natural Theology and Institutes transition to an exploration of the nature of the designing cause. It is to this subject the next portion of this chapter turns.

**Chalmers’ Discussion of the Nature of the Cause**

When it comes to the nature of the cause behind the formation of the world, Chalmers employs more structure than the preceding arguments. Having offered support for the view that the present order of the world had a beginning and that beginning was the result of design, there are noticeable shifts towards efforts to describe the characteristics of the cause. In his Natural Theology and Bridgewater Treatise, he provides a series of arguments based on evidence that attempt to identify
the cause as the Christian God. Through arguments that at times have a hint, at least as far as Chalmers is concerned, of an *a priori* orientation, his works terminate with a *personal* designing cause who possesses attributes of omniscience, omnipotence, and benevolence, as opposed to an impersonal force.

Chalmers begins his analysis, dealing with the delayed question Hume offers in his *Dialogues*, “who caused God?” After this, he embarks on a lengthy presentation of “facts” and analyses that lead him to conclude the cause to be the God of the Christian faith.

*Argument for the Eternality of the Cause*

When the question turns to the origins of the cause of the world, Chalmers writes rhetorically, “the Atheist does not perceive why a material economy as exemplified in the world might not fall into order of itself, as well as a mental economy as exemplified in God” (1835a, 165). More specifically, he indicates that the question on the table is, if the world is designed by an external cause, then who or what caused the cause? Or to be more specific, ‘who made God?’ Of this he writes,

If Nature is clearly made out to be a consequent, then it might be admitted, that the adaptations which abound in it point to an intelligent and designing cause. But this remains to be proved; and till this is done, it is contended, that it is just as well to repose in the imagination of Eternal Harmonies in a Universe, as of Eternal Harmonies in the mind of one who framed it (1835a, 162-163).
Although he is not directly quoted, Chalmers again has Hume in mind. Regarding this specific question, Hume famously writes in his *Dialogues*:

> How therefore shall we satisfy ourselves concerning the cause of that being, whom you suppose the author of nature, or, according to your system of anthropomorphism, the ideal world, into which you trace the material? Have we not the same reason to trace that ideal world into another ideal world, or new intelligent principle? But if we stop, and go no farther; why go so far? Why stop at the material world? How can we satisfy ourselves without going on *in infinitum*? . . . It was never more applicable than to the present subject. If the material world rests upon a similar ideal world, this ideal world must rest upon some other; and so on, without end . . . When we go one step beyond the mundane system, you only excite an inquisitive humour, which it is impossible to ever satisfy (1990, 72).

The response to this question leans upon evidence, as required by Common Sense philosophy. Chalmers sees the reason one can presume the world had a commencement, but not the cause of the world’s beginning, is that the latter has no evidence to suggest that opinion. “The precise difference between the two is that we have had proof . . . of a commencement to our present material economy – we have had no such proof of a commencement to the mental economy which may have preceded it” (1835a, 165).

This short phrase entails the entirety of Chalmers’ rebuttal to the proposition of an infinite regress of beginning causes. He turns to empirical evidence, maintaining that the world has left vestiges of it having had a beginning. However, when it comes to the origins of the initiating cause, all one can say is there is no
evidence it was anything other than what it is. Of course, this is assuming the cause of the world can be referred to as a something, which has not yet been demonstrated. It is interesting that Chalmers is turning Hume’s objection to the teleological argument – that no one has seen God designing a world – back on Hume. His argument is that geology and historical testimony give evidence to the present order of things having a beginning, and dispositions indicate the beginning was designed or as he would prefer, intentionally caused. However, there is no such evidence that requires or indicates that the nature of the cause had to have a beginning, thus one should not assume the cause had a beginning.

He expands on this thought, contending it is logically permissible to consider the eternal existence of the cause, because we have no evidence to suggest there ever was a time when this mental economy (a classification not yet demonstrated) was not.

There is room for the question, how came the material system of things into its present order? – Because we have reason to believe that it has not subsisted in that order from eternity. There is no such room for the question, why might not the material have fallen into its present order of itself, as well as the mental that is conceived to have gone before it? We have no reason to believe that this mental economy ever was otherwise than it now is. The latter question presumes that the mental did fall into order of itself, or which is the same thing, that the Divinity had a commencement. In the material economy we have vestiges before our eyes of its having had an origin, or in other words of its being a consequent – and we have furthermore the experience that in every instance which comes under full
observation of a similar consequent, that is of a consequent which involved as the mundane order of things does so amply, the adaptation of parts to an end, the antecedent was a purposing mind which desired the end, and devised the means for its accomplishment (1835a, 165).

His argument is noticeably circular. He asks the question: why is it not possible for the cause of the world to be caused or have come together by itself? To which he answers, because there is no such evidence to indicate that it was anything other than it is now. The error he makes is that the cause he is arguing for has yet to be shown to be personal, or that it is a “mental economy,” to use his words.

His argument makes no mention of Hume’s words, “like effects prove like causes” (1990, 75). If he had considered this, then he may have argued thus, since human artefacts are caused by a mind, then, if it can be shown the world is designed, it is reasonable to presume the world designer has mental capabilities. Chalmers considers none of this; instead, he makes the supposition that there is no metaphysical contradiction in maintaining the possibility of an eternal self-existent cause since there is no evidence to the contrary.

To complete this argument Chalmers would need to venture into the realm of *a priori* apologetics of the necessity of a self-existent being, an argument resembling Samuel Clarke and some of Thomas Aquinas’ writings. He does mention that there have been previous efforts to distinguish between the need for the world to have a commencement, and no such need for its cause to have a beginning. “At the same time we must admit that on this question between the eternity of matter and the eternity of mind, there has been advanced, on the Theistical side of the controversy, a deal of speculation and argument with which our understandings do not at all coalesce” (1835a, 167). The previous efforts Chalmers is speaking of come from Sir
Isaac Newton, Dr. Samuel Clarke, William Paley, and William Wollaston. Of these, he is not convinced, pointing out “we may state that in general we feel no sympathy of understanding with much which has been written on the side of Natural Religion” (1835a, 167-168).

Chalmers considers Paley’s view “that wherever we meet with an organic structure where there is the adaptation of complicated means to an end, the cause for its being must be found out of itself and apart from itself” (Chalmers 1835a, 169) to be wholly unsatisfactory. Paley contends that living organisms (humans, plants, and animals) are complicated organic structures with means to an end, thus their cause must come from the outside; whereas God, on the other hand, is not organic; therefore, it does not require an explanation outside of itself. He does not believe Paley’s explanation is well structured, indicating,

It does not carry the instant assent of a proposition that announces at once its own evidence. Neither, although we think it a very impressive consideration, would we insist on the argument by which it is attempted to be proved, that although the existence of each organic being can be accounted for by derivation from a parent of its own likeness – yet we are not on that account to acquiesce in the imagination of an infinitude for the whole race, as if the line of successive generations reached backward to eternity (1835a, 169).

Continuing with the previous train of thought, Chalmers builds his a posteriori position citing the lack of evidence to the contrary as functioning as evidence, which demonstrates that for all we know the presupposed mental economy is unchangeable.

84 William Wollaston (1659-1724) wrote a popular book in 1722 entitled *The Religion of Nature Delineated*. 

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We have ample reason for regarding this world as a posterior term, and seeking after its antecedent. But we have no such reason for treating this antecedent as a posterior term, and seeking for its prior term in a higher antecedent. The one we see to be a changeable and a recent world. The other for aught we know may be an unchangeable and everlasting God (1835a, 166-167).

Here he adds the characteristic of unchangeable, or immutability, to the attributes to the cause of the world. Combining these he now arrives at an eternal unchangeable mind referred to as God. He recaps, writing,

So that when the question is put – Why may not the material economy fall into order of itself, as well as the mental order which we affirm to have caused it? – Our reply is that so far from this mental economy falling into order of itself, we have yet to learn that it ever had to fall into order at all. The one order, the material, we know, not to have been everlasting. The other, the mental, which by all experience and analogy must have preceded the material, bears no symptom which we can discover, of its ever having required any remoter economy to call it into being (1835a, 167).

Chalmers has very little else to say on the subject, likely arising from his reticence to use a priori reasoning. In the end, he conjectures that the cause of the present order of things is an eternal unchangeable mind, something personal like the Christian God.
The Personal Nature of the Cause

Having developed the notion of an eternal unchangeable mind, Chalmers turns again to dispositions to add intelligence. “The wisdom therefore that appears in the formation of an eye is not properly indicated by the law but the adaptation of the parts of this organ to the law” (1835a, 197). In a similar fashion, he comments that the disposition of matter is not only the strongest, but also the sole argument for the designer to have a mind that superintends over all. While, he does not use the words omnipresent or omniscient, this is evidently the intention of referring to the wisdom and the presiding mind, who is the cause, the intelligent designer over all creation.

We do not need to demonstrate the non-eternity of matter. We do not need to involve ourselves in any question about the essential and the arbitrary properties of matter. We make our single appeal to its dispositions. It is in these that we behold the finger of God – and in these that there is most unequivocal impress of the mind which presided over the formation of all things (1835a, 201).

These attributes should be enough to take the position that the cause of the present order of things, having a mind, is an eternal, unchangeable, omniscient, omnipresent personal cause rather than an impersonal cause. Chalmers never comes right out and makes the statement that the cause of the beginning of the present order of things is personal. Somewhere in his argument, he passes from the unknown to the known. His reserve at this point fades away, and the words God and Creation become commonplace. He does comment in the third, fourth, and fifth books of Natural Theology, returning to the abstract idea of the cause or at least using the term mind in an effort to continue to explore the character of the personal cause. The
focus though is different, considering how dispositions of the mind of humanity reflect on the moral character of the intelligent designer. He points this out stating,

There is one inquiry in Natural Theology, which the constitution of the mind, and the adaptation of the constitution of the external world, are pre-eminently fitted to illustrate – we mean the character of the Deity. We hold that the material universe affords decisive attestation to His natural perfections, but that it leaves the question of His moral perfections involved in profoundest mystery (1835a, 288).

In these next several books, Chalmers describes the human mind as providing evidence about the Character of God, but there is no analogy, as in the watchmaker. By finally applying the principle that the designer must possess the characteristics of that which it designs, he infers an intellect and a morality on the designer. He writes, “the character of the ordination, and so the character of the ordainer, depends on the terms of succession; and not on the nature of that intervention or agency, whether more or less complex, by which it is brought about” (1835a, 289-290).

Having already discussed the intelligence of God by appeals to design in the external nature of things, he again alludes to the intellect of the designer, by considering the intelligence implanted in the human mind. He says, “the parent cause of intelligent beings shall itself be intelligent is an aphorism, which, if not demonstrable in the forms of logic, carries in the very announcement of it a challenging power over the acquiescence of almost all spirits. It is a thing of instant conviction, as if seen in the light of its own evidence, more than a thing of lengthened and laborious proof” (Chalmers 1835a, 285).

This instant conviction is again an element of Chalmers’ foundational orientation of nature’s constancy, now utilized in the argument for a personal God. It
is not only intelligence that Chalmers infers by analysing the human mind; it is the innate expectation of the mind to presume upon nature to have intelligence behind purposeful design. He looks at the human conscience and the whole range of human emotions, volitions, and habits and infers from them the moral character of God. The chief among these are God’s goodness, kindness, or in other words His benevolence. He considers human benevolence and deduces benevolence in God, writing, “the sight of distress, for example, should be followed up by compassion, is an obvious provision of benevolence, and not of cruelty, on the part of Him who ordained our mental constitution” (1835a, 290). This step is made because of the analogy he believes exists between the human mind and the mind of the designer.

In addition to benevolence, righteousness in the creator is again indicated by the righteous character of man. Chalmers expounds, “within this peculiar department of evidence there lie the most full and unambiguous demonstrations, which nature hath given to us, both of the benevolence and the righteousness of God” (1835a, 289).

Then to summarize his reasoning, he writes:

Again, that a feeling of kindness in the heart should be followed up by a feeling of complacency in the heart, that in every virtuous affection of the soul there should be so much to gladden and harmonize it, that there should always be peace within when there is conscious purity or rectitude within; and, on the other hand, that malignity and licentiousness, and the sense of any moral transgression whatever, should always have the effect of discomforting, and sometimes even of agonizing the spirit of man – that such should be the actual workmanship and working of our nature, speaks most distinctly, we
apprehend, for the general righteousness of Him who constructed its machinery and established its laws (1835a, 290).

As in his argument for an eternal unchangeable cause, Chalmers uses evidence drawn from an inspection of the human mind. He does not refer to Hume’s words that like effects have like causes, however he is arguing in this manner. His entire structure is to use the argument from analogy, by which he employs numerous examples of human characteristics to infer the characteristics of the designer. It is this style of argument, which constitutes the entire subject of his Bridgewater Treatise, taking the title, “On the power, wisdom, and goodness of God as manifested in the adaptation of external nature to the moral and intellectual constitution of man” (1853).

To frame Chalmers’ arguments, presented in this chapter, in a logical representation, we have brought forward the logic tree, developed in Appendix 1, as figure 6.1 to help highlight his work. The essential point of Chalmers’ final arguments are to demonstrate the cause of the world is personal, not impersonal. While he never articulates his position precisely in this manner, his train of thought can be identified. Contrary to his other apologetics, in this situation, in both his works on Natural Theology and the Bridgewater Treatise, his presentation follows the sequence given in this dissertation. Had he employed a decision tree, as we have presented, Chalmers would be saying that the impersonal branch, of figure 6.1, has been blocked, and the conclusion is that the cause of the present order of things is a personal intelligent being possessing eternality, immutability, omniscience, omnipresence, goodness and kindness (i.e., benevolence, and righteousness. In short, the personal cause of the present order of things is the God of theism, and more
specifically, the Christian God. This scenario, retaining all previous results is depicted in figure 6.1 below.

![Diagram](attachment:image.png)

**World/Universe (or present order of things)**

- Had a beginning
- Had no beginning
- Designed
- Un-designed
- Personal cause
- Impersonal cause

**Fig. 6.1**

**Critical Assessment and Comparison to Modern Apologetics**

Huie, in his dissertation, spends more time explaining Chalmers’ evidence for God, via the constitution of the human mind, than he does the teleological argument. Huie believes Chalmers is drawn to this construct, as “only one step is necessary from the consciousness of the mind to the conviction of the mind that originated” (1949, 98). This single step, according to Huie, suits Chalmers’ view of the mind possessing innate expectations, and is to be expected coming from an
advocate of the Scottish philosophical school. Huie writes, “The a priori principle necessary in this process he admitted more openly than he did in his discussion of our expectation of a constancy in nature” (1949, 98). As further evidence, Huie cites this statement of Chalmers, taken from the treatise on Natural Theology,

That the parent cause of intelligent beings shall be itself intelligent is an aphorism, which, if not demonstrable in the forms of logic, carries in the very announcement of it a challenging power over the acquiescence of almost all spirits. It is a thing of instant conviction, as if seen in the light of its own evidence, more than a thing of lengthened and laborious proof. It may be stigmatized as a mere impression – nevertheless the most of intellects go as readily along with it, as they would from one contiguous step to another of many a stately argumentation. If it cannot be exhibited as the conclusion of a syllogism, it is because of its own inherent right to be admitted there as the major proposition. To proscribe every such truth, or to disown it from being truth, merely because incapable of deduction, would be to cast away the first principles of all reasoning. It would banish the authority of intuition, and so reduce all philosophy and knowledge to a state of universal scepticism . . . (1835a, 285).

The remainder of Huie’s discourse on Chalmers’ evidence for God follows along the same lines given in this dissertation. He notes Chalmers’ position that the eternal existence of the designing cause – based on the absence of contrary evidence – can be assumed, and that the attributes of this cause can, using analogy, be taken from the constitution of the mind (1949, 84-112). Yet, in keeping with his research
objective, Huie provides no critical analysis, no comparison to Chalmers’ contemporaries or to the apologetics of Huie’s own time.

When it comes to this thread of Chalmers’ apologetics, Rice includes less analysis than Huie. His writings focus on the presence and interplay between Scottish Common Sense and Natural Theology on Chalmers’ thinking. His critique of Chalmers is more general in nature. His essential comments follow a somewhat post-Humean fashion, in which he writes, “Even if purposiveness can be established as inhering in the natural order, any inference based upon such grounds is conjectural and uncertain at best . . . It is indicative of the obsession with the wisdom of God in creation in those who advocated such an apologetic” (1966, 172-174). Hence, Rice, like Huie, offers little in the way of a detailed critique of Chalmers’ methodology to prove a personal designer. Furthermore, his writings also tend toward the descriptive, providing no further clues to aid researchers of Chalmers.

Addinall, like Rice, offers no detailed critique of this portion of Chalmers’ apologetic thinking. Addinall, in his Philosophy and Biblical Interpretation, is more interested in identifying any Kantian-sounding portion of Chalmers’ works. He writes, concerning Chalmers’ references, in Bridgewater and Natural Theology, to the human sense of morality as sources of religious convictions “if Chalmers had let his arguments start out from this conviction, the real nature of religion’s claim to commitment and its complete incompatibility with the use of reason in scientific investigation would have been laid bare” (1991, 114). Finding little to satisfy his enquiry, Addinall passes over this element of Chalmers’ writings without comment.

Huie, Rice, and Addinall deal with Chalmers’ theology and apologetics from a specific orientation: Addinall is looking to support his claim that biblical interpretation should follow Kantian lines; Rice maintains that Chalmers represents a
more evangelical-minded theologian trained in Common Sense and Natural Theology than his contemporaries; and Huie is concerned with presenting an extensive survey of Chalmers’ theology. None of these authors’ attempts a detailed analysis of Chalmers’ apologetics, seeks to present them in their logical order, or compare them to modern efforts. Additionally, none of the three provides anything by way of insight or guidance to assist readers in dissecting Chalmers’ works.

Huie and Rice do identify, as this dissertation does, the presence of Chalmers’ foundational presupposition, but neither examines the extent to which this foundation influences the actual methodology he employs. Chalmers’ view of the mind’s innate expectation of nature’s constancy is readily identifiable in the application of analogy between the human mind and the presumed mind of the designer.

Chalmers, as we have shown, believes the human mind innately expects an intelligent designer when presented with contrivances; thus, he concludes it is acceptable, by analogy, to expect an intelligent world designer based on the presence of contrivances in the world. This is similar to Hume, who maintains causes must be similar in scale and complexity as their effects, which can be used to claim that the cause of the human mind must have similar attributes, being of sufficient scale and power to accomplish the design. Chalmers’ writings on the attributes of God based on an analysis of the human mind are of this ilk; yet, he does not to connect these points to a rebuttal of Hume. In short, Chalmers’ analogy is rooted in the idea that the mind expects a designer to have attributes similar to its effect, and since nature never disappoints, the designer has characteristics that are uniquely personal.

Regarding this portion of Chalmers’ apologetics, his writings are less grounded in logical precision or oriented toward any concrete debate with Hume,
than his other contributions. To contend that the absence of evidence to the contrary supports the premise that the cause of the world is an eternal unchangeable mind is circular. If one presumes the designer to be an eternal unchangeable mind, then based on this premise, it is reasonable to expect to find no contradictory evidence. However, to use this result then to argue for the truthfulness of the premise is circular.

Chalmers does not enlist ontological methods for the existence of a necessary self-existent designer. He avoids any method, which resembles those of Samuel Clarke or Thomas Aquinas. Baconian induction and the appeal to evidence, central to the Scottish school, dominate his methodology. In following this pattern, his approach begs the question and jumps the gun, assigning the name of God to the mind he is striving to demonstrate has attributes of personality. Consequently, his work does not move forward the needs of academic apologetics to combat Hume’s scepticism.

Overall, Chalmers’ argument for a personal designer does not satisfy the goal of refuting Hume. Yet, he does introduce a method of argumentation very popular by apologists of today. Using the decision tree, this research reveals a logical pattern to Chalmers’ arguments for a beginning, design, and a personal cause to the world. Looking back over this chapter, the logic tree, shown earlier in figure 6.1, is nearly identical to the logic employed by the modern apologists of Craig, Sinclair, DeWeese, and Rasmussen, all who favour an apologetic called the Kalam cosmological argument (KCA)\textsuperscript{85} (Craig, Moreland 2009, 683; Craig 1984; DeWeese, Rasmussen 2005, 123).

\textsuperscript{85} “The Kalam cosmological argument gets its name from the word kalam, which refers to Arabic philosophy or theology. The Kalam argument was popular among Arabic philosophers in the late Middle Ages. Christian philosophers during that period did not generally accept the argument, perhaps due to the influence of
Chalmers was probably unaware he was incorporating elements of cosmological apologetics. He thought in strictly empirically based teleological terms. Nonetheless, the unpacking undertaken by this research demonstrates the clear signs of the ancient (even during Chalmers’ time) cosmological argument that has found renewed favour today.

The KCA presented by Craig, Sinclair, DeWeese, and Rasmussen is extremely simple, following the basic plan of A) Everything that begins to exist has a cause; B) The universe began to exist; C) Therefore, the universe has a cause (Craig, Moreland 2009, 102; DeWeese, Rasmussen 2005, 123-149). The actual diagram Craig uses to describe the KCA comes from his work *Philosophical and Scientific Pointers* (1980, 5), and is shown below in figure 6.2.

Aquinas, who, following Aristotle, rejected it. A notable exception was Saint Bonaventure, a contemporary of Aquinas, who argued extensively for the soundness of the Kalam argument” (Moreland 1987, 18)
It is premise B in the KCA syllogism, the universe begins to exist, which is the crucial step, and represents the first branch on the decision tree of both figures 6.1 and 6.2. Our decision tree representation of Chalmers’ work is only slightly different from the one found in today’s works. The difference being Chalmers’ starting point of the beginning to the present order of the world, as opposed to creation ex nihilo, and his use of the concept of design as opposed to a strict causal analysis in the second branch.

Craig, Sinclair, DeWeese, and Rasmussen’s writings invoke similar approaches to Chalmers, arguing for a beginning to the present order of things. Each author turns to arguments from cosmology, like the big bang, physics, thermodynamics and entropy, and the impossibility of an actual infinite to contend for a definite commencement to the universe.
When it comes to the second branch of the tree, the differences are more pronounced. Chalmers places confidence in the concept of dispositions as the agent of causality. The mind innately recognizes the intelligent disposition of matter with laws in works of human contrivance; thus, the mind innately recognizes intelligent design in the unmistakable disposition of matter with the laws of nature in the universe. For Chalmers, the conclusion of design is self-evident. Modern researchers turn to *a priori* metaphysical arguments, something Chalmers does not do, to argue for intentional causality. DeWeese and Rasmussen, after arguing the universe has a beginning, or there was a time when the universe began to exist, turn to a metaphysical principle of causality, “whatever begins to exist has a cause of its existence,” as the underpinning for the second branch (2005, 123, 130-144). Craig and Sinclair follow along similar lines, resting on “everything that begins to exist has a cause,” as being epistemically more probable than the negation (2009, 182-190).

The third branch, the topic of this section, is also the end of the KCA. Craig and Sinclair indicate that their version of the KCA already requires the cause of the universe to be uncaused, since they hold the impossibility of an infinite regress. Their progression continues with the conclusion that an uncaused cause must be eternal, changeless, immaterial, transcendent, and extremely powerful. With these, they conclude that only a personal being that possesses free agency can satisfy these conditions with any degree of probability. They conclude their KCA stating, “If the universe has a cause, then an uncaused, personal Creator of the universe exists, who sans the universe is beginningless, changeless, immaterial, timeless, spaceless, and enormously powerful” (2009, 190-196). DeWeese and Rasmussen are less ambitious. They incorporate the principle of determination: “If two qualitatively identical states of affairs are complementary, the obtaining of one rather than the
other is due to the will of a free agent” (2005, 144-149). Then pointing out that the universe was caused to exist when it did, indicates the cause was a free agent, which demonstrates intentionality. Regarding the agent’s attributes, they hold the line at an extremely powerful eternal free agent, being more conservative than Craig and Sinclair (2005, 149).

Chalmers, on the other hand, identifies the personal designer of the present order of things to be none other than the Christian God, a conclusion already shown to be premature. Again, the entirety of the KCA is not directly visible in Chalmers’ actual words, yet, every point on the KCA syllogism and the logic tree can be found. The differences in method of argumentation are notable, and Chalmers does jump the gun to the conclusion. Nonetheless, the KCA can be seen, after careful examination, to exist in his works. Although the author was not aware that he was using this form of cosmological apologetic, it is after deciphering and learning to read Chalmers that numerous advanced apologetic ideas can be found.

**Summation of This Section and Chapter Six**

Chalmers believes his works serve the aim of proving the existence of God. It has been noted that he does not tie together the threads of his thinking. He begins with the watchmaker analogy, which demonstrates an intelligent designer if the world can be shown to be designed. He then transitions to refuting the argument that the world could be eternal, and in so doing argues for a beginning, intentional causality, and the personality of the designer. Had he tied these two ideas together more clearly, his works would have more structure, potentially leading to more widespread use by subsequent apologists.
His work on dispositions, useful for arguing that the world was caused, also serves the investigation of the nature of the cause. This work is distinct from the design syllogism leading directly to, as Chalmers argues, identifying God as the nature of the cause. He states, “The main evidence, then, for a God, as far as this can be collected from visible nature, lies not in the existence of matter, neither in its laws, but in its dispositions” (1835a, 191).

Chalmers maintains that the idea of collocation is so important that he chides his contemporaries for overlooking the matter.

This distinction between the laws and the dispositions of matter has been overlooked by theists; or at least not been brought forward with sufficient prominency. Nevertheless it is essential, not only for the purpose of exhibiting the argument in its strength, but of protecting it from the sophistry of infidels (1835a, 191).

His casual use of words at times clouds his intentions, and he incorporates terminology that reads as if he is jumping the gun and presuming that the God of theism is the only answer to the design inference. Of this error he does correct himself, writing, “all we are warranted to conclude of the antecedent in a deduction thus generalized and purified is that it is purely a mental one” (1835a, 157). Finally, it must be admitted that Chalmers is not entirely successful in his effort to offer up arguments to challenge David Hume that were appreciably better than his contemporaries were.

Rice concludes that in balance, Chalmers’ works show a “lack of imaginative thought” (1966, 171-172). We disagree. In actuality, Chalmers shows significant imagination. He uses arguments, which are novel or can be found in the modern
works of numerous classical apologists, intelligent design advocates, and natural theologians. Of note are the following:

- The use of geological evidence to discount an eternal world theory, which shows a willingness to investigate scientific findings.
- The introduction of an extensive treatise on the value and legitimacy of historical testimony to serve as additional evidence for the belief that the world had a beginning, something not previously or since considered.
- The concept of the impossibility of actual infinity, which supports the view that an infinite progression and a self-generating world are logically unsupportable.
- The identification of causal necessity resident in the disposition of matter and laws of nature as evidence for contrivance and God.
- Allusion to the modern idea of irreducible complexity to counter random assemblage of the world.
- Incorporation of fine-tuning of matter with the laws of nature that indicate the necessity of an intelligent agent.
- Discussion of the view that there is no epistemological difficulty in maintaining that an eternal mind working as the collocating force of the world’s commencement is uncaused and eternal.
- And an overall structure of argument, which resembles the KCA in use today.

In summary, Chalmers’ design apologetic is not entirely successful in refuting Hume. His writing can be difficult to follow, and does at times lack organizational structure and clear statements of premises and conclusions. His works are not always technically precise, but are crafted to lift the emotion of the believer.
Nonetheless, this dissertation discovered that the key to understanding Chalmers’ apologetics lies in recognizing the guiding presence of his foundational premise of the constancy of nature and humanity’s expectation of that constancy. It is through this discovery that order and structure were identified and many of his ideas were shown to possess originality and imagination, and in numerous instances reflect apologetics in use today.
CHAPTER SEVEN: Chalmers’ Defence of Miracles

From what has been discussed, it is clear that Chalmers believes demonstrating God’s existence is an important task of Natural Theology. Even more important than this, he believes it is necessary to go beyond the existence of God and demonstrate the truthfulness of the Christian religion, something Natural Theology cannot do. At the end of *Natural Theology*, Chalmers writes, “it is not that natural religion is the premises, and Christianity the conclusion; but it is that natural religion creates an appetite which it cannot quell” (1835b, 399). He writes it is essential to use “proper evidence” to support the claim that Christianity quells one’s appetite for God. Stating, “It is Natural Theology which accomplishes this first – it is the proper evidence of Christianity which accomplishes the second part of the process” (1835b, 386).

Chalmers recognizes Natural Theology is limited in scope and applicability. He frequently insists that the “self-evidencing power of the Bible” (1835b, 387) is indispensable to bring the unbeliever to faith, and in other places “the Bible is the instrument” (1849b, 263) by which people learn of the remedy for their condition.

Writing of the self-evidencing power of the Bible, one would think Chalmers would not engage in a debate to defend the veracity of the Bible via external evidence. However, Chalmers is sufficiently concerned with efforts, particularly those of David Hume, to discredit historical testimony that he is compelled to engage in the debate of defending the Bible. By entering the fray, Chalmers turns to the task of applying his apologetic views beyond the scope of Natural Theology and explores evidence in support of revealed religion (i.e., the Bible.)

86 Chalmers tends to use the terms Natural Theology and natural religion interchangeably.
His working premise is that in order to defend the Christian religion from sceptical attacks, it must be demonstrated that, under certain conditions, human testimony is eminently reliable. Since the Bible includes numerous accounts of miracles, any task to defend the Bible must include a defence of miracles. This being the case, Chalmers undertakes the task of defending miracles, believing they constitute the strongest historical proof for the truth of the Christian faith. Of this he writes, “The greatest of our historical proofs in behalf of Christianity is the miraculous power said to have been put forth by its first teachers, as the evidence of their supernatural commission” (1849b, 143).

Before writing his work On the Miraculous Internal and External Evidences of the Christian Religion, Chalmers spent years, studying various evidences for the truthfulness of Christianity. Shortly after his illness of 1809-1810, he set down his defence in writing. Before completing his article, ‘Christianity’ for the Edinburgh Encyclopaedia of 1811, Chalmers asked a visiting friend “tell me that ever you heard against Christianity from all its enemies: I am more than able to refute them all. The evidences of our religion are overwhelming” (Hanna 1850, 201-202). The encyclopaedia article, based solely on historical evidence, was such a success that it was independently published in 1814, expanded and republished in 1829, only to be enlarged further, to include a rebuttal of Hume, in 1836, as On the Miraculous and Internal Evidences of the Christian Revelation.

In each of these works, Chalmers’ underlying theme is that the veracity of human testimony and its description of biblical miracles are indispensable as underlying evidence for Christianity. In his memoirs, he indicates that the truth of Christianity depends on “the reality of the gospel miracles” (Hanna 1850, 371).
Chalmers’ defence of miracles will be analysed in this chapter, being accomplished by reviewing and analysing his rebuttal of one of the most forceful objections to miracles: those of David Hume, found in chapter X of Hume’s *Enquiry*. The primary materials used for investigating and analysing Chalmers’ rebuttal are found in his works *On Natural Theology, On the Miraculous and Internal Evidences of the Christian Revelation*, and *Institutes of Theology*, with *On the Miraculous* comprising the primary source. As in his defence of the design argument, Chalmers considers the works of his contemporaries to be inadequate. Therefore, he throws his hat into the ring, so to speak, to develop an argument he believes “neutralized the hostile argument of Mr. Hume” (1836a, 107).

He begins his work *On the Miraculous*, writing that his reason for embarking on the subject at hand is to meet the challenges of Hume. He writes that the “alleged insusceptibility of a proof is everywhere, throughout the celebrated essay of Mr. Hume, regarded and reasoned upon as if it were a bar in the way of all further or detailed examination – just as the preliminary objection to a witness upon a trial if not previously judged of and pronounced upon, is held fatal to the reception of his evidence” (1836a, v).

Chalmers desires to establish the credibility of miracles based on verified testimony so that the Christian Revelation will be permanently safe from Hume’s sceptical attacks. Regarding this goal, he indicates:

If the argumentation which we have employed against him be at all valid, the just conclusion is not merely that there is evidence on the side of Christianity, as much superior to the greater improbability of its extraordinary facts, as the best evidence which has descended to us from ancient times is superior to the small improbability of the facts
in ordinary history – but that, in truth, after full deduction has been made for the incredibility of miracles, there remains an overpassing superiority of evidence in their favour above all that can possibly be claimed for the best attested histories which have been transmitted to the present day, in any other records of past ages. Christianity on this ground too, as on many others, has we think not only won herself the safety of a defence; but has been enriched by the spoils of a victory (1836a, vii-viii).

Background on Objections to Miracles

In part X of the *Enquiry* (2004, 84-101), Hume develops what are acknowledged today as the most damaging attacks ever launched against the truthfulness of Christianity (Sennett, Groothuis 2005). Hume’s attacks are focused on disparaging the credibility of human testimony as it pertains to evidence for miracles. In that section alone, Hume discounts the possibility of establishing miracles based on historical witnesses, maintaining “that no testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours to establish” (2004, 89), and as he further conjectures, humanity is sufficiently depraved so as to ensure this condition is never satisfied (2004, 89-90).

As a matter of completeness, it must be acknowledged that arguments against miracles did not begin with Hume. Objections against the possibility of miraculous events began to be more prevalent nearly one hundred years earlier (Craig 1984, 101). It was during the Enlightenment, when Sir Isaac Newton (1643-1727)
formulated his three laws of motion, providing science with grounds for conceiving of a world without miracles. In Newton’s 1687 work *Philosophiae Naturalis Principia*, the world is described in terms of masses, motions, and forces all operating according to absolutely fixed and unchangeable laws of nature. These laws made the world seem like a great machine, serving the purposes of seventeenth and eighteenth century deists. Newtonian physics provided doubters of miracles with ammunition to contend that there was no longer a need to believe that God was actively working in the post-creation world. During these centuries, there was a growing belief that it was absurd, insulting, and even contradictory to think that God would or could interrupt the operations of the world. After all, so the argument went, the world had been created according to His divinely decreed and immutable laws so why should He need to intervene (Craig 1984, 101-102).

About 20 years before Newton formulated his physics, the philosopher Baruch Spinoza (1632-1677) published a work entitled *Tractatus Theologico-Politicus*, which called into question the necessity of God’s specific revelation (i.e., the Bible). Spinoza’s argument did not come from science, but from philosophy. He applied the ideals of Rationalism, in which all knowledge could be deduced by reason alone, and writes, as quoted by Clark:

> The truth of an historical narrative, however assured, cannot give us the knowledge of God nor consequently the love of God, for love of God springs from knowledge of him, and knowledge of him should be derived from general ideas, in themselves certain and known, so that the truth of an historical narrative is very far from being a necessary requisite for our attaining our highest good (Clark 2004, 142-143).
Spinoza, with his pantheistic belief that the universe and God were one, argued in the *Tractatus* that nothing happens contrary to the eternal unchangeable order of nature and the will of God, which he believed are one in the same. Therefore, a miracle would be a violation of the laws of nature and, according to Spinoza, against God’s will in one case, and in the other destructive to belief in God’s existence (Craig 1984, 101-104).

While Spinoza questioned whether miracles could happen, a century later, David Hume doubted that evidence could ever be discovered that would lend support to verifying the occurrence of a miraculous event (Carnell 1948, 247-275). Hume makes the case against the existence of testifying evidence in two ways; the first way is called the *in principle* argument, the second the *in fact* argument (Craig 1984, 103; Beckwith 1993, 117). Chalmers follows Hume’s structure, first addressing the question: can evidence in support of miracles *in principle* be sufficient to overcome scepticism, and second, is the Bible *in fact* that kind of evidence? The remainder of this chapter will follow the structure of these two questions. It will also include Chalmers’ critiques of his contemporaries, and critical analyses of Hume’s and Chalmers’ works.

**Miracles: Part I of Hume’s Objection and Chalmers’ Rebuttal**

This section presents the first part of Hume’s objection to miracles called the *in principle* argument. Afterwards, attention will turn to Chalmers’ critiques of his contemporaries, a presentation and analysis of his rebuttal to Hume, and a critical assessment from today’s apologists.
In the beginning of the essay on *Miracles*, which contains the only original part of his argument, Hume flatters himself that he has discovered a cure for religious sentiment. “I flatter myself, that I have discovered an argument . . . which, if just, will, with the wise and learned, be an everlasting check to all kinds of superstitious delusion, and consequently, will be useful as long as the world endures. For so long, I presume, will the accounts of miracles and prodigies be found in all history, sacred and profane” (2004, 85).

Hume maintains that it is impossible, *in principle*, to prove that a miracle has occurred. He writes, “A wise man, therefore, proportions his belief to the evidence” (2004, 85). This means that if a wise person learns of some alleged event, they will consider two things in judgment. First, they will consider the likelihood, based upon the evidence, that the reported event could actually take place. Second, they will consider the quality or veracity of the testimony, which again must be based on experience alone (Sennett, Groothuis 2005, 24). If the evidence from both investigations never fails to meet the person’s expectations; then the wise person may, as Hume writes, “regards his past experience as a full proof of the future existence of that event” (2004, 85). If, however, the evidence of the event in question does not amount to a full proof, but is instead merely “supported by the greater number of experiments,” then the wise person considers the event in question with some degree of hesitation (2004, 85).

Throughout Hume’s essay, he makes use of the term probability. At times, it is synonymous with the idea of something being highly likely, at other times it indicates the amount of evidence in support of an event, and even at other times he
uses it in a balancing sense writing, “all probability, then, supposes an opposition of experiments and observations, where the one side is found to overbalance the other, and to produce a degree of evidence, proportioned to the superiority” (2004, 85). Hume’s subtle use of equivocation regarding probability and evidence causes difficulties for his argument, a point which will be noted when the need arises.

Hume, goes on to write that even if the evidence for a miracle amounts to no less than a full proof, it cannot be believed because standing opposite this is the full proof of the constancy of the fixed never changing laws of nature; laws, which no person has experienced to have ever been abrogated. He summarizes this conclusion along with his definition of a miracle saying, “a miracle is a violation of the laws of nature; and as a firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined” (2004, 88). Since there is proof against proof as Hume maintains, the “wise man” cannot hold to a miracle with any degree of confidence. He summarizes his in principle argument saying:

The plain consequence is (and it is a general maxim worthy of our attention), “That no testimony is sufficient to establish a miracle unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours to establish; and even in that case there is a mutual destruction of arguments, and the superior only gives us an assurance suitable to that degree of force, which remains, after deducting the inferior” (2004, 89).

Then pointing his argument directly at the Christian miracle of the resurrection of Christ, Hume concludes the first part of the argument writing that
unless it would be a greater miracle for the testimony of the resurrection to be false then the miracle, it cannot be believed.

When anyone tells me, that he saw a dead man restored to life, I immediately consider with myself, whether it is more probable, that this person should either deceive or be deceived, or that the fact, which he relates, should really have happened. I weigh the one miracle against the other; and according to the superiority, which I discover, I pronounce my decision, and always reject the greater miracle. If the falsehood of his testimony would be more miraculous, than the event which he relates; then, and not till then, can he pretend to command my belief or opinion (2004, 89).

This constitutes the essence of Hume’s in principle, or part I, of his argument against miracles, in which he maintains that in principle miracles can never be verified, as the evidence is never sufficient to overcome the evidence of the laws of nature.

*Chalmers’ Critique of His Contemporaries*

Before entering into his own rebuttal, Chalmers provides lengthy expressions of his dissatisfaction with other attempts at refuting Hume. Of Paley87, he says that he:

Sees most instantly and vividly the falsehood of Hume’s theorem in a particular case, and this satisfies him of a mistake in the

87 It is Paley’s work *A View of the Evidences of Christianity in Three Parts* (Paley 1855), which Chalmers is considering.
demonstration. But this is a different thing from undertaking to show the fallacy of the demonstration on its own general principles as different as were the refutation of a mathematical proposition by the measurement of a figure constructed in the terms of that proposition, from the general and logical refutation of it grounded on the import of the terms themselves. This is certainly a desirable thing to be done; and all we have to say at present is, that this is what Paley has failed to accomplish (1836a, 46).

Chalmers implies that Paley recognizes an error in Hume, but instead of attacking the issue, Paley prefers to jump into the immediate argument of the veracity of human testimony. Chalmers believes Paley’s approach avoids directly refuting Hume, and while evidence is what needs to be brought forward, he is of the opinion that it is first necessary to expose the flaws in Hume’s thinking before embarking on a presentation of the evidence.

As mentioned, Chalmers, much like Paley, considers it of paramount importance to demonstrate the reliability of historical testimony when it comes to analysing the evidence for miracles. Consequently, he dedicates the first 150 pages of his treatise to what he calls Preliminary Considerations, reasoning it is better for the sake of epistemological completeness “to place our argument with Hume at the outset of the following work, rather than at the end of it” (1836a, v).

With Paley’s failings mentioned, it is fellow Scotsman Dr. George Campbell (1716-1796), and his 1762 rebuttal of David Hume, titled A Dissertation on Miracles (1762), upon whom Chalmers expresses his greatest dissatisfaction, dedicating an entire chapter of his work by way of a critique.

Of Campbell, Chalmers writes:
We have long stood in doubt of the validity of that reply notwithstanding the singular acumen and dexterity and power of expression by which it is characterized. We still hold it to be neither a clear nor a conclusive one and do therefore feel an insecurity and a want of completeness in the Christian defence, whenever this sceptical reasoning of Mr. Hume is again advanced by any of those more recent writers who have succeeded him on the side of infidelity (1836a, 72).

By way of introduction, Chalmers considers the following words from Campbell’s own hand, when speaking of Hume’s argument, to be a fair summary of Campbell’s thesis.

I propose first to prove, that the whole is built upon a false hypothesis. That the evidence of testimony is derived solely from experience, which seems to be an axiom of this writer, is at least not so incontestable a truth, as he supposes it; that on the contrary, testimony hath a natural original influence on belief, antecedent to experience, will, I imagine, easily be evinced. For this purpose, let it be remarked, that the earliest assent which is given testimony by children, and which is previous to all experience, is in fact the most unlimited; that by gradual experience of mankind, it is gradually contracted, and reduced to narrower bounds. To say, therefore, that our diffidence in testimony is the result of experience, is more philosophical, because more consonant to truth, than to say that our faith in testimony has this foundation. Accordingly, youth, which is inexperienced, is
credulous; age on the contrary is distrustful. Exactly the reverse would be the case, were this author’s doctrine just (1836a, 71-72).

At the outset, it is tempting to think that Chalmers, who bases his teleological argument on a belief in innate tendencies in the human mind, would agree with Campbell’s proposition that belief in the veracity of human tendency is also an innate tendency of the mind, but Chalmers disagrees with Campbell’s presupposition identifying three difficulties.

First, he doubts that Campbell is correct in thinking that people have a distinct innate tendency to believe in testimony. He writes, “We, in the first place, doubt whether he is right in the theory which he proposes respecting the origin of our faith in testimony” (1836a, 72-73). Campbell, according to Chalmers, contends that faith in human testimony is strongest in infancy, and becomes weaker due to the disappointments experienced in life. Chalmers writes, “The reason which Dr. Campbell alleges for faith in testimony being an instinctive and original principle, and not derived from any other, is, that it is strongest in infancy, and that it becomes weaker as we advance to manhood and old age” (1836a, 78).

Chalmers disagrees, writing that an infant “having once experienced testimony to be true, it expects it to be true, in all time coming as, having elicited a noise from a stroke, it expects a noise from a stroke, in all time coming” (1836a, 84-85). Chalmers is returning to the idea of innate tendencies, and it would appear that his difference with Campbell is one of semantics. Both Campbell and Chalmers believe that people in one way or another seem, at infancy, to expect the testimony of a witness to be truthful. Where Campbell believes it to be a unique tendency, Chalmers considers it none other than a manifestation of the mind’s innate tendency to expect nature to be constant. He writes, “We shall in the course of the following
discussion have to remark on a certain phenomena of our belief in testimony which incline us to resolve it, with Mr. Hume, into our faith in the constancy of nature” (1836a, 73).

The problem with Campbell’s view, as Chalmers notes, is that a child after having received false or deceptive testimony does subsequently doubt all future testimony. Instead, as Chalmers maintains, this experience teaches and corrects the child to understand that there is a difference between those who are truthful and those who are false. He points out that the “little learner will not only be taught by experience to discriminate between man and man – he will learn by experience to discriminate between the characteristics in general of a true, and that of a false testimony” (1836a, 85).

Chalmers notes that Campbell’s position does not properly take into consideration the law of cause and effect, and the value of observation. In his design argument, he points out that experience does not reduce a person’s innate expectation of the constancy in nature; instead, it merely assists in determining which testimony is from a true and which is from a false witness. Experience, according to Chalmers, teaches the child to be able to discriminate the true antecedent of a given piece of testimony. “He will learn to read the veracity of a witness in the air, and distinctness, and the simplicity, and withal the circumstantial nature of his testimony” (1836a, 86). In short, Chalmers says that experience teaches a person to be a good judge of character.

Campbell’s theory, Chalmers fears, weakens the overall defence for miracles against Hume. He writes that it reduces the effectiveness of human testimony, making it less believable and less valuable as people age. “Dr. Campbell, by making our faith in testimony a distinct principle in our intellectual constitution from our
faith in experience, hath mystified his argument, and so far weakened it” (1836a, 89).

To summarize, Chalmers’ first point of dispute with Campbell would be to say that if people have an innate tendency to expect reliable testimony, and experience only works to destroy that faith, then this would play directly into Hume’s hands who says, “no testimony is sufficient to establish a miracle” (2004, 89). Chalmers must maintain the value of evidence in order to argue for the admissibility of testimony as proof of miracles. He insists that experience does not reduce the innate tendency to expect causal relationships, but instead aids the observer in their ability to distinguish between reliable and false testimony. Without this, he has no basis to begin his argument with Hume. Here, is an early form of the evidence/probability confusion that Craig and Beckwith (Beckwith 1989, 32-38) attribute to Hume, something Chalmers senses, which will be pointed out in more detail when his rebuttal is presented.

Unfortunately, Chalmers passes Campbell’s error off as a non-issue, writing, “but even should, notwithstanding all that we have said, should Campbell’s instinctive faith in testimony be sustained, this will not embarrass or impair our argument” (1836a, 89). Chalmers believes he will soon present an argument against Hume that stands on irrefutable scientific and philosophical moorings. He firmly believes in the truthfulness of the Common Sense system, and is confident he will present a scientific argument to Hume that will solve the issue for the last time. He is not concerned with Campbell’s view, believing his argument is independent, based on experience and evidence.

His second point of disagreement with Campbell is an elaboration of the point just made. He indicates that Campbell’s search for the source of people’s belief
in testimony not only hurts the argument against Hume (his first point), but is moot. He writes, “we may or we may not be born with a precipitate tendency to believe in the testimony of our fellow-men; and yet if it be found in experience, that testimony in certain given circumstances had deceived us at a rate of once in ten times; it is precisely at that rate that we should deduct from our confidence in the testimony offered in these circumstances; and our doing so would meet the approval of every enlightened understanding” (1836a, 74). Chalmers’ intention by this is to say that regardless of the source of people’s confidence in testimony the actual testimony must still be analysed, even if one’s confidence is reduced by 10%. Chalmers believes this plays directly into Hume’s hands, for repeated bad testimonies will continue to reduce confidence in the veracity of human testimony.

Chalmers’ third dispute with Campbell is as follows. “Thirdly, this assertion of our faith in testimony being an original and distinct principle from the faith of experience, so far from clearing the question of advancing it towards a settlement, seems but to make it more puzzling and inextricable than before” (1836a, 74). Thus, just as Reid and Stewart are discounted for formulating the idea of humanity’s innate ability to detect design, so too Campbell’s work is set aside because he proposes a new principle, people’s innate expectancy in the constancy of testimony, which Chalmers believes to be spurious.

**Chalmers’ Rebuttal to Part I of Hume’s Argument**

In keeping with Chalmers’ style of writing, he delays his rebuttal of Hume until the second section of his work. At first, he makes a detour to engage in a metaphysical discussion. Within the detour, Chalmers points out that he disagrees
with Brown’s view that the inner workings of the mind must first be investigated before any knowledge of the sciences can be garnered. Brown overstates the importance of mental philosophy, yet Chalmers is initially hesitant to contradict his former teacher. Apologetically, he says, “on this subject we hold Dr. Brown to have overrated the importance of mental philosophy” (1835a, 19). Then more forcefully he admits he disagrees with Brown, writing, “what the mind is, is therefore indispensable to the result, but not our knowledge of what the mind is; and therefore though in direct contradiction to Dr. Brown we hold that every branch of the physics of mere matter could be cultivated to its highest degree of accuracy and perfection, without once ever having reflected on the nature of that intellectual medium through which alone the phenomena of matter become visible to us” (1835a, 21).

Eventually Chalmers explains the reason for the detour. It is for the purpose of pointing out that there are “men in all ages, who have wandered from the direct path of simplicity and common sense in pursuit of some laborious follies of their own” (1835a, 26). He demonstrates that Dr. Brown wanders from the direct path, by overrating the need to understand the mind; but he is also convinced that David Hume wanders from the direct path. The folly, according to Chalmers, could have been avoided if these philosophers had remained true to the principles of Common Sense and the inductive method. Principles, Chalmers believes, are of such superior force so that even the “sophistries of Hume” can be overthrown (1835a, 25).

Regarding the principle of common sense, Chalmers reunites his readers with the familiar illustration of the child and the spoon. The child expects the same noise after a single incident of striking a table, demonstrating innate or common sense tendencies. The principle of experience, on the other hand, reveals the value of the method of induction. Whereby he says, “there is a beautiful accordance between our
primary instincts of belief and the lessons of our ultimate experience” (1836a, 56).

Chalmers writes, “This observation rightly applied will be found to correct . . . the philosophy of . . . Hume on the subject of human testimony” (1836b, 52).

Taken together, Chalmers remarks that proper reasoning is ensured by following these principles (i.e., common sense and induction). He states:

Let us now reassemble the different leading phenomena of man’s belief in the constancy of Nature. He in the first instance is furnished with this belief and feels it strongly, antecedently to experience. In the second instance, the experience does not add any further assurance to this primary and instinctive faith. It rather seems to check its anticipations” (1836a, 57).

He elaborates further on the role of induction, but as he does, he makes a statement that needs exploration.

The strength then of the primary confidence on the part of the child, and that of the acquired confidence on the part of the man, will be found to have originated in distinct causes. The former is anterior to experience, we feel assured that the same antecedents will always be followed up by the same consequents. The latter again is the fruit or the lesson of experience; and the effect, it should be remarked, is not to build up a confidence that is already perfect (1835a, 60).

Chalmers’ statement is somewhat difficult and requires explaining. He means that humans always expect nature to be constant; this is no different in the child as in the adult. The difference is that, in adult life, there are more stored up experiences that need processing to identify the actual causal sequence, but the expectancy of
nature’s constant behaviour remains the same. That this is his meaning can be obtained from his next statement comparing the two situations, in which he says:

By the first we are assured of the invariable operation of causes. By the second we learn in what assemblage of circumstances the same causes are seldomer or oftener or always to be found. In regard to the first there is the utmost strength of anticipation from the outset of our mental history. In regard to the second there is a growing strength of anticipation which approaches indefinitely towards a full assurance (1835a, 61).

Chalmers, as in his other works, is attempting to lay a Common Sense framework for his argument. When he comes to the argument at hand, it is clear his intention is to challenge Hume’s premise “that no testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours to establish” (2004, 89). Thus, Chalmers does not challenge Hume on metaphysical or initial conditions; instead, he challenges him on evidential grounds.

His rebuttal of Hume begins by introducing the reader to the science of probability. He conceives of a situation where past experience of high and low tides are compared to the readings of high and low tide results from some sort of predictive index. It is not important if such an instrument exists, for Chalmers rightly says, “the reality or possibility of such an instrument is not essential to the validity of our argument” (1836a, 62).

With the idea of a tidal index established, Chalmers next considers a situation in which the regular sequence of two high and two low tides per day are interrupted. On one particular day, he conceives of a disappointment, in which one of the high
tides does not occur. If a person had witnessed the anomaly, paying careful attention to the surrounding area to guard against an error in judgment, they would have no choice but to believe that a most unusual, even miraculous event had occurred. The illustration is expanded by incorporating the tide index, which also reports the most unusual and anomalous low-tide reading at the precise time of the visual attestation (1836b, 61-69).

Chalmers continues with his illustration saying, “to set aside all but . . . personal experience in the matter, there might have been a thousand instances of observed regularity . . . in regard to the occurrence of high-water – in which case the probability against the occurrence of an anomalous low-water would be as a thousand to one” (1836b, 62-63). Chalmers asks the reader to clear their mind of all prior experiences regarding high and low tides. He asks that all knowledge of the effects of the moon and gravity be removed, and to imagine a situation where the person has no concept or inkling of high and low tides, except from personal observation of 1000 uninterrupted repetitions of this particular high and low tide sequence. By considering the 1000 past observations, the probability of such a strange event occurring is small, roughly 0.001, or 0.1%. The probability against the event occurring, which is another way of saying the probability that the usual expected tidal sequence occurs, is highly probably, being about 0.999, or 99.9%.

Before proceeding, the reader may notice that Chalmers is using the concept of odds to mean probability. Specifically, the probability against the occurrence of an anomalous low water, as Chalmers describes, is 1000/1001, or ~0.99988.

88 That the two are related can be shown as follows: Let the symbol $O(1000)$ represent the 1000 observations of high and low tide. Let $T$ be the event that a normal high and low tide sequence occurs on the 1001$^{\text{st}}$ observation, and $\bar{T}$ that it is the anomaly. The probability against $\bar{T}$ is expressed as $1 - P(\bar{T} \mid (O)1000 )$. $P(\bar{T} \mid (O)1000 ) = 1/1001$, since we had one anomalous high and low tide in 1001 total trials (i.e., the first 1000 being normal.) Therefore, the probability against $\bar{T}$ is $1 - P(\bar{T} \mid (O)1000 ) = 1 - 1/1001 = 1000/1001 = 0.999$. 

225
Chalmers continues the experiment, returning to the state just before the 1001st observation writing, “it may further be conceived that though on all the other thousand occasions, I observed a perfect harmony between the phenomena of high and low-water and the indications of the instrument” (1836a, 63). In this situation, the reliability of the tide index is indeed very high, and should one not look at the actual tide but consult the index for the 1001st observation, its results would need to be considered with high regard. However, the number of historical observations of the actual tide and the tide index both total 1000. Chalmers concludes that the one “exactly balances or neutralizes the other” and there is insufficient evidence to believe the index if it registers anomalous low tide (1836a, 64). Chalmers writes that the open problem is “it remains to be seen whether it is possible by means of any accession to the testimony of these tide-indices, to arrive at a legitimate belief in the occurrence of an anomalous low-water, to express it otherwise, belief in the violation of a wonted order to which we never had witnessed a single exception in the whole of our past experience” (1836a, 64).

Chalmers answers the problem by considering not one, but two tide indices. He supposes a situation where one index is as before, with odds against an anomalous low tide reading of 1000 to 1, and the other a less accurate index with odds against of 1000 to 50. The cumulative effect of the independent readings of an anomalous low tide on the 1001st observation coming from two independent indices raises the odds against to a number approaching 20,000 to 1. In other words, it would be an extremely rare, almost miraculous situation if the combined accuracy of the two indices were to be wrong in indicating a strange phenomenon regarding the tide on the 1001st occurrence. To put odds against in terms of a probability statement, the

Using odds against notation, as Chalmers means, would be \( O(T \mid (O)1000) = P(T \mid (O)1000) / P(T \mid (O)1000) = 1000/1 \), read 1000 to 1 (Lindley 1985, 45).
following would be the condition. The probability of both tide indices simultaneously indicating a miraculous anomaly in the sequence of high and low tides is 0.00005, or 0.005%. Hence, they are accurate 0.99995, or 99.995% of the time. In this situation, the cumulative increase in accuracy of the tide index is more than an order of magnitude, actually 20 times higher than a person’s expectation based solely on 1000 physical observations. Thus, Chalmers concludes that the prediction of the two tide indices is stronger than observation, and should be considered as indicating a strong possibility of the miraculous tide (1836a, 67-68).

Chalmers continues adding tide indices, all with odds against of 1000 to 1. In this scenario, the odds that the cumulative effect of 10 or more indices being wrong becomes negligible or approaching zero. Chalmers remarks of this situations:

By the concurrence of independent notices on the subject, the amount of evidence for an anomalous low-water may become indefinitely great. There may be other tide-indices, and that too of the best sort, in other houses beside our own – and each of which has never been known to present a false indication in the whole course of human experience. The concurrent testimony of two such instruments yields the probability of a thousand – of three no less than a million – till the number of distinct and independent testimonies be so great as to make the superiority of evidence quite overwhelming, and to afford practically the force of an absolute moral certainty on the side of an anomalous low-water (1836a, 68-69).

This forms the foundation of Chalmers’ rebuttal to Hume’s contention “that no testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours
to establish” (2004, 89). What remains to be shown, as Chalmers indicates, is “how much or how little can be done in this way by living witnesses – but it seems very clear to us on the strength of the above reasoning, that at the mouth of two or three inanimate witnesses the truth of a miracle may be established” (Chalmers 1836a, 69).

Chalmers’ effort to neutralize Hume’s objections has a strong resemblance to many modern day approaches. Researchers such as Swinburne (1968, 320-328), McGrew and McGrew (2009, 683), Holder (1998, 49-65), and Tucker (2005, 373-390), to name a few, have all constructed various probability based rebuttals. Some are based on Bayes’ theorem89 and are constructed as follows:

- Let M denote a specific miracle having occurred, and \( \bar{M} \) denotes the opposite (i.e., the miracle did not occur.)
- Let \( T_1, T_2, T_3 \ldots T_n \) denote \( n \) independent testimonies that claim miracle \( M \) occurred.
- The Bayes factor of miracle \( M \) occurring is calculated, as the probability of \( n \) independent testimonies to a miracle given the miracle occurred, divided by the probability of \( n \) independent testimonies to a miracle given the miracle did not occur. If the ratio is significantly greater than one90, then the testimonies of a miracle are highly confirmatory. Symbolically, this is represented as,

\[
\frac{P(T_1 \& T_2 \& T_3 \ldots T_n | M)}{P(T_1 \& T_2 \& T_3 \ldots T_n | \bar{M})} \gg 1 \quad \text{(McGrew, McGrew 2009, 595-596).}
\]

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89 Bayes’ theorem provides for the probability of some event \( F \) given that event \( E \) has occurred, as follows. 
\[
P(F|E) = \frac{P(E|F)P(F)}{P(E)}, \text{ provided } P(E) \neq 0 \quad \text{(Lindley 1985, 43).}
\]

90 Significantly greater than 1 is open to subjective interpretation. However, a number on the order of 1011 or one trillion begins to be beyond general comprehension.
Using Chalmers’ illustration of high and low tides measured from two tide indices, it is determined they are accurate 99.995% of the time, and give false readings 0.005% of the time. Following the above formula, with evidence from the two tide indices, yields a value for the Bayes factor of $\frac{99.995}{0.005} \approx 20,000$ much higher than 1. Thus, Chalmers’ construction leads to a situation where the event of a miraculous low tide would need to be considered as possibly having occurred; the more evidence in the miracle’s favour the more probable that it did, in fact, occur, or as Chalmers says, it reaches “moral certainty” (1836a, 68-69).

Chalmers’ illustration makes use of just 1000 physical observations of tidal activities. He feels no need to comment on the real world, in which an enormous number of actual tidal observations, as well as knowledge of the effects of gravity, will only tilt the scales further in nature’s favour. He is confident, however that the use of testimony, if determined to be reliable represents overwhelming evidence in favour of miracles.

Returning to the idea of miracles, Hume’s objection, as Chalmers understands it, is based entirely on the presumption that human testimony often errs. He writes, “Mr. Hume’s affirmation is, that we have never experienced a violation of the laws of Nature, but that we have often experienced the falsehood of testimony – and the argument which he grounds upon this affirmation is, that it is not in the power of testimony to establish the truth of such a violation – for this would be making the weaker prevail over the stronger, that which is unstable and uncertain prevail over that which is constant and immutable”(1836a, 92).

Chalmers desires to use the method of probabilities to refute Hume, but he needs to overcome the objection of falsity in human testimony. He answers Hume’s objection saying, “he makes all testimony responsible, for all the instances of
falsehood” (1836a, 95). Chalmers believes the solution to the dilemma of falsity in human testimony is to distinguish between testimony that is honest and testimony that is false. If honest testimony attests to miracles, then it should carry more weight than that which is false. Alternatively, if the testimony for a miracle is judged to be from a truthful witness, then the negative influence of dishonesty can be ignored. More specifically, Chalmers outlines his rebuttal as follows:

The way in which we would meet the general charge of Mr. Hume against testimony, is, by the separation of testimony into its kinds, and making each kind responsible for itself. Each kind has its own special prognostics; and, as in all other cases of experience, each has its own corresponding result. It were strange to anticipate, from testimony having one set of prognostics, the result which belongs, to testimony having another set of prognostics. But this is just what Mr. Hume has done. He lays on the kind of testimony which is quite unexpected, the burden of the exceptions, that belong to other and inferior kinds of testimony. He infers, that because certain testimony have deceived us – this species, the purest and the highest, may deceive us also (1836a, 96-97).

It is the separation of testimonies into their proper kind that Chalmers believes removes the stain of human falsity from the kind of testimony that comes from a reliable source. He elaborates his point by hypothesizing a particular type of testimony, clearly alluding to the apostles, to demonstrate how erroneous it would be to place the demerits of others at their feet.

Give me an individual with all the indications, both in his manner and conduct of perfect moral honesty – let me recognize, whether in his
oral or written testimony, a directness, and a simplicity, and a high
tone of virtuousness, and withal a consistent while minutely
circumstantial narrative, which all experience declares to be the signs
of an upright testimony – let me understand that he forfeited every
interest which is dear to nature, the countenance of friends, the
auction of relatives, the comfort and security of home, the blessings of
domestic society, the distinctions as well as the pleasures of affluence,
and lastly the enjoyment of life itself, in a resolute adherence to the
avowals which he made, and which had brought upon him such a
weight of persecution and odium – let me plainly see that there is
nothing in the whole exhibition, which can mark the falsehood of
imposture or the frenzy of enthusiasm – let me know the subject-
matter of his attestation to be some palpable fact, addressed to senses
which could not be deceived, because, instead of a momentary glare,
there was daily and repeated converse with a visible thing, and where
both the sight and the touch lent to each other a mutual confirmation –
let me further make the supposition that the statement in question was
the resurrection of one from the dead, and who had been seen to expire by thousands of assembled witnesses. If, it be objected that the
truth of such a fact would imply a phenomenon wholly unexampled in
the history of the species, our reply is, that the falsehood of such a
testimony would imply a phenomenon equally unexampled in the
history of the species – if it be said, that we have no experience of
such an event turning out to be real, it may be said as truly, that we
have no experience of such an averment turning out to be fallacious;
and the one singularity, if it do not overmatch the other will at least neutralize it. There is nothing in the occasional falsehood of other and inferior grades of testimony, which can inflict discredit or disparagement upon this. It stands aloof from all the suspicion which attaches to these, because exempted from all those similarities which make it questionable like these. The renovation of a lifeless corpse that had been laid in the tomb, but emerged from it again in the full possession of wonted activity and consciousness, is said to be a miracle – but equal, at least would be the miracle of either a falsehood or an error in him, who throughout the whole if a life devoted to the highest objects of philanthropy, made constant assertion of his having seen and handled and companied with the risen man – who maintained this testimony amid the terror and the pains of martyrdom – and in the words of such an exclamation as, “Lord Jesus receive my spirit,” breathed out as the last and the dying utterance of his faith (1836a, 102-104).

It is on this arrangement that Chalmers confines his argument with Hume. He rhetorically asks Hume a question, referring back to his illustration of apostolic testimony. “We ask, did he ever experience this sort of testimony to be false? He tells us that we are never deceived by trusting to the constancy of nature; but that testimony often deceives us. We ask, did such testimony ever deceive us” (1836a, 96).

Chalmers argues that Hume has blended false and honest testimonies to distort the evidence for miracles. He believes they should remain distinct, and by doing so testimony in favour of miracles will be found to outweigh Hume’s
objections. Chalmers’ argument is not original; however, he views the efforts of others to have been sporadic, writing that none have “kept a steady hold of it, in the course of his reasoning” (1836a, 104).

Before turning his attention to an examination of the Bible itself, Chalmers, summarizes Hume’s argument. He reviews the deficiencies and errors he has exposed in Hume’s construction, giving insight into the direction in which he plans to proceed.

The reasoning of Mr. Hume may be cast into the following syllogism. Testimony has deceived us, but nature is never known to have done so by the violation of her constancy: But these violations of Nature’s constancy termed miracles are only reported to us by testimony: Therefore these events never known to have happened, as being deponed to by an evidence that has often deceived us, must be rejected as untrue. – The fallacy of this syllogism is akin to that which is termed by Logicians the fallacy of composition – the middle term being used in the one premise distributively and in the other collectively. In the above syllogism the middle term or testimony is used collectively in one of the premises and distributively in another. It is true that testimony has deceived us – but this ought not to have been charged collectively upon all testimony; and it is also true that miracles, especially the miracles of the gospel, are reported to us by testimony, but if by a sort of testimony which never has deceived us, this at least countervails, if it do not overmatch, the improbability which attaches to the event in question because of its miraculous
character. In this section of our argument we may be said to have but neutralized the hostile argument of Mr. Hume (1836a, 107).

This is Chalmers’ critique of Hume’s logical construction. In the remainder of his work, he focuses on demonstrating the veracity of the biblical record as being that type of testimony that never deceives. He is correct that the syllogism, as presented, commits the fallacy of composition. Testimony that has deceived in one situation is being charged to all testimony at the end of the syllogism. Today’s researchers, however, use a different characterization of Hume’s construction. Geisler summarizes Hume’s argument as follows: “(1) miracles by definition are a violation of natural law; (2) natural laws are unalterably uniform; (3) therefore, miracles cannot occur” (1997, 75). The construction Geisler uses is also given by Beckwith (1989, 152), Carnell (1948), Craig (1984), Holder (1998, 49-65), Lewis (2002, 506), Maidment (1939, 422-433), Millican (1993, 489-495), Norton (1982, 329), Swinburne (1968, 320-328), and Tucker (2005, 373-390). With the differences being that Chalmers focuses on evidence and the veracity of testimony, whereas the others concentrate on Hume’s definitions of a miracle and the laws of nature.

A review of Hume’s work indicates that his syllogism is as indicated by the preponderance of writers. Even Hume’s own words attest to this. He writes, “a miracle is a violation of the laws of nature; and as a firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined” (2004, 88). The reasons for Chalmers’ construction likely stems from four sources: first, his love for math attracts him to a probabilistic argument, second his devotion to Common Sense Philosophy and the method of induction focuses his attention on using an evidential argument, third his training in Natural Theology points him in the
direction of William Paley, and fourth his evangelical spirit moves him to focus on defending the veracity of the biblical witness.

When one considers these factors, it is understandable that Chalmers does not explore Hume’s definition of miracles and natural law. In fact, Chalmers, in numerous places, concedes to Hume both definitions. He desires to place his argument with Hume on purely scientific grounds, which he believes withstands the scrutiny of investigation much better than philosophical arguments. Chalmers believes sufficient evidence can be found for overthrowing natural law as long as it can be demonstrated that it is more of a miracle for the writers of Scripture to have deceived than not.

Apologists from the beginning of the twentieth century to today find Hume’s *in principle* argument to be less than convincing. First, it is claimed that Hume is guilty of having committed the logical fallacy of begging the question. Craig maintains that to say that uniform experience is against miracles is to implicitly assume that miracles have never occurred, which begs the question (1984, 121). Along these same lines, C.S. Lewis writes:

Now of course we must agree with Hume that if there is absolutely, “uniform experience” against miracles, if in other words they have never happened, why then they never have. Unfortunately, we know the experience against them to be uniform only if we know that all the reports of them are false. And we can know all the reports to be false.

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91 The *petitio principii* or begging the question fallacy essentially means that one of the premises from which the conclusion is deduced is the conclusion itself, somewhat disguised in form. Now in the strictest sense this is actually a valid argument. The conclusion follows from the premises by strict logic. It has to, for the premise is the conclusion itself, and any proposition implies itself. But as a proof by which to convince anyone else, the argument can be considered useless for one must first presume the premise (Clark 1985, 14-15).
if we know already that miracles have never occurred. In fact, we are arguing in a circle (2002, 266).

Noxon, in Merrill and Shahan’s, *David Hume, a many-sided genius*, calls Hume’s argument a “question-begging failure” (1976, 77), and Beckwith and Norton point out that if natural law cannot be a natural law if the law has been violated, then Hume has begged the question just by the nature of the definition (Beckwith 1993, 123; Norton 1982, 298-299). This critique of Hume is also held by Carnell who believes that Hume’s very definition of natural law and miracles has stacked the deck, before one has even started, in favour of the conclusion (1948, 247-253).

The point of these arguments is that Hume’s definition of natural law is essentially tautological with the concept that they cannot be violated. Therefore, by definition, miracles are excluded from the realm of possibility without the need to examine evidence.

In Hume’s defence, Newtonian physics, in his day, were assumed without challenge. Therefore, Hume’s definition that a miracle was a violation of the laws of nature did not cause any great stir. Even Chalmers says nothing about Hume’s definition of miracles or natural law. Chalmers’ rebuttal is that Hume charges the error of false testimony in some witnesses to all the testimony of all witnesses. Chalmers does not discuss the potential logical problem that Hume’s definitions create for his own rebuttal. He does not realize the tension that exists between his stated willingness to accept miracles on the one hand, and his philosophical stance regarding the absolute constancy of nature on the other. Clearly, a strict adherence to the constancy of nature eliminates the possibility that miracles, a violation of the laws of nature (according to Hume), can occur. Had Chalmers been
able to embrace something less than an absolute mechanistic universe this tension may have been avoided.

Chalmers’ probabilistic endeavour reveals a mind capable of proceeding along an apologetic that accepts probabilistic perturbations in nature. By loosening his strict Newtonian mechanistic view of the world, he would need to adjust his view of nature’s constancy. Nonetheless, this could have been accomplished without overturning his work or Common Sense philosophy. By providing for a looser view of nature’s constancy a path would have been opened by which Hume could have been challenged on definitional as well as evidential grounds.

Instead, Chalmers believes that the real issue is a matter of evaluating the probability in favour of a miracle based on an examination of reliable evidence. This limits the effect of Chalmers’ overall argument. Had he noted, as Beckwith illustrates in his article *Hume’s Evidential/Testimonial Epistemology, Probability, and Miracles* (1993, 117-140) that it is by no means necessary to call something a natural law and maintain that it is impenetrable, he may have developed an early form of the argument found today. Beckwith points out that the term - natural law - can be retained even if the theory is deemed as describing only what has generally or what has always been observed to happen in nature. This leaves open the possibility that there are undiscovered exceptions, or conditions in which the law does not hold, or that there is a new, yet unknown law that accommodates the violation. Beckwith points out that in today’s scientific arena natural law is generally defined as what happens in a regular and predictable manner, with unexpected events requiring the scientist to look again at the law and determine if it needs revising (1993, 124-127). Geisler considers this possibility in creating a “softer” view of Hume’s argument. Geisler states Hume’s softer arguments as, “1. Miracle is by definition a rare
occurrence. 2. Natural law is by definition a description of regular occurrence. 3. The evidence for the regular is always greater than that for the rare. 4. A wise man always bases his belief on the greater evidence. 5. Therefore, a wise man should never believe in miracle” (1997, 75). This “softer” syllogism is much easier to overthrow, as natural law is no longer impenetrable. Nonetheless, as in Chalmers’ design argument, both he and Hume were of the opinion that Newtonian Physics was a settled matter, with Quantum Physics one hundred years in the future.

Another error that Craig, Beckwith, and Geisler believe Hume makes is in confusing the terms evidence with probability. Hume, as indicated, asserts that the wise person should always place their confidence in what is the most probable, because that which has occurred most frequently has the greater probability, as it has the greater evidence (Beckwith 1989, 32-34). This is certainly not a consistently logical form of reasoning. Beckwith indicates that the sheer quantity of evidence cannot be the basis for believing in the miraculous. He cites this illustration.

Life magazine once reported that all 15 people scheduled to attend a rehearsal of a church choir in Beatrice, Neb., were late for practice on March 1, 1950, and each had a different reason: a car wouldn’t start, a radio program wasn’t over, ironing wasn’t finished, a conversation dragged on. It was fortunate that none arrived on schedule at 7:15 p.m. – the church was destroyed by an explosion at 7:25. The choir members wondered whether their mutual delays were an act of God . . . Weaver estimated there was a one-in-a-million chance that all 15 would be late the same evening. According to Hume’s view of probability and evidence, it seems that a wise man should reject the reliable testimony and circumstantial evidence that has substantiated
the fact of this occurrence, even though we know that no reasonable person would reject it (1993, 128-129).

If Hume’s understanding of probability and evidence were strictly followed, then according to Hume, the wise person would always reject reliable testimony, in favour of the most commonly occurring event.

Chalmers does touch on the objection identified by modern researchers. He writes, “there can be alleged cases of false perception as well as of false testimony – and were Mr. Hume’s argument consistently carried out, it might as well be contended, that we should not believe a miracle though we saw it, as that we should not believe a miracle however it may be reported to us” (1836a, 112). Chalmers recognizes that Hume would never believe a report of a miracle, but Chalmers does not document the source of the statement. Additionally, he does not point out that Hume mixes the idea of evidence with probability. As mentioned, Chalmers’ entire focus is in generating sufficient numerical evidence to overbalance the laws of nature. In this, he is confident that he has found the solution with his mathematical illustration of the tide index.

Chalmers’ probabilistic construction has merit when he is comparing, as do modern-day apologists, the probability of a truthful versus a false testimony. The moment one attempts to argue against Hume on the grounds of observational evidence, they will most surely be lost. Craig, Beckwith, and Geisler point out this fact again. These apologists argue that from today’s understanding of natural law, a miracle is an exceedingly unlikely event, an event having miniscule probability. Consequently, a miracle will necessarily have less evidence, from a strictly numerical perspective, than the common expected working of natural events. Any attempt to stack numerical evidence of miracles against numerical evidence of
natural law is doomed to fail (Craig 1984, 115-125; Beckwith 1993, 127-135; Geisler 1997, 73-85).

These apologists claim that not all evidence should be treated equally. A point Chalmers also makes numerous times. They argue that historical testimony, which counts as evidence, cannot be treated with the same weight as observations of natural occurrences; historical testimony must be treated differently when evaluating the possibility that a miracle has occurred. Chalmers notices this aspect of Hume’s work. He writes that both Hume and Campbell have made this mistake. “We think, that both the combatants have erred, by ascribing to testimony in general, what should only have been ascribed to a certain sort of testimony, and which is in no way ascribable to a certain other sort of it” (1836a, 93-94).

Craig, Beckwith, and Geisler point out that wise and intelligent people base their convictions on evidence, not on Hume’s ideas of equivalency in numeric experiences. They go on to argue that an event’s occurrence may be very improbable or nomologically\(^\text{92}\) miniscule in terms of the quantity of experience and what the laws of nature would indicate. Nonetheless, testimonial evidence may still be sufficient for the wise person to believe that the unexpected, and even the miraculous, has, in fact, occurred (Craig 1984, 115-125; Beckwith 1993, 127-135).

Hume’s in principle argument today is believed by many to be invalid because it begs the question, and confuses the terms evidence with probability. Geisler lists more than these two errors, debunking Hume’s work, saying that it “begs the question by assuming that miracles are by definition impossible . . . engages in special pleading . . . proves too much (such as that even Napoleon did not

\(^\text{92}\) Craig defines something to be nomologically possible if it is in accord with natural laws. If it does not conform to these laws, then it is nomologically impossible, but this does not mean that it is illogical or epistemological impossible (Craig 1984, 115).
exist!), is inconsistent with Hume’s own epistemology and makes scientific progress impossible” (1997, 85). In Chalmers’ apologetics, these objections do not enter the debate. On the other hand, Chalmers correctly points out that Hume attributes the errors of some evidence to the errors of all. It is this that he attacks, focusing the next three books of his two-volume treatise on what is the second part of Hume’s objection to miracles.

**Miracles: Part II of Hume’s Objection and Chalmers’ Rebuttal**

The second part of Hume’s essay explains why historical testimony is summarily dismissed in the case of miracles. Hume is willing to allow for the possibility that miracles could exist in his first argument, though he maintains they are a logical impossibility because of his definition of natural law. In his *in fact* argument, he presents data he believes proves that there are no facts and no reliable evidence, to use for the defence of miracles.

Chalmers dedicates nearly two thirds of *On the Miraculous* to addressing Hume’s *in fact* argument. However, he does not mention Hume’s work any further; having believed his statistical method overpowers Hume’s argument. From Chalmers’ perspective, all that remains is to demonstrate that the Bible is, in fact, the kind of testimony Hume claims does not exist. He ends his argument against Hume’s *in principle* objection, before attempting to prove the reliability of the Bible.

Having thus freed the argument in the abstract from the objections of Mr. Hume, we can now, with all greater confidence, pass to the argument in the concrete, as founded on the actual state of the testimony of our religion . . . The argument, grounded on the
combination of such testimonies, exceeds all computation – and, whatever strength there may be in the consideration, that never did such an event as the resurrection of our Saviour before occur in the annals of our species, it is overpassed by the more than million-fold strength of the reply, that never did there occur in the annals of our species, the falsehood of any such testimony, as that whereof we can allege the consent of many thousands to the fact in question . . . When Mr. Hume appeals to our experience of the falsehood of testimony, we ask, if ever on the face of the earth, there has been the experience of falsehood of such testimony – or rather, when we think of the rapid progression by which it grows and multiplies with every new accession that is made of it, may we confidently affirm of its evidence, that no anomalies in nature or history however unexampled, that no miracles however stupendous, can withstand it (1836a, 136-138).

_Hume’s In Fact Argument_

As Chalmers does not provide a summary of the second part of Hume’s treatise on miracles, this section fills that gap. Chalmers’ rebuttal of Hume’s objections to the reliability of human testimony is presented in the section to follow.

Many modern apologists have had much to say of part II of Hume’s argument. McGrew and McGrew’s critique of Hume indicates that the second part of his argument contains little more than an assortment of supposed miracles, all of
which had been discussed by deists decades earlier, and were specifically organized
to cast the evidence of the Gospel miracles in a most unfavourable light (2009, 651).

Hume begins part two of his argument with these words:

In the foregoing reasoning we have supposed, that the testimony,
upon which a miracle is founded, may possibly amount to an entire
proof, and that the falsehood of that testimony would be a real
prodigy: But it is easy to show, that we have been a great deal too liberal in our concession, and that there never was a miraculous event established on so full an evidence (2004, 89).

The remainder of part two of Hume’s essay is divided into four arguments against the possibility of any historical testimony amounting to what he would call a full proof.

The first of Hume’s four arguments, which is clearly directed toward the Christian Apostles, and widely believed to be a rebuttal of Sherlock’s 1729 work The Tryal of the Witnesses (1729, 110), is that there is in all of history a complete lack of quality witnesses to miracles. Of this contention, Hume writes:

There is never to be found, in all history, any miracle attested by a sufficient number of men, of such unquestioned good-sense, education, and learning, as to secure us against all delusion in themselves; of such unbounded integrity, as to place them beyond all suspicion of any design to deceive others; of such credit and reputation in the eyes of mankind, as to have a great deal to lose in case of their being declared in any falsehood; and at the same time, attesting facts performed in such a public manner and in so celebrated a part of the world, as to render the detection unavoidable: All which
circumstances are requisite to give us a full assurance in the testimony of men (2004, 89).

The Englishman Samuel Chandler (1693-1766) addressed these very issues just two years before Hume’s publication of the essay (see below note)93. In all practicality, Chandler’s work pre-empted Hume’s objection, and was directed not toward Hume, but toward deists who had been arguing the same point Hume makes nearly one hundred years earlier. Chalmers focuses a great deal of attention in his rebuttal attempting to show that the writers of the biblical record meet the qualifications of integrity and honesty that Hume says does not exist. Chalmers’ argument is very similar to Chandler’s although he is not referenced directly.

More recently, Hume’s contention has been pointed out as being overtly biased. According to McGrew and McGrew, Hume is guilty of begging the question in his first argument by boldly stating that no testimony exists sufficient to meet his testimony requirements, before analysing all the evidence. (2009, 651). Colin Brown says, “the qualifications he demands of such witnesses are such as would preclude the testimony of anyone without a Western university education, who lived outside a major cultural center in Western Europe prior to the sixteenth century, and who was

93 The following lengthy quotation from Chandler’s work retains the old English spelling used by the publisher. “I would obferve, that there are all the Characters of Integrity appear in these Writers, that can poiffibly be demanded or defired. The very Inconifitencies that are at firft View the feem to be chargeable with, fhew at leaft there was no Contrivance amongft them, to deceive others. They make no Scruple to tell us, that firft Appearances of Chrift were to a few Women, with whose Single Teftimony theyre well knew the Wolrd would be far from being fatisfied. They feem to have concealed no Circumstances of Chrift’s Appearances, however exceptionable they might poiffibly affure us, that the Dificiples imagin’d the firft Accounts of the Refurrection, to be mere Dreams and Tales, and unsupported Imaginations, and were not in the leaft difpofed to receive or credit them. It doth not appear that they could have any preffent Interfts to anfwer, by the Accounts they gave, if they had not known them to be true; or that they were fet on to write them by Perfons, who either could reward them, or receive themfelves and worldly Advantages from the Publication of thofe Accounts to others . . . Now though ’tis fcarce poiffible to conceive how any one Perfon could be deceived in the Proof that was given of the Refurrection, yet were they all deceived? What, was there not one of the Apoftiles, not one of thofe who were with them, not one of the Hundred and Twenty, or Five Hundred, that had Eyes to fee, or Ears to hear, Hands to feel, or Judgment to difcern? Were they all deluded with a fantaftick Appearance, and the Senfes of fuch a Variety of Perfons all absolutely impofed on, and deceived? What Credibility is there in fuch a Suppofition? Or did they all agree to support a Lye, a known Lye, and incredible, obnoxious, and dangerous Lye? A few might have kept the important Secret, had the whole Affair been a Fraud. But could fuch a Secret ever be preferved where fo large a Number was privy to it? Were they fo fteady and true to a Falfehood, as that neither Intereft nor Perfecution could move them to difcover it (Chandler 1744: 133, 141-142)?
not a public figure” (1984, 97). Of Hume’s criteria for a reliable witness, Beckwith writes, “intellectual acumen and philosophical sophistication are not attributes that predispose one to impeccable ethical conduct” (1989, 50).

Regarding Christianity and the question Hume raises of sufficient evidence, Beckwith goes on to argue, “the crowning miracle of Christian theism, the Resurrection of Jesus, seems to fulfil Hume’s first criterion” (1989, 50). Beckwith cites apologists like James Dunn, Gary Habermas, Wolfhart Pannenburg, William Coleman, William Lane Craig, and Robert Stein as all agreeing that the biblical account of the resurrection satisfies Hume’s objections; having occurred in a major metropolis, Jerusalem; being witnessed by a good number of people; and having been given by witnesses who were educated (1989, 65).

When Hume does present an example of a miracle that appears to satisfy his first criteria, he still cannot permit himself to accept miracles.

There surely never was a greater number of miracles ascribed to one, person, than those, which were lately said to have been wrought to France upon the tomb of Abbe’ Paris, the famous Jansenist, with whose some sanctity the people were so long deluded. The curing of the sick, giving hearing to the deaf, and sight to the blind, were everywhere talked of as the usual effects of that holy sepulchre. But what is more extraordinary; many of the miracles were immediately proved upon the spot, before judges of unquestioned integrity, attested by witnesses of credit and distinction, in a learned age, and on the most eminent theatre that is now in the world. Nor is this all; a relation of them was published and dispersed everywhere; nor were the Jesuits, though a learned body, supported by the civil magistrate,
and determined enemies of those opinions, in whose favour the miracles were said to have been wrought, ever able distinctly to refute or detect them. Where shall we find such a number of circumstances, agreeing to the corroboration of one fact? And what have we to oppose to such a cloud of witnesses, but the absolute impossibility or miraculous nature of the events, which they relate? And this surely, in the eyes of all reasonable people, will alone be regarded as a sufficient refutation (2004, 96).

By all accounts, Hume’s illustration satisfies his own criteria, but he changes his tune having predetermined that miracles cannot happen. Swinburne writes, “Here the credibility of the witnesses in terms of their number, integrity and education is dismissed, not as inadequate, but as irrelevant” (1970, 16).

Hume’s second argument against the existence of sufficient testimony to believe in miracles is that human nature tends to embellish and exaggerate:

When anything is affirmed utterly absurd and miraculous, it rather more readily admits to such a fact, upon account of that very circumstance, which ought to destroy all its authority. The passion of surprise and wonder, arising from miracles, being an agreeable emotion, gives a sensible tendency towards the belief of those events, from which it is derived (2004, 90).

With this argument, Hume is speculating on human psychology, without offering evidence. Again as in his first argument, Hume’s objection had been offered years earlier by the deist Thomas Morgan, and effectively responded to by the American John Gorham Palfrey in his Lowell Lectures of 1843. Palfrey contended that there is a limit to what may be explained by such a broad brush of human
psychology without making a full inquiry of the data, something which Hume does not do and is, therefore, guilty of generalization without evidence (1843, 293-294). More recently, Brown says that it “is irresponsible to brand all religious people as naturally prone to disseminate untruth . . . some people, including religious people, are by nature sceptics” (1984, 97). Swinburne indicates that there are “some religious people who lean over backwards in their attempts to report their observations honestly” (1970, 17). Chalmers does not touch on this objection directly, most likely considering his treatment of the first objection sufficient to dispense with the second. However, he does give allusions to the general stability of the witnesses and the circumstances of their trials in retaining belief in the resurrection as leaning in favour of them being in their right mind.

Hume’s third argument is that miracles are generally offered up by ignorant and barbarous people. He writes:

It forms a strong presumption against all supernatural and miraculous relations, that they are observed chiefly to abound among ignorant and barbarous nations; or if a civilized people has ever given admission to any of them, that people will be found to have received them from ignorant and barbarous ancestors, who transmitted them with that inviolable sanction and authority, which always attend received opinions (2004, 91).

As before, this argument was standard issue from the deists of the seventeenth and eighteenth centuries, and as McGrew and McGrew write, is a statement that in itself is historically inaccurate, as well as misleading and itself ignorant (2009, 653). Beckwith finds three problems with Hume’s objection “(1) Hume does not adequately define what he means by an uneducated and ignorant
people; (2) This criterion does not apply to the miracles of Christian theism; and (3) Hume commits the informal fallacy argumentum ad hominem” (1989, 53). Beckwith also writes:

If, as mentioned, an ignorant people are anyone not educated in a modern European university, then Hume is guilty of the fallacy of begging the questions. By any stretch of the imagination, one would have to consider the ancient Roman world to be educated and sophisticated. Finally, as any first year law student learns; to attack the witness not the testimony (i.e., argumentum ad hominem) is a sure way of deflecting attention from the actual business at hand, and often done to mask a weak hand (1989, 152).

Chalmers deals with this objection when he describes the nature of the people and times in an effort to demonstrate that it could be considered a miracle that the New Testament survived efforts of Jews and Romans to put down the Christian religion.

Hume’s fourth in fact argument is that miraculous accounts in various religions cancel each other out. He says, “there is no testimony for any, even those which have not been expressly detected, that is not opposed by an infinite number of witnesses; so that not only the miracle destroys the credit of testimony, but the testimony destroys itself” (2004, 93). More specifically, Hume writes:

To make this the better understood, let us consider, that, in matters of religion, whatever is different is contrary; and that it is impossible the religions of ancient Rome, or Turkey, of Siam, and of China should, all of them, be established on any solid foundation. Every miracle, therefore, pretended to have been wrought in any of these religions
(and all of them abound in miracles), as its direct scope is to establish
the particular system to which it is attributed; so has it the same force,
though more indirectly, to overthrow every other system (2004, 93-
94).

Again, Hume has numerous problems with this argument. First, by putting all
religions on the same plain he devalues even undermines his own definition of a
miracle. Hume defined a miracle as a violation of the laws of nature. Other religious
events, may not fit that definition, therefore, he summarily dismisses them, or
contends they are contradictory. Again, Hume has begged the question (1989, 54-
55).

The second problem Hume has, which is similar to the first, is that he treats
all miracles as being equal. However, it has been pointed out by Carnell that the
Christian miracle of Jesus’ resurrection is significantly more important than other
miracles, as it addresses humanity’s greatest fear, death. Carnell writes:

The incongruity between man’s desire for life and the reality of
physical death is the most maddening problem of all. Although he
sees the handwriting on the wall, man yet refuses to think that death is
his final destiny, that he will perish as the fish and the fowl, and that
his place will be remembered no more. Man wills to live forever; the
urge is written deep in his nature (1948, 24-25).

The point that not all miracles are created equal is articulated admirably by
Beckwith, who writes, “By virtue of this universally accepted truth, we can conclude
that a religion which is grounded on the miracle of physical resurrection from the
dead, has in its apologetic arsenal a qualitatively better miracle than any other
religious system has yet to put forth” (1989, 56).
Third, Hume’s conjecture that miracles in other religions cancel out, is true only if both religious miracles are true. If two religions have contradictory miracles then it is possible that both religions have false miracles (and the point is moot). However, it just may be that one of the religions is false; hence, its negative testimony carries no weight for the other religion (Beckwith 1989, 56-57). An example of this error appears in Hume’s own essay, where he refers to Tacitus reporting of an event supposedly to have happened to Alexander the Great. This supposed miracle concerns the curing of a blind man. McGrew and McGrew claim that Hume either misquotes or intentionally misrepresents his own historian, and is so careless with his data that this argument falls short of providing any support to his overall presupposition (2009, 655). Chalmers also cites Tacitus in his treatise, but not to counter this argument of Hume, instead to indicate that secular historians offer no evidence that counters the Christian revelation.

By all accounts, Hume’s opening statement of Part II of his treatise is a bald assertion. He says, “It is easy to show, that there never was a miraculous event established on so full an evidence” (2004, 89). Hume tries, but as has been shown his arguments where general and little more than cursory replays of previous arguments. None is overly convincing, which is probably why people focus on part I, as it is the most effective argument. McGrew and McGrew write, “neither singly nor taken together do these four considerations do the work Hume claims that they will” (2009, 651). This may be why Chalmers pays little attention to refuting Hume’s part II arguments. Instead, he presents a host of reasons why the Bible should be declared a trustworthy record of historical events, including miracles. It is the evidence that Chalmers supplies to refute Hume’s second objection that in fact there is no
testimony sufficiently reliable to be admissible as an attestation to miracles that we now turn our attention.

**Chalmers’ Rebuttal to Part II of Hume’s Argument**

Chalmers begins the examination of the Bible’s truthfulness by indicating that there are two ways any particular testimony can be deemed true. “We might either sit in examination upon the substance of the message, and then, from what we know of the person from whom it professed to come, judge whether it was probable that such a message would be sent by him; or we may sit in examination upon the credibility of the messengers” (1836a, 147). Of these two, Chalmers considers the second more practical to examination via evidence, as the first is complicated when the author is separated by distance or time. The first way of examination, Chalmers says comes under the heading of internal evidences. Something he addresses in the second book of *On the Miraculous*, and more succinctly in his *Institutes of Theology*. Chalmers’ apologetic views on internal evidences are outlined in the appendix of this research. At this point, we will confine ourselves to Chalmers’ articulation of the second way of examining the Bible, as it more directly affects his argument with Hume.

Chalmers begins his defence of biblical reliability indicating that the office of history is to inform people what has been observed by others. If this evidence is deemed legitimate, then this evidence, though based on derivative rather than on direct or primary observations, should be considered as Baconian in character, in the same vein as those which are personally observed (Chalmers 1835a, 170-187). He writes that faith in ancient history is founded upon written testimony, but there is a
peculiar impression given to the testimony when its subject is a fact connected with religion. Some are led to overrate the strength of this testimony and others underrate it. Overall, Chalmers thinks that the secular world is generally biased against religious histories. However, he wants religious history to be treated with the same respect in which scientific enquiry is conducted (1835a, 170-187).

We ask no special indulgence for them. We should like them to be tested in the same way as all other authors; and, ere they are admitted as the chroniclers of past ages, to pass through the ordeal of the same criticism that they do. It is thus that we would trace by its successive landmarks, what may be called the great central stream of that history which stretches from the commencement of our existing world to the present day (1835a, 180-181).

He begins the process of analysing the biblical record, and thereby evidence for miracles attempting to review the data as an impartial observer. Chalmers first defines three terms he will use throughout his work. They are authentic, genuineness, and integrity. He writes, “we would understand by the authenticity of the book the truth of its information; by its genuineness that it is the production of the author whose name it bears; and by its integrity the incorruptness of its received copies, or the agreement in the main between the book as it exists at present and the book as it came from the hands of its author” (1836a, 175).

Chalmers constructs his argument to demonstrate the authenticity, genuineness, and integrity of the biblical record, and in particular the resurrection of Jesus in four ways. These are:

- That the different pieces which make up the New Testament (Chalmers considers the Old Testament in his analysis of the Bible
as a whole when considering internal evidence) were written by the purported authors in the age commonly assigned.

- That internal signs of truth and honesty, which can be gleaned from the compositions themselves, are resident in the New Testament.

- That the history and situation of the authors satisfies all questions of veracity and reliability.

- That all the additional and subsequent testimonies confirm and support the New Testament writings (1836a, 175).

Concerning the question if the purported authors wrote the New Testament and in the age attributed, Chalmers assembles ideas from the works of Dr. Hill, Dr. John Cook, William Paley, Butler, Taylor, and Nathaniel Lardner. His main argument is that writings available today, which were written by early church fathers Clement of Rome, Ignatius, Polycarp, and Tertullian to name a few, as well as the second century Platonist Celsus all provide evidence that agrees with the age and names of the authors of the books of the Bible. He writes:

Had the pieces, which make up the New Testament, been the only documents of past times, the mere existence of a pretension to such an age, and to such an author, resting on their own information, would have been sustained as a certain, degree of evidence, that the real age and the real author had been assigned to them. But we have the testimony of subsequent authors to the same effect; and it is to be remarked, that it is by far the most crowded, and the most closely sustained testimonies, of which we have any example in the whole field of ancient history (Chalmers 1836a, 184-185).
Chalmers’ indicates that no one questions the authorship and antiquity of the works of Plato, Aristotle, Tacitus, Cicero, Celsus, and even the church fathers; and these have fewer witnesses of their authorship and date when combined then do the books of the New Testament. Chalmers rhetorically asks, “Could Clement have dared to refer the people of Corinth to an epistle said to be received by themselves, and which had no existence” (1836a, 189).

Chalmers provides no unique arguments in his first evidential argument. What he is attempting to do is bring forth the work of others, which he believes have established that the New Testament, in fact, was written at the time and by who it is purported to have emanated. He presents a well-constructed argument using the traditional evidences that identify the New Testament to be an assemblage of first century writings with little controversy regarding the identity of the authors. As one reads Chalmers’ argument, it becomes clear he ignores the questions emanating from German higher criticism, giving no mention to authorship questions that would arise in the decades after his death.

Chalmers’ second main argument for the veracity of the New Testament, thereby the miracles contained therein is based on the internal marks of truth and honesty that can be found in the New Testament writings themselves. Chalmers again refers his readers to Lardner’s work Credibility of the Gospels. In this section, he notes the accuracy with which the New Testament record agrees with the events in Judea before the fall of Jerusalem. He points to the writings of Cicero, Tacitus, and the Jewish historian Josephus to indicate they are in agreement regarding the political and historical figures and events of the time. Chalmers mentions that there is agreement of the existence of Herod, Pontius Pilate and that other details regarding descriptions of cities and the history of the times are in unison.
Chalmers goes on to present a further internal mark of New Testament reliability writing:

That none of the gospel writers are inconsistent with one another . . . The different parts are found to sustain, and harmonize, and flow out of each other . . . There is little or no parading about their own integrity . . . They bring their story forward in the shape of a direct and unencumbered narrative, and deliver themselves with that simplicity and unembarrassed confidence, which nothing but their consciousness of truth, and perfect feeling of their own strength and consistency, can account for . . . They deliver what they have to say, in a round and unvarnished manner; nor is it in general accompanied with any of those strong asseverations by which an impostor so often attempts to practise upon the credulity of his victims (1836a, 208-209).

The most striking internal evidence for the truth of the gospel as Chalmers sees it, is the “perfect unity of mind and of purpose which is ascribed to our saviour” (1836a, 211). Chalmers views there to be perfect harmony between all the writers of the purpose and mission of Jesus.

After outlining the evidence he deems establishes the genuineness and accuracy of the New Testament coming from his first two arguments, Chalmers turns to considering his third point: the history and situation of the authors. He begins by saying, “There was nothing in the situation of the New Testament writers, which leads us to perceive that they had any possible inducement for publishing a falsehood” (1836a, 212-213).
He considers the condition of the New Testament authors living within an environment when neither Jew nor Roman would consider it admirable to believe in the gospel. Chalmers writes, “A voluntary martyrdom must be looked upon as the highest possible evidence which it is in the power of man to give of his sincerity” (1836a, 218). He goes on to mention that there is no writing in Jewish histories that indicates that the apostles were anything other than morally upright men, and the Roman historian Tacitus merely mentions that they followed *superstitio exitiablis*.

It is due to the clear internal marks and the integrity of the witnesses that Chalmers considers as a reason for the volume of New Testament manuscripts. He says, “The great number of scriptural manuscripts, compared with the small number of manuscripts of all other books, is of itself a testimony in favour of the original witnesses for the truth of the gospel narratives” (1836a, 227).

The fourth evidence for the authenticity, genuineness, and integrity of the New Testament comes from the testimony of subsequent witnesses. Chalmers again turns to Lardner’s work adding that the number of church fathers, who read the works of the New Testament, personally knew the writers themselves, and could attest to their honesty, and integrity is beyond what exists for any other work of antiquity. He writes, “Every convert to the Christian faith in those days, gives one additional testimony to the truth of the gospel history” (1836a, 237). If a Jew, they were ostracized from their family and relations; if a Gentile, they were subject to the prejudices and persecutions of the Roman authorities. In all, they suffered for their faith, something Chalmers believes more miraculous if it had been a cleverly concealed rouse than it being for the truth.

Weighing all the evidence Chalmers writes, “We are inclined to think, that the argument has come down to us in the best possible form” (1836a, 248). He
believes these four points demonstrate the authenticity, genuineness, and integrity of the New Testament. As such, they contain reliable evidence to the miracles of the Bible, and specifically, to the resurrection. Furthermore, they contain the witnesses of multiple first-hand apostles to the miracle of Jesus’ resurrection. On these grounds, Chalmers considers the evidence to be overwhelming in regards to his mathematical construction.

Before turning to internal marks impressed upon the heart of the reader due to the spiritual nature of the New Testament, Chalmers pauses to mention again the value of verified history.

If there be one thing more distinctive of all that is sound in our Modern Philosophy than another, it is the respect which it maintains throughout for the evidence of observation. Now the original witnesses of the gospel had the evidence of observation for the truth of its recorded miracles. And to us of the present day, it comes in the shape of observation at second hand – coming as it does through the medium of a testimony altogether unexampled in strength and sureness. The office of history is to inform us, not of that which has fallen under the observation of the senses of other men – and, if only transmitted to us by a sure pathway, then, though it may be termed derivative rather than direct or primary observation, yet may it claim the same rightful authority over all that is of a conjectural character, which is now allowed at all hands to the evidence of facts over the gratuitous fancies of Theory or Speculation (1836a, 296).

Chalmers is confident he has proved the case. He is confident he has shown that history, even if derivative, if perfectly reliable can be admissible as first hand
observation. He is convinced he has demonstrated, primarily by citations of other works that any effort to make the Bible anything short of authentic, genuine, and filled with integrity can be refuted. Thus, he believes he has the unspoiled testimony, which contains multiple witnesses that create a statistical preponderance of support for the gospel miracle of Jesus’ resurrection. He concludes his evidence writing:

What then, we ask, does the Atheist make of the miracles of the New Testament? If he question their truth, he must do it upon grounds that are purely historical. He is precluded from every other ground by the very principle on which he has rested his Atheism; and we, therefore, upon the strength of that testimony which has been already exhibited, press the admission of these miracles as facts (1836a, 342).

**Summation of Chalmers’ Argument**

Huie says of Chalmers’ work, “there is little in it that cannot be found in a combination of Campbell, Penrose, Le Bas, and Paley” (1949, 143-144). Nonetheless, it remains a very thorough presentation of the then available evidence for the truth of Scripture. Chalmers’ work serves as a valuable compendium to these other works as well as a compilation of all that had been produced to date. Hence, it provides valuable insights into the apologetic thinking of the 1830s.

Had Chalmers connected his historical evidences directly to Hume’s part II on *Miracles* it would have had better appeal. As it is, once his statistical construction is formulated, he leaves Hume behind. Had he assigned, like many apologists today, likelihoods of truth or falsity to his four historical arguments, the reader would have more clearly seen the connection between his first and second books.
Chalmers’ first book is an imaginative attempt to counter Hume purely on evidential grounds. He develops a probabilistic rebuttal that has more detail than what had been used before, and bases the method on his foundational belief in innate tendencies to construct his argument. He can be considered one of the forerunners of this technique, readily found in modern defences of miracles. Had he compared the likelihood of a miracle given the evidence to the likelihood that the testimony was false; his argument would have been truly Bayesian, which would have made him one of the earliest to use such an approach.

Chalmers did not attempt to challenge Hume on metaphysical grounds. He remains within the purview of Common Sense Philosophy, and develops an argument based entirely on evidence. Overall, his argument shows much insight for the possible use of probability to argue miracles, and his summarization of historical evidence serves as a window into the state of knowledge at the time. While, other apologists to follow would more effectively refute Hume and as Chalmers says, “neutralize” his writings, Chalmers’ work nonetheless is admirable and of value for historical apologetics.
PART IV: SUMMARY OF FINDINGS AND CONCLUSION

CHAPTER EIGHT: Summary of Apologetic Findings

The remainder of Chalmers’ apologetic endeavours deals not with external but with evidence internal to the human mind and conscience for God and the truth of Christianity. While of interest in their replay of the works of such notables as Paley and Butler, they, as Rice and Huie document (Huie 1949; Rice 1966), show no marks of originality, save the continuing presence of his foundational presupposition.

While these other apologetics possess little to investigate, they are, for the sake of completeness, outlined in the appendix of this dissertation. This chapter completes the task of analysing Chalmers’ apologetics, looking more closely at his evangelical orientation and the lasting impacts of his works.

Limitations of Natural Theology

Much of Chalmers’ works fall within the traditional category of British Natural Theology. It is important to remember that Chalmers does not consider Natural Theology capable of answering all questions an inquirer might ask. He believes that the principle usefulness of Natural Theology is in the direction it points, and the impelling force with which it sends the inquirer onward in their search.

It is a call upon man’s attention – not perhaps to inform but to awaken him. He obeys this call who places himself on the outlook for any traces or manifestations of God. The missionary who lands upon his
shore will find him the first to listen to his message – at least the first to be impressed by its aspect of honesty and sacredness . . . It is the existence of this impression which secures an introduction for us (1835b, 385-386).

Thus, the apologetics of Natural Theology should be viewed as being limited in its ability to present the problem of the human condition. Natural Theology can in no way be thought of as offering an adequate solution to the problem of sin and lead one to salvation. Of this, he writes:

How can a breach between God and a guilty world be repaired, or how can a readjustment be effected between a righteous lawgiver and the transgressors of His law? . . . It is a question which nature can originate, but which nature cannot solve . . . Revelation is called for, not merely as a supplement to the light and informations of nature; but far more urgently called for as a solvent for nature’s perplexities and fears. Natural Theology possesses the materials out of which the enigma is framed; but possesses not the light by which to unriddle it (1849b, 133-134).

By this, it can be seen that Chalmers confronts two schools of thought with regard to Natural Theology – one school emphasizing its insufficiency, the other its importance. The two positions are not contradictory; he considers them perfectly reconcilable. He champions the cause of Natural Theology, recognizing its important bearing on the promotion of evangelical Christianity, while also recognizing its limitations. The concluding words of Natural Theology indicate the soteriological direction, which his Natural Theology points.
It is a science not so much of dicta as of desiderata . . . For the problem which Natural Theology cannot resolve, the precise difficulty which it is wholly unable to meet or to overcome, is the restoration of sinners to acceptance and favour with a God of justice . . . It makes known to us our sin, but it cannot make known to us salvation (1835b, 419).

Chalmers, who sides with the Evangelicals of Scotland in the early-nineteenth century, repudiates the synthesis that in those days existed between his preferred form of philosophy and the moribund theology of eighteenth century Moderatism (Rice 1971, 23-46). He shows concern that Natural Theology, as proffered by the Moderate arm of the Scottish church, has taken the inquisitive nature of the study and supplanted God’s own revelation. Chalmers writes:

It is quite overrated by those who would represent it as the foundation of the edifice. It is not that, but rather the taper by which we must grope our way to the edifice . . . Christianity rests on its own proper evidence, and if, instead of this, she be made to rest on an antecedent natural religion, she becomes weak throughout (1835b, 398-399).

He is confident that the deeper one probes the length and breadth of the evidences found within Natural Theology, the more one becomes convinced that the solution to the human disease can only be found in Scripture. His education, background, and life experiences are clearly seen in his approach to Natural Theology. His apologetic writings, as is his preference, include healthy doses of scientific investigation, as prescribed by Common Sense Philosophy. Yet, he places boundaries on overzealous Natural Theology that tends, as he sees it, toward Moderatism. Furthermore, his works have a strong element of an evangelical
objective. The apologetics of Natural Theology, for Chalmers, are not just to demonstrate the arguments in support of Christianity, but to begin the process of winning souls. He writes, “How can the breach between God and a guilty world be repaired . . . It is a question that nature can originate” (1849b, 122).

This limitation or boundary, placed upon Natural Theology, permeates his works and his pastoral type writing gives them a decidedly evangelical feel. As mentioned, McCosh is of the opinion that Chalmers was a mere reconciler “between the philosophy and the religion of Scotland” (1875, 393), in the vein of traditional Moderatism. Rice successfully argues that Chalmers’ evangelical orientation was at odds with this synthesis, and does not allow for a purely anthropocentric exercise in academic apologetics. “The fact of the matter is that Chalmers did feel an antagonism here, precisely at the point where theologians of Moderate persuasion could successfully draw theological conclusions from Common Sense Philosophy which were at variance with the orthodox position Chalmers so rigorously defended” (1971, 23).

Rice indicates that Chalmers was committed to orthodox Christianity and desired to demonstrate that view in his more evangelical writings (1971, 23-46). While Chalmers, to some extent, did synthesize science with religion and although categorized as a natural theologian, he retained a unique evangelical perspective, always aware of the limits of apologetic proofs from Natural Theology.

This awareness of the limits of Natural Theology blended with his evangelical zeal is what sets Chalmers’ writings apart, according to Blaikie, from his contemporaries.

Here, then, was one source of Chalmers’ unprecedented influence on his age – he understood its cravings; he supplied them on the true
basis; and he did this in a way of his own, untrammelled alike by the forms and the phraseology of a preceding epoch. He let in the daylight and fresh air on our evangelical enclosures (1888, 287).

He is deeply convicted of the centrality of Christ’s atonement in his own conversion experience, and carries this conviction over into his more anthropologically structured treatment of systematic theology. This conviction is seen in the following from Blaikie:

Most Calvinist treatises on systematic theology start from the divine point of view, setting forth the nature of God; and, on the basis of His sovereignty, explaining his relation to man . . . Chalmers preferred to start with the actual condition of man, the diseased and disorganised state into which he had fallen, and to rise from that to the provision which God had made of his recovery through Jesus Christ . . . But, from the eminently practical character of his mind, it was not his habit to put the higher doctrines of Calvinism in the forefront of his preaching, or even of his theology (1888, 93-94).


Yet, as shown earlier, Chalmers writings contain numerous apologetic ideas, with similarities to the works of modern researchers. His desire to preach the gospel is, without question, recognizable, and the reader of his works should keep this in mind. Appreciating and expecting the prevalence of Chalmers’ evangelical
sensitivity will enable readers to empathize and be patient with Chalmers’ periodic drifts into doxology and sermon like editorials. Having this perspective will, we believe, facilitate successful reading and appreciation of Chalmers’ works.

**Systematic Theology**

It is this same evangelical orientation, found in his works of Natural Theology that Chalmers takes with him, as he explores the fullness of systematic theology. Just as with his writings in Natural Theology, his evangelical orientation influences how and in what manner he presents the subject matter of systematics.

As the first Principal of the post-Disruption New College of the Free Church, Chalmers proposes an entirely new scheme of theological education – a scheme he considers is eminently conducive to the proper training of ministers, based on evangelical and inductive ideas. The reason for his desire to shift from the traditional presentation of theology (i.e., Scripture, God, man, Christ, Holy Spirit, salvation, church, and eschatology) is a concern that seventeenth century Reformed thought had severely compromised, or at least obscured, evangelicalism (Rice 1966, 120-125).

He proposes for there to be preparatory study in mathematics and science (i.e., the subjects of natural philosophy), these were then followed by lectures in moral and mental philosophy (Hanna 1852c, 410). The apologetics of Natural Theology would form the first clearly theological course of study during a student’s four years at university. Following Natural Theology, in order of succession, would be lectures on the internal evidences for the truth of Christianity and inspiration of Scripture, and a general view of scriptural criticism. Having been prepared with the
substance of Christianity, the student, according to Chalmers, would then be ready for a study of the contents of Christianity, comprising lectures in Calvinistic systematics and pastoral theology (Hanna 1852c, 410).

Order of Christian Doctrines

The order of presenting the doctrines of Christianity is even more pertinent to Chalmers than the order of the various theological courses. He was aware that the usual method, as found in Calvin, Turretin, the Thirty-Nine Articles, and the Westminster Confession, proceeded by beginning with the Godhead and concluding with eschatology. Chalmers refers to the method as being too a priori for his liking and one that precedes modo demonstrandi, resulting in speculation, as it was too closely linked to the medieval method of scholastic speculation. Chalmers derides the traditional method for what he considers its untimely treatment of such doctrines as the trinity, at the beginning of the course, delaying discussion of the disease of humanity (1849b, xi-xiii).

The method he adopted for his regular lectures in systematic theology was – anthropological – a system that proceeds chronologically in order of human inquiry. While anthropological, it is not, according to Rice, anthropocentric94 (1971, 30-31). Salvation, for Chalmers, is based on God’s grace alone through faith alone as it says in Ephesians 2:8-9, and not of “your own doing; it is the gift of God, not a result of works, so that no one may boast” (ESV).

By anthropological, Chalmers prefers the order of theological instruction to begin with the disease or condition of humanity (i.e., humanity’s total depravity),

94 Anthropocentric means to give power of salvation into the hands of humanity.
then progressing to the remedy as presented in the gospel of God’s revelation. By presenting the doctrines of theology in an inductive manner, he maintains the unbeliever can gain as much as the believer, so that out of the darkness and probabilities of natural religion, the unbeliever would be prompted to inquire further (1849b, xiv-xv).

Chalmers’ anthropological orientation is as much evangelical as it is apologetic and theological. When he looks at the evangelical task, he considers it necessary to connect with the person’s need for apologetic answers for their distress. To begin with the trinity is, according to him, wholly unacceptable. What is required is to address the person’s need to understand that Christianity contains the remedy for their disease. He believes that someone may be convinced of the truth of Christianity by an examination of its credentials, but conviction only arises out of observing Christianity’s harmony with natural religion, and finding it to answer the distress and difficulties they are experiencing. Thus, Chalmers argues that the proper order of presenting the subject-matter of Christianity (i.e., its doctrines or systematics) is: 1) the disease for which the gospel remedy is provided; 2) the nature of the gospel remedy; 3) the extent of the gospel remedy; and 4) the doctrine of the Godhead who is the author and finisher of that remedy (1849b, ix-xx).

Underlying his preference for this order, which he describes in the preface of the Institutes, is his attitude toward a theology he calls a science. “A science whose initial elements we cannot pluck from the dark recesses of the eternity that is past, and whose ultimate conclusions we cannot follow to the like dark and distant recesses of the eternity before us, and which we can, therefore, only explore to the confines of the light that has been made to shine around us” (1849b, xii).
Chalmers once again applauds the consistency of following the Baconian method in science, starting with the objects of phenomena and from them deriving the principles. In addition, he lists three reasons why the subject of human depravity should precede that of the gospel remedy in systematic theology: 1) Christianity is primarily a remedial or restorative system; 2) study of the subjective is nearer and lies within the domain of our immediate consciousness; and 3) it is usually the first topic that engages the inquirer at the beginning of religious earnestness (1849b, 364-369).

From the time of his own conversion, Chalmers shows a preference for this method; a preference reflected in his many sermons and lectures (Hanna 1850, 421-436). His order of topics somewhat parallels the structure of the *Heidelberg Catechism*\(^95\), though there is no evidence of influence from this source. There may have been a Pascalian influence, derived from his sickbed experience (Hanna 1850, 161), but he never suggests this as a source. His admiration of Paul’s order in Romans suggests, in his introductory lecture on that epistle, it could serve as a possible inspiration for his anthropological ordering (Chalmers 1856, 1-47). However, the most probable reason for adopting such a procedure was his strong emphasis on Common Sense Philosophy, by which the observable and the practical reign supreme. It was the observable and the practical (i.e., the recognition of the disease, which progressed to the recognition of the remedy) which was the pattern of his spiritual awakening in Kilmany. That this is most probable, is identified by Huie (1949, 72), who reasons that it is probable that the anthropological order seemed the most effective order for systematizing Christian truth for the intellectual, as well as providing for the spiritual needs and understanding of both students and inquirers.

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\(^95\) The three main divisions are: Misery, Deliverance, and Gratitude.
Adaptability and Appeal

According to Chalmers, this method of presenting systematics serves not only the evangelist, but also the minister and professor with equal validity. Whether from the pulpit or professor’s chair, Chalmers always insisted that, in the presentation of Christian truths, adaptability to the local situation was eminently beneficial. Saint Paul was a favourite example to which he often appeals. “In the reasonings of the Apostle Paul, we cannot fail to observe, how studiously he accommodates his arguments to the pursuits or principles of prejudices of the people whom he was addressing” (1850, 13).

Another aspect of adaptability he emphasizes is for the preacher. Chalmers says, “In all our discussions of the different questions in theology, we have ever rejoiced when, instead of a merely intellectual dogma, a topic, perhaps, of learned controversy, we could perceive any opening whatever by which it might be turned to an object of plain and practical application” (1849c, 471). Both in the selection of themes and their presentation, Chalmers lived by and carried out this evangelically practical emphasis. His writings, thus, are meant to be accessible to Christians in general, not just academicians. In the preface to a volume of his sermons, he justifies “Predestination” and “The Sin against the Holy Ghost” with this statement:

These are topics of a highly speculative character, in the system of Christian Doctrine, which it is exceedingly difficult to manage, without interesting the curiosity rather than the conscience of the reader. And yet, it is from their fitness of application to the conscience, that they derive their chief right to appear in a volume of
Sermons; and I should not have ventured any publication upon either of these Doctrines, did I not think them capable of being so treated as to subserve the great interests of practical godliness (1830b, 371).

His apologetics and theology, consequently, are ultimately for the practical purpose of evangelism. He writes, “the more practical – the better.” A maxim, which he says, “is not vulgarizing Christianity to bring it down to the very humblest occupations of human life. It is, in fact, dignifying human life, by bringing it up to the level of Christianity” (1820, 96).

His own congregations, he reminds his students, are composed of all levels of intellectual endowment, and to his students Chalmers stresses the importance of presenting Christian truth in such a way as to make it appeal to all classes of people. A scholarly minister is needed, not only to meet heretical attacks, but also to gain the support of the intellectual contingent of the population (1835b; 1849c). On the other hand, the common person must not be forgotten:

The *odi profanum vulgas* of the Egyptian priesthood, how, wrapt in hieroglyphic mystery, forbade the access of all but the initiated to their temple, is not more hateful to my eyes than is that freezing interdict of certain doctors or dignitaries, which, if given way to, would lock up the bread of life from the multitude, and lay obstruction on the free circulation among our streets and lanes of those waters of life which are for the healing of the people (1849a, 416).

The appeal of Christian truth should be not only to all people, but also to the whole person. This had overwhelmed Chalmers, and he is zealous that its appeal to others should attract both their minds and their hearts. He senses among certain
intellectual leaders of his day a suspicion of emphasizing the emotional element in religion, and to ally such an attitude is the purpose of his sermon entitled *Defence of Religious Enthusiasm* (1860, 487 ff.). A similar thought is expressed in his comments on contemporary German thought, as quoted by Morrell:

> We do not need to take down the framework of our existing orthodoxy, whether in theology or in science. All we require is that it shall become an animated framework, by the breath of a new life being infused into it. Ours has been most truly denounced as an age of formalism: But to mend this, we do not need to exchange our formulas, only to quicken them; nor to quit the ground of our common sense for baseless speculations; nor to substitute the Divine Idea of Fichte for a personal living God; nor to adopt a saviour a mere embodied and allegorized perfection, and to give up the actual and historical Jesus Christ of the New Testament . . . What we want is that the very system of doctrine which we now have shall come to us not in word only but in power. As things stand at present, our creeds and confessions have become effete; and the Bible a dead letter; and that orthodoxy which was at one time the glory, by withering into the inert and the lifeless, is now the shame and the reproach of all Churches . . . It is not by gratifying German philosophy on the gospel of Jesus Christ, - nor by overlaying its literal facts of literal doctrines with the glosses and allegories of German rationalism, - it is not thus that we shall be able to vindicate, far less to magnify, our religion in the eyes of the world. Without the mutilation of it by one jot or one tittle, we have but to fill and follow up that Gospel, to embody it entire in our
own personal history, turning its precepts into a law, and its faith into a living principle (November 1846 - February 1847, 326-328).

Just as with Natural Theology, Chalmers’ evangelical orientation dominates his order and method of theological presentation. Rice believes Chalmers’ concept borders on the creative. While in the same paragraph he writes, without explanation, that Chalmers’ efforts are a colossal failure (1979, 188), citing Dillenberger, who believes that no one is able to escape “the basic shape given to theology by the 17th century” (1969, 54).

Without a doubt, evangelism reigns supreme in Chalmers’ mind. Therefore, apologetics, Natural Theology, and systematic theology must be oriented toward the needs of the person led by the Holy Spirit, to seek the solution for their sinful condition. Because Chalmers’ approach to theology begins with the questions an unbeliever asks, he begins theology with a discussion of the existence of God, the reliability of revelation, and the human disease. Only after establishing these, does he embark on the presentation of the solution to humanity’s sinful condition. The reader of Chalmers’ works will do well to keep this mind. It serves to explain the connection between Natural and systematic theology, and the evangelical focus of his apologetics found on every page.

**Chalmers’ Apologetic Distinctive**

It has been mentioned that Chalmers is representative of the typical apologetics of natural theologians prevalent in the eighteenth and nineteenth centuries. The previous chapters illuminated these similarities. Nonetheless, there is,
as has just been demonstrated, an aspect of Chalmers’ apologetics that are unique. There is what could be called a Chalmerian uniqueness to his apologetics.

As Rice writes, eighteenth and nineteenth century Natural Theology, of both England and Scotland, was heavily synthesized with religious Moderatism (1971, 33). Many of the apologetic works of this era were noticeably lacking in orthodox doctrine or evangelical sentiment. Instead, they were endowed, as George Trevelyan writes in his *Illustrated English Social History*, with “a cauld clatter of morality” (1944, 459). The overwhelming objective of these works, as Rice comments, was not for the evangelical promulgation of Christianity, but merely the reasoned demonstration of the existence and character of God, and reliability of Scripture via appeals to nature (Rice 1966, 111-155).

In some respects, this attitude is understandable, for outright atheism or anti-Christian beliefs were a social taboo. Consequently, Christianity was assumed true without exception, and all that was required was to demonstrate the underpinnings of faith (i.e., the existence and character of God and the credibility of the Bible). Doctrine was left to the ministry, and evangelism in this time of Moderatism was frowned upon as being too closely related to religious fanaticism (Huie 1949; Rice 1971, 23-46).

Chalmers’ works have the same basic contents as the works of his contemporaries. His efforts in Natural Theology reflect what had been produced by Butler, Paley, Reid, and a host of others; focusing on demonstrating the existence and character of God via appeals to creation, and the ordered working of the world and humanity. His treatises are oriented toward demonstrating the veracity and authority of Scripture, and reflect the same ideas of Butler’s eighteenth century
Analogies. In general, Chalmers apologetics, save those previously described aspects of originality, contain the traditional subjects of Natural Theology (Huie 1949).

Nonetheless, James McCosh, who considers Chalmers to be essentially a synthesizer of moderate religion with philosophy, also says that the tenor of Chalmers’ apologetics reflected a great uniqueness in his time.

Hitherto there has been a severance, at times an opposition if not avowed yet felt, between the Scottish philosophy and the Scottish theology. The one had magnified human nature, and tended to produce a legal, self-righteous spirit; whereas the other humbled man and exalted God, enjoining such graces as faith, humility and penitence. But there never was any real opposition between the facts gathered by the one and the truths taken out of God’s Word by the other. The metaphysicians had shown that there is such a faculty in man as the conscience; and the conscience proclaims that man is a sinner, while the Bible provides a forgiveness for the sinner in a way which honours the moral law. The reconciliation between the philosophy and the religion was effected by Thomas Chalmers, who has had greater influence moulding the religious belief and character of his countrymen than any one since the greatest Scotchman, John Knox (1875, 393).

Considering this statement, it is possible to distinguish Chalmers from his natural theological contemporaries. In short, the apologetics of Chalmers are differentiated by their practical evangelical nature. This then is the Chalmerian difference attested to earlier, which we define as,
The apologetics of Natural Theology with an anthropological evangelical emphasis on humanity’s disease of sin remedied by Christ’s atonement.

When reading Chalmers’ works, the practical nature, the evangelical sentiment of his inductive apologetics becomes obvious. Chalmers writes not just to prove a point, but also to motivate his readers to pick up and read their Bibles. “It will be a great satisfaction to the writer of the following pages, if any shall rise from the perusal of them, with a stronger determination than before to take his Christianity exclusively from the Bible” (1817, vii-viii). In this, Chalmers’ apologetics are unique, being more evangelical, while still inductively rooted, than the typical works of his day.

Even Chalmers himself identifies his apologetic uniqueness in his *Evidences*. He believes the approach he, and for that matter his evangelical contemporaries are taking, reflects something different, something he considers more Scottish than English. Of this, he writes:

> The treatment which Mr. Hume’s argument has met with in the two countries of England and Scotland is strikingly in unison with the genius of the respective people. The savants of our nation have certainly a greater taste and inclination for the reflex process, while it is more properly of our southern neighbours to enter, vigorously and immediately and with all that instinctive confidence wherewith nature has endowed us, on the business of the direct one. Our general tendency is to date our arguments from a higher point than the English do to reason for example about reasoning, before we proceed to reason about the matter on hand . . . The English again, to borrow
another phrase from their own parliamentary language, are for proceeding to the order of the day (1836a, 42-43).

Chalmers identifies this English-Scottish difference when commenting on Paley’s work on Christian evidences. He indicates that the Scottish theologian, trained in Common Sense Philosophy, first thinks upon the metaphysical underpinnings to the question, before embarking on proofs. He comments:

This is what our friends in the south seem to have no patience for. Their characteristic is not subtlety of discrimination on the powers and principles of the mind, but often admirable soundness and sagacity in the direct application of their powers to the practical object coming to a right judgment on all important questions. Dr. Paley stands forth in full dimension as an exemplar of this class (1836a, 42-44).

Chalmers considers the English approach to apologetics to be characterized by this more direct attack. Metaphysical reasonings do not take such a central focus in the recognized works of English Theologians. Scottish apologists, on the other hand, according to Chalmers, place significant emphasis on philosophical thinking. A survey of the Scottish works of Reid, Stewart, and Brown, for example, are replete with metaphysical preliminaries. In all of Chalmers’ technical works, metaphysical preliminaries occupy the first several chapters of the writings.

James McCosh considers the influence of Scottish Philosophy on the religious and theological expression of the nation as the primary reason for a unique form of apologetics found not only within Chalmers, but also within Scotland as a whole. McCosh points out that the reason for this uniqueness is that the Scottish church exerted power and influence over the people, in the absence of a political
structure, long since removed to Westminster (1875, 16). James Buchan gives the same reason for the distinctiveness he believes is found in Chalmers and in Scottish theology. He claims that, without the presence of political or aristocratic elites, the church and university professors assumed the role of the formulators of society (2003).

With this pivotal role in Scottish society by the clergy, the general make-up of Scottish thinking, according to McCosh, became more reflective, bearing the hallmarks subscribed to by Common Sense Philosophy. In general, Scottish apologetics, of which Chalmers is an excellent example, have a tendency to use inductive pursuits, to be distinguished from apologetics of other writers who use more *a priori* metaphysical thinking. While still focused on Natural Theology, Chalmers considers the intellectual processes behind human nature, the mind, and epistemology, to be in essence a blending of philosophy and religion (McCosh 1875).

Based on the analysis found within this dissertation, Chalmers’ own assessment, and the views of other researchers, it is safe to say that Chalmers’ apologetics were unique for his time. They reflect the general contents of Natural Theology, but were controlled by the empirical demands of Common Sense induction and were written for an evangelical not academic purpose.

**Chalmers’ Influence on Evangelical Apologetics**

In addition to his writings, Chalmers evangelical orientation came forth in his sermons and lectures. He constantly encouraged his congregations and students to live out their faith in a very active manner. The response given by the public to his
sermons brought him many laudatory descriptions, of which these are typical: “as a preacher, the foremost of his age . . . no living rival,” (Williamson 1847, 23) “The greatest preacher which Scotland has produced,” (McCosh 1875, 397) possibly “the greatest pulpit orator of modern times” (Macmillan 1928, 146). Anthologies of great sermons and great preachers would be inclined to include one of Chalmers’ sermons, usually the “Expulsive Power of a New Affection.” That the reputation of this master preacher of nearly two hundred years ago has not been forgotten is indicated by the description given him by a contemporary professor of homiletics, who called Chalmers “the ablest preacher that the Presbyterian Church has produced” (Huie 1949, 263).

In Chalmers’ sermons, there is recognition for an enlarged view of relating Christian truths to everyday life. This recognition was the impelling force behind his beliefs on such subjects as pauperism and missions. According to one church historian, Chalmers was the first churchman to see the significance of the Industrial Revolution in the church’s life (Huie 1949, 272), and his Commercial Discourses certainly exemplified his keenness to see a broader application of Christian teaching than had previously been expected. Blaikie recognized Chalmers to be the first to apprehend the capabilities and obligations of the pulpit. Indicating that a minister’s job is “to educate character, to establish right relations with nature and humanity, to improve all that was improveable in man, to saturate the social and national life of the country with the spirit of Christ” (1888, 8).

“The king of practical theologians” was Peter Bayne’s description of Chalmers, observing he “wrote with the sound of the world in his ears; every one of his books seems anchored to earth” (1887, 167). This testimony is supported by many other writers who recognize Chalmers’ contribution to the practical side of
apologetics, to that of an enlarged view of Christian truths toward the demands of everyday life (Walker 1880, 91, 123). Blaikie sums it up this way:

Thoroughly Calvinistic in his theology, he was yet full of humanity, and breathed only love and kindness to his race; and the bones of Calvinism were so covered with flesh and skin and life-like colour, that, in his hands, it became a thing of beauty and joy forever (1888, 288).

By approaching theology from the bottom of the heart as well as from the top of the head, Chalmers’ apologetics are noticeably evangelical, especially in the spoken word. Their impact on his congregations and the entire Free Church of Scotland cannot be underestimated.

One of the things that Chalmers noticed when he left Kilmany for Tron Church in Glasgow was the incredibly impoverished conditions of a large proportion of the city. The people lived in abject squalor and rarely attended church. According to Charles Walker, there had been a general tendency on the part of Moderate ministers to consider the problem of the poor as one that was without a solution even though they might not express these sentiments (2010).

From the beginning of his time in Glasgow, Chalmers viewed things differently. With more than ten thousand people living in his parish, Chalmers, with his evangelical orientation, established a pattern of visitation for himself and his elders. His program was so successful that every person in the parish was visited at least once a year. Out of necessity, his visits were short, but long enough to enable him to make an accurate assessment of the congregations most urgent needs. He soon discovered that providing an education to the impoverished was high on the list of issues facing his charge. To rectify this situation, he divided the parish into
smaller districts and arranged for Sunday Schools, to provide some level of education, in each district. It became evident that this was not enough, and Chalmers set about the task of raising money from the congregation to start day schools.

Chalmers was determined that the schools would not be funded by the government, but by the church, and have no hint of charity.

“The first thing that I have to say of these schools”, he informed the congregation, “is that in no one sense of the term are they charity schools . . . The education is not given - it is paid for. It is not given to a particular number, as in some schools, where so many poor scholars are admitted gratis, and marked out by this distinction from the rest of their play-fellows. We are anxious to keep any distinction of this kind away from our establishment. Each scholar comes upon the same equal and independent footing . . . There will be no other inequality known within the walls of our institution but such as arises from the diversity of talent and diligence and personal character. In every other respect it will be a little republic” (Hanna 1852a, 238-239).

Chalmers’ pastoral apologetics were not only limited to the establishment of schools. He spent a great deal of his time and energy reorganising and administrating the parish poor relief system. When he arrived in Glasgow, he had very definite views on how a Christian pauper relief system should work. He approached Glasgow’s municipal government with his plans and obtained permission to have the entire system managed by the church. Not only did the church manage the pauper relief system, but all expenses were met through church collections, a great relief to the government’s budget. Chalmers’ system was so successful that it continued for eighteen years after his departure in 1823 (Oliphant 1893; Hanna 1852a).
Even with all his dedication to the ministry and hard work, Chalmers alone could not have carried out his pastoral work in Glasgow. In this, numerous individuals aided, and it was his extraordinary gift for awakening spiritual convictions that garnered him tremendous support. He gathered a group of committed Christians, many of whom had come to faith under his preaching. He turned the detailed work over to the office of Church deacon, a position that had for many years fallen into general disuse. He returned to New Testament descriptions of deacons as servants of the church, appointing to the office men who would administer the relief system. He also ordained a group of elders and placed many of them in charge of the Sunday schools. Chalmers never seemed to be short of dedicated workers, a testimony to the power and effectiveness of his personal and living form of apologetics.

When he left Glasgow in 1823, his work in pastoral apologetics did not end. During the remaining 24 years of his life, he was dedicated to the teaching and training of men who would carry the mantle of his efforts into the future. When it came to the classroom, he was equally effective, as in the pulpit, instilling deep convictions and desire by his students to become ministers, teachers, and missionaries.

His impact on students during his five years at St. Andrews is marked by the missionary enthusiasm he instilled in six students. John Urquhart, Robert Nesbit, Alexander Duff, John Adam, David Ewart, and William Sinclair Mackay were all stirred to take up the missionary task. These students were so moved by Chalmers’ practical teachings that they all became involved in Scottish missionary work to India. Working in India for the balance of the nineteenth century, these six students
began schools, hospitals, and cared and tended the needs of the church, preaching the gospel to both upper and lower classes in India’s society (Piggin, Roxborogh 1985).

After removing to Edinburgh University in 1828, Chalmers focused on teaching systematic theology. His students went on to represent the evangelical movement 15 years later, when the Free Church started. All told, Chalmers’ students rank as a who’s who of mid-nineteenth century Scottish theologians, including such names as Robert Candlish and William Cunningham.

After becoming Professor of Divinity at Edinburgh University in 1827, it was Chalmers’ custom to allow interested residents and passers-by attend his lectures. Even with a class filled with Divinity students, Chalmers was never overly technical. He constantly strove to resurrect a dead creed and enliven a formalistic theology to the eternal benefit of both the highly educated and working class people. On 13 April 1829 Robert Morehead, the spokesperson for a group of men who had been attending Chalmers’ lectures, wrote the following letter of appreciation.

> It is, indeed, of infinite moment for the religious improvement of society over the face of the land, that a circle of this kind should, year after year, continue to gather around you: in this indirect influence of your efforts no less good is to be expected than in their more peculiar and appropriate application; and it is not only the future ministers of our parishes that will go forth to sow the seed which you have prepared for them, but our landed proprietors, the members of every honourable and liberal profession among us, our respectable citizens, our sons, who are going to distant shores, these will carry sounding in their ears and glowing in their hearts the ‘thoughts that breathe and words that burn;’ and may not only, through the Divine blessing, be
rescued by them in years long after from the blight of spiritual ignorance, or the fatal corruptions of the world, or of philosophy, but may even convey them on, in circle succeeding circle, like the impression made by the pebble upon the waters (Hanna 1852b, 235).

When assessing Chalmers’ apologetics, it is clear that his written works had minimal impact. However, his practical apologetics left their mark on Scotland, and are still noticeable today. One needs only attend a presbytery or General Assembly meeting of the Free Church and hear Chalmers’ words quoted, followed by the obligatory foot stomping of approval by the members in attendance.

It is the practical part of Chalmers’ apologetics, the evangelical nature of his works and demeanour that is most remembered. Often the aspects of his works that outline the need for schools, and serve as the motivation for people to enter the missionary field are labelled social work. Nevertheless, they are an outgrowth of his apologetics that had a warm and life-changing appeal. Understanding this aspect of Chalmers’ personal life, again, assists readers of his apologetics.
CONCLUSION

Dr. Thomas Chalmers (1780-1847) has been called Scotland’s “greatest man since Knox” (Huie 1949, 261), the “greatest of modern Scottish churchmen” (Watt 1943a, vii), “the chief Scotsman of his time” (Walker 1895, 20), “the greatest teacher of Theology our country has ever seen” (Hanna 1852c, 420), and “one of nature’s notables” (Philip 1929, 16). Numerous biographies written about his life, document the indelible influence he left on the protestant church in Scotland, and his numerous efforts to care for the needs of the poor. As a preacher, he was, in his time, without equal, drawing praise from all walks of British society. Yet, even with all the fanfare, scholarly investigations of Chalmers pass over his apologetic and theological endeavours, relegating this once celebrated man to theological anonymity.

This research’s objective was to analyse critically Chalmers’ Christian defences. In so doing, we demonstrated that the single most influential factor in his apologetic arguments is his philosophical presupposition of the mind’s innate tendency to expect nature’s constancy, and the assumption that nature harmoniously satisfies that expectation. This belief in innate tendencies of the mind emanates from Chalmers’ education in Scottish Common Sense Philosophy and reveals itself as the foundation of all his apologetic works.

This dissertation discovered that Chalmers’ apologetic arguments, while reflecting the general nineteenth century approach of Natural Theology and containing numerous unique and interesting rebuttals to his literary antagonist, David Hume, have numerous marks of similarity to works of many modern natural theologians, classical apologists, and intelligent design advocates.
A thorough study of the pertinent literature revealed no researcher had undertaken a detailed critique of Chalmers’ arguments, assessed their similarities to modern works, or identified the reasons for his theological anonymity. Only two dissertations, one by Wade Huie (1949) the other by Daniel Rice (1966), attempt to review the entirety of Chalmers’ apologetic and theological writings. These works, however, offer no formal critiques of the foundations, methods, or effectiveness of these Christian defences. Instead, they prefer to present their findings as descriptive contributions to historical research. They do agree with this dissertation, without providing detailed explanations, in identifying the pivotal role Chalmers’ foundational presupposition has in his apologetics.

Chalmers’ writings, sermons, and journals served as the primary source material to prove that his arguments for the existence of God, creation, inspiration of Scripture, and miracles emanate from his foundational belief in innate tendencies and nature’s constancy.

His proof for the existence of God follows the traditional teleological design analogy, generally associated with William Paley. He employs his foundational presupposition to argue that humanity expects constancy in nature; hence, when presented with objects that are contrived for a purpose, they are warranted in presuming upon an antecedent designer. As such, Chalmers argues that the analogy is valid, as it is merely an application of the expectation of nature’s constancy to presume upon a designer of the world. His argument does not overcome the formidable theistic objections of David Hume, committing the same begging the question, evidence, and jumping the gun errors of efforts by other apologists. The real noteworthy aspect of Chalmers’ attempt is the idea of reducing one’s gaze to the essential attributes of a generic designer and any artefact contrived for a purpose. In
so doing, he exposes a flaw in Hume’s argument (i.e., that all effects are singularities, thus knowledge is impossible, if the accessory components of the cause are included) and develops a line of reasoning previously unrecognized in reviews of his works; a line of reasoning that displays nearly identical statements as the concept of irreducible complexity put forward in the latter half of the twentieth century by intelligent design advocates.

A necessary element in Chalmers’ design analogy is the demonstration that, in fact, the world is designed. He attempts this not only by arguing for a definite commencement to the world, but that its commencement was purposefully designed by a personal cause. He contends geology and Scripture present theologians with two eyewitnesses to the world’s beginning. According to geology, Chalmers argues that the consistent behaviour of the laws of erosion removes the necessity of examining the origins of matter, as the present order of the world appears to be a recent reconstitution out of an earlier confusion (i.e., the Gap Theory). As it pertains to Scripture, Chalmers, using arguments found in Paley and Butler, defends the view that the Bible is a reliable testimony of human history. Being reliable, he claims – in a manner never done before or since – that the Bible is admissible as corroborating eyewitness testimony for the beginning of the present order. While neither argument is entirely successful, containing the same logical issues as his analogy, they do reveal significant originality, and reflect his willingness to incorporate contemporary science, which is rare for an early-nineteenth century Scottish evangelical minister.

It is his work with dispositions (i.e., the life giving beneficial disposition or collocation of matter with finely tuned laws of nature) that numerous parallels to modern arguments arise. Having completed his argument for a definite commencement to the present order, Chalmers finds, in the staggering odds against
random assemblages, the reason to favour purposeful (i.e., intelligent) design. He argues, again using the concept of irreducible complexity, for the need of a guiding influence behind the beneficial dispositions of the world and its current organisms. He also examines the ‘fine-tuned’ precision with which the laws of gravity operate to maintain celestial orbits. In so doing, Chalmers states the case for a fine-tuning design argument resembling those employed by today’s apologists.

He concludes his examination of the world, arguing that the cause of the present order of things is a personal, transcendent being, rather than an abstract force. Turning to his foundational views, Chalmers contends that the human mind innately expects an intelligent designer when presented with contrivances; thus, he concludes it is acceptable, as there is no evidence to the contrary, to expect a personal world designer. Furthermore, he writes it is acceptable to believe in a powerful, eternal, self-existent being, as there is no evidence to suggest the designer of the world is otherwise.

This last argument, for the personal nature of the cause, lacks technical precision, and like much of his works does not completely meet the challenge of refuting Hume. However, when looking at the entirety of his efforts to prove design, Chalmers presents his apologetic using the identical pattern of what is known as the Kalam Cosmological Argument (KCA). While his terminology varies and he does jump the gun to the conclusion of a God, this research concluded that Chalmers, in fact, is arguing along the identical lines of modern forms of the KCA.

When it comes to the apologetics for the existence of miracles, Huie says Chalmers’ defence contains little new, in terms of a rebuttal of the formidable works of David Hume. While true in some respects, this research concludes that Chalmers does develop an intriguing probabilistic argument. As with his other works,
Chalmers proceeds by rooting his argument on the belief of innate human tendencies. He then continues to develop an argument, in which he maintains that belief in truthful testimony can be such that its collection of eyewitnesses is greater than prior observational experience of natural phenomena. This research concluded that had Chalmers compared the probability likelihood of a miracle given the evidence to the probability likelihood that the testimony was false, his argument would have been truly Bayesian, which would have put him in the class of being one of the earliest proponents of this form of contemporary argument. Although he does not rise to the level of modern works, his line of reasoning shows significant insight for the possible use of probability to defend miracles, and his summarization of historical evidence serves as a window into the state of knowledge at the time. While other apologists, who would follow, would more effectively refute David Hume and as Chalmers says, “neutralize” his writings, Chalmers’ works nonetheless are innovative, admirable, and of value for historical apologetics.

Unfortunately, the originality and forward-looking aspects of Chalmers’ apologetics have gone unnoticed. As a man, he possessed great interest in mathematics and the sciences, was thoroughly imbibed in Scottish Common Sense Philosophy, Natural Theology, and preferred, above all else, the scientific method of argument via induction. This research demonstrated that it is his love of words, appeals to alliteration, illustration, and strong evangelical orientation employed to lift emotions, which results in a diminution of the academic nature of his works. Specifically, it is his verbose style of writing, use of repetition, inconsistent organizational structure, strict adherence to traditional forms of apologetic proofs, and the growing nineteenth century agnostic movement in science, which coalesced to cause Chalmers’ works to be viewed negatively and languish on library shelves.
Today, his works are forgotten, with scant references to him in theological articles. Yet, this research demonstrated it is possible to extract gems of real apologetic originality by understanding the make-up and motivation behind Chalmers’ writings. First, understanding his penchant for inductive arguments, scientific ideas, Natural Theology, and Common Sense Philosophy enables the reader to orient themselves to Chalmers’ approach to apologetics. Second, recognizing his overriding concern for evangelism and love of words helps readers have patience with his flowery prose. Third, grasping the significance of Chalmers’ guiding foundational premise of the constancy of nature and humanity’s innate expectation of that constancy enables the reader to understand better his methods and identify the connection each argument has with the totality of his works. Through these discoveries, this dissertation was able to review thoroughly his works and identify that many of his ideas resemble apologetic approaches in use today.

Overall, Chalmers is not successful in his efforts to offer up definitive arguments to challenge David Hume. Rice concludes that Chalmers’ works show a “lack of imaginative thought” (Rice 1966, 171-172). We disagree. In actuality, Chalmers shows significant imagination. He uses arguments, which resemble those of modern researchers in classical apologetics, intelligent design, and Natural Theology.

As mentioned, Chalmers’ main apologetic views have had minimal impact on the academics of the field. Yet, this is not to say his works did not go without influence. One only needs attend a presbytery or General assembly meeting of the Free Church and hear Chalmers’ words quoted, followed by the obligatory foot stomping of approval by the members in attendance. When one considers the evangelical motivation he instilled in his students, churches, and entire
denominations, then Chalmers’ contribution to the religious atmosphere of his day, his evangelical example, becomes clear. Chalmers’ apologetics, therefore, are not trapped in the stale atmosphere of the Moderatism of his day, but had the life-changing influence of evangelicalism.

It is the practical part of Chalmers’ apologetics, the evangelical nature of his works and demeanour that is most remembered. Often the aspects of his work that outline the need for schools, and serve as the motivation for people to enter the missionary field are labelled social work. Nevertheless, they are an outgrowth of his apologetics, which had a warm and life-changing appeal. Understanding this aspect of Chalmers’ personal life, again, assists readers of his works.

Apart from the man, his writings lack rigour, order, and readability; connected to the man, they contain gems of apologetic ideas more commonly associated with researchers of today. It has been the effort of this dissertation to critically analyse Chalmers’ apologetics in a manner so that they may be better understood and appreciated for their originality and similarity to today’s works. This objective has been achieved. Finally, the intended side effect of this research was to shed a light on Chalmers’ apologetics, providing keys to deciphering the density of his writings, making them more accessible to modern researchers. We believe this task has been accomplished as well.

We conclude by reminding readers that Chalmers’ view of the task of apologetics is inextricably linked to theology and evangelism. To this end, we offer up this excerpt from Chalmers’ apologetic sermons *Astronomical Discourses*, which reminds his readers to embrace apologetics, yet turn to the Bible.

The Christian apologist thinks he can go farther than this - that he cannot merely expose the utter baselessness of the Infidel assertion,
but that he has positive ground for erecting an opposite and a confronting assertion in its place - and that, after having neutralized their position, by showing the entire absence of all observation in its behalf, he can pass on to the distinct and affirmative testimony of the Bible. We do not think that this lays open a very interesting track . . . There is not one of its parts or bearings which needs the shelter of disguise thrown over it . . . Christianity stands in a higher and a firmer attitude . . . Hers is the naked majesty of truth . . . Such a religion as this there is nothing to hide (1850, 114-115).
APPENDIX 1: Logical Representation of Chalmers’ Defence of Design

This appendix provides a systematic presentation of Chalmers’ work, analysed in Chapter 6 of this dissertation. Graphically, Chalmers’ initial two options, of how the present order of things came to pass, are presented in diagram form using a logic tree, as follows.

![Diagram of World/Universe options]

After much investigation, this research demonstrated there is a pattern emerging in Chalmers’ thoughts. He is attempting, by using geology and historical testimony, along with material from his second and third books of *Natural Theology*, to build a cumulative case for believing the world is designed. He is confident his arguments eliminate the possibility of the eternity of the present order. In this, Chalmers is confident of success; he believes he has removed the “no beginning” option from the logic tree, leaving only the branch that the present order of the world had a definite beginning to be explored.
Deciphering Chalmers’ thinking is facilitated by noting his appreciation for the use of cumulative evidence, as found in Paley and Butler. Following these apologists’ lead, in which there are attempts to overwhelm readers with a sense of God’s majesty. Chalmers’ writings, as has been observed by others, are structured more for effect than academic precision. Therefore, to assist in understanding his writings, we continue developing the logic tree used in depicting the argument for a beginning to the present order. Since the branch for the world having no beginning, as shown in figure A1.2, is blocked, Chalmers’ continuing efforts are directed at the remaining open branch. Looking at the argument in this manner, Chalmers’ writings, while intermixed with discussions of beginnings, become recognizable as efforts to prove intentional design in distinction to un-designed random or unknown internal processes.
Confident in the power of his reasoning, Chalmers, as demonstrated in Chapter 6 of this research, considers the un-designed branch of figure A1.3, through the use of his arguments based on dispositions, to be successfully blocked. Nonetheless, for completeness sake, he includes, in his numerous apologetic efforts, positive support for the logic tree’s designed branch, as figure A1.4 depicts.
Continuing, with the logic tree, the decision branch shown in figure A1.5 now requires the addition of an analysis of the nature of what caused the design to the present order of things. As such, Chalmers adds the personal and impersonal options for the nature of the designing cause to his argument. He begins his analysis, dealing with the delayed question Hume offers in his *Dialogues*, “who caused God?” After this, he embarks on a lengthy presentation of “facts” and analyses that lead him to conclude the cause to be the God of the Christian faith.
Returning to the decision tree, the essential point of Chalmers’ arguments are to demonstrate the cause of the world is personal, not impersonal. While he never articulates his position precisely in this manner, his train of thought can be identified. Contrary to his other apologetics, in this situation, in both his works on *Natural Theology* and the *Bridgewater Treatise*, his presentation follows the sequence given in this dissertation. Had he employed the decision tree this work presents, Chalmers would be saying that the impersonal branch has been blocked, and the conclusion is that the cause of the present order of things is a personal intelligent being possessing eternity, immutability, omniscience, omnipresence, goodness and kindness (i.e., benevolence, and righteousness). In short, the personal cause of the present order of things is the God of theism, and more specifically, the Christian God. This scenario, retaining all previous results is depicted in figure A1.6 below.
World/Universe (or present order of things)

Had a beginning  

Had no beginning

Designed  

Un-designed

Personal cause  

Impersonal cause

Fig. A1.6
In some respects, Chalmers’ apologetics of Natural Theology are essentially an amalgamation of the Natural Theology of William Paley and Joseph Butler. He combines Paley’s emphasis on design and Butler’s emphasis on the human conscience in his apologetic writings. Both Paley and Butler’s influences are immediately recognizable in his apologetic cornerstones: (1) the moral constitution of the mind and (2) nature’s constancy. His admiration for both apologists accounts, in part, for what at times appear to be contradictory statements, though in all practicality, it is Chalmers’ verbose style of writing that must be identified as the main source of inaccuracy. Although he never entirely integrates their individual and distinct emphases into a coherent view of his own, it becomes apparent that Butler’s influence is increasingly stronger in Chalmers’ later years. To see Butler’s increasing influence, it is illustrative to compare Chalmers’ early apologetic works, Christianity and Evidences, with his later works Natural Theology and Institutes. When this is done, there is a noticeable increase in the emphasis given to apologetic evidence based on the mental constitution of the mind, especially the conscience, something that blends with his evangelical persuasion of later life. Of conscience in comparison with external evidence, he writes:

This internal evidence outweighs in impression, and perhaps also in real and substantive validity, all the external evidence that lies in those characters of design which are so variously and voluminously inscribed on the face of the material world. It has found an access for itself to all bosoms. We have not to look abroad for it, but it is felt by each man within the little homestead of his own heart; and this
theology of conscience had done more to uphold a sense of God in the world than all the theology of academic demonstration (1849b, 103).

In Support of Scripture

In April 1808, Dr. Brewster, editor of the Edinburgh Encyclopaedia, invited Chalmers to become one of its contributors, taking up the task of writing an article on trigonometry. Chalmers enthusiastically agreed, but soon after the death of his sister Barbara, he wrote to Dr. Brewster strongly desiring to be given the task of writing the article on “Christianity.” Hanna writes that Chalmers “urged the request with earnestness, expressing his extreme anxiety to do the subject justice” (1850, 151-152). Hanna goes on to write that it is not entirely clear what awakened the conviction within Chalmers to turn his attention from mathematics to the subject of the reasonableness of the Christian faith, but the impact of the death of his sister was most likely at the centre (1850, 152).

It would not be until the end of 1811, after his religious awakening, when Chalmers would finish the article “Christianity.” The work being complete, it appeared in the 1813 publication of the Edinburgh Encyclopaedia, marking Chalmers’ maiden voyage into the literary world as an evangelical concerned with defending the Christian religion (Hanna 1850, 371-372).

Chalmers’ article only presents a defence of the Christian faith by an analysis of the trustworthiness of historical evidences. He presents no new ideas, instead, summarizing the results of his college studies. Hanna reports that Chalmers had preached on these exact concepts nearly 10 years earlier, as revealed in a review of the diary of a certain Dr. Duff. Hanna continues, “when his work . . . was put into the
hands of one who had heard him frequently (speaking of Dr. Duff) while he was assistant to Mr. Elliott, many of its discussions were recognized as having many years previously been propounded from the pulpit of Cavers” (1850, 152).

According to Dr. Duff, Chalmers, at that time “considered the historical evidences of Christianity the most satisfactory, and that little value is to be attached to the internal evidences apart from the external” (Hanna 1850, 152). Of the primacy of historical evidence, Chalmers writes at the end of his encyclopaedia article:

Tell us a single discovery, which has thrown a particle of light on the details of the divine administration. Tell us a single truth in the whole field of experimental science, which can bring us to the moral government of the Almighty by any other road than his own revelation (1830a, 394-395).

Although containing no new apologetic concepts, the force and eloquence with which Chalmers casts light upon the value of scriptural and secular testimonies, for the case of the Christian argument, won immediate acclaim and applause. Because of the article’s warm reception, the publisher decided to release the work independent of the encyclopaedia under the title The Evidence and Authority of the Christian Revelation (Hanna 1850, 371-372).

However, not all reviews of Chalmers’ work were complimentary. He received severe criticism from Dr. Charles Stuart and Dr. Duncan Mearns. Stuart and Mearns took Chalmers to task for what they considered to be his one sided defence of the historical evidences, a defence that entirely dismisses the value of internal or the experiential influence of the Holy Spirit.

Considering these criticisms, Chalmers began a period of re-evaluation, and by the end of 1813, he replied to Stuart:
I have not yet arrived at a right settlement of opinion about it . . . There may be something in the subject which may allure me to it, which may lead me to prize it, and to abide by it; and I do not see that the Spirit of God may not, by an immediate work of illumination, give me a belief of the truth, without the intervention of any of those links of argument which may be drawn out into a lengthened demonstration (Hanna 1850, 372).

The separate volume of *Evidence* was published the next year, having been expanded to encompass nearly three hundred pages. In addition, to take into consideration some of the most severe criticisms, Chalmers placed the following words in the preface, hoping to dissuade continued criticism.

The contents of this volume form the substance of the article CHRISTIANITY, in the EDINBURGH ENCYCLOPAEDIA . . . It is chiefly confined to the exposition of the historical argument for the truth of Christianity; and the aim of the Author is fulfilled if he has succeeded in proving the external testimony to be so sufficient, as to leave infidelity without excuse, even though the remaining important branches of the Christian defence had been less strong and satisfactory than they are . . . The Author is far from asserting the study of historical evidence to be the only channel to a faith and truth of Christianity. How could he, in the face of the obvious fact, that there are thousands and thousands of Christians, who bear the most undeniable marks of the truth having come home to their understanding, “in demonstration of the Spirit and of power?” . . . It will be a great satisfaction to the writer of the following pages, if any
shall rise from the perusal of them, with a stronger determination than
before to take his Christianity exclusively from the Bible (1817, v-vii).

However, Chalmers’ efforts to allay criticism did not materialize. The new
work received scathing reviews in the 1817 editions of the Edinburgh Christian
Instructor and Quarterly Review. One of the most pointed critiques again came from
Mearns. “It appears that the principles upon which Dr. Chalmers’ system of
‘Christian Evidences’ is constructed, not only subvert the conclusions of Natural
Theology with the internal evidences, but destroy the external proofs; and that the
various arguments he employs in support of his system are destructive of each other,
and of the objects at which he aims” (Hanna 1850, 375).

Structurally, the Evidence is merely a duplication of his encyclopaedia
article. Dr. Nick Needham points out that, in addition to ignoring internal evidences,
Chalmers makes no effort to confront Hume’s formidable objection to the possibility
of miracles. Instead, Chalmers restricts his work to an analysis of the historicity,
integrity, and credibility of the Christian message, by using the method of induction
to test the veracity of the Biblical authors (1990, 50).

Chalmers’ book begins by investigating the authorship of the New Testament
writings; it then continues with an assessment of the sincerity of the apostles and
early Christians in the face of persecution and numerous hardships; next Chalmers
discusses the value of the fulfilment of prophecies as it pertains to the question of the
Bibles’ legitimacy; and finally, he addresses recent geological and archaeological
discoveries, which he believes strengthens his argument that the Bible is authentic.

Following the publication of the Evidence, Chalmers had further discussions
on the merit of internal evidences. One such discussion was with Thomas Erskine of
Linlathen. The depth of Chalmers’ interest in the merit of internal evidences is demonstrated by his willingness to read a draft of Erskine’s work on the same subject in November of 1818 (Needham 1990, 55). Furthermore, the effect of the criticisms on the Evidence and the opportunities time afforded him to read works by other authors eventually had a noticeable effect on Chalmers. He soon began to consider more fully the merit and value of internal evidences, as well as the need to support Natural Theology by directly addressing David Hume’s devastating philosophical objections to miracles. The development of these thoughts is detected in his later writings first materializing in the preface of his treatise The Christian Defence against Infidelity (1829) and a revision of the Evidence published in 1836 as On the Miraculous and Internal Evidences of the Christian Revelation (1836a). His Institutes of Theology (1849b; 1849c) represents his most mature thoughts on the subject, with an entire section on “Evidences of Christianity” placed between the topics of “Natural Theology” and what he calls the “Subject-Matter of Christianity” (i.e., systematic theology.)

Chalmers’ final views on Christian evidences are most readily displayed in his 1836 and 1849 works, and are organized into two main groups, or lines of reasoning: the first being the historical evidences (reviewed earlier in this dissertation) and the other the internal, or as he calls them, the experimental or experiential evidences.

Internal Experiential Evidences in Support of Scripture

It has been noted that Chalmers was slow to consider experimental or experiential evidence as an apologetic for defence of God’s written revelation.
However, the hostile criticism his article “Christianity” and the book *Evidence* received caused him to reconsider his position. In particular, it was the criticism of Thomas Erskine of Linlathen that Huie says was highly influential (1949, 152).

As mentioned, Erskine sent Chalmers the first draft of his *Remarks on the Internal Evidences for the Truth of Revealed Religion*, in which he attempts “to show that there is an intelligible and necessary connection between the doctrinal facts of revelation and the character of God (as deduced from natural religion) . . . and further, that the belief of these doctrinal facts has an intelligible and necessary tendency to produce Christian character” (1878, 25). Though we have no record of Chalmers’ reaction to this volume, we can assume that Erskine’s reliance on humanity’s natural inner consciousness of spiritual truth had an impact on Chalmers. This impact can be seen in Chalmers’ later life, when he begins to place a greater emphasis on the role of the human consciousness (Huie 1949, 153; Needham 1990, 56).

The first outward sign that Chalmers had changed his position on the supremacy of historical evidence came in 1829, when in the preface of a new volume entitled *The Christian Defence against Infidelity*, Chalmers writes, “we firmly believe that there is no one position in theology which can be more strongly and philosophically sustained than the self-evidencing power of the Bible” (1829, xiii). Then in the same work, he continues, writing, “there must be something more than the bare evidence of Christianity, to work the faith which is unto salvation . . . They must open their Bibles, and give earnest heed unto the word of this prophecy. To the spirit of earnestness they must add the spirit of prayer” (1829, xxx).

Finally, to signify his complete reversal of opinion regarding historical versus experiential evidence, Chalmers in 1830 writes:
The historical evidences of Christianity are abundantly sufficient to satisfy the scrutinizing researches of the learned, and are within the reach of all well-educated persons. But the internal evidence of the Truth lies within the grasp of every sincere inquirer. Every man who reads his Bible, and compares what it says of mankind with the records of his own experience; every man who marks the adaptation of its mighty system of doctrine to his own spiritual need, as a sinner in the sight of God, is furnished with practical proof of the divine origin of our religion. I love this evidence. It is what I call the portable evidence of Christianity (Gurney 1832, i).

This marks a decided shift in Chalmers’ apologetics. In earlier days, he was enamoured with the beauty and sophistication of mathematical, philosophical, logical and erudite arguments from Natural Theology. By 1830, Chalmers’ evangelical concern for preaching the gospel becomes obvious. Apologetics, is not just for the intellectual, but is necessary for defending and endearing Christianity to every person on earth.

With this change of view, Chalmers revises his earlier Evidence enlarging sections dealing with internal evidence and publishing it under the title On the Miraculous and Internal Evidences of the Christian Revelation in 1836. The Institutes of 1849 brought much needed simplification and clarification to his 1836 work, which had grown to two volumes and was at times unwieldy in its repetition. To contrast his total shift of position it is helpful to consider quotes from his 1814 Evidences with his final convictions documented in the Institutes of 1849.

From the Evidences:
We hold by the total insufficiency of natural religion to pronounce upon the intrinsic merits of any revelation, and think that the authority of every revelation rests exclusively upon its external evidences, and upon the marks of honesty in the composition itself as would apply to any human performance (1817, 243-244).

From the Institutes:

Of all the evidence that can be adduced for the truth of Christianity, it (experimental) is that for which I have the greatest value – both from its being the only evidence which tells on the consciences and understandings of the great mass of the people, and also, I think, that evidence which is the main instrument of conversion, or for working in the minds of your hearers that faith which is unto salvation (1849b, 251).

In examining Chalmers’ mature thoughts on the subject of the experimental or experiential evidence of Scripture, it is necessary to note how he defines terms. Chalmers uses the words “experimental” or “experiential” to expresses the sentiment that what the Bible says and what is “experienced” are in perfect accordance, thereby attesting to the divine nature of the Bible’s instruction. Of experience, he writes:

One thing is palpable throughout – its reigning and ascendant godliness. God is obviously the all in all of the Bible; and whatever system may be gathered from its contents, He is the soul and centre of that system (1849b, 174).

The high tone of sacredness and pure morality which pervades all the writings of the Old and New Testaments, a most impressive token of
their credibility . . . It is felt by men of moral earnestness that the Bible speaks thus for itself (1849b, 176).

It is thus that a peasant may, in the act of reading his Bible, feel, and most legitimately feel, on the strength of his intimations given there, that he is holding converse with God. A majesty, and a moral greatness, and a voice of commanding authority . . . We do not need to wait for the description of this evidence ere it shall become operative (1849b, 233-234).

Elaborating on his views of experience, Chalmers conjectures that there are three ways in which the individual is influenced by the internal evidence in the Bible.

First, he says that it is by the reality of what the Bible says people are and what people find themselves to be that it is possible to recognize the truth of Scripture. “It is thus that with no other apparatus than a Bible and a conscience, a light may be struck out between them. A man might be awakened thereby into a thorough conviction of sin” (1849b, 241).

Second, that there is perfect agreement between people’s needs and what the Bible offers to satisfy that need.

Conversion to the truth as it is in Jesus, does not lie in the understanding being reached by a train of deductions; but it lies in the conscience being reached by the naked assertion of the truth. To go and preach the Gospel is not to go and argue it, but it is to go and proclaim it . . . It is by simply promulgating the doctrine, and confiding the acceptance of it to the way in which it meets and is at
one with the knowledge that a man has of his own heart, and the sense by which he is touched of his own necessities (1836b, 145-146).

Thirdly, that this process of experience is explained by the harmony that exists between personal history and what the Bible says is the Christian experience. This evidence is continuously growing, as the believer begins to comprehend what was previously hidden, but now being “called out of darkness into His marvellous light” (1836b, 158). The Bible, decries Chalmers, is the bearer of its own credentials, and is universal in its appeal. He writes, “Their belief in Scripture, and we think all saving belief whatever, is grounded on the instant manifestation of its truth unto the conscience” (1836b, 165).

One further question should be considered, and that is what Chalmers has to say concerning the relation of the Holy Spirit to Scripture. Chalmers’ answer to this question is quite clear, writing, “we can imagine a reader of the Bible to be visited with the resistless yet legitimate conviction, amounting to a strong felt and immediate sense that God has spoken to him there – insomuch that he feels himself to be in . . . direct correspondence with God uttering His own words to Him” (1836b, 68). To become operative in the unbeliever’s heart, Chalmers insists that it is necessary for God’s Spirit to shine on the Bible in every instance of conversion. Of this, he writes, “unless the Spirit of God opens our eyes to behold the wondrous things that are contained in the book of God’s law, it will remain a sealed book to us” (Hanna 1852b, 146).
Summation of Chalmers’ Views on Evidence

As demonstrated, Chalmers’ apologetics regarding evidence in support of the Christian faith took two forms. Initially, it was only on historical evidence, to the complete exclusion of all other evidences for the truth of Scripture and the Christian faith. His use of historical evidence made it paramount that he confront the sceptical writings of David Hume. However, in his later years, he incorporates experimental or experiential evidence in his apologetic arguments for the Christian religion. He recognizes that thousands come to faith without ever investigating historical evidence; therefore, it stands on its own as a legitimate apologetic for faith.

Within these two approaches, Chalmers’ predilection for mathematics, Scottish Common Sense Philosophy, and Natural Theology, can be seen to manifest themselves in the methods he uses to demonstrate credible human testimony as evidence for the miraculous. In his later apologetics, which emphasize experience, Chalmers’ evangelical orientation as opposed to Moderatism becomes known. In the arguments from experience, he frequently turns to humanity’s conscience as guiding and directing them to belief. While, Chalmers grew to favour the experiential evidence, he at no time turns away from the value of the historical.

Regardless of the approach, Chalmers’ primary objective remains the same: demonstrating the truth of the Bible. Chalmers considers it necessary to support the inspiration, authority, and reliability of the Bible. Consequently, it is mandatory to answer Hume, as well as to demonstrate the Bible’s self-evidencing character. He believes that the objective of apologetics is no mere exercise in intellectual investigation. Apologetics has the goal of conversion at its core, and when it comes
to Christian evidences, Chalmers believes that everything revolves around demonstrating the truth of Scripture.

On Natural Theology

While Chalmers’ maiden voyage in the literary world of apologetics dealt with evidences in support of Scripture, this was not his only area of apologetic interest. Natural Theology, which Chalmers had an interest in since his school days, was also a central component of his apologetic writings.

Huie asserts that for Chalmers, a zealous leader of Scottish evangelicals, to be an adherent of Natural Theology was unusual for his day. Huie insinuates that most evangelicals in early-nineteenth century Scotland were of the experiential persuasion (1949, 76). However, Chalmers’ enthusiastically acclaimed 1817 work *Astronomical Discourses* is replete with arguments from Natural Theology. Much of the praise Chalmers received came from evangelicals, such as well-known Member of Parliament William Wilberforce. In opposition to Huie, Daniel Rice points out that the prevailing apologetics in the first half of the nineteenth century were overwhelmingly based on Natural Theology (1979, 34). This point has been addressed earlier in this work. It is fair to say that Huie and Rice are correct in saying that Chalmers is essentially a product of the times depending on traditional apologetic arguments from the field of Natural Theology.

However, to generalize and say that Chalmers is a strict natural theologian is incorrect. Chalmers does make extensive use of Natural Theology, but he also recognizes that the gospel message is found only in God’s Revelation. This section presents both sides of Chalmers’ apologetic thinking (1835b, 385-386).
Chalmers’ Natural Theology, which is thoroughly outlined in his 1835 work by the same title and his 1849 Institutes, begins with a prevailing sentiment that there is a universal knowledge of God. Chalmers frequently cites Romans 1:19-21 as scriptural validation, acknowledging that the main object of theology is God. He goes on to say that all people have a “twilight glimmering . . . for in no age or country of the world . . . did the objects of theology lie hidden under an entire and unqualified darkness” (1835a, 57). Chalmers even goes as far as to suggest that knowledge of God is required in order for man to be truly man. “For man not to know of God, he has only to sink beneath the level of our common nature” (1835a, 62).

Nonetheless, Chalmers recognizes that there are many who do not acknowledge God, and there are many who do not believe. These manifestations of unbelief Chalmers separates into two groups: atheists and antitheists (1835a, 59). According to Chalmers, the antitheist claims to have conclusively proven that God does not exist, while the atheist, only that God’s existence is not known. Chalmers dismisses the antitheist’s position on philosophical grounds writing, “to be able to say that there is no God, we must walk the whole expanse of infinity, and ascertain by observation, that such vestiges are to be found nowhere” (1835a, 60). Chalmers declares the antitheist’s position illogical, dispensing with it out of hand, leaving those of that persuasion to their own devices. Having dealt, to his satisfaction with the antitheist, Chalmers shifts his focus to the atheist, offering up numerous arguments for the existence of God (1835a, 62-63).
Before embarking on any proofs for God’s existence, Chalmers believes he has to overcome an epistemological problem. The nature of the problem is God’s remoteness. Chalmers writes, “We can take no direct cognizance of Him by our faculties whether of external or internal observation” (1835a, 18). In essence, the spiritual nature of God, along with His attributes of eternity and omnipresence, places Him beyond the reach of our direct cognizance.

Therefore, in order to eliminate the epistemological problem, Chalmers makes the distinction between what he calls the ethics and the objects of theology. He writes, “it will somewhat dissipate this felt obscurity of the science, and give more of distinctness and definiteness to the whole of this transcendental contemplation – if we distinguish aright between the Ethics of Theology, and the Objects of Theology” (1835a, 20). This distinction parallels that which exists in natural philosophy between mathematics and the objects of mathematics, where mathematics exists eternally apart from and distinct from the objects to which they are applied.

The objects of theology, therefore, are those substantive beings and historical events which come within the category of what Chalmers calls *quid est* (what is), while the ethics of theology have reference to human obligations and come under the category of *quid oportet* (what ought) (1835a, 22-23).

Chalmers illustrates this distinction by conceiving of a relationship between two men, one of whom confers kindness on the other. The gratitude the dependent displays toward the benefactor he calls the ethic of gratitude and the benefactor and dependent are both objects. Chalmers then modifies the illustration by conceiving of a situation where the benefactor is unknown, possibly not even of this world. He then surmises that anonymity of the benefactor does not remove the ethical duty of
gratitude by the dependent shown toward the unknown benefactor. The illustration demonstrates the distinction between ethics and objects, as well as hints of its application to God. Chalmers continues with the illustration arguing that if this unknown benefactor is postulated to be God then the ethics become ethics of theology, which exist eternally having their source in the very essence and character of God (1835a, 17-98).

Before continuing with his illustration of demonstrating the possibility of God, Chalmers pauses to ask a question: where does this ethic of gratitude originate? Chalmers speculates by saying, “I have a moral nature, a law within my heart, which already tells me how I should respond to this communication” (1835a, 29). By saying this, Chalmers claims that the objects of theology, as well as every other science, are ascertained by observation, a clear deference to the first principle of Common Sense Philosophy. Consequently, the relationships that exist between objects are called the ethics, in the same way that mathematics explains the orbital relationship between the earth and the sun (1835a, 21-23).

Furthermore, Chalmers, drawing upon his understanding of Common Sense Philosophy, posits that the knowledge of these ethics is an intuitive principle, which “are ultimate facts in the human constitution, not communicated to us from external objects, but called forth into actual and sensible exercise by the contact as it were and excitement of these objects” (1835a, 37).

While Chalmers recognizes that the knowledge of ethics does not prove the existence of God, it does raise the possibility that God exists. According to him, the mere possibility of God’s existence places a duty upon the atheist to investigate what might be the source of these ethics. He writes, “In the utter destitution, for the present, of any argument, or even semblance of argument, that a God is – there is,
perhaps, a certain duteous movement which the mind ought to take, on the bare suggestion that a God may be” (1835a, 63). Hence, his purpose in beginning with the ethics of theology is to demonstrate that the unbelieving reader is obliged to consider the evidence for God saying, “it ought to make him an inquirer” (1835a, 82).

The moral constitution of the mind for Chalmers begins the process of leading the inquirer to Christianity. It is, therefore, indispensable to his concept of Natural Theology, being one of its two cornerstones. However, Chalmers believes the mind’s innate morality is insufficient to prove God’s existence. To prove God’s existence, he recognizes that something else is needed. That something else is Chalmers’ second cornerstone of Natural Theology: the constancy of nature. It is nature’s constancy that forms the footing for his arguments for God’s existence; an argument based on an appeal to marks of design in the world, which he argues requires a designer.

The Proposition of Design in the Constitution of the Mind

While Chalmers expresses confidence in the combination of discernible evidence in the external world for the proposition of a God, he is even more confident that the combination of internal evidence will remove any doubt in the inquiring atheist.

The mind, he believes, being the seat of our moral, intellectual, volitional, and emotional natures, offers a variety of evidences for God. By far the most important of these internal evidences is what Chalmers calls “the supremacy of conscience,” an idea obtained from Butler’s Analogy, and one that manifests itself in humanity’s moral sense (Chalmers 1835b, 9; Butler 1900, 56).
For Chalmers, the conscience is not to be identified with the moral law universally written on the hearts of humanity; instead, it is the moral sense within each person, which perceives the moral law that exists without. In some sense, the moral law is light, and the conscience is the eye that perceives the light (Gurney 1853, 3). Alternatively, to use Chalmers’ earlier terms, the moral law is the ethic and the conscience is the object upon which the ethic adheres or excites. By these illustrations, it is clear that Chalmers conceives the moral law to exist apart from and independent of man, being synonymous with his ethics of theology.

With this view of the human conscience, Chalmers defines the supremacy of conscience to mean that there is a master faculty presiding over all other faculties in the mind. The function of the supremacy of conscience as Chalmers writes:

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\text{is to arbitrate and direct among all these propensities. It claims the station and the prerogative of a mistress over them. Its peculiar office is that of superintendence, and there is a certain feeling of violence or disorder, when the mandates which it issues in this capacity are not carried into effect (1853, 51).}
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From this moral sense, from this supremacy of conscience, Chalmers sees a necessary connection in the mind with the idea of a judge without. This inference, this instant conclusion of the mind, he believes comes in the course of one rapid transition from the feeling or inclination of a judge within to faith in a judge and a Maker who placed it there. The rapidity of the inference makes it appear intuitive, but Chalmers is insistent that it is not, writing:

\[
\text{The ratiocination by which theology is established, is not the less firm or the less impressive, that, instead of a lengthened process, there is but one step between the premises and the conclusion – or, that the}
\]
felt presence of a judge within the breast, powerfully and immediately suggests the notion of a Supreme Judge and Sovereign, who placed it there. Upon this question, the mind does not stop short at mere abstraction; but, passing at once from the abstract to the concrete, from the law of the heart it makes the rapid inference of a law giver. It is the very rapidity of this inference which makes it appear like intuition; and which had given birth to the mystic theology of innate ideas. Yet the theology of Conscience disclaims such mysticism, built, as it is, on a foundation of sure and sound reasoning; for the strength of an argumentation in nowise depends upon the length of it. The sense of a governing principle within, begets in all men the sentiment of a living Governor without and above them, and it does so with all the speed of an instantaneous feeling; yet it is not an impression, it is an inference notwithstanding – and as much so as any inference from that which is seen, to that which is unseen (1835a, 331).

The evidence from conscience, however, was not so much evidence for the existence of God, but for God’s moral character. Of this Chalmers says:

He would never have established a conscience in man, and invested it with the authority of a monitor, and given to it those legislative and judicial functions which it obviously possesses; and then so framed it, that all its decisions should be on the side of that virtue which He himself disowned, and condemnatory of the vice which He himself exemplified (1835a, 324).

Having dealt with the evidences rising out of humanity’s moral nature, which indirectly supports God’s existence by shedding light on His character, Chalmers
next examines other aspects of human nature. In doing so, he hopes to discover further evidences for God in the constitution of the mind.

To do this, he conceives of the human intellect as the percipient of human nature, including in it such functions as memory and judgment. Chalmers considers the emotional faculty to refer to those states of mental feelings, such as fear, shame and gratitude. The volitional he defines as the aspect of the mind central for determining and deciding. The relations of these parts of the human nature – the intellectual, emotional, and volitional, together with the moral – are so carefully arranged and show such a magnificent harmony of interrelationship that he believes they bespeak of the hand of an intelligent and benevolent designer. Chalmers’ thinking can thus be seen to be progressing along the same lines as his idea of the fine-tuning or collocation of matter with nature’s laws. These harmonious adaptations of the mind are worked out in the last part of his *Bridgewater Treatise* (1853, 309-401), with parts transferred to his *Natural Theology*. However, he omits any discussion of these ideas in his *Institutes*, perhaps indicating the minimal value he attached to them.

Regardless of Chalmers’ final valuation of the harmonious adaptation of the intellectual, emotional, volitional, and moral constitution of humanity to its surroundings, he still maintains the presence of the conscience. It is the conscience that Chalmers believes guides the human spirit. Furthermore, it is the innate conscience, the law within that bespeaks of a lawgiver without, which Chalmers retains. By doing so, his adherence to Common Sense philosophy and evangelical bent are combined in his apologetics of the mind.
The Adaptations of Humans to the Natural Environment

In the *Bridgewater Treatise* and again in *Natural Theology*, Chalmers penetrates deeply into an inquiry of the perceived fine-tuned adaptations that exist between humanity and the physical and social environment.

The first general adaptation he notes that exists between a person’s moral constitution and the social environment is the conscience. The social environment is so related, so finely adapted to the human conscience that there is a discernible causal relationship between the two. People experience shame over the possibility of detection when they have violated the innate moral constitution of the mind; they experience fear when contemplating the possibility of the consequences or punishment to be endured if discovered; and they are guided down a path of renewal of moral sensibilities. The restorative efficacy that exists between the moral and the social environment, Chalmers says, superintends society acting as preventative medicine for lawlessness.

A pure moral light is by this means kept up in society, composed of men whose thoughts are ever employed in ‘accusing or else excusing one another’ – so that every individual conscience receives an impulse and a direction from sympathy with the conscience around it (1835b, 17).

In a similar manner, Chalmers is convinced that humans are so connected so dependent on their social environment that there is an inherent pleasure derived from performing virtuous deeds. It is not the promise of reward that motivates virtuosity or generates the greatest degree of pleasure, according to Chalmers; it is the joy the
recipient feels in knowing and realizing the benefactor’s kindness that fuels further virtuous behaviour on all parts.

While every giver feels as he ought, experiences a delight in the exercise of generosity which rewards him a hundred-fold for all its sacrifices; every receiver who feels as he ought, rejoices infinitely more in the sense of the benefactor’s kindness, than in the physical gratification or fruit of the benefactor’s liberality (1835b, 21).

Closely aligned with the beneficial medicine of the moral constitution’s adaptation to its environment, is how it works to teach and modify human habits. When the governing medicine of pleasure derived from virtuous behaviour is impressed upon the mind, then habitual patterns become modified so that there is, according to Chalmers, an ever-increasing abundance of human virtue. So confident is Chalmers of the positive effects of the mind’s adaptation to the environment that he persuades himself to contemplating an ever improving morality and virtue of society, practically avowing an evolutionary progression toward perfection on earth that he even conceives of being more than a possibility, but a probability that there would someday be a “universal reign of virtue in the world” (1835b, 30).

There are numerous other adaptations Chalmers describes between people and the social environment that expands on what has been presented, but he also delves into those adaptations of people to the material world. Under adaptations to the material world, Chalmers lists hunger as finding its counterpart in the environment with the presence of food. The mastery over the elements in the indefinite progress of physical science also shows the adaptation of mind and matter. From his geological studies, Chalmers observes a tendency toward a balanced
fertility of the soil, operating in the general interest of society, from which he infers a designed adaptation (1835b, 178-185).

While Chalmers recognizes there are numerous instances of injustice between people and the material world not satisfying the needs of society, in general he is an optimist. He believes that the evidence in favour of the harmonious adaptations of humanity to natural and societal environments is sufficient to consider this as a reasonable argument for the designing and purposing influence of a designer.

The conclusion of Chalmers’ apologetic observations on the adaptations of humans to their environment requires he address the problem of evil. Regarding this problem, he turns to Leibniz’ theory of the origin of evil, which he feels, although unproved, can offer great service to the apologetic task by dissuading the sceptic if for no other reason than it may not be possible to disprove the hypothesis.

According to Leibniz’ theory of the origin of evil, the actual universe is conceived to be the way it is, because of all the possible universes that could be created, this one, this universe, works for the greatest amount of good. To prove otherwise would require the sceptic to posit other designs and prove they are better. Not only this, but the antagonist would have to define a universal, absolute concept of good, which may be impossible. With this hypothesis then, God is not the author of evil; therefore, evil is not the terminating object of His creation. That object, according to Leibniz, is the production of the maximum amount of good. Evil, then, has its place in the existing economy only because it is subservient to the perfectly benevolent and holy end that God had in view, and it is only that specific end – the maximum good – of which He can be properly called the author.
Leibniz, continues Chalmers, supposes all the possible forms of a universe to have been present to the divine mind from eternity. Only one of them has been embodied into an actual production by an exercise of God’s creative and voluntary power. God willed this universe into existence, but He did not will other forms into possibility. They were the objects of His understanding, just as number and figure are, but none of which He is the author. God is the author only of that universe which He selected out of all the possible forms, yielding the greatest amount of good just so happens to envelope a certain amount of evil. It was not for the evil but for the good that the universe was called out of the region of possibilities into a state of reality; and the unbeliever must prove that there are better possible worlds than the present one (1835b, 286-313). In the words of Leibniz,

Evil comes . . . from ideas which God has not produced by an act of His will . . . God . . . is not the author of the essence so long as they are but possibilities – but there is nothing actual which He has not decreed and gives existence to; and He has permitted evil because it is enveloped in the best plan which is found in the region of possibilities, and the Divine wisdom could not fail to have chosen (1898, 240).

Though criticizing Leibniz’ theory as too optimistic, Chalmers says, “if we can but say of the Optimism of Leibniz that aught we know it may be true, this would at least neutralize the origin of evil as a topic of objection – and though it may not satisfy the Infidel, a great practical good is effected by it, should it put him to silence” (1835b, 286).

In modern times, apologists like James Madden contend that Leibniz’ theory has the potential to resolve objections to design arguments. As Madden puts it, the
common attack is that if God is an omniscient and omnipresent designer then why is there evil. Madden writes, “Leibniz gives us good reason to believe that well-designed systems may coexist in nature with apparently flawed systems and still raise the probability of the existence of an omniscient and omnipresent designer” (2005, 174).

Chalmers’ recognition of Leibniz’ work signifies that he considers the theory of the origin of evil to be potentially a valuable aid in refuting this common objection to the design argument. However, Chalmers does not connect its potential to the teleological argument, placing his review of Leibniz near the very end of his second volume of *Natural Theology*, and omitting it entirely from his 1849 *Institutes*. 
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