

‘THESE SEEMINGLY RIVAL SPHERES CONSTITUTE
BUT ONE COSMOS’: CONSTANCE NADEN
AS SCIENTIST, PHILOSOPHER, AND POET
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ABSTRACT

Through her poetry and essays Constance Naden (1858-1889) sought to create an interdisciplinary philosophy predicated upon finding unity in diversity. By providing close-readings of Naden's poetry, essays, and unpublished notebooks, and thus considering the full breadth of her intellectual pursuits, this thesis demonstrates the extent of her secular world-scheme which attempted to synthesise science, philosophy, and poetry. I begin with an intellectual biography that situates Naden's scientific education, philosophical ideas, and poetic output in their nineteenth-century contexts. This creates a framework for understanding the trajectory of Naden's endeavours as scientist, philosopher, and poet. The subsequent chapters demonstrate how these three strands of her life were fundamentally intertwined. Chapter Two focuses upon Naden's engagement with scientific ideas and the scientific imagination, specifically examining the importance of light as it manifests in the study of botany, astronomy, physics, and physiology. Chapter Three turns to Naden as philosopher, teasing out the details of her childhood faith (newly demonstrated by the notebooks) and analysing the development of her relationship with the freethought movement and wider philosophical discourses. Chapter Four analyses Naden's equivocal relationship with poetic tradition, focusing on her shifting engagement with Romanticism, and her use of the lyric 'I' and the comic mode.

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TABLE OF CONTENTS

INTRODUCTION	1
INTELLECTUAL BIOGRAPHY	29
Biography.....	35
Naden’s education – ‘now discussing the latest scientific discovery’	39
Naden’s philosophy – ‘now deep in some philosophical theory’	65
Naden’s poetry – ‘now reciting some fine passage from the poets’	84
Conclusion	101
SCIENTIST	105
Naden and the Scientific Imagination.....	114
Heliotropic Urges.....	125
Physics and Physiology	143
Conclusion	164
PHILOSOPHER	171
Starting Points.....	177
The Path to Freethought.....	192
A Synthetic Philosophy	210
‘A Modern Apostle’	227
Conclusion	238
POET	241
Romanticism, Gender, Comedy.....	247
Naden’s Notebooks.....	262
<i>Songs and Sonnets of Springtime</i>	275
<i>A Modern Apostle; The Elixir of Life; The Story of Clarice; and Other Poems</i>	289
Conclusion	302
CONCLUSION	309
APPENDIX	313
Translation of ‘Das Ideal’, <i>Songs and Sonnets of Springtime</i> (1881).....	313
BIBLIOGRAPHY	315

LIST OF ABBREVIATIONS

This thesis follows the Modern Humanities Research Association (MHRA) style guide for all references in footnotes and the bibliography. While it is not required by these guidelines, for monthly nineteenth-century periodicals I also include volume numbers as a finding aid for future scholars.

The following primary texts are referenced parenthetically using abbreviations:

CPW: The Complete Poetical Works of Constance Naden, ed. by Robert Lewins (London: Bickers and Son, 1894)

FR: Further Reliques of Constance Naden: Being Essays and Tracts for our Times, ed. by George M. McCrie, (London: Bickers and Son, 1891)

I&D: Constance C. W. Naden, Induction and Deduction: A Historical and Critical Sketch of Successive Philosophical Conceptions Respecting the Relations Between Inductive and Deductive Thought and Other Essays, ed. by R. Lewins (London: Bickers and Son, 1890)

Memoir: William R. Hughes, Constance Naden: A Memoir (London: Bickers & Son; Birmingham: Cornish Brothers, 1890)

N78-9: Constance Naden, Untitled Notebook [1878-89], Birmingham, Cadbury Research Library, USS 115

P75: Poems; by Constance C. W. Naden. 1875, Birmingham, Cadbury Research Library, USS 115

P75-7: Poems; by Constance C. W. Naden. 1875-6-7, Birmingham, Cadbury Research Library, USS 115

In addition, the following abbreviations are used in footnotes:

MCM: Mason College Magazine

MCC: Mason Science College, Calendar for the Session

All emphasis in quotations is original unless otherwise stated.

INTRODUCTION

these seemingly rival spheres constitute but one Cosmos

(Constance Naden, *I&D* xxii)

Constance Naden's complete works reveal a life-long desire to elaborate a world-scheme predicated upon finding unity in diversity. Born in 1858 and dying just thirty-one years later, in her short life Naden pursued a wide variety of interests, applying her intellectual abilities across the sciences, arts, and philosophy as well as to ancient and modern languages. Charles Lapworth, who taught her geology, wrote that 'She listened, she read, she selected, and she assimilated; and the new ideas, the novel views, grew to be her own' (*Memoir* xv). By engaging with a multiplicity of ideas in a synthetic manner Naden sought to demonstrate the mutual dependence of all modes of thought, writing that 'The task of philosophy is the unification of life' (*FR* 151). Her poetry and prose elaborate upon the reciprocal relationship between art, science, and philosophy, illuminating a nineteenth-century interdisciplinary urge that sought to understand the universe, and our place within it, by demonstrating the need to consider each of these distinct perspectives simultaneously.

In her 'Prefatory Note' to *Induction and Deduction* (1890), the volume of essays published soon after her death, Naden wrote that her work was underpinned by 'the principle, implied where not explicit, that man evolves from his inner nature the world of experience as well as the world of thought; that, in fact, these seemingly rival spheres constitute but one Cosmos' (*I&D* xxi-xxii). This combination of idealism and materialism is the key position taken by Naden's philosophy, out of which all her other assertions and theories arise. George M. McCrie highlighted the importance of this within what he calls 'Miss Naden's "world-

scheme””, writing that her ‘treatment of social problems, scientific questions, religious opinions, ethical disputes, [...] hinge upon one pivot’, that of monism.¹ This concern with unity was not unique to Naden during this period. Indeed, Herbert Spencer, one of the most influential thinkers of the later nineteenth century, made a remarkably similar claim regarding the synthesis of knowledge across scientific disciplines:

when we recognize these divisions as mere conventional groupings, made to facilitate the arrangement and acquisition of knowledge – when we regard the different existences with which they severally deal as component parts of one Cosmos; we see at once that there are not several kinds of Evolution having certain traits in common, but one Evolution going on everywhere after the same manner.²

Naden develops upon this in an important way, for she wishes to synthesise the broadest sweep of human intellectual endeavour by encompassing the arts in her secular world-scheme. The concept of synthesis is a lynchpin to my thesis; Naden uses the word frequently although she does not clearly define it. It is not employed in a strictly Hegelian sense whereby a resolution of the conflict between thesis and antithesis is reached through a new, synthesising idea – although she was clearly familiar with Hegel’s works, for she references him in order to reject ‘Absolute Idealism’ in ‘The Brain Theory of Mind and Matter’ (*I&D* 161). Instead, Naden uses the term in a primarily Spencerian manner, as per his *Synthetic Philosophy*: synthesis therefore signifies the bringing together of seemingly distinct ideas from separate realms of knowledge and showing their points of connection. It is in this manner that the term is used in this thesis, for such synthesis rejects homogeneity in favour of enabling the unification of knowledge in all its disparate forms.

¹ George M. McCrie, ‘Miss Naden’s “World-Scheme”: A Retrospect. I’, *Open Court*, 4 August 1892, pp. 3335-37 (p. 3336).

² Herbert Spencer, *First Principles* (London: Williams and Norgate, 1867), *Online Library of Liberty*. <<http://oll.libertyfund.org/titles/spencer-first-principles-1867>> [accessed 18 September 2016], pp. 345-46.

Naden's claim is that when seeking to understand the human race's place in the universe poetry is of equivalent importance to science and philosophy, and, furthermore, that when these three 'rival spheres' unite to form 'one Cosmos' it is possible to dispense with religion. She explicitly rejects religious faith and replaces it with scientific rationalism and poetic rhetoric. It is important to note that science here does not denote simply the evolutionary perspective with which Naden has been associated by previous scholars; Naden's philosophy is founded upon the far broader sweep of scientific ideas that she had accumulated over six years spent studying at Birmingham's Mason Science College.

In 'Cosmic Identity' (c.1889) Naden writes of a 'unity manifested in diversity' which, she elaborates, 'is not a unity of substance or of being, which makes no provision for diversities, and indeed expressly excludes them, but a unity of relation, which at once implies diversities, and renders them intelligible' (*FR* 188-89). This concept is crucial to understanding Naden's intellectual endeavours, for she is motivated by a desire to reconcile disparate concepts by synthesising, not homogenising. Naden's reworking of this phrase throughout the 1880s emphasises her commitment to this distinctive approach to monism. It is reported that her 1882 address to the Birmingham Ladies' Debating Society was 'founded on a belief that "the watchword of the coming day is Unity, built up from Diversity"' (*Memoir* 31), while in 'Induction and Deduction' (1887) Naden writes of 'that unity in diversity, which renders the world Cosmos instead of Chaos' (*I&D* 79), and in 'Pig Philosophy' (1889) she asserts that 'there is a unity of import clearly visible in the midst of the diversity' (*FR* 1). By considering the significance of this concept across Naden's corpus – published poetry and prose alongside three unpublished 1870s notebooks – this thesis offers a critical intervention into readings of her life and works. Furthermore, I contend that Naden's works provide scholars with a unique

vantage point from which to consider synthetic thinking as a creative force within nineteenth-century intellectual culture, and reflect upon this drive in the context of twenty-first-century interdisciplinary scholarship.

While disciplines, and the boundaries between them, were not as clearly drawn in the 1880s as they became in the twentieth century, there was nevertheless a much clearer distinction between art, science, and philosophy than there had been a century earlier. Marjorie Stone writes, ‘If we treat the disciplines as historically produced, the nineteenth century emerges as a critical age of “transition”’.³ At Mason College, debate abounded concerning the relative merits of a modern scientific education over a classical education rooted in the humanities. As a result, Naden was acutely aware of how educational institutions participated in this discipline formation that fragmented knowledge into discrete sets of subjects and methodologies; she sought to build a world-scheme that bound them together. There is a distinction to be made between the interdisciplinarity that exists with the modern academic sphere, and the kind of interdisciplinary thinking that was available to Naden. Nonetheless, as Julie Thompson Klein asserts, ‘The roots of [interdisciplinarity] lie in a number of ideas that resonate throughout the modern discourse – the idea of a unified science, general knowledge, synthesis, and the integration of knowledge.’⁴ Crucially, Klein equates interdisciplinarity with the search for unity. She identifies how ‘the cumulative effect of the growing particularization of knowledge was to accelerate the forces of differentiation, slowing down conceptual assimilation’ and argues that ‘The modern connotation of *disciplinarity* is a product of the

³ Marjorie Stone, ‘Back to the Future: Disciplinary Hauntings and Victorian Studies’, *Victorian Review*, 33.1 (2007), 61-66 (p. 62).

⁴ Julie Thompson Klein, *Interdisciplinarity: History, Theory, and Practice* (Detroit: Wayne State University Press, 1990), p. 19.

nineteenth century [...] As the modern university took shape, disciplinarity was reinforced in two major ways: industry demanded and received specialists, and disciplines recruited students to their ranks'.⁵

Naden did not use the term 'interdisciplinary', as its first recorded usage is in 1937, and the work conducted by her cannot be seen as equivalent to the often fraught interdisciplinary projects undertaken within the modern academy.⁶ Nevertheless, there are significant and productive parallels to be drawn. Naden is not partaking in 'the poaching of equations, methods, and other expressions of process from one discipline for use in another', 'the one-way migration to establish a new discipline', or the mid-point between these that Willard McCarty describes.⁷ Instead she is undertaking the inherently flawed task of breaking down disciplinary boundaries as they were being put up. This therefore speaks to the same concerns and shares key aims of modern, scholarly interdisciplinarity whereby it is deemed not possible to truly understand a subject from a single disciplinary point of view; an understanding of the reciprocal relationships between modes of knowledge is therefore necessary for the development of a unified perspective. The late nineteenth century garnered a different set of approaches and issues compared to those employed today, since the boundaries between disciplines were less clearly delineated and academic specialisation was not enforced. Naden is not successful in achieving true, transcendent interdisciplinarity – it is doubtful if this

⁵ Ibid., p. 21. Daniel Brown has suggested that the opposition of literature and science in Britain was inaugurated by the British Association for the Advancement of Science's decision in 1831 not to include literature amongst their academic sections, despite the fact that most provincial and continental societies made such a provision. *The Poetry of Victorian Scientists: Style, Science and Nonsense* (Cambridge: Cambridge University Press, 2013), p. 5.

⁶ My own methodology is not inherently interdisciplinary; I use the methods of literary studies - archival, biographical, and close-reading approaches – to trace Naden's intellectual influences and contexts in terms of the histories of poetry, science, philosophy, and education.

⁷ Willard McCarty, 'Becoming Interdisciplinary', in *A New Companion to Digital Humanities*, ed. by Susan Schreibman, Ray Siemens, and John Unsworth (Chichester: Blackwell/Wiley, 2015), pp. 69-83 (pp. 76-77).

would ever be possible – but she nevertheless aspires to attain a perspective of the universe uninhibited by disciplinary boundaries.

Naden therefore draws from and connects the methodologies of art, philosophy, and science. This gesture is indicative of a wider push during the nineteenth century to develop and apply universalising theories. Before this period the relative lack of boundaries between disciplines (suggested by the term ‘natural philosophy’ to denote the sciences, for example), and the tendency to accept the claims of religion’s unifying creation myths, meant that thinkers were less anxious about the splintering of the world into discrete disciplinary categories. In the early nineteenth century, as Western society shifted away from an easy acceptance of Christian totality, synthetic philosophies such as those of Auguste Comte and Spencer arose from an imperative to develop alternative approaches to conceiving universal truth. For Naden, this meant that her philosophy was closely linked to the secular approach of the contemporary freethought movement. Unifying concepts were also an important aspect of nineteenth-century science, with wave, cell, and evolutionary theories all playing key roles in the development of Victorians’ understanding of the world. Each of these concepts permeated culture more broadly, as indicated by research into literature and science over recent decades; this is perhaps epitomised by Gillian Beer’s discussions of ‘cultural encounter’ that highlight the variety of ‘crossings we make as readers between fields’ and equivalent moves made by writers.⁸ The rapid growth of literature and science, particularly within Victorian studies, demonstrates the richness of historical interdisciplinarity as an object of study. It is a field that

⁸ Gillian Beer, *Open Fields: Science in Cultural Encounter* (Oxford: Oxford University Press, 1996), p. 1.

is itself interested in finding unity in diversity; not exact equivalence but what Sharon Ruston has called ‘common ground, common purpose and common means’.⁹

Naden’s engagement with philosophy and science began during her adolescence. In 1876 she met Robert Lewins (1817-1895), an army surgeon who had been stationed in India and served in the Crimean War.¹⁰ Upon retiring to England in 1868 he had turned his attention to propounding his atheist philosophy, publishing numerous pamphlets on the subject as well as being a prolific correspondent in certain quarters of the periodical press during the latter decades of his life.¹¹ He encouraged Naden to broaden the scope of her reading, particularly in the direction of continental philosophy. The principles of Hylo-Idealism, the scheme Naden developed in conjunction with Lewins, engaged with and built upon several different approaches to philosophy. In pamphlets, essays, published letters, and poetry Naden advocated this unifying theory, which arose from the principle that everyone creates and experiences a unique universe based upon their perception of physical sensations; in such a universe religious belief can only be a product of the human brain and ‘God’ cannot exist because this is not a materially perceptible phenomenon. Hylo-Idealism maintains that

man is the maker of his own Cosmos, and that all his perceptions – even those which seem to represent solid, extended and external objects – have a merely subjective existence, bounded by the limits moulded by the character and conditions of his sentient being. (*I&D* 157)

Naden asserts that if the fundamental philosophical conflict between idealism and materialism can be dispensed with through a new scientific understanding of matter and cognition, other

⁹ Sharon Ruston, ‘Introduction’, *Literature and Science*, ed. by Sharon Ruston (Cambridge: Brewer, 2008), pp. 1-12 (p. 11).

¹⁰ ‘Navel and Military Medical Services’, *British Medical Journal*, 10 August 1895, p. 395.

¹¹ The most detailed, but nonetheless brief, account of his life is to be found in George M. McCrie ‘In Memoriam – Robert Lewins, M.D.’, *Open Court*, 22 August 1895, pp. 4607-08.

binaries, such as objective and subjective, art and science, and self and other can also be drawn together. This is a repeated motif in her prose and verse. While Naden had begun to distance herself from Hylo-Idealism towards the end of the 1880s, it was a crucial aspect of her work from approximately 1876 to 1886.¹² After this period she remained committed to its unifying principles despite casting off its dogmatism; Naden had perhaps confronted the inherent contradiction that underlies propounding a single creed founded upon rejecting single creeds.

Marion Thain has suggested that there is little unique in Lewins's philosophy, but that

what appealed to Naden, came in key part from his poetic ability to elevate monistic theories of life through his rhetoric [... Naden] shares Lewins' desire to imbue her monism with the same sense of wonder and power which people have traditionally found in religion.¹³

The notion that Hylo-Idealism is identified with poetic revelation grounded in physical sensation (as opposed to moments of spiritual transcendence) is fundamental to my own argument. Naden cites William Whewell's view that: 'Art is the parent, not the progeny of science; the realisation of principles in practice forms part of the prelude, as well as of the sequel, of theoretical discovery' (*I&D* 32).¹⁴ This positions leaps of imagination as central within the scientific method, and John Tyndall's later elaboration of this proposal lies at the heart of Chapter Two.

¹² After 1886 references to Hylo-Idealism tail off in Naden's published works, although in the obituary essays by Lewins, in particular, he is keen to label her a life-long ardent Hylo-Idealist.

¹³ Marion Thain, 'Birmingham's Women Poets: Aestheticism and the Daughters of Industry', *Cahiers victoriens & édouardiens*, 74 (2011), 37-57 (p. 50).

¹⁴ Naden quotes Whewell's *History of the Inductive Sciences, from the Earliest to the Present Times*, 3 vols (London: John W. Parker, 1837), I, p. 333.

Naden also looked to poets who made positive statements about interdisciplinarity, finding much of worth in the writings of the Romantic period. Wordsworth, for example, wrote: ‘the Poet binds together by passion and knowledge the vast empire of human society, as it is spread over the whole earth, and over all time’.¹⁵ In Chapter Four I shall elaborate upon the points of connection between Naden and these earlier writers, and consider how her poetic identity was also shaped by pushing back against many of their assumptions surrounding lyric subjectivity. She wrote in 1882 that ‘Poetry may be personal; philosophy (world wisdom) must be universal’; if we forget this distinction, philosophy ‘will exercise a reactionary influence upon contemporary speculation and progress, by fettering living emotion to dying or dead thought’ (*I&D* 144). Progress was, for Naden, integral to philosophy, as she sought to build upon what had come before rather than tolerating an intellectual culture that stagnates or regresses. In this formulation the links between poetry, philosophy, and science are also made clear – while poetry *may* be personal, if it is to aspire to the realm of philosophy and achieve change it must look to be universal. As Naden went on to state in one of her last essays:

Fully conceived, Philosophy is that science which takes for its subject-matter the whole sphere of consciousness, and has for its object the detachment and systemisation of the ultimate principles of thought and conduct, and the exhibition of their point of unity [...] one central law of reason. (*FR* 137-38)

In this way philosophy, conceived as a science, must look to the new, dispensing with ideas that are accepted simply because they are established, and following the only true path to higher knowledge: reason.

The discovery of Naden’s notebooks dating from 1875-79 further demonstrates the progression of her ideas, indicating both constants and variables. Writing in 1879, two years

¹⁵ William Wordsworth, ‘Preface to *Lyrical Ballads* (1802)’, *The Major Works, including ‘The Prelude’*, ed. by Stephen Gill (Oxford: Oxford University Press, 2008), p. 606.

before she published any prose, Naden was already articulating an assured position on the role of poetry in relation to philosophical truth and the desire to find unity in diversity:

Poetry must lay her foundations in Truth, nor can she reach higher than the sublime verities of nature. She ranges over two spheres, those of fact & fiction, & can be excluded from neither. Truth & Poetry are not opposed, neither are they synonymous. (*N78-9* 42-43)

When asked to provide a review of Naden's *Complete Poetical Works*, Max Müller, an acquaintance who was the celebrated Professor of Comparative Philology at Oxford University, wrote that:

Tennyson once told me that the only excuse for rhyme was that it helped the memory. That may have been so in ancient times; but is it so now? My only test of poetry is: Does it stand translation into prose? It struck me when I read Miss Naden's poems that several of them would stand that test. (*CPW* Appendix 8)

Naden expressed a contrasting view, however, arguing that only unsuccessful poetry deserves 'to be reduced to the ranks of plain prose'.¹⁶ She was keenly aware of poetic form having a far higher function than Müller assigns the 'jingle of rhyme and the glamour of words' (*CPW* Appendix 8). The boundaries of poetry and prose are therefore blurred, for Naden is recorded as explaining that 'she meant her real mission to be philosophy, "not harsh and crabbed as dull fools suppose, but musical as is Apollo's lute"' (*Memoir* 23), itself a quotation from Milton's 'Comus'.¹⁷ This speaks directly to my close-reading approach to Naden's philosophical and scientific prose alongside her poetry.

My methodology draws upon and responds to the ascent of literature and science as an influential force within literary studies, and Victorian studies in particular, over the past three

¹⁶ 'Poesy Club. May 17th', *MCM* 5, June 1887, pp. 83-84 (p. 83).

¹⁷ Naden quotes John Milton, 'A Masque Presented at Ludlow Castle ("Comus")', in *The Major Works, including 'Paradise Lost'*, ed. by Stephen Orgel and Jonathan Goldberg (Oxford: Oxford University Press, 2008), p. 57 (ll. 477-78).

decades. The *Journal of Victorian Culture* considers this a ‘key interdisciplinary development’, which led them to publish two interrelated articles (by Gowan Dawson and George Levine) upon the establishment of the British Society for Literature and Science in 2006.¹⁸ Collections of essays such as *One Culture: Essays in Science and Literature* (1987) and *Nature Transfigured: Science and Literature, 1700-1900* (1989) established the thematic, methodological, and temporal reach of the field. Levine, the editor of the former, explains the need to move on from the ‘not very helpful cliché’ of ‘two cultures’ inaugurated by C. P. Snow by considering how literature and science might ‘be embraced in the same discourse’.¹⁹ The editors of the latter collection, John Christie and Sally Shuttleworth, propose ‘to widen the possibilities of understanding and of questioning the primary division of modern western culture, if not to heal it’ through interventions using ‘historically informed practice’.²⁰

More recently, the large-scale SciPer project run by the University of Leeds between 1999 and 2007 yielded two important volumes that drew upon scientific and literary methodologies to identify and analyse their reciprocal relationship in the nineteenth-century periodical press.²¹ Within periodicals the proximity and juxtaposition of scientific and literary texts is

¹⁸ Gowan Dawson, ‘Literature and Science under the Microscope’, *Journal of Victorian Culture*, 11 (2006), 301-15 (p. 301); George Levine, ‘Science and Victorian Literature: A Personal Retrospective’, *Journal of Victorian Culture*, 12.1 (2007), 86-96. See also Gowan Dawson and Sally Shuttleworth’s special issue of *Victorian Poetry* dedicated to literature and science: *Victorian Poetry*, 41.1 (2003).

¹⁹ George Levine, ‘One Culture: Science and Literature’, in *One Culture: Essays in Science and Literature*, ed. by George Levine (Madison, WI: University of Wisconsin Press, 1987), pp. 3-32 (p. 3). The impact of Snow’s seminal lecture ‘The Two Cultures’ makes itself known through its presence in almost all literature and science scholarship from the past fifty years. An overview of the history of and controversies surrounding Snow’s argument, which has been deemed far too antagonistic and simplistic by the majority of modern critics, can be found in Stefan Colloni’s valuable introduction to C. P. Snow, *The Two Cultures*, ed. by Stefan Colloni (Cambridge: Cambridge University Press, 2014), pp. vii-lxxiv.

²⁰ John Christie and Sally Shuttleworth, ‘Introduction: Between Literature and Science’, in *Nature Transfigured: Science and Literature, 1700-1900*, ed. by John Christie and Sally Shuttleworth (Manchester: Manchester University Press, 1989), pp. 1-12 (p. 12).

²¹ Geoffrey Cantor and others, eds., *Science in the Nineteenth-Century Periodical: Reading the Magazine of Nature* (Cambridge: Cambridge University Press, 2004); Geoffrey Cantor and Sally Shuttleworth, eds., *Science Serialized: Representations of Science in Nineteenth-Century Periodicals* (Massachusetts: MIT Press, 2004).

understood to stimulate interdisciplinary practices. Within this thesis I identify Naden's complete works as a comparable site of interweaving; reading her poetic, scientific and philosophical writings alongside each other enables the interdisciplinary framework of her thought to be identified. In the second half of the nineteenth century there are few individuals for whom such a claim can be made, so it behoves us to attend to Naden's corpus in order to consider how, as reader, writer, and practitioner in both literature and science, she is a locus for active participation across these fragmented discourses. Her works straddle these domains in a manner that ensures that no single discourse is clearly prioritised or, conversely, relegated to the role of context, epitomising Beer's now widely accepted paradigm of two-way traffic.²²

The one culture model in some ways dominates literature and science studies, although it has been problematised in important ways. Christine Lehleiter reminds us that 'interdisciplinarity is in no way "more natural" than the disciplinarity that we have exercised for so many years', advising researchers within literature and science studies to be mindful of our contemporary 'historical and political moment in which literature feels under pressure from the sciences'.²³ Furthermore, Beer has argued that scholars must acknowledge that 'Transformations and imbalances reveal as much as congruities', and as such 'The question of meaning in (and across) science and literature needs to be sustained without seeking always reconciliation'.²⁴ More recently, Dawson, in *Darwin, Literature, and Victorian Respectability* (2007), has identified the often destructive relationship between these two aspects of Victorian culture,

²² Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, 3rd edn (1983; Cambridge: Cambridge University Press, 2009), p. 5.

²³ Christine Lehleiter, 'Fact and Fiction: Literary and Scientific Cultures in Germany and Britain – Thoughts on a Contentious Relationship', in *Fact and Fiction: Literary and Scientific Cultures in Germany and Britain*, ed. by Christine Lehleiter (Toronto: University of Toronto Press, 2016), pp. 1-30 (p. 4).

²⁴ Beer, *Open Fields*, p. 195.

suggesting that this reflects ‘the actual interconnection’ of science and literature.²⁵ Anne Dewitt is similarly interested in antagonistic encounters, arguing that while literature and science are not entirely separate cultures, ‘Science and the [Victorian] novel are not invariably engaged in a productive exchange of ideas’.²⁶ It is therefore important to recognise that the creative and reciprocal relationship between literature and science is not always as clear or as balanced as some works of scholarship suggest. While I argue that Naden was an exemplary interdisciplinary thinker who sought to bring literature and science into mutually productive conversation, I nonetheless attend to the discord that manifests around questions of objectivity and subjectivity, for example. Furthermore, in the conclusions to Chapters Three and Four I point to Naden’s uneasiness with balancing the roles of poet and philosopher during the final years of her life, suggesting the indisputable difficulties inherent in her desire to attain the ‘reconciliation of poetry, philosophy, and science’ (*FR* 126).

Beer’s field-shaping collection of essays *Open Fields* is notably wide ranging. While a significant proportion of the chapters engage with ‘Darwinian Encounters’, the closing section, titled ‘Victorian Physics and Futures’, focuses upon how the nineteenth-century development of wave theory – the pursuit of ‘a single explanation of cosmic processes that would include light, heat and sound’ – provides an alternative and equally important strand of interdisciplinary engagement.²⁷ Nonetheless, it is literature and evolution (and the biological sciences more broadly) that have come to dominate the academic canon. Works such as Beer’s *Darwin’s Plots* (1983), Levine’s *Darwin and the Novelists* (1992), and John Holmes’s

²⁵ Gowan Dawson, *Darwin, Literature, and Victorian Respectability* (Cambridge: Cambridge University Press, 2007), p. 7.

²⁶ Anne Dewitt, *Moral Authority, Men of Science, and the Victorian Novel* (Cambridge: Cambridge University Press, 2013), p. 6.

²⁷ Beer, *Open Fields*, p. 298.

Darwin's Bards (2009) shaped the critical landscape.²⁸ While studies such as these and many others were fundamental to the establishment of the field of literature and science, later publications actively sought to move beyond evolutionary frameworks in order to diversify research by attending to other scientific disciplines.

The drawing together of literature and physics in nineteenth-century studies was established by work such as Daniel Brown's *Hopkins' Idealism: Philosophy, Physics, Poetry* (1997); such research has tended to build links between disparate disciplines by picking up on echoes of scientific theories in literary works.²⁹ For example, Jason Rudy analyses the breadth of poets for whom the poetic form was tied to 'electrical epistemologies' that grew out of contemporary developments in physics and physiology. However, his perfunctory mention of James Clerk Maxwell's own poetry as not 'the sort that rewards extended reflection' indicates a focus upon unidirectional influences.³⁰ Brown's recent book *The Poetry of Victorian Scientists: Style, Science and Nonsense* (2013) engages more clearly with Maxwell's poetry, and that of other science practitioners. Significantly, Brown is keen to identify the centrality of comic irony and nonsense as modes through which scientists expressed their positioning of science within culture.³¹ Naden's own use of the comic register is integral to her poetic corpus and its connections to science, highlighting her participation in an existing (although largely unpublished) tradition. Barri Gold has stated, in her conclusion to *ThermoPoetics* (2010), that

²⁸ George Levine, *Darwin and the Novelists: Patterns of Science in Victorian Fiction* (Cambridge, MA: Harvard University Press, 1992); John Holmes, *Darwin's Bards: British and American Poetry in the Age of Evolution* (Edinburgh: Edinburgh University Press, 2009).

²⁹ Daniel Brown, *Hopkins' Idealism: Philosophy, Physics, Poetry* (Oxford: Clarendon Press, 1997).

³⁰ Jason R. Rudy, *Electric Meters: Victorian Physiological Poetics* (Athens, OH: Ohio University Press, 2009), pp. 5, 3.

³¹ Daniel Brown, *The Poetry of Victorian Scientists*. Jeffrey Mackowiak constructs a more complex position on what constitutes poetic approaches by scientists in order to consider how nineteenth-century debates about materialism were negotiated in 'The Poetics of Mid-Victorian Scientific Materialism in the Writings of John Tyndall, W. K. Clifford and Others' (unpublished doctoral thesis, University of Cambridge, 2006).

Victorian literature is ‘at least as concerned with energy as [...] with evolution or sexuality or colonialism or any of the other issues that have preoccupied’ modern scholarship.³² There is therefore clearly scope for scholarly work on literature and physics and other sciences that is analogous to the abundance of publications on evolution that appeared during the last few decades. It is into this space within the field that my work on Naden’s engagement with light via astronomy, physiology, and physics can be placed.

Unity in diversity is a common theme within literature and science studies, often implicitly as scholars recognise the differences in methodologies and outcomes while asserting the disciplines’ interconnectedness. J. A. V. Chapple uses this phrase as a section title in the chapter ‘Astronomy, Physics, Chemistry, Meteorology’ within *Science and Literature in the Nineteenth Century* (1986); he identifies how ‘In seeking correspondences in nature, scientist and poet were engaged in a common pursuit, typical of the relatively undivided intellectual culture’ of the early nineteenth century.³³ Across the decades that followed, some kinds of unity (that of forces in nature, for example) became accepted as central to scientific progress, while others became less widely accepted as the development of educational institutions codified the separation of the physical sciences from the humanities. Gold highlights the significance of Grand Unified Theories, which lie at the heart of energy physics but were also central to the development of the social sciences; she specifically cites the importance of Spencer’s synthetic philosophy, which exerted such a strong influence upon the development of Naden’s thought.³⁴

³² Barri J. Gold, *ThermoPoetics: Energy in Victorian Literature and Science* (Massachusetts: MIT Press, 2010), p. 260.

³³ J. A. V. Chapple, *Science and Literature in the Nineteenth Century* (Basingstoke: Macmillan, 1986), pp. 20, 23.

³⁴ ³⁴ Barri J. Gold, *ThermoPoetics: Energy in Victorian Literature and Science* (Massachusetts: MIT Press, 2010), pp. 71-112.

Modern literature and science scholarship is regularly traced back through the twentieth century to Snow's Rede Lecture in 1959 and those who pushed back against it, and yet the ground work to this was being carried out during the nineteenth century. In particular, Edward Dowden's 1877 essay 'The "Scientific Movement" and Literature' is a foundational text; he identifies distinctions between the truths reached by these two fields and argues that imagination, and by extension literature's, 'unifying power can bring together the two apparently antagonistic elements'.³⁵ That the interplay between literature and science was being actively scrutinised during the late nineteenth century is important regarding my approach to Naden's works; I trace her understanding and critique of perceived boundaries between types of knowledge and how she sought to challenge these in her writings.

My research shares the historicist underpinnings of the vast majority of literature and science scholars, making clear connections between text and context, and troubling the boundaries of what may be understood as the material for literary analysis. The contributors to the *Journal of Literature and Science's* 2012 roundtable on historicism are right to interrogate the foundations of this approach; as Holmes remarks during these proceedings, while it is the default in the field 'it is neither uncomplicated nor necessarily unquestionable'.³⁶ Nonetheless, it is the most productive method by which to situate Naden's life and works in their time and place, and thus to consider how these texts interact with wider discourses surrounding science, religion, philosophy, and poetry during the late nineteenth century. Chronologies of thought

³⁵ Edward Dowden, 'The "Scientific Movement" and Literature', in *Studies in Literature: 1789-1877* (London: Kegan Paul, Trench, Trübner, 1892), pp. 85-121 (p. 91). For a more in depth assessment of Dowden's argument see Tess Cosslett, *The 'Scientific Movement' and Victorian Literature* (Sussex: Harvester, 1982), pp. 3-9, 19.

³⁶ John Holmes, 'Introduction: Historicism in Literature and Science: A Roundtable', *Journal of Literature and Science*, 5.2 (2012), 55 <<http://dx.doi.org/10.12929/jls.05.2.05>>

are rarely easy to pinpoint, problematising the identification of the form and function of reciprocal relationships between disciplines. Often this leads to antagonism between the aims and claims of history of science and literature and science as fields, an issue raised specifically by a series of short articles published in *Isis* in 2010. A range of highly-regarded commentators demonstrated the interdependence of these two fields, signalling the latter's increasing significance in relation to the former, longer established field.³⁷ My own research demonstrates how intensive archival research (which produces a detailed account of an individual's scientific education and wider intellectual interests) can be productively paired with close textual analysis of poetry and non-fiction prose, providing valuable contributions to literary studies, the history of science, and the field of literature and science.

Ben Marsden has recently argued that it is imperative for literature and science studies to continue looking outside the canonical writers that populated much early research within literature and science. He proposes that 'non-canonical, obscure or undistinguished literature can offer sharper insights and stronger challenges to preconceptions about the past than texts which fit more easily into modern aesthetic codes'.³⁸ It is with this in mind that I present the first in-depth study of Naden's multifaceted literary, scientific, and philosophical career. I contextualise the 'Evolutional Erotics', which have already attracted critical commentary and may be said to have become canonical, by reading them alongside the other intellectual discourses and genres of writing (both literary and 'non-literary') in which Naden participated. This is a significant contribution because, in doing so, I argue that we are

³⁷ James J. Bono and others, 'Focus: History of Science and Literature and Science: Convergences and Divergences', *Isis*, 101 (2010), 555-98.

³⁸ Ben Marsden, 'Introduction', in *Uncommon Contexts: Encounters between Science and Literature, 1800-1914*, ed. by Ben Marsden, Hazel Hutchison, and Ralph O'Connor (London: Pickering and Chatto, 2013), pp. 1-19 (p. 9).

empowered to consider how Naden utilised practices and ideas that lie at the heart of the modern literature and science field. We find in her work a version of the one culture model that proposes a synthetic, interdisciplinary approach to identifying unity in diversity.

In this thesis I do not attempt to provide an exhaustive analysis of Naden's intellectual interests, influences, and pursuits. While Naden's corpus is relatively small, even with the new addition of the unpublished notebooks, the reach of her ambition to assimilate knowledge would make such a task unfeasible. The three analytical chapters of this thesis respectively focus on the imagination and light as subjects and tropes within science, freethinking and synthetic philosophies, and poetic voice primarily in relation to Romanticism and comic verse. From each arises the theme of unity in diversity, the keystone of my argument. Naden's intellectual project was a synthetic one; she sought to make connections between ideas and disciplines in order to develop a truly interdisciplinary way of thinking. Whether or not she was entirely successful in achieving this – for she can be a somewhat contradictory figure – in the concepts of light, freethought, and poetic expression Naden saw the raw materials of such a philosophy, which she synthesised into something all her own.

In the past three decades there has been a steady rise in scholarly interest in Naden, who was largely forgotten after the end of the nineteenth century. As a result of the rise of feminist criticism in the latter part of the twentieth century a proliferation of anthologies have sought to republish and rehabilitate Victorian women's poetry. Naden appears in most of these, including *Everyman* (1994), *Blackwell* (1995), *Oxford* (1996), and annotated *Longman*

(2001) editions.³⁹ With the exception of the two discussed below, all anthologies that include Naden have selected at least one of the ‘Evolutional Erotics’ (‘Scientific Wooing’, ‘The New Orthodoxy’, ‘Natural Selection’, and ‘Solomon Redivivus’) and several editors have chosen to print all four. The cause and effect of this decision is that in modern criticism Naden has been primarily discussed in terms of women’s literary engagement with Darwin, and only a small percentage of Naden’s published poems have been subject to scholarly analysis, despite her *Complete Poetical Works* being freely available online since 1996.⁴⁰

Naden is less commonly found in non-gender orientated collections of nineteenth-century poetry, although ‘Christ the Nazerene’ appears in *The Penguin Book of Victorian Verse* (1997) and ‘Illusions’ is included in ‘The Aesthetic Movement’ section of *The Broadview Anthology of British Literature, Volume 5: The Victorian Era* (2006). The latter choice of a rather uncharacteristic sonnet speaks to the tendency of scholars to situate writing of the 1880s in a familiar context rather than seeking to understand Naden’s specific style.⁴¹

Although Naden was a family friend of Edith Cooper (one of the pair of poets who wrote as

³⁹ *Victorian Women Poets 1830-1901. An Anthology*, ed. by Jennifer Breen (London: Everyman, 1994); *Victorian Women Poets: An Anthology*, ed. by Angela Leighton and Margaret Reynolds (Oxford: Blackwell Publishers, 1995); *Nineteenth-Century Women Poets: An Oxford Anthology*, ed. by Isobel Armstrong, Joseph Bristow, and Cath Sharrock (Oxford: Oxford University Press, 1996); *Victorian Women Poets. A New Annotated Anthology*, ed. by Virginia Blain (Harlow: Pearson Longman, 2001). It may be noted that Naden is not included in *Winged Words: Anthology of Victorian Women’s Poetry and Verse*, ed. by Catherine W. Reilly (London: Enitharmon Press, 1997). Reilly was clearly aware of Naden, however, as a full biographical and bibliographical entry appears in the earlier *Late Victorian Poetry 1880-1899. An Annotated Biobibliography* (London: Masell, 1994).

⁴⁰ Constance Naden, *The Complete Poetical Works of Constance Naden* (London: Bickers & Son, 1894). *Victorian Women Writers Project. Indiana University Digital Library Program* <<http://purl.dlib.indiana.edu/iudl/vwwp/VAB7115>> [accessed 5 September 2016].

⁴¹ *The Penguin Book of Victorian Verse*, ed. by Daniel Karlin (Middlesex: Penguin Books, 1997); *The Broadview Anthology of British Literature. Volume 5: The Victorian Era*, ed. by Joseph Black, Leonard Conolly, Kate Flint, Isobel Grundy, Don LePan, Roy Liuzza, Jerome McGann, Anne Lake Prescott, Barry Qualls, and Claire Waters (Ontario: Broadview, 2006). In addition, Naden appears in anthologies pertaining to a more limited time period: *Decadent Verse: An Anthology of Late-Victorian Poetry, 1872-1900*, ed. by Caroline Blyth (London: Anthem Press, 2009) and *Poetry of the 1890s*, ed. by R. K. R. Thornton and Marion Thain (Middlesex: Penguin Books, 2001), despite Naden not having lived into the latter decade she is admitted because *CPW* was published in 1894.

Michael Field) and had her poetry published and positively reviewed in *The Woman's World* while under Oscar Wilde's editorship, as Marion Thain has observed, 'one would be hard pushed to class Naden as an aesthete'.⁴² It is notable, therefore, that the Broadview anthology's website component had, by 2011, expanded their selection to include 'The Lady Doctor', 'The Sister of Mercy', 'Love *Versus* Learning', and the 'Evolutional Erotics', reinforcing the perceived primacy of Naden's engagement with gender issues and evolutionary ideas.⁴³

The earliest twentieth-century scholarship on Naden was a principally biographical article by Philip E. Smith II and Susan Harris Smith in 1977.⁴⁴ Subsequent literary critical attention has largely focused on 'Evolutional Erotics' and 'A Modern Apostle', both of which were published in 1887, with additional interest shown in the earlier 'The Lady Doctor' and 'Love *versus* Learning'. As I shall describe, recent doctoral projects have begun to engage with a broader span of Naden's published poetry and prose, from which more multifaceted arguments have developed. Their focus on Naden's work in the context of other women writers, however, and the underlying constraints of multi-author theses, mean that the breadth of Naden's thought and achievements has not yet been fully explored. In addition, it may be noted that Naden has never appeared in histories of Victorian philosophy or social science. As a result, her prose writings have thus far been understood as contexts, rather than texts in their own right, a limiting approach that this thesis rejects in favour of close reading across the full breadth of Naden's corpus.

⁴² Thain, 'Birmingham's Women Poets', p. 49.

⁴³ Constance Caroline Woodhill Naden, in *The Broadview Anthology of British Literature. Volume 5: The Victorian Era* (Ontario: Broadview, 2012) <sites.broadviewpress.com/bablonline> [accessed 5 September 2016]

⁴⁴ Philip E. Smith II and Susan Harris Smith, 'Constance Naden: Late Victorian Feminist Poet and Philosopher', *Victorian Poetry*, 15 (1977), 367-70.

To date, academics have endeavoured to read Naden's poetic writings in three interlinked contexts: evolutionary science, religion, and gender. The former has characterised Naden's position within studies of literature and science, beginning with Patricia Murphy's 2002 article which examines how the discourse of evolutionary science that Naden utilises inevitably 'validates and reconfirms the gendered power relationship through which women are always already marginalized'.⁴⁵ In 'Scientific Wooing: Constance Naden's Marriage of Science and Poetry' Thain considers more expansively the 'true dialogue and reciprocity' between disciplines in her works, while remaining focused on evolutionary themes.⁴⁶ Andrea Kaston Tange argues, however, that Murphy and Thain offer reductive readings of Naden's poetry, in which she finds a more nuanced voice that often 'revels in apparent contradictions and their repercussions'; Tange also emphasises 'that it is vital to read any of Naden's poetry against the larger body of her writings'.⁴⁷ Michelle Boswell's 2014 doctoral thesis 'Beautiful Science: Victorian Women's Scientific Poetry and Prose' is concerned with genre and form in women's scientific writings, and includes close-readings of Naden's philosophical poetry and prose as well as her comic verse. Boswell demonstrates a fuller awareness of Naden's complete corpus, asking how far 'poetry could satisfy Naden's scientific and philosophical ambitions', but nonetheless remains wedded to the omnipresent theme of evolution.⁴⁸ Naden's

⁴⁵ Patricia Murphy, 'Fated Marginalization: Women and Science in the Poetry of Constance Naden', *Victorian Poetry*, 40 (2002), 107-30 (p. 128).

⁴⁶ Marion Thain, "'Scientific Wooing': Constance Naden's Marriage of Science and Poetry", *Victorian Poetry*, 41 (2003), 151-69 (p. 151).

⁴⁷ Andrea Kaston Tange, 'Constance Naden and the Erotics of Evolution: Mating the Woman of Letters with the Man of Science', *Nineteenth-Century Literature*, 61.2 (2006), 200-40 (pp. 220, 203).

⁴⁸ Michelle Boswell, 'Beautiful Science: Victorian Women's Scientific Poetry and Prose' (unpublished doctoral thesis, University of Maryland, 2014), p. 159. See also Catherine Elizabeth Birch's thesis, which uses a variety of Naden's poetry and prose to explore how 'the presentation of evolutionary science in New Woman poetry of the 1880s and 1890s works both to reinforce and disrupt the conclusions of professional scientists', 'Evolutionary Feminism in Late-Victorian Women's Poetry: Mathilde Blind, Constance Naden and May Kendall' (unpublished doctoral thesis, University of Birmingham, 2011), p. 1.

inclusion in Holmes's *Darwin's Bards* (2009) reinforced her association with this subject; he takes the position that her 'Evolutional Erotics' remain 'pertinent to how we think about evolution and sex today'.⁴⁹

The field of Victorian literature and science has been dominated by the theory of evolution, and I contend that while there are important links to be made between Naden's work and this discourse (and it is gratifying to trace a developing debate about her poetry in this regard), her knowledge of science and interest in it extended much further; the focus on evolution has therefore pushed studies of Naden into a cul-de-sac. Research into Naden's poetry and philosophy needs to look past the most obvious connections in order to appreciate the broader scientific underpinning of her synthetic philosophy. It may be considered, for example, in the context of recent research on other poet-scientists (such as Maxwell, Humphrey Davy, and George Romanes) that has sought to demonstrate the utility of such interdisciplinary thinking in the long nineteenth century.⁵⁰ Pertinent too is research into the intersections between literary studies and synthetic philosophies grounded in science, for example that regarding George Eliot's intellectual relationship with Spencer and Comte, although this is at present limited.⁵¹

⁴⁹ Holmes, *Darwin's Bards*, p. 191.

⁵⁰ See in particular Daniel Brown, *The Poetry of Victorian Scientists*; Sharon Ruston, 'From the Life of the Spinosist to Life: Humphry Davy, Chemist and Poet', in *Literature and Chemistry: Elective Affinities*, ed. by Margareth Hagen and Margery Vibe Skagen (Aarhus: Aarhus University Press, 2013), pp. 77-98; J. David Pleins, *In Praise of Darwin: George Romanes and the Evolution of a Darwinian Believer* (London: Bloomsbury, 2014).

⁵¹ Sally Shuttleworth, *George Eliot and Nineteenth-Century Science: The Make-Believe of a Beginning* (Cambridge: Cambridge University Press, 1984); Nancy L. Paxton, *George Eliot and Herbert Spencer: Feminism, Evolutionism, and the Reconstruction of Gender* (Princeton: Princeton University Press, 1991); Gold, pp. 71-112; Lauren Cameron, 'Spencerian Evolutionary Psychology in Daniel Deronda', *Victorian Literature and Culture*, 43 (2015), 63-81.

In 'Atheist Prophecy: Mathilde Blind, Constance Naden, and the Victorian Poetess' Charles LaPorte positions Naden in a second key context by considering her engagement with the question of faith. LaPorte argues that Naden's poems 'reclaim and redeem some of the prominent religious elements of the mid-century poetess tradition' typified by Elizabeth Barrett Browning's *Aurora Leigh* and George Eliot's *Legend of Jubal*.⁵² Nour Alarabi's doctoral thesis 'A God of their Own: Religion in the Poetry of Emily Brontë, Christina Rossetti, and Constance Naden' and subsequent article on Naden pursue this enquiry in more detail. Significantly, she asserts that the tendency to read Naden's work through the lens of gender is ill-founded, and contends that Naden sought to communicate how 'both women and men were suffering due to the limits set against their potential by scientific misconceptions and religious dogmas'.⁵³ Alarabi thus rejects the notion that gender is pivotal to Naden's writings.

Without wishing to dismiss the importance of the many feminist readings of Naden's work, I share Alarabi's concerns. There is no inherent need to judge Naden's academic and intellectual achievements from the perspective of gender, and yet it is the most ubiquitous theme in studies to date. As the preceding overview demonstrates, responses to Naden have been limited by exclusively discussing her works alongside those of other female poets. James R. Moore, in his 1987 essay and the 1986 self-published work on which it is based, offers a

⁵² Charles LaPorte, 'Atheist Prophecy: Mathilde Blind, Constance Naden, and the Victorian Poetess', *Victorian Literature and Culture*, 34 (2006), 427-41 (p. 427).

⁵³ Nour Alarabi, 'A God of their Own: Religion in the Poetry of Emily Brontë, Christina Rossetti, and Constance Naden' (unpublished doctoral thesis, University of Leicester, 2009), p. 243. See also Nour Alarabi, 'Constance Naden's Philosophical Poetry', *Literature Compass*, 9 (2012), 848-60. In addition, Prudence Brand reads Naden's sonnets 'Starlight. I' and 'Starlight. II' alongside Emily Pfeiffer's 'The Soul's Prayer' and 'The Soul's Pride' in an attempt 'to locate a Christian feminist niche in the interstices between science and religion' during the latter part of the nineteenth century. 'Emily Pfeiffer and Victorian Women's Religious Poetry' (unpublished doctoral thesis, Royal Holloway, University of London, 2012), pp. 123-35.

sustained critique of her writing through the lens of gender. He uses Naden's philosophical essays to underpin his Freudian readings of her poems, and while the bibliographical and biographical research undertaken by Moore is of great value, his frankly sexist perspective inevitably limits the usefulness of his conclusions.⁵⁴ Other critics have taken a more contextualised approach to Naden and gender. For example, in 'Love's Mirror: Constance Naden and reflections on a feminist poetics', Thain draws out Naden's 'witty analysis of the position of woman in Victorian poetics as muse and other to man'.⁵⁵ While I agree that Naden is an important addition to the canon of female poets, and do not deny that there are arguments to be made about how she wrote within imposed societal limits, I endeavour to show in this thesis that it is equally valuable to explore other facets of her life and work.

The prose in Naden's corpus has only been considered in its own right by Smith and Holmes. The former sought to contextualise Naden's secular philosophy in *Notes and Queries*, although this is a descriptive overview rather than close analysis.⁵⁶ Holmes's brief discussion of Naden in 'Victorian Evolutionary Criticism and the Pitfalls of Consilience' places her synthetic philosophy in dialogue with other nineteenth-century evolutionary approaches to literature and art, although it is her teleological views expressed in 'The Evolution of the

⁵⁴ Moore insists on casting Lewins as an 'aberrant genius' and Naden his 'impressionable student', grouping Naden with 'other so-called mad poets' (as he labels Emily Dickinson, Charlotte Mew, and Amy Stewart), and condescendingly referring to her as 'Constance' throughout both essay and monograph. James R. Moore, 'Constance Naden and Hylo-Idealism', in *One Culture: Essays in Science and Nature*, ed. by George Levine (Madison, WI: University of Wisconsin Press, 1987), pp. 225-57 (pp. 225-26, 231-33). Nonetheless, in the longer work the 'Calendar of the Works of Constance C. W. Naden, 1877-1894', which Moore suggests 'should be regarded as a preliminary bibliography', is invaluable for having identified many short works published during Naden's lifetime that were not subsequently collected in her posthumous volumes. Jim Moore, 'Remembering Constance Naden: Feminist Erotics and the Philosophy of Science in Late-Victorian England' (the author, c.1986). Birmingham, Cadbury Research Library, rpp PR 5102.N2.

⁵⁵ Marion Thain, 'Love's Mirror: Constance Naden and Reflections on a Feminist Poetics', *English Literature in Transition (1880-1920)*, 41.1 (1998), 24-41, (p. 27). This is developed from Marion Thain, 'Constance Naden and a Feminist Poetics' (unpublished M.Phil dissertation, University of Birmingham, 1995).

⁵⁶ Philip E. Smith II, 'Robert Lewins, Constance Naden, and Hylo-Idealism', *Notes and Queries*, 223 (1978), 303-09.

Sense of Beauty' that come into focus rather than her broader ideas about interdisciplinary endeavour.⁵⁷ This thesis considers a more complete range of her prose, which enables me to identify the functions of Naden's synthetic philosophy across its stages of development, since she was still in the process of fully articulating her ideas at the time of her death.

The themes of evolution, religion, and feminism have so far shaped an understanding of Naden that, while certainly valid, has inevitably curtailed arguments about her body of work. This thesis redresses the balance by reading her corpus more fully, placing her prose on equal standing with her poetry, and demonstrating that the latter is significantly more diverse than many previous studies have credited. I show that her status as poet, philosopher, and scientist provides her with a uniquely panoramic view of the society and time in which she lived.

Previous scholars have not had access to the three unpublished notebooks from the 1870s which I uncovered in the course of my research. Prior to this, the only documented manuscript material belonging to Naden was a single letter to Edith Cooper in the Bodleian's Michael Field archive. This, alongside a facsimile letter printed as a frontispiece to the posthumous essay collection *Further Reliques*, confirms that the notebooks are in Naden's hand. The notebooks were in the possession of Naden's indirect descendants, and have now been deposited in the Cadbury Research Library at the University of Birmingham.⁵⁸ In this thesis, the first to take Naden as its sole subject, I therefore embrace the opportunity to consider texts attributable to Naden from 1875 until her death in 1889 and explore how her poetry fits within

⁵⁷ John Holmes, 'Victorian Evolutionary Criticism and the Pitfalls of Consilience', in *The Evolution of Literature: Legacies of Darwin in European Cultures*, ed. by Nicholas Saul and Simon J. James (New York: Editions Rodopi, 2011), pp. 101-12 (pp. 106-07).

⁵⁸ Birmingham, Cadbury Research Library, USS 115. All material from these items reproduced in this thesis has been done so with the kind permission of Julian Rees and Margaret Mary Hall (Naden's half-sister's grandchildren), and the Cadbury Research Library.

the layers of her synthetic intellectual project. In addition, I describe many aspects of Naden's life in fuller and more accurate detail than has previously been recorded, particularly regarding her educational experiences and critical heritage. Building upon the limited research that has come before, I offer an intervention that redirects the study of Naden in a way that places her works in dialogue with a far wider set of contexts and intertexts.

Chapter One provides Naden's intellectual biography, in which I describe the key events in her life and situate her scientific education, philosophical position, and poetic output in relation to the specifics of her social and cultural context. This creates the framework for the following three chapters, in which I consider in turn Naden's role as scientist, philosopher, and poet. I demonstrate how these three strands of her life were intertwined, with the adage 'unity in diversity' (*I&D* 79) underlying her engagement with each set of disciplines. Chapter Two, then, focuses upon Naden's engagement with scientific ideas and interdisciplinary discourses, specifically considering light as it manifests in the study of botany, astronomy, physics, and physiology, as well as the function of the scientific imagination. In Chapter Three I turn to Naden as philosopher, teasing out the details of her childhood faith (newly demonstrated by the notebooks) and then analysing her relationship with the freethought movement and wider philosophical discourses in her writings. Chapter Four analyses how Naden positions herself within the poetic tradition, tracing her shifting engagement with key Romantic figures and troubled relationship with the lyric 'I', and pays particular attention to the function of the comic mode. Each chapter follows a trajectory through Naden's life and works that considers the impact made upon her core ideas by her access to education and a widening intellectual circle. I show how Naden develops a position that interrogates received

opinion and applies synthetic, unifying approaches to demonstrate how ‘seemingly rival spheres constitute but one Cosmos’.

INTELLECTUAL BIOGRAPHY

She wandered on easily from grave to gay, from serious to sentimental:
now discussing the latest scientific discovery –
now reciting some fine passage from the poets –
now deep in some philosophical theory
(Charles Lapworth, *Memoir* xix)

Science, poetry, philosophy – in this sentence Charles Lapworth describes the three key strands of Naden's life and works. He captures the breadth of Naden's learning and the facility with which she was able to bring it into engaging conversation. The sheer rapidity of her intellect is communicated through the litany of nows, emphasising her desire to synthesise, drawing together ideas from a variety of disciplines. These three fields of thought span Naden's writings, forming the foundation of this intellectual biography and the analytical chapters that follow. The subsequent clause in Lapworth's description – 'now laughing over the comical idiosyncrasies of some great authority' (*Memoir* xix) – offers an insight into Naden's personality; that she sought humour as well as seriousness is evident in much of her writing. I am interested in using the aspects of Naden's life that are a matter of record – her own published and unpublished works, reactions to this in the periodical press, posthumous memorialising, and archival materials – to piece together her unified philosophical and social project. I trace how Naden's education and intellectual interests sat within her society, and how she, and those around her, crafted a public persona that functioned to demonstrate the power of synthetic thinking.

In this thesis I am not interested in uncovering Naden's 'true' self, whatever that might mean, but in using her writings to piece together the full scope of her intellectual endeavours,

through which she sought to express a unifying theory of knowledge. And yet, for much of her life, Naden strove to separate out her diverse endeavours by publishing some of her work anonymously and under pseudonyms. My project undertakes to reconnect Naden's poetic, scientific, and philosophical outputs and, in doing so, to demonstrate how Naden enacted her own central edict: 'unity in diversity' (*I&D* 79). The thematic focus of this intellectual biography, which considers Naden's formal education, her philosophical pronouncements, and her poetry publications in turn, means that the narrative offered is not wholly chronological, and there are contours of her life, for example her paintings and translations, that are left largely absent.¹ This chapter is not, therefore, an exhaustive biographical overview, but instead focuses upon laying the groundwork for understanding how the desire for synthesis pervades Naden's works.

There are limitations to intellectual biographies as a genre. The disagreements between the authors of essays that memorialised her life in the 1890s attest to the impossibility of knowing Naden's, or indeed any individual's, whole or true self. All of those who knew Naden and her work fixed upon the narrative of a great thinker cut off in her prime. They were, however, compelled to make a choice about which Constance Caroline Woodhill Naden to portray – was it the charming lady poet or the outspoken proto-suffragette, the hardworking polymath or the contentious atheist philosopher? These facets of Naden's character were variously

¹ We know that Naden was a prolific painter, but only a single painting has been attributed to her in the twentieth century: an undated watercolour of a periwinkle which is in the private ownership of Julian Rees, one of her descendants. While this closely-observed botanical study is fascinating, the overall lack of extant materials is not conducive to developing discussions of Naden as artist. Naden's translations are an important facet of her poetic output; her desire to translate poetry from French, German, and Italian demonstrates not only her linguistic capabilities but identifies several important intertexts regarding Naden's development of a poetic and philosophical voice. Due to the confines of space and the specialist skills required to adequately develop critical readings of translations, these do not feature heavily in this thesis, and are instead left for future scholars to tackle.

described in *Constance Naden: A Memoir* (co-authored by four of her friends) and in obituaries or remembrances in the local and national press. In the decade or so that she had been in the public eye, first for her poetry and academic achievements, and later for her philosophical and political stances, Naden developed from a celebrated provincial figure within the Birmingham intellectual community to a notable presence in London.² The absence of archival materials relating to her life during the 1880s necessitates a reliance upon published narratives, which provide us with an almost exclusively laudatory perspective of Naden. This unwavering positivity can largely be attributed to her death at the young age of thirty-one, and it is the untimely nature of her death that leaves the modern Naden scholar in the enviable position of having a variety of detailed sources from which to piece together her life. This is often not the case for her contemporaries. Catherine Birch has observed, for example, that May Kendall's (1861-1943) 'legacy has suffered as a result of the timing of her death [...] Dying in the mid-twentieth century when her poetry had been forgotten and her friends had pre-deceased her, her death went almost unremarked'.³

The discovery of three of Naden's notebooks in the process of the research for this thesis is a watershed moment in research into her life and works, as they provide unprecedented insight into Naden's voice between 1875 and 1879 unmediated by editorialising or memorialising. I draw upon these where relevant, although, because they date from the period before Naden published any significant work (1881 onwards), there remains a large portion of her life that can only be grasped through what she decided to publish and what her friends and colleagues chose to record several years after the event. Nonetheless, the unpublished poems and

² Marion Thain has argued that Naden is an important link between the Midlands' industrial heritage and London-based aestheticism during the late nineteenth century. 'Birmingham's Women Poets', p. 47.

³ Birch, p. 65.

reflective notes contained in these notebooks shed important light upon Naden's development from precocious Unitarian school girl to independent freethinking young woman.

The unfortunate lack of archival materials from the 1880s, and absence of letters or diaries, means that there remain many gaps that are not easily filled. Certainly many of her friends, particularly fellow Hylo-Idealists, had an agenda when recounting Naden's life: namely, ensuring that the chief proponent of their philosophy remained in the public eye. When reading Naden's Hylo-Idealist essays alongside those of Robert Lewins, Herbert Courtney, George M. McCrie, and 'Julian' (E. Cobham Brewer's pseudonym), it is clear that her talent for writing clear, accessible, and engaging prose set her apart. Indeed, H. P. Blavatsky, editor of the theosophical magazine *Lucifer* states that 'a letter on Hylo-Idealism, signed C. N. [...] places Hylo-Idealism in a new and very different light, and its straightforward style and language are in strong contrast to the turgid effusions' of other Hylo-Idealists.⁴ Naden's life and works were therefore preserved in a deliberate manner, with Lewins taking a leading role in editing her posthumous volumes (including copious footnotes to her collected essays) and contributing to her *Memoir*. Naden's transition from her dissenting upbringing to propounding an atheist philosophy is particularly contentious, although, as is discussed later in this chapter and in Chapter Three, the 1870s notebooks shed further light upon this.

A letter of condolence sent by Herbert Spencer to Lewins upon Naden's death seems to have galvanised her friends in their mission to ensure her character was left untainted by unfitting

⁴ H. P. Blavatsky, 'Editors' Note', *Lucifer: A Theosophical Magazine*, 15 January 1888, p. 411. It should be noted that while Hylo-Idealist writing was published in *Lucifer*, Blavatsky she did not agree with the doctrine, writing that 'Theosophy has no bitterer enemy than Hylo-Idealism, the great ally of materialism, to-day', 'Modern Idealism, Worse than Materialism', *The Theosophist* 18, October 1896, pp. 9-12 (p. 9). (Blavatsky died in 1891 and while the editor introduces the article as having 'quite recently come into my hands', internal evidence suggests that it was composed c.1887-88).

memorialisation. In his otherwise laudatory letter Spencer asserted that ‘in her case, as in other cases, the mental powers so highly developed in a woman are in some measure abnormal, and involve a physiological cost which the feminine organization will not bear without injury more or less profound’.⁵ Madeline Daniell rebuffed Spencer’s views in the *Birmingham Daily Post* and *Women’s Penny Paper* some weeks later, and also responded by making explicit Naden’s femininity as it manifested both physically and in her character.⁶ She, and others, highlight Naden’s intellectual strength and the robustness of her physical constitution while making it clear that these characteristics did not nullify her femininity. Thus, Daniell provides the following sketch of Naden’s features: ‘tall, slender, pale, with dark hair; a delicate, yet powerful face [...] She had especially small white hands’ (*Memoir* 59). Further on it is stated that Naden had ‘very dainty hand-writing’ (*Memoir* 60). Throughout *Memoir* her more traditionally feminine activities, such as poetry and flower painting, are often emphasised by those that sought to demonstrate that Naden was not a one-dimensional stereotype. This provides a context for the final clause of Lapworth’s sentence with which I began: ‘now telling, with sweet sympathy and dewy eyes, of the loves and sorrows of her friends’ (*Memoir* xix). He was Professor of Geology at Mason College and therefore knew Naden firstly as a scientist – writing that she was ‘not so much a student, as an interested and sympathetic fellow-worker [...] I learnt perhaps as much from her as she gained from me’ – but also felt her to be ‘one of the best and dearest of my personal friends’ (*Memoir* xii-xiii).

⁵ Herbert Spencer, ‘Letter from Mr. Herbert Spencer to Dr. Lewins. June 10th 1890’, in *Memoir*, p. 90.

⁶ Madeline M. Daniell, ‘Miss. Naden and Mr. Herbert Spencer’, *Birmingham Daily Post*, 1 July 1890, p. 4; Madeline M. Daniell, ‘A Point Omitted’, *Women’s Penny Paper*, 5 July 1890, p. 439. It may be noted that William Hughes was not similarly enraged, and seems convinced by Spencer’s belief that ‘in cases where the feminine intellect, under high pressure, is made to vie with the masculine in power, the physical tax tells primarily on the reproductive system’ (*Memoir* 91).

These descriptions of Naden as stereotypically feminine reassure the reader that, in Lapworth's words, 'there was nothing of the sexless "blue stocking" about her' (*Memoir* xvi). Nonetheless, she was outspoken in her desire to interrogate gender roles, and was considered by the Women's Suffrage Society someone that they could 'ill spare' from their ranks.⁷ As one of the first female members of the Aristotelian Society and the first female Associate of Mason College, Naden demonstrated that she wished to transcend the boundaries that society attempted to position between women and the pursuit of knowledge.⁸ Towards the end of her life Naden became increasingly politically active, and would surely have responded to Spencer's letter with the same critique that she levelled at him in her essay 'The Principles of Sociology'. Commenting on this distasteful side of Spencer's philosophy, Naden advised that even 'our most favourite theories' must be tested: referring to a *Times* article, she suggests that the reported Chinese stance that women are 'of a lower state than men, and can never attain to full equality with them [...] The aim of female education, therefore, is perfect submission, not cultivation', 'might very well form a note to Mr. Spencer's chapter on the "Status of Women"' which has 'distinct value as a curious instance of reversion' (*I&D* 188-89).⁹ One response to Spencer printed in the *Women's Penny Paper* demonstrates a similarly amused but critical attitude: 'Lætitia' asks, 'Mr Spencer what ought women to do, to whom Nature has been so unkind as to bestow on them mental gifts rare in both sexes? In what way ought they seek to rectify this unaccountable oversight?'.¹⁰

⁷ 'Women's Suffrage', *Women's Penny Paper*, 25 January 1890, p. 161.

⁸ Naden joined the Aristotelian Society in December 1888 along with Madeline Daniell; it was formed in 1880 and only five other women had been members by this point, 'List of Officers and Members for the Session for the Eleventh Session, 1889-90', *Proceedings of the Aristotelian Society*, 1.2 (1889-90), 142-43; 'Associateship', *MCC 1888-1889* (Birmingham: Cornish Brothers, 1888), p. 273.

⁹ Naden quotes from 'The Status of Women According to the Chinese Classics' by 'Dr. Faber' in *The Times*, which it has not been possible to trace.

¹⁰ Lætitia, 'For Herbert Spencer to Answer', *Women's Penny Paper*, 5 July 1890, p. 439.

The contours of Naden's multifaceted character will be developed over the course of this thesis as I draw connections between her diverse pursuits and explore how her writings demonstrate their reciprocal relationship. In developing Hylo-Idealism, Naden was committed to the maxim 'unity under different aspects', her writing centring upon the importance of synthesis.¹¹ Reading Naden's poetry and prose together honours her commitment to exposing the interrelatedness and mutual benefit of disciplines; indeed, my approach arguably should be considered the default position for approaching the literature of a period in which disciplinary divides were not rigidly enforced. In order to orientate the reader in later discussions of Naden's work, I begin with a short biographical and bibliographical sketch.¹² The rest of this chapter draws upon biographical and historical sources to contextualise her accomplishments. I first consider in detail the importance of Naden's higher education in Birmingham and the course of her intellectual development. The subsequent section introduces her philosophical endeavours, identifying key influences upon the development of Naden's freethinking ideas. Finally, I turn to Naden's poetic works, drawing upon publishing records and contemporary reviews to situate these in a cultural context.

Biography

Naden was born in Birmingham on 24 January 1858. Her mother died a fortnight after her birth, and as a result Naden spent her childhood living with her wealthy maternal grandparents

¹¹ Constance Naden, 'On Mental Physiology and Its Place in Philosophy', *Proceedings of the Aristotelian Society*, 1.3 (1889-90), 81-82 (p. 82).

¹² Naden's modern biographers in the *Oxford Dictionary of National Biography* and *Dictionary of Literary Biography* are reliable but concise, offering little information that is not taken from nineteenth-century sources. I therefore use *Memoir* and other contemporary sources for my overview of her life and work. S. M. den Otter, 'Constance Caroline Woodhill Naden (1858-1889)', *The Oxford Dictionary of National Biography*, 2004 <<http://dx.doi.org/10.1093/ref:odnb/19716>>; J. Jakub Pitha, 'Constance Naden', in *Dictionary of Literary Biography: Vol. 199 Victorian Women Poets*, ed. by William B. Thesing (Detroit: Brucoli Clark Layman, 1999), pp. 211-15.

in Edgbaston, as per their daughter's wishes; her father remarried a few years later.¹³ Between 1867 and 1874 Naden attended a private day school run by 'the Misses Martin, two Unitarian ladies of considerable culture' (*Memoir* 9), and subsequently taught at Birmingham's 'Home for Friendless Girls' during the late 1870s. Naden was certainly writing poetry soon after leaving school, as attested to by her manuscript collections *Poems; by Constance C. W. Naden. 1875* and *Poems; by Constance C. W. Naden. 1875-6-7*; recollections of her penchant for devising fairy tales imply that she also engaged in creative writing earlier on in her childhood and adolescence (*Memoir* 10). In 1876 Naden met and began a correspondence with Lewins, and the following years were filled with independent study, painting, and poetry writing. In 1878 Naden's painting 'Bird's Nest and Wild Roses' was accepted by the Royal Birmingham Society of Artists for inclusion in their Spring Exhibition. Naden enrolled at the Birmingham and Midland Institute (BMI) in 1879 to study languages and botany, and may have attended the British Association for the Advancement of Science (BAAS) in Sheffield that same year (*N78-9* 85-87). In 1881, after travelling around northern Europe in the summer, she joined Mason College, where for six years she took classes in chemistry, physiology, geology, physics, and zoology. According to her friends and academic colleagues, she undertook this diverse and intensive education in order to 'gather for herself the elements of the synthetic philosophy which she thought to pursue as a life-work' (*Memoir* 68).

Naden first published poetry in 1877, in the periodicals *St. James's Magazine* and *London Society*. Her first volume of poetry appeared in 1881 under the title *Songs and Sonnets of Springtime*. Over the years that followed her essays and letters appeared in journals including

¹³ Census records show that Thomas Naden was living with his daughter and parents-in-law in 1861; however, by the 1871 census he was living nearby with a new wife and four children between the ages of three and seven. 1861 England, Wales & Scotland Census, Piece Number 2123, Folio 14, p. 24; 1871 England, Wales & Scotland Census, Archive Reference RG10, Piece Number 3081, Folio 21, p. 33.

the reputable *Journal of Science and Knowledge*, as well as the more esoteric *Agnostic Annual* and *Lucifer*, usually under pseudonyms such as C. N., C. C. W. N., and Constance Arden. These pen-names often elide her gender, something that was particularly useful as she participated in debates in the letters pages – on the rare occasion that her status as a woman was apparent her opinions were liable to be belittled and dismissed.¹⁴ As asserted by Marion Thain, these also functioned to maintain, although with only partial success, a distinction between her secular philosophy, which had working-class and republican origins, and her status as a poet and successful student who grew up in bourgeois Birmingham society.¹⁵ This is borne out by Naden’s unwillingness until quite late in her life to acknowledge publicly the full extent of her activities across science, philosophy, and poetry.

In 1883 Naden published the pamphlet *What is Religion?* (as C. N.), began editing the *Mason College Magazine*, and joined the Birmingham Natural History Society, where she went on to give several warmly-received public addresses. Naden continued publishing philosophical tracts and maintained an active involvement in these Birmingham institutions through to June 1887, at which point she left Mason College and published her second volume of poetry, *A Modern Apostle; The Elixir of Life; The Story of Clarice; and other Poems*. Later that year, Naden travelled in Europe, the Middle East, and India with her companion Daniell, and in the spring of 1888 Naden’s last poem was published, having been solicited by Oscar Wilde for *The Woman’s World*.¹⁶ Naden became a more public figure after moving to London in 1888:

¹⁴ See, for example, a response to ‘Constance Arden’ that suggested ‘she were better employed in woman’s vocation – as Iago suggests, “suckle fools, &c.” – than so to write’. S. Billing, ‘What is Religion? Hylo-Idealism?’, *Journal of Science*, 3rd ser., 6, June 1884, p. 315. Naden received no such responses when writing under genderless initials.

¹⁵ Thain, ‘Scientific Wooing’, pp. 153-54.

¹⁶ Constance Naden, ‘Rest’, *The Woman’s World* 1, March 1888, p. 218. Wilde’s letter to Naden is reproduced in Moore, ‘Re-memering Constance Naden’, Appendix pp. 17-18n80.

she became a vocal member of the Women's Liberal Association, the Aristotelian Society, and the National Indian Association. She was 'on the list of lady lecturers for Women's Suffrage for the Central National Society', Naden's addresses being praised as a 'matured and commanding strain of oratory' that ensured she was 'listened to with rapt attention' (*Memoir* 51, 52).¹⁷ Her charitable endeavours were also notable, having offered shortly before her death to take 'responsibility of the Campden Houses [...] arranged for the reception of ladies of limited means' (*Memoir* 50).¹⁸ At this stage in her life it seems that Naden was still largely viewed as a poet, the *Women's Penny Paper* describing her as 'author of "A Minor Prophet," [sic] and other poems' in September 1889.¹⁹ Nonetheless, in their 'In Memoriam' article just months later she is described as 'Poet and Scientist'.²⁰ Her career was cut short by the late diagnosis of ovarian cysts which, when operated on, were found to have become gangrenous; she died from this infection on 23 December 1889.²¹

Naden's death was 'the subject of very general regret, and the public press [gave] a full account of her life and work' in the months that followed.²² The quantity and variety of remembrances after her death is demonstrated in 'Some Personal and Press Opinions' appended to her *Complete Poetical Works* (1894). Her friends made a concerted effort to maintain posthumous interest in Naden, overseeing the publication of four poetic and philosophical collections in the following five years. These received a largely positive

¹⁷ 'Current News about Women', *Women's Penny Paper*, 21 September 1889, p. 2.

¹⁸ Hughes relates that 'she had so many private cases to help that she had little money to subscribe to public charities' (*Memoir* 51).

¹⁹ 'Current News about Women'. The attribution of 'A Minor Prophet' to Naden may be a telling slip, since this is a poem by George Eliot that Charles LaPorte has profitably discussed in relation to Naden's later poem 'A Modern Apostle'.

²⁰ 'Constance Caroline Woodhill Naden: Poet and Scientist', *Women's Penny Paper*, 4 January 1890, p. 125.

²¹ Moore, 'Re-membering', p. 60n102.

²² Shadworth H. Hodgeson, 'Report of Executive Committee for the Eleventh Session', *Proceedings of the Aristotelian Society*, 1.3 (1889-90), 158-60 (p. 160).

reception and, as I discuss later in this chapter, reviewers generally focused their critique on her perceived intellectual immaturity and the likely development of her ideas had she lived.²³

Naden's education – 'now discussing the latest scientific discovery'

Naden's education was not exclusively scientific, but it was her scientific education that made her achievements stand out most from those of her contemporaries. John Holmes remarks that 'of all the Victorian poets it was Naden who had the most comprehensive and up-to-date scientific education'.²⁴ Naden spent over half of her short life enrolled at educational institutions, and during the periods that she was not attending classes it is clear from friends' accounts that she was still engaging in education independently.

During the 1880s the word 'scientist' was not a universally accepted term and, while it was in general use, its precise meaning was under debate. Sydney Ross explains that 'until *ca.* 1910, careful writers in Britain used "scientist" only as a colloquialism, the phrase "man of science" being used in formal discourse or writing'.²⁵ A central point of contention was that 'scientist' was too comprehensive: few if any individuals working in the sciences engaged with a range of disciplines, and so 'scientist' was deemed to lack the descriptive specificity to be found in 'chemist' or 'physicist'. Some also expressed the concern that the label might be co-opted by more amateur workers than the 'men of science' connected to the Royal Society and BAAS.

²³ Emily R. Anderson provides a short overview of Naden's nineteenth-century critical reception; I expand upon this in the following sections of this chapter. 'Constance Naden', in *Nineteenth-Century British Women Writers: A Bio-Bibliographical Critical Sourcebook*, ed. by Abigail Burnham Bloom (London: Aldwych Press, 2000), pp. 283-86.

²⁴ Holmes, *Darwin's Bards*, p. 190. Virginia Blain describes Naden as 'exceptionally well educated' in this regard, 'Introduction', in *Victorian Women Poets: A New Annotated Anthology*, pp. 1-16 (p. 15).

²⁵ Sydney Ross, 'Scientist: The Story of a Word', *Annals of Science*, 18.2 (1962), 65-85 (p. 75). Melinda Baldwin highlights the intense debate surrounding the word 'scientist' from its coinage by William Whewell in 1833 until as late as 1925 when it was still *Nature's* editorial policy to avoid the term; 'science worker', 'man of science', and more discipline-specific descriptors were used instead. *Making Nature: The History of a Scientific Journal* (Chicago: University of Chicago Press, 2015), pp. 4-8.

Both of these establishment anxieties speak directly to the utility of labelling Naden a scientist within this thesis. She was highly educated in a wide range of sciences, and so could lay claim to such a comprehensive label. In addition, ‘man of science’ neither suits her gender nor her pursuits, for we have no evidence that she performed scientific experiments outside of the bounds of college classes. The labels ‘professional’ and ‘amateur’ were not clearly defined during the nineteenth century, and Naden’s liminal position within the scientific arena – she was not employed or paid to carry out scientific study, yet she committed six years of her life to learning the theory and practice of science – exemplifies how it can be difficult to label individuals working in and around the sciences during the period. Most importantly, however, ‘scientist’ was a label applied to Naden by her contemporaries: in the *Women’s Penny Paper* obituary she is introduced as ‘Poet and Scientist’ and Hughes calls her ‘a philosopher and a scientist’ in *Memoir* (22).²⁶

While it is important not to accept unquestioningly every anecdote and assertion in *Memoir* and other obituary essays, in these the value placed by Naden on education is striking. From the outset, her precocious thirst for knowledge is emphasised anecdotally: Maude Mitchell, ‘a beloved friend from her earliest years’ describes how ““talks” with the trees, birds, and butterflies’ led to ‘questionings as to “How?” and “Why?” these were’ (*Memoir* 8-9). She was also fortunate to be supported by her family in this regard; William R. Hughes comments upon Naden inheriting her mother’s ‘mind [that was] always open to new modes of thought, and her habit of voracious reading’, and describes her maternal grandfather as ‘a great book-lover [...] who possessed a large miscellaneous library’ (*Memoir* 13). Overall Naden’s

²⁶ ‘Constance Caroline Woodhill Naden’, p. 125.

learning is quite astonishing, both for its breadth and the way it developed systematically over the course of her life.

From the age of eight Naden was educated at a Unitarian school, which was particularly supportive of her creative development. While the impact of a specifically Unitarian education is not dwelt upon by her biographers, Unitarianism notably reveres ‘reason, or the faculty which perceives universal and necessary laws’ and is amenable to the perspectives offered by other faiths, the sciences, the arts, and the natural world.²⁷ Both of these tendencies encourage rather than hinder freethinking philosophical inclinations. Ruth Watts has published frequently on Unitarianism, and her work indicates the kind of education the young Naden would have been exposed to for several years from 1866 onwards. Watts notes, for example, that a nineteenth-century Unitarian education did not differentiate between instruction for girls and boys. Unfortunately, the monograph which consolidates much of Watts’s research only covers the period 1760 to 1860, so details of Naden’s adolescent education remain elusive; archival research has not yielded any specific information about Naden’s Edgbaston school and no other scholarship exists to fill this lacuna.²⁸ Nonetheless, the shared Unitarian background of many of the women who agitated for and achieved changes in female education during the nineteenth century (such as Anna Barbauld, Mary Carpenter, and Barbara Leigh Smith Bodichon) suggests the influence Unitarianism may have had in shaping Naden’s perspective on her own academic ambitions.²⁹

²⁷ James Freeman Clarke, *Manual of Unitarian Belief* (Boston: Unitarian Sunday School Society, 1884), p. 7.

²⁸ Ruth Watts, *Gender, Power and the Unitarians in England 1760-1860* (Essex: Addison Wesley Longman, 1998). The lack of documentary evidence relating to Naden’s school is unsurprising, for, as John Roach has described, ‘Most nineteenth-century private schools are shadowy institutions which survive only through their advertisement in the press or in scholastic directories.’ *Secondary Education in England 1870-1902: Public Activity and Private Enterprise* (London and New York: Routledge, 1991), pp. 172-73.

²⁹ See *Practical Visionaries: Women, Education and Social Progress 1790-1930*, ed. by Mary Hilton and Pam Hirsch (Essex: Pearson Education, 2000).

Naden left school at the age of sixteen or seventeen; it is at this point that the *Memoir* begins to mention her engagement with philosophy and science, which was sparked by an interest in mysticism. Naden's earliest discussion of scientific education is rather ambivalent. 'The Lady Doctor' appears in *Poems 1875* and was published in *London Society* in 1877 and *Songs and Sonnets* in 1881. The education the titular character receives is initially viewed positively: the study of 'classic lore' and 'mathematical knowledge' means 'At length the coveted M.D. / Was to her name appended' and thus 'Learning with beauty blended' (*P75* 135, ll. 34, 36; *CPW* 83, ll. 44-45, 48). This happy coexistence of femininity and education falls away as the nameless woman ages. While the poem's tone is comedic it nonetheless ends on a melancholy note, the moral being that a woman should only embark on such a career if she is willing to let it consume her life entirely. There is an irony in such an announcement, as by the time *Songs and Sonnets* appeared Naden had embarked upon her formal scientific education and seems to have decided not to pursue the roles of wife and mother. For the adolescent Naden a successful work-life balance seemed a long way off and her publication of the poem in two places (in almost identical forms) indicates her willingness to be identified with the moralistic closing stanza:

Fair maid, if thine unfettered heart
Yearn for some busy, toilsome part,
Let that engross thee only;
But oh! if bound by love's light chain,
Leave not thy fond and faithful swain
Disconsolate and lonely. (*CPW* 84, ll. 67-72)

The tone of this stanza, which casts romantic relationships as a kind of imprisonment – love's chain may be light, but it still restricts one's freedoms – is indicative of Naden's desire to seek

alternative paths to fulfilment.³⁰ Nevertheless, scientific references in *Poems 1875* and *Poems 1875-6-7* are very limited; they offer no indication that she had embarked upon her scientific education in earnest.

This shifted upon her acquaintance with Lewins in 1876. The development of their intellectual relationship can be partially traced in the letters Lewins wrote to Naden between November 1878 and February 1880, which were edited and published in 1887, with a preface by Naden, as *Humanism versus Theism; or Solipsism (Egoism) = Atheism*. We therefore know that Lewins was pointing Naden towards accessible scientific discussion – suggesting on 29 January 1880 that she read ‘the article in this quarter’s *Edinburgh Review* on “Mental Philosophy”’ (*HvT* 21) – and it is reasonable to suppose that such recommendations were being shared from their first meeting. Naden’s rapid assimilation and synthesis of scientific knowledge during this period is clearly demonstrated in *Notebook*. Here she actively disagrees with Professor George Allman’s presidential address that was given in Sheffield at the BAAS on 20 August 1879 (*N78-9* 85-87).³¹ It is not clear whether Naden attended this lecture on protoplasm and recent research into the nature of living matter or simply read about it, since the content was widely reported, including in the following day’s *Birmingham Daily Post*.³² Either way, to be not only reading and understanding the details of this, but engaging in

³⁰ Tange has profitably discussed ‘The Lady Doctor’ in relation to several other of Naden’s poems regarding the subject of women’s intellect, gender roles, and relationship expectations.

³¹ Allman specialised in marine zoology, and ‘was one of the early promoters of the British Association for the Advancement of Science’, presiding over the biological section in 1873, as well as being president in 1879. A. F. Pollard, ‘Allman, George James (1812–1898)’, rev. by Peter Osborne, *The Oxford Dictionary of National Biography*, 2004 <<http://dx.doi.org/10.1093/ref:odnb/408>>

³² ‘The British Association for the Advancement of Science. [By Telegraph]’, *Birmingham Daily Post*, 21 August 1879, p. 6. Naden includes the quote “‘When the swimming spore of an alga avoids collision, & by reversal of the stroke of its cilia backs from an obstacle lying in its way, there is almost certainly in all this nothing but a purely unconscious act.’” (*N78-9* 87). This remark is not in the *Birmingham Post*’s report of Allman’s address, an indicator that she may have been in attendance. A very similar quote does appear, however, in the *Leeds Mercury*’s report (and therefore was potentially printed elsewhere), Allman is recorded here as saying ‘swarm-spore’ and ‘lying in its course’ (‘The British Association at Sheffield’, *Leeds Mercury*, 21 August 1897, p. 6). There is therefore no conclusive evidence as to whether Naden was actually in attendance.

(private) debate with such an established figure – writing of his central thesis ‘The idea [...] is unbelievable’ (N78-9 85) – indicates how rapidly and successfully Naden’s scientific knowledge had developed over the previous four years. This is particularly notable when read alongside assessments of Allman’s address such as that in the *Sheffield Independent*, which asserted that ‘The ladies, who formed so conspicuous a feature of the audience, were too well-bred to show that they did not understand what he was saying; but I am afraid they found it terribly hard work’.³³ Naden, however, was engaging with this man as a peer.

The BAAS was progressive relative to other scientific societies, having had women members and speakers since 1853, although they were kept out of positions of power, such as section president and council member.³⁴ Nevertheless, Rebekah Higgitt and Charles Withers have argued that these women were not the norm and it was unusual for female audience members to engage with the content of BAAS papers, viewing it instead as a primarily social event.³⁵ Naden was in the minority of women who were not simply consumers, but had an active scientific interest. Specifically, she was unconvinced by Allman’s assertion that (in her words) ‘though life is a property of protoplasm, sensation must be caused by some distinct essence’, instead arguing that ‘There is no way in which so-called inanimate matter can be acted upon except by some form of physical force’ therefore ‘physical force must enter into our conception of mind’ (N78-9 85-86).³⁶ *The Examiner*’s positive review of Allman’s

³³ Le Flaneur, ‘On Men and Things’, *Sheffield Independent*, 21 August 1879, p. 5.

³⁴ Suzanne Le-May Sheffield, *Women and Science: Social Impact and Interaction* (Santa Barbara, CA: ABC-CLIO, 2004), p. 139.

³⁵ Rebekah Higgitt and Charles W. J. Withers, ‘Science and Sociability: Women as Audience at the British Association for the Advancement of Science, 1831–1901’, *Isis*, 99 (2008), 1-27. For additional information about women at the BAAS see Janet Browne, ‘A Glimpse of Petticoats: Women in the Early Years of the British Association for the Advancement of Science’, in *Papers to be Presented at Science and British Culture in the 1830s*, Trinity College Cambridge (British Society for the History of Science, 1994), pp. 77-86.

³⁶ That Tyndall’s 1870 address concluded with him discussing the same issue – whether life ‘belong[s] to what we call matter’ or is ‘an independent principle inserted into matter at some suitable epoch’ – indicates the

address commends the fact that he ‘declares that it is yet beyond the ken of science, and in all likelihood will ever so remain, to say where consciousness begins’.³⁷ It is with this that Naden most fundamentally disagrees, because she takes the optimistic view that science will eventually reach an understanding of physical force and matter that is able to fully explain (without recourse to unknowns) how sentience arises. Thus, the earliest extant example of Naden’s active engagement with science is paradigmatic of her approach to scientific endeavour throughout her writings, as she sees its potential to unify all of nature, linking human and non-human animals, the organic and the inorganic.

Naden’s developing expertise is also demonstrated by her use of science to argue against a religious understanding of the universe. In entry 86 (from late 1878 or early 1879), for example, she combines biological knowledge and philosophical reasoning to refute the existence of the soul:

we cannot believe in “spirit”, unless we admit such a principle existing as a separate entity in all that lives [...] if so, every sentient being, every microscopic animalcule that lives, moves & has his being in a drop of water, must be the home of an immaterial soul [...] since man differs from a mollusc simply in the variety & complexity of his sensations. (N78-9 6-7)

The contours of Naden’s reading also come into clearer focus, as she makes brief reference to and/or quotes from Schiller, Berkeley, Wordsworth, Milton, Victor Hugo, James Thomson, Epicurus, Bernard of Cluny, Hobbes, and Nathaniel Hawthorne in the notebook, although she rarely writes about them in significant depth (N78-9 frontis, 6, 45, 50, 51-52, 53-55, 77, 79, 80-81). While the discovery of the notebooks therefore fills in certain details about Naden’s intellectual development during this period, the time prior to enrolling in Mason College

ongoing prominent nature of this debate. John Tyndall, *The Scientific Use of the Imagination: A Discourse* (London: Longmans, Green, 1870), p. 36.

³⁷ ‘Philosophers in Council’, *The Examiner*, 23 August 1879, pp. 12-13 (p. 12).

nonetheless remains the least well documented of Naden's adult life in terms of her activities. What is clear is that her interest in science, philosophy, and alternatives to monotheism gathered pace after her introduction in 1876 to Lewins.

Around the same time Naden also enrolled in classes on languages and botany at the BMI, an institution which had opened in 1854 and was comprised of Industrial (scientific) and General (literary and philosophical) departments. It filled the gap left by the relatively unsuccessful mechanics institutes that, by the middle of the nineteenth century, had faltered in their intention to provide scientific knowledge to Birmingham's middle and working classes.³⁸

Anne B. Rodrick discusses the BMI in *Self-Help and Civic Culture: Citizenship in Victorian Birmingham*, and asserts that it specifically encouraged a broad education:

Whereas the Mechanics' Institution and the Polytechnic Institute had regarded scientific self-instruction as the natural purview of the working man, and a concurrent taste for literature and history as anomalous, the Midland Institute slowly inverted this relationship. Its students [...] sought science *and* literature, mathematics *and* history.³⁹

Naden therefore received institutional encouragement to pursue her varied academic interests (as well as the broader informal education simultaneously encouraged by Lewins). That 'the "educated" working man and woman [...] not only synthesized invention and application, but also science and literature' is something Rodrick considers to be quite distinctive to Birmingham's system of education and it is borne out in Naden's approach to learning.⁴⁰

³⁸ Rachel E. Waterhouse, *The Birmingham and Midland Institute, 1854-1954* (Birmingham: Birmingham & Midland Institute, 1954), pp. 4-5.

³⁹ Anne B. Rodrick, *Self-Help and Civic Culture: Citizenship in Victorian Birmingham* (Aldershot: Ashgate, 2004), p. 111.

⁴⁰ *Ibid.*

Naden initially enrolled in language classes; Hughes notes that she began her study of German and French at the BMI under Dr Karl Dammann, who would later be employed at Mason College (*Memoir* 15). From *Poems 1875* we know that Naden was already able to translate French poetry into English, and *Poems 1875-6-7* indicates that at some point during this period she turned her attention to German. Translations from the former language stop abruptly and are replaced by those from the latter, supporting the observation in the *Memoir* that after leaving school Naden ‘devoted herself to the systematic study of languages, mastering *in turn* French, German, Latin, and the elements of Greek’ (16, my emphasis). There is nonetheless a degree of uncertainty regarding exactly what she was studying and when, since the details in the *Memoir* do not always correspond to the records found in the Institute’s archives. For example, in the *Report of the Council* the only indication that Naden studied languages is her name in the list of first-class examination results for the Ladies’ Advanced German class in 1881.⁴¹ R. W. Dale states that William Bates (Professor of Classics at Queen’s College, Birmingham) taught her Latin in a small class of women and that Naden also ‘did something at Greek’ (*FR* 223). The latter sells her short, however, since her proficiency in both ancient and modern languages was highly praised, and she is said to have astonished Dammann and her classmates by providing a ‘masterly’ unprepared translation of a Greek passage into German with great ‘ease and rapidity’ (*Memoir* 18).

Naden began formally studying science in 1879, enrolling for two years in the Botany and Field classes offered by the BMI. She had achieved a first-class certificate in the Botany examinations by the time she left in 1881 (*Memoir* 17).⁴² While the Institute’s archives do not

⁴¹ *Birmingham and Midland Institute, Report of the Council for the Year 1881* (Birmingham: The “Journal” Printing Offices, 1882), p. 28.

⁴² Corroborated by the examination results in *Birmingham and Midland Institute, Report 1881*, p. 44.

contain details of the classes offered nor the manner of teaching, we do know that they were examined by the Science and Art Department. This national body was set up with surplus funds from the 1851 Great Exhibition, when Prince Albert had been instrumental in plans to provide ‘aid to education in a more direct form than merely “creating institutions at Kensington Gore”’.⁴³ The Department existed between 1853 and 1900, its main goal being to raise industrial standards through teaching in London and the provinces.⁴⁴ It has a relatively complicated administrative history, but fundamentally it brought standardised testing in a variety of subjects to the United Kingdom.

Science and Art Department records enable us to identify the Botany examination that Naden took in 1881. It was both practical and theoretical, requiring students to describe and identify specimen plant organs as well as testing their knowledge of plant structure and processes in more abstract ways.⁴⁵ However, an examination paper can never demonstrate a student’s full breadth of study or illustrate the educational experience provided by the institution. There is little additional information relating to Naden’s time at the Midland Institute, particularly since the *Institute Magazine* did not begin until 1882, so the student experience is not well documented before this. The only reference to Naden’s endeavours (academic, poetic, or otherwise) appears in an unsigned obituary. Unaccountably, the article begins:

Although Miss Naden was not connected in any way with the Midland Institute [...] we cannot suffer the best of our poetesses to pass away untimely without an expression of poignant regret.⁴⁶

⁴³ Harry Butterworth, ‘The Science and Art Department, 1853-1900’ (unpublished doctoral thesis, University of Sheffield, 1968), p. 20.

⁴⁴ *Ibid.*, p. 29.

⁴⁵ Committee of the Council on Education, South Kensington, ‘Subject XV – Elementary Botany. Examiner W. T. Thiselton Dyer’ in *Examination Papers for Science Schools and Colleges, May 1881* (London: George E. Eyre & William Spottiswood, 1881), pp. 71-73.

⁴⁶ ‘In Memoriam: Constance Naden’, *The Institute Magazine* 4, February 1890, p. 233. Naden became a ‘subscriber’ to the Birmingham and Midland Institute in 1884, *Birmingham and Midland Institute, Report of the Council for the Year 1884* (Birmingham: The “Journal” Printing Offices, 1885), Appendix F, p. 106.

It is unclear why this was assumed, since contributions to *Memoir* confirm people's awareness of her enrolment. The obituary thus focuses upon Naden as a notable Birmingham personage, lamenting 'that London should have swallowed up in its insatiable gulf the intellect which Birmingham had nurtured and honoured' and reminding readers that 'There remains the poor consolation that her best work is, after all, local work'.⁴⁷ The civic pride and the rivalry between capital and province evident here emphasises Naden's stature within the intellectual community of the Midlands. The breadth of Naden's interests across arts, science, and philosophy is also highlighted, again indicating the BMI's approval of interdisciplinary pursuits. This is further emphasised by C. B. Caswell's retiring presidential address in September 1882: 'The Value of Literary Culture to the Student of Science'. He states that 'just as the old school of educationalists erred in being almost exclusively literary, the modern school might err as seriously in becoming exclusively scientific'.⁴⁸

Alongside the academic pursuit of languages and botany, Naden followed her creative interests by writing poems, and the influence of her studies can be seen to manifest itself within the poems published in *Songs and Sonnets*. Botany comes into particular focus through her 'Lament of the Cork-Cell', which echoes Erasmus Darwin's *The Botanic Garden* (1831) with its playful personification and recourse to footnotes to expand upon specific scientific details (*CPW* 98).⁴⁹ More broadly, scientific study's influence upon her philosophy is evident

⁴⁷ 'In Memoriam', *The Institute Magazine*.

⁴⁸ C. B. Caswell, 'The Value of Literary Culture to the Student of Science', *The Institute Magazine* 1, November 1882, pp. 33-42 (p. 34). The vocations of the Presidents of the Institute also indicate the balance of the sciences and arts; between 1869 and 1883 Charles Dickens, T. H. Huxley, Charles Kingsley, Henry Fawcett, John Tyndall, Max Müller, and William Thompson (Lord Kelvin) all took on the mantle (Waterhouse, p. 183).

⁴⁹ Fabienne Moine has insightfully read 'Lament of the Cork Cell' as a commentary on Spencer's sociological theories, as well as a botanical parable in *Women Poets in the Victorian Era: Cultural Practices and Nature Poetry* (Farnham: Ashgate, 2015), pp. 260-61.

in a series of sonnets that includes ‘Undiscerned Perfection’, ‘Starlight. I’, and ‘Starlight. II’ (*CPW* 129, 143-43), which are discussed at length in following chapters. These poems reflect her growing engagement with the interdisciplinary and unifying ideas central to a synthetic philosophy such as Hylo-Idealism.

A fellow student recounted Naden having said in 1881, “‘I had studied history and literature previously, and I came to Mason College to gain a knowledge of science’”.⁵⁰ This systematic approach to education is emphasised by William Tilden, the Professor of Chemistry, who stated that ‘she had planned for herself a very definite and very complete course of study, with a very defined purpose’, namely to obtain a solid understanding of physical and biological sciences as a basis for her academically rigorous articulation of Hylo-Idealism (*Memoir* 68). Naden’s dedication to learning was well-known, ‘the marginal notes in her text-books testifying to the depth of her reading and the clearness of her comprehension’ (sadly these are no longer extant).⁵¹ Her success as a student was recognised officially when she became the first woman to receive an Associateship – Mason College’s highest academic honour, awarded to individuals ‘in consideration of the distinguished positions they have taken as students’.⁵² Indeed, in 1894 the principal of Mason College, R. S. Heath, cited Naden in an interview when asked about whether there had been any ‘great women students’, and took the opportunity to refute Spencer’s assessment of her death as being indicative of the strain intellect places on women’s bodies.⁵³ In *Modern Apostle* (published in 1887, her final year studying in Birmingham) poems such as the four ‘Evolutional Erotics’, ‘Poet and Botanist’,

⁵⁰ ‘In Memoriam. Constance C. W. Naden’, *MCM* 8, February 1890, pp. 49-55 (p. 51).

⁵¹ *Ibid.*

⁵² ‘Associateship’.

⁵³ G. W. T., ‘Do Women Study Science? An Interview with R. S. Heath’, *The Woman’s Signal*, 25 October 1894, pp. 258-59 (p. 259).

and 'The Nebular Theory' attest to her engagement with the tensions between and synthesis of science and art, and the way in which such interdisciplinary alignment might replace theological explanations for the universe. As Lapworth recognised, Naden's education clearly supported her other endeavours:

But poet and philosopher as she was, the science was more or less a necessity for her. It gave her that infinitude of past time, in which she could trace for herself the numberless relationships which bind man to the earth and to his fellow creatures, organic and inorganic. (*Memoir* xiv)

Histories of science education have tended to focus upon institutions and their progression, the key issues being how different individuals were able to access science and how scientists were being trained.⁵⁴ While the answers to both of these questions are relevant to Naden and Mason College, my interest lies in considering what was being taught and how this teaching was actually carried out during the late nineteenth century. The type of education offered by Mason College, and the context in which it was founded and opened, had a direct impact upon Naden's approach to science and culture. In the 1870 Foundation Deed for a science college in Birmingham, Josiah Mason specified:

thorough systematic education and instruction specially adapted to the practical, mechanical, and artistic requirements of the manufactures and industrial pursuits of the Midland district [...] to the exclusion of mere literary education and instruction and of all teaching of theology.⁵⁵

By 1880, when Mason College opened, this intention had been modified, principally because in order to offer degree-level education it had to follow the regulations of the University of London, whereby the matriculation examination required languages and humanities alongside

⁵⁴ See for example, W. H. Brock, 'Science Education', in *Companion to the History of Modern Science*, ed. by R. C. Olby and others (Routledge: Abingdon, 1990), pp. 946-59.

⁵⁵ Josiah Mason, 'Deed of Foundation of The Mason Science College. 12th December 1870', Birmingham, Cadbury Research Library, UB/MC/G/1/1, p. 21.

mathematics, natural philosophy, and chemistry.⁵⁶ While staff were not in place to set up an arts faculty for the inaugural 1880-81 session, at the opening of the College on 1 October 1880 Max Müller announced ‘that not only English, French and German, but Greek and Latin, are to be taught’.⁵⁷ However the name of the institution stated in the Foundation Deed – “‘Josiah Mason’s Scientific College” or “Josiah Mason’s College for the Study of Practical Science”” – still implied that this was a place of vocational learning, where the applications of science were being taught and the knowledge imparted was expected to be put into practice.⁵⁸

This assumption has rarely been interrogated, since the one in-depth study of Mason College, *The First Civic University: Birmingham 1880-1980*, provides little detail on the content of the curriculum, focusing instead upon the teaching facilities, staff, and student demographics.⁵⁹ The omission here of educational methods and content at Mason College is compounded by the lack of such studies in relation to other institutions. History of education scholars have tended to focus on either the broad causes and outcomes of civic university colleges, or the research output that was deemed to be influential in wider scientific circles; this has been at the expense of considering the details of the student experience.⁶⁰ Few high-profile scientific breakthroughs can be attributed to staff during their tenure at Mason College, and as a result scholarly reference to the institution is limited despite the significant role it played in developing co-educational higher education during the last decades of the Victorian period.

⁵⁶ ‘University of London Examinations’, *MCC 1880-1881* (Birmingham: Cornish Brothers, 1880), pp. 50-57 (pp. 50-52).

⁵⁷ ‘The Luncheon’, *MCC 1880-1881*, pp. 85-116 (p.113)

⁵⁸ Mason, p. 20

⁵⁹ Eric Ives, L. D. Schwarz and Diane K. Drummond, *The First Civic University: Birmingham 1880-1980* (Birmingham: Birmingham University Press, 2000), pp. 3-107.

⁶⁰ For example, while Mary Jo Nye discusses the laboratory facilities available for experimental research in chemistry and physics at Owens College in Manchester, the parallel teaching rooms are mentioned only in passing. *Before Big Science: The Pursuit of Modern Chemistry and Physics, 1800-1940* (New York: Twayne Publishers, 1996), pp. 14-15

David R. Jones's *The Origins of Civic Universities* provides an overview of this kind of nineteenth-century education. Although it conforms to the above assessment of existing scholarship, it nonetheless offers insights into the political, social, and cultural environment within which other civic institutions were created, detailing the dynamics of supply and demand relating to the new educational opportunities. Jones states that nationally:

It is not the picture of many technical courses and predominantly industrially-based demand which has often been painted. Social and economic demands for Arts subjects were substantial. The demand for pure science came as much from medical students and those seeking general education as from industry.⁶¹

This corresponds with the breadth of courses available to Naden and her contemporaries at Mason College, and highlights the variability in enrolled students' backgrounds and motivations for study. At no point, however, does Jones discuss the details of the education that was actually being provided. He concludes his assessment of the provincial demand for education by emphasising the breadth of disciplines (liberal, professional, scientific, and technical) that increased in popularity during the late nineteenth century, stressing that this was due to 'colleges' accessibility, low costs, acceptance of the middle-class ethos, and willingness to adapt to local requirements'.⁶² Thus, while it is certainly useful to place Mason College in its national context, it is also important to take the local, Midlands context into account. Furthermore, this supports my desire to consider how Naden's scientific, philosophical, and literary works speak directly to the specificity of educational opportunities in this time and place.

⁶¹ David R. Jones, *The Origins of Civic Universities: Manchester, Leeds and Liverpool* (London: Routledge, 1988), p. 65

⁶² *Ibid.*, p. 93

On the other hand, development and communication of the sciences was a truly national and international affair during this period. T. H. Huxley, for example, stated that ‘French and German, and especially the latter language, are absolutely indispensable to those who desire full knowledge in any department of Science’.⁶³ Exchanges of scientific ideas were occurring within Europe, and also traversing the Atlantic, the British Empire, and beyond.⁶⁴ Mason College’s large-scale, structural changes during the 1880s generally reflect local influences (such as the specific needs of a Midlands population and the restrictions presented by Josiah Mason’s founding charter), but the way in which syllabi developed was also dictated by international developments in relevant scientific fields. The links between Naden’s education at Mason College, developments in scientific knowledge, and the use of this in her poetry and philosophy will form a foundation to the second chapter of this thesis.

Naden attended Mason College between 1881 and 1887, a period of rapid transformation for the institution, involving both expansion and diversification. *The First Civic University* documents the expansion, using archival student population data to build a sense of the College’s demographic development.⁶⁵ Whilst this growth was important, it is the diversification that is more significant for my research. This happened from the outset, as what began as an institution modelled upon Mason’s desire to focus solely on the practical sciences soon morphed into a college that taught a wider range of science and humanities subjects. Earlier in the century discussions regarding the relative importance of science and art educations had fostered high profile debates between Spencer, J. H. Newman, and John

⁶³ [T. H. Huxley], ‘The Opening Ceremony and Inaugural Address’, *MCC 1880-1881*, pp. 59-85 (p. 77).

⁶⁴ For an introduction to the extent that international scientific communication shaped the development of theoretical and applied science during the nineteenth century see David Knight, *The Making of Modern Science. Science, Technology, Medicine and Modernity: 1789-1914* (Cambridge: Polity Press, 2009), pp. 195-216.

⁶⁵ Ives, Schwarz, and Drummond, pp. 63-66.

Stuart Mill among others.⁶⁶ A flashpoint was Huxley's address on 'Science and Culture' at the opening of Mason College in October 1880, in which he concurred with Mason's rejection of the 'ordinary classical course of our schools and universities'. Huxley argued that those who supported classical education were outdated in their understanding of culture:

[The] distinctive character of our own times lies in the vast and constantly increasing part which is played by Natural Knowledge [...] our whole theory of life has long been influenced, consciously or unconsciously, by the general conceptions of the universe, which have been forced upon us by physical science.⁶⁷

While this supported the founding objectives of Mason College, his views were immediately called into question, as recorded in the *Mason College Calendar 1880-1881*. During the toasts over the formal luncheon that followed, Dale – Congregationalist minister, active figure in campaigns for education reform, and a friend of Naden's who wrote an essay of remembrance for *Contemporary Review* (FR 217-36) – gestured to the newly built Mason College, facing Birmingham's Library, Art Gallery, and the BMI. He characterised science as an upstart that, while undoubtedly important, did not challenge the sovereignty of 'Art and literature, ethics and religion'.⁶⁸ Dale's speech was followed by Müller's more light-hearted contribution in which he stated that 'To attempt to study nature without man is as impossible as to study light without studying the eye', speaking directly to Naden's conviction that idealism and materialism must be brought together.⁶⁹ It is clear, therefore, that even within Mason College's supporters there was no consensus about the relative merits of providing a modern scientific versus a classical arts education.

⁶⁶ An excellent overview of this debate, with extended extracts from key sources, can be found in the chapter 'The Great Debate, 1852-82' in *The Universities in the Nineteenth Century*, ed. by Michael Sanderson (London: Routledge & Kegan Paul, 1975), pp. 115-41.

⁶⁷ [Huxley], 'Inaugural Address', pp. 66, 74.

⁶⁸ 'The Luncheon', p. 96.

⁶⁹ *Ibid.*, pp. 112-13.

The best-known response to Huxley's remarks came from Matthew Arnold two years later. In 'Literature and Science', he called for a broader understanding of what constitutes literature; this is analogous to modern interdisciplinary approaches to text that encompasses all writing, including the scientific. Arnold thus makes the case that if the purpose of education is to 'know ourselves and the world', the study of literature (in its fullest sense) must take the highest position in society.⁷⁰ The discussion was also ongoing within Birmingham, as demonstrated by E. A. Sonnenschein's 1885 lecture 'Culture and Science', in which he introduced his theme as a response to Huxley's speech and the ensuing debate. Sonnenschein taught in the Arts Faculty of Mason College throughout the 1880s, and therefore provides a valuable perspective on how the dialogue between the arts and sciences had fared during this period. His lecture began with the claim that language and literature are sciences (a sentiment stemming from his specialism in philology), and a wish to 'defin[e] the relations of science and letters to culture'.⁷¹ Sonnenschein's argument is twofold, emphasising the importance of the 'scientific attitude' in all disciplines, and remarking that although 'the whole is made up of its parts, it cannot be conceived by addition of isolated conceptions of parts. [... P]oetry bodies forth conceptions of wholes, rejecting all definition by limitation, sacrificing detail for breadth'.⁷² This emphasis upon unity, with a focus on poetry, resonates with Naden's philosophical project. Indeed, a positive review of this address written by Naden and published in the *Mason College Magazine* indicates the extent to which his views agreed with her own.⁷³

⁷⁰ Matthew Arnold, 'Literature and Science', in *Discourses in America* (London: Macmillan, 1912), pp. 72-137 (p. 84).

⁷¹ E. A. Sonnenschein, 'Culture and Science', *Macmillan's Magazine* 53, November 1885, pp. 5-16 (pp. 7-9).

⁷² *Ibid.*, p. 11.

⁷³ C. C. W. N., 'Culture and Science', *MCM* 3, October 1885, p. 113.

Naden was often characterised by her friends as a polymath who sought to make connections across disciplinary boundaries. Despite the trend towards specialisation and disciplinary fragmentation over the course of the nineteenth century, in the 1880s it remained possible for interested individuals to maintain an awareness of the most recent developments in science and literature concurrently. Naden's interdisciplinary aspirations that were so integral to her conception of the current and future state of society can therefore be seen to arise from her educational context; the ongoing negotiation between science and art at Mason College supported and encouraged her engagement with interdisciplinary debates.

The Arts Faculty assumed an increasingly prominent position within Mason College over the 1880s.⁷⁴ Naden did not enrol in any of their language or literature courses alongside her science studies (although many students did), but she was certainly active within this division of the college. Her poetry was published in *Mason College Magazine* (ten poems in all) and so too was Naden's one extant piece of prose fiction ('A Modern Apostle'). She was also involved in the Poesy Club (and elected to the board in 1886), where students gave papers on individual poets and discussed themes pertinent to literary studies, such as 'That form in poetical composition is equally important with matter'; this is a debate to which I shall return in Chapter Four.⁷⁵ Anecdotal evidence regarding Naden's proficiency in languages implies that she was too advanced for the classes offered by the institution. She was nonetheless involved with the departments, judging, for example, a German translation competition

⁷⁴ By the time Naden left there were four departments: 'Greek and Latin', 'English Language and Literature' (which also encompassed History), 'French Language and Literature' and 'German Language and Literature'. 'Prospectus: Arts Department', *MCC 1886-1887* (Birmingham: Cornish Brothers, 1886), pp. 65-82.

⁷⁵ 'Poesy Club. May 17th', p. 83.

alongside Professor Sonnenschein and Dr Dammann.⁷⁶ It is therefore clear that her non-scientific abilities were well known and appreciated.

Nevertheless, it was in the Science Faculty that Naden enrolled in classes, took examinations, and won prizes. When Mason College first opened only Mathematics, Physics, Chemistry, and Biology were taught; however, by the time Naden left in 1887 it had grown to comprise of eleven departments.⁷⁷ Although prescriptive programmes of study were provided for students who wished to specialise, Mason College offered significant flexibility as demonstrated by Naden's enrolment in many individual modules without working towards an external degree or vocational qualification.

The prospectus indicates that a balance was struck between theoretical and applied science. Elementary and junior classes focused on the basics of a scientific discipline, while senior classes followed the curriculum for the University of London examinations which covered theoretical and applied knowledge, but did not test industrial science.⁷⁸ Naden did not enrol on the technical courses; her desire to apply science had philosophical rather than industrial ends. On the other hand, every department offered practical laboratory or field-based classes, which taught experimental techniques and encouraged independent research. For example, the purpose of the Practical Chemistry course was 'to supply instruction in the principles of Analysis, Qualitative and Quantitative, to enable the Student to conduct original investigation,

⁷⁶ 'Prize Competition', *MCM* 2, February 1884, p. 19.

⁷⁷ The additional subjects were 'Zoology and Comparative Anatomy' and 'Botany and Vegetable Physiology' (which together replaced the Biology department), 'Metallurgy', 'Physiology', 'Geology and Physiography', 'Mining' and 'Civil and Mechanical Engineering'. 'Prospectus', *MCC 1880-1881*, pp. 24-41; 'Prospectus: Science Department', *MCC 1886-1887*, pp. 65-195.

⁷⁸ The exception to this being the structure of vocational departments such as Mining and Engineering. 'University of London Examinations'.

or to pursue practically the study of any special branch of Chemistry’, while dissection and microscope work in the Botany department was supported by classes at Edgbaston Botanical Gardens.⁷⁹ Records from the Chemistry department show that Naden enrolled in laboratory classes in 1883 and 1884, although in the *Mason College Magazine*’s memorial essay it is stated that ‘Practical research in science was not Miss Naden’s aim; she had no special ability as a manipulator, and only studied in the laboratories sufficiently to gain a knowledge of scientific methods’.⁸⁰ Thus, while Naden did not seek to extend the boundaries of scientific knowledge in this way, she was, along with all other Mason College students, encouraged to explore her own scientific interests through practical experiment and investigation.

The Results of Examinations section of the *Mason College Calendars* show that Naden completed the following courses and was graded as achieving ‘Class I’ in each: ‘Organic Chemistry’ (1882), ‘Physiology; Systematic’ (1883), ‘Geology; Elementary’ (1884), ‘Geology; Local’ (1885), ‘Physics; Middle’ (1885), and ‘Zoology’ (1886).⁸¹ In addition, she received college prizes ‘awarded upon the results of examinations’ for local geology and zoology in corresponding years, as well the inaugural Heslop Memorial Medal in 1888 in recognition of her original philosophical research in ‘Induction and Deduction’ (this later formed a significant part of Naden’s first posthumous collection of essays).⁸² From this list of

⁷⁹ William A. Tilden, ‘Chemistry’, *MCC 1880-1881*, pp. 30-34 (p. 32). It is noted that a part of the Botanical Gardens had been ‘newly laid out, from the plans of the Professor of Botany’, William Hillhouse, ‘Botany and Vegetable Physiology’, *MCC 1884-1885* (Birmingham: Cornish Brothers, 1884), pp. 93-102 (p. 100).

⁸⁰ [William A. Tilden], ‘Chemistry Attendance Ledgers’, Birmingham, Cadbury Research Library UB/MC/I/3/2/II, 43, 47, 50; ‘In Memoriam’, *MCM*, p. 51.

⁸¹ ‘Examination Results: Organic Chemistry’, *MCC 1882-1883*, (Birmingham: Cornish Brothers, 1882), p. 138; ‘Examination Results: Physiology; Systematic’, *MCC 1883-1884* (Birmingham: Cornish Brothers, 1883), p. 154; ‘Examination Results: Geology; Elementary’, *MCC 1884-1885*, p. 188; ‘Examination Results: Geology; Local’ and ‘Examination Results: Physics; Middle’, *MCC 1885-1886* (Birmingham: Cornish Brothers, 1885), pp. 197, 203; ‘Examination Results: Zoology’, *MCC 1886-1887*, p. 213.

⁸² Examination Results: Geology; Local’; ‘Examination Results: Zoology’; ‘Heslop Memorial Medal’, *MCC 1888-1889*, p. 275.

examination results it is possible to identify, using the published prospectus and examination papers, the specifics of Naden's studies. For example, the syllabi inform us that Naden studied optics and light in physics, the organs of the senses in zoology, and 'Light; the formation of images in the eye, colour, optical instruments' in systematic physiology.⁸³ That this education enabled Naden to develop an up-to-date understanding of how light travels and how visual perception operates is fundamental to Chapter Two, in which I discuss the relationship between Naden's formal scientific education and her poetry and essays.

The archives show that the preceding list does not cover all of the classes Naden took, however. The extent of her education outside these examination results is supported by departmental attendance ledgers, which are unfortunately incomplete. Only those relating to the Chemistry and Geology departments are extant. In three volumes pertaining to Chemistry classes between 1880 and 1888 Naden's name appears eight times. The earliest correlate with what is published in the *Mason College Calendar*: 'Elementary – October to Xmas 1881', 'General Lecture Course – October to March' and 'General Course Organic (April to June 1882)'. Later ledgers reveal that Naden also took laboratory classes in 1883 and 1884 and was enrolled on a general course in 1882-83, for which no examination results are recorded.⁸⁴ Similarly, the Geology ledgers provide a finer-grained account of Naden's studies than the calendars, for while the 1884-85 examination results record her success in 'Geology; Elementary', the attendance records indicate that Naden attended three separate classes –

⁸³ J. H. Poynting, 'Physics', *MCC 1884-1885*, pp. 62-67 (pp. 62-63); T. W. Bridge, 'Zoology and Comparative Anatomy', *MCC 1885-1886*, pp. 111-18 (p. 113); John Berry Haycraft, 'Physiology', *MCC 1882-1883*, pp. 85-87 (p. 85).

⁸⁴ [William A. Tilden], 'Chemistry Attendance Ledgers'. UB/MC/I/3/2/I, p. 7, and UB/MC/I/3/2/II, pp. 19, 17-18, 20, 43, 47, 50, 69.

junior, senior, and physiography – and twenty days of fieldwork.⁸⁵ Furthermore, while the *Mason College Calendar* for the 1885-86 session only records Naden as taking ‘Geology; Local’ the attendance ledger shows her to have also undertaken the ‘Senior (3rd Year) Class’ and the associated practical class.⁸⁶ It is unfortunate that such materials do not exist for other departments; however, it is reasonable to assume that Naden studied other disciplines in a similar manner. These documents therefore highlight the need to take a less prescriptive approach to the breadth of her Mason College education than the examination results alone would allow.

Articles written by and about Naden in the *Mason College Magazine* corroborate and extend our knowledge of her studies. For example, while the examination results and attendance registers record that Naden finished studying Chemistry in the 1884, two published poems demonstrate that in 1885 she attended Chemistry Society meetings. The first of these – ‘Freethought in the Laboratory’ – is signed C. C. W. N. and there is a ‘Reply’ from T. T. (Thomas Turner, Chemistry department demonstrator). Naden’s playful poem of ten quatrains begins:

My mind was calm, my heart was light,
My doubts were few and fleeting,
Till I attended yesternight
An M. C. Chem. Soc. Meeting.⁸⁷

It goes on to recount how the demonstrator rejected the absolute nature of scientific knowledge that is taught in schools and ‘to first year’s men’; ‘initiates’ attending the meeting are instead exposed to ‘doctrines esoteric’, new science where explanations of phenomena are

⁸⁵ [Charles Lapworth], ‘The Mason Science College, Department of Geology attendance register, 1884-87’. Lapworth Museum of Geology Archive, L20.1, pp. 2, 5, 6, 10, 12.

⁸⁶ *Ibid.*, pp. 13, 16, 18.

⁸⁷ C. C. W. N., ‘Freethought in the Laboratory’, *MCM* 3, June 1885, pp. 83-84 (p. 83), ll. 1-4.

not readily available. Naden ‘sadly muse[s], “How blest, / Oh Faith! is he who hath you!”’, and laments that she cannot conceive of the world with the surety of Higher Critics such as Ernst Renan, David Strauss, and Matthew Arnold.⁸⁸ The tone of the poem, with its multiple exclamation marks, jaunty rhythm, and comic rhymes – ‘he who hath you’ / ‘Arnold (Matthew)’ for example – emphasises the conversational and light-hearted response to her ‘chemic faith’ being shattered.⁸⁹ The two stanza ‘Reply’ mirrors Naden’s metre and rhyme scheme in order to ‘thank her for her pleasant rhyme’.⁹⁰ Turner ends on a more serious note, however, the sentiment of which aligns with Naden’s Hylo-Idealism, which is gestured towards by ‘freethought’ in her poem’s title:

He’s no regret for causing doubts
Of truth of benzene rings,
For doubts should only lead to faith,
In nobler, truer things.⁹¹

Through these two poems the content and character of the scientific societies at Mason College is brought into focus. Here is an alternative type of engagement with science that provides the scope to consider the unknown or unverified aspects of a discipline. These poems indicate that students attended societies of departments they were not enrolled in, and underline Naden’s adoption of a comprehensive approach to learning. Such society meetings also developed the intellectual relationships between staff and students, and would have allowed bright and outspoken individuals such as Naden to discuss their own ideas about the functioning of the universe with experts in several fields.

⁸⁸ Ibid., p. 84, ll. 33-34.

⁸⁹ Ibid., ll. 35-36, 38.

⁹⁰ T. T. [Thomas Turner], ‘Reply’, *MCM* 3, June 1885, p. 84, l. 3.

⁹¹ Ibid., ll. 5-8.

A further motivation for maintaining a breadth of perspective when considering the academic context of Naden's poetry and philosophy is the following exhortation from Tilden:

The story of her life at College would be short enough if a successful student-life could be summed up in a simple record of marks, classes or degrees. For the official testimony of the College Calendar shows that a very few class places and prizes taken, without obvious effort [...] represent all there is to show the outside world of the career of the most brilliant student the doors of Mason's College have yet admitted. (*Memoir* 67)

Here Tilden emphasises the limited perspective provided by official records. The *Memoir* is therefore an attempt to capture a more fully-rounded sense of Naden's life and character, for example that, 'as in one subject after another, she obtained command of the fundamental principles, with no mean acquaintance with its detail, she transferred her active intelligence, her keen reasoning faculty, and great powers of acquisition, to new ground' (*Memoir* 68). A list of examination results and limited administrative records do not do justice to the depth and breadth of Naden's education and her engagement with Mason College as a whole. In Chapter Two, I therefore draw upon the range of subjects that interested Naden throughout the period that she was studying.

As indicated by Naden's Chemistry Society poem, the *Mason College Magazine* is a valuable resource for shedding light on the academic community that surrounded her for six years. Articles written by and about Naden in the magazine are the most immediate accounts of her experiences of academic life in the 1880s, and those of her fellow students.⁹² These comprise of editorials and letters to the editor regarding the running of the College, reports of debates in the Union and papers given at individual societies, and hundreds of essays, stories, poems,

⁹² Mason College Magazine began as a monthly venture in 1883, and later in the decade became a twice-termly publication.

and reviews. Furthermore, Naden was the editor for the first eighteen months of the magazine's existence, and was a prolific contributor. For my purposes reports on the papers given at academic societies offer particularly useful insights. For example, at the inaugural Physical Society meeting in May 1884 J. H. Poynting read 'The Growth of the Modern Doctrine of Energy', a paper focused on Michael Faraday and James Clerk Maxwell's researches, which concluded: 'The next great step will be the discovery of the relation between these energies and gravitation.'⁹³ This resonates with Naden's desire for unity, and while her name is not mentioned in the short report, given that she took the Middle Class in Physics in the following session and we know her to have been a dedicated student, it is seems unlikely that she would have passed over this opportunity to discuss these highly relevant contemporary scientific theories.

Naden's name frequently appears in the Union debate reports printed in the magazine, and her contribution is often summarised. Some debates were about scientific concerns, for example 'That the evidence in favour of the Darwinian Theory does not justify its acceptance as scientific truth', at which Naden supported Darwin and, tellingly, brought Spencer into the debate.⁹⁴ Others were more political in nature, such as the 1885 debate, 'That Free Education should be provided in schools regulated by representatives of the people'. Here Naden argued that 'separation of the religious and secular elements would promote more efficient teaching' and entreated 'let us not impose [... a] tax on the light of knowledge', emphasising both her commitment to empowerment through education and to secularism.⁹⁵ These debates were therefore a forum for forthright discussion about topical issues, as well as an opportunity to

⁹³ 'Growth of the Modern Doctrine of Energy', *MCM* 2, May 1884, pp. 67-68 (p. 68). Poynting's address appears in full in his *Collected Scientific Papers* (Cambridge: Cambridge University Press, 1920), pp. 565-75.

⁹⁴ 'The Union. February 5th, 1886', *MCM* 4, March 1886, pp. 36-38 (p. 37).

⁹⁵ 'The Union. December 11th, 1885', *MCM* 4, February 1886, pp. 14-16 (p. 15).

develop rhetorical skill; indeed, Naden was renowned for ‘the ease and vigour of her extemporary speaking [which] made her an extremely dangerous opponent’ (*FR* 228). Naden often undertook speaking engagements on scientific topics, too, and several of these addresses were developed into published essays. On the basis of these she was commended, in the words of barrister U. S. Misra, ‘As a real thinker, genuine debater, and eloquent speaker’ (*FR* 264). Later in her life she began to speak publically on political platforms, but these addresses do not survive in print.

Archival evidence about Mason College’s curriculum and wider academic culture allows lines of influence to be drawn between Naden’s studies and her original work in poetry and prose. This was a reciprocal relationship, for while a class on Physiology might have sparked a meditation on the processes behind optical perception, the flexibility Naden had when choosing her classes means that a discussion with Lewins about the energy bound up in a drop of water may have provided the impetus for her to enrol in a Physics class. In the next chapter I shall concentrate upon specific aspects of her education that relate to her interest in light as a concept that unified an increasingly fragmented universe. However, at this juncture, I turn to another great influence upon her intellectual project: her engagement with philosophy of the nineteenth century.

Naden’s philosophy – ‘now deep in some philosophical theory’

Naden was fascinated by the concept of unity, placing her within some of the most important cultural conversations of the nineteenth century. Indeed, James Paradis and Thomas Postlewait have observed that Victorian ‘scientists, artists and critics alike – assumed that a culture, however diversely organized, was itself an organic unity in which the values

motivating the scientist could be reconciled with those of the artist and humanist'.⁹⁶ Naden's belief that science and art are of equal importance, mutually dependent, and therefore inextricably linked is a facet of her wider thesis that stresses the essential oneness of the universe, and reflects contemporary debates about this topic. In this section I discuss Naden's Hylo-Idealism in the context of other nineteenth-century synthetic philosophies, consider how she synthesised and built upon the works of other philosophers, and provide an overview of the reception of her ideas in the periodical press.

As Lapworth indicates, Naden was interested in delving deeply into the philosophies that had come before her, and she drew on this knowledge in order to develop her own synthetic world-scheme. 'Induction and Deduction', Naden's longest published essay, is indicative of this approach to knowledge. On the surface it is a survey of the philosophy of scientific method, which considers developments in inductive and deductive logic from 'The Greek Cosmologists' to Naden's contemporaries such as T. H. Green and W. Stanley Jevons. However, while predicated on rejecting the false dichotomy between induction and deduction, it is clear that the text is principally about 'mutual relations', for science 'finds its true home in universals' (*I&D* 100, 23). It is Naden's thesis that while sensations and ideas, matter and form, can in theory be separated as distinct and opposite, they are not so in reality, for it is 'unity in diversity, which renders the world Cosmos instead of Chaos' (*I&D* 79).

Naden shows that classical philosophers were aware of and engaged with this concept, but because Plato only theoretically united induction and deduction, she dismisses him for being

⁹⁶ James Paradis and Thomas Postlewait, 'Preface', in *Victorian Science and Victorian Values*, ed. by James Paradis and Thomas Postlewait (New York: Annals of the New York Academy of Sciences, 1981), pp. vi-viii (p. vii).

‘purely dialectical, never scientific, and therefore barren’ (*I&D* 11). The intellectual barrenness of attempting to use a single discipline, whether philosophy, science, or art, to make universalising statements is the key to Naden’s philosophy, and her most explicit description of this is (fittingly) in a poem, the sonnet ‘Undiscerned Perfection’ (1881). In the octave she writes of her dream of ‘The land where Poetry and Science meet’, which is characterised by shifting visions that ‘never clear, and steadfast, and complete / In one transcendent brilliancy unite’ (*CPW* 129, ll. 3, 7-8). After the volta, however, the tone changes with the realisation that ‘the seeming discord is but mine’, and the final two lines suggest that poetry plays an important role in developing new ways of seeing that will allow the original dream to be realised: ‘I know that each confused and tortuous line, / To fuller sight, in true perspective lies.’ (*CPW* 129, ll. 9, 13-14).

This reaching toward a transcendent true perspective based in the reconciliation of science and art demonstrates Naden’s engagement with disciplinary debates which continue to this day. Education is often a particular point of contention, demonstrated in the nineteenth century by the aforementioned debate between Huxley and Matthew Arnold. In addition, the question of whether and how art and science are interrelated was tied to a general rejection of the highly-empirical Baconian scientific method, and movement towards one based upon hypothesis and the utilisation of scientific imagination.⁹⁷ Although this had been under discussion throughout the nineteenth century, the phrase was brought firmly into public view by John Tyndall in his 1870 BAAS address ‘The Scientific Use of the Imagination’, the influence of which I discuss in Chapter Two.

⁹⁷ Jonathan Smith, *Fact and Feeling: Baconian Science and the Nineteenth-Century Literary Imagination* (Madison, WI: University of Wisconsin Press, 1994), p. 37.

As if in dialogue with Naden's sonnet, Tyndall's subsequent 'Belfast Address' (1874) concluded by bringing together the work of scientists and artists, proclaiming 'They are not opposed but supplementary – not mutually exclusive, but reconcilable'.⁹⁸ The epistemological function of art is therefore brought to the fore, and the methodology of art and science is merged to create a synthetic approach to explaining phenomena. The unity being touted is not one of underlying sameness, but an identification of the shared processes and mutuality of scientific, artistic, and philosophical thinking. Tyndall's address highlights how 'the world embraces not only a Newton, but a Shakespeare – not only a Boyle, but a Raphael – not only a Kant, but a Beethoven – not only a Darwin, but a Carlyle. Not in each of these, but in all, is human nature whole'.⁹⁹ He thus emphasises the pairing of complementary types of thought and the need for a synthetic approach while suggesting that this unified multidisciplinary knowledge is not situated within a single person. His phrasing is recalled by Naden in her essay on 'Scientific Idealism' from 1883, in which she states that 'It is a far cry from Buddha to Berkeley, from Angelus Silesius to Herbert Spencer; yet all four tell the same tale in different language' (*FR* 210).

Before Tyndall, George Henry Lewes had identified this issue in an 1852 *Westminster Review* essay and attempted to resolve it:

Poets and Men of Science, in all times, formed two distinct classes, and never, save in one illustrious example, exhibited the twofold manifestation of Poetry and Science working in harmonious unity; that single exception is Goethe. There have been philosophic poets, and men of science with poetical tastes, but the absolute fusion of high scientific capacity with the highest poetical power has, we believe, been limited to the single example just cited.¹⁰⁰

⁹⁸ John Tyndall, 'The Belfast Address', *Fragments of Science*, 6th edn, 2 vols (London: Longmans, Green, 1879), II, pp. 137-203 (p. 203).

⁹⁹ *Ibid.*, pp. 202-03.

¹⁰⁰ George Henry Lewes, 'Goethe as Man of Science', *Westminster Review* 58, October 1852, pp. 479-506 (p. 479).

The essay focuses upon Goethe's scientific writings, allowing Lewes to explore a secondary factor: Unity of Composition or zoological type, which points towards a single ancestor. This binding together of unities underscores the importance of this dominant motif within nineteenth-century culture and society. A 'synthetic manner of treating nature', leads to (or even obliges) a broader synthetic philosophy.¹⁰¹ Naden made a comparable case in her 1884 essay 'Schiller as Philosophic Poet', published in *Mason College Magazine*. The similarities between her rhetoric and Lewes's are notable, as she states that 'The union of seer and singer in one personality is, indeed, sufficiently rare; but now and then a twy-souled mortal is born who possesses both vision and voice'.¹⁰² Unlike Lewes, Naden underscores the importance of poetry to philosophy and science by offering readings of his verse. She begins her analysis of imagery in *Life and the Ideal* by asserting that here:

Schiller has expressed his genius most fully, embodying in lovely metaphor and rhythm the essential significance of his beautiful essay *On the Sublime*, and of his more closely reasoned but somewhat tedious *Letters on the Aesthetic Education of Man*. The seemingly arid Kantian philosophy here blossoms as the rose.¹⁰³

For Naden poetry is 'as indispensable a part of life as reason itself, and supplies data which cannot be neglected in any synthetic view of truth'.¹⁰⁴ This identification of emotion with data underlines the break from the Baconian scientific method that Jonathan Smith has situated at the centre of nineteenth-century debates about the philosophy of science. Indeed, Naden partakes in this with gusto in 'Induction and Deduction' as she attacks the 'myth' of Bacon as a great man of science or philosophy, demoting him to only 'the father of English prose' (*I&D* 35).

¹⁰¹ Ibid., p. 498.

¹⁰² C. C. W. N., 'Schiller as a Philosophic Poet', *MCM* 2, February 1884, pp. 1-8 (pp. 1-2).

¹⁰³ Ibid., p. 7.

¹⁰⁴ Ibid., p.1.

Naden does not cast herself in the role of ‘seer and singer’, but did strive to write with ‘vision and voice’, creating a body of work that unites poetic, philosophical, and scientific methods in order to identify the underlying unity of universal phenomena. In an essay written after her death W. H. Hardings celebrates Naden’s poetic voice, but is more directly concerned with casting her as a speaker of ‘the language [...] of the coming day – the day of her realised ideal, the noontide of her prophetic fulfilment’.¹⁰⁵ While this may be overstating the uniqueness of Hylo-Idealism’s philosophical remit, echoing as it does Naden’s own hyperbolic essay title ‘Hylo-Idealism: The Creed of the Coming Day’, Hardings nevertheless situates Naden’s voice as one that spoke directly to contemporary synthetic philosophies.

Naden was fundamentally interested in how the universe could be conceived as an enclosed system. The question of universality was not a new one, but as society shifted away from an easy acceptance of Christian totality many thinkers worked to develop an acceptable replacement. In the first half of the century Romanticism sought to reconcile Christianity with the scientific developments of the time, maintaining a metaphysical ideal of social and individual wholeness. At its centre lay the reconciliation of binaries such as mind and nature, the self and other; however, as the century progressed the metaphysical nature of this unity was increasingly interrogated and found lacking. Thus Positivism, via scientific naturalism, came to the forefront, its central conviction being that ‘science offers the only viable way of thinking correctly about human affairs’.¹⁰⁶ This was not an uncontentious position, but nevertheless over the course of the nineteenth-century iterations of the idea became embedded

¹⁰⁵ [W. H. Hardings], ‘A Modern Interpreter’, *Temple Bar* 103, October 1894, pp. 187-200 (p. 200).

¹⁰⁶ Peter Allan Dale, *In Pursuit of a Scientific Culture: Science, Art and Society in the Victorian Age* (Madison, WI: University of Wisconsin Press, 1989), p. 11.

in the world-view of a growing number of individuals who engaged with science (either through formal education or the popular science of periodicals and other media).

In Hylo-Idealism, binaries customarily viewed as opposed – idealism and materialism, induction and deduction, art and science – are fashioned into mutually dependent pairings, as the existence of one is given meaning by its opposite. Furthermore, Naden repeatedly insists that it is only by recognising the reciprocal relationship within such pairings that ideal unity can be attained. This concept is recognisably based upon G. W. F. Hegel’s speculation over the identity of the subject-object, or absolute. Rolf-Peter Horstmann explains this principle as stating that ‘one has to take the entirety of reality as an undivided unity of subject and object’, it is this ‘that first makes possible the subject-object distinction’.¹⁰⁷ This absolute, the first principle of German Idealism, is a significant starting point for Naden’s philosophy and she further engages with this movement by bringing idealism into the very name of the concept that she developed alongside Lewins – prior to her involvement it was called ‘Hylo-Zoism’. Thain suggests that the shift ‘stems from a desire to stress the fact that the theory has as its main objective the reconciliation and unification of matter and spirit’.¹⁰⁸ Nevertheless, Hylo-Idealism’s rejection of metaphysics places it fundamentally at odds with what Naden calls, in ‘The Brain Theory of Mind and Matter’, ‘Absolute Idealism which will deny the existence of aught that is corporeal’ (*I&D* 160). Thus she refutes idealism’s proposal that ‘the thing in itself is, in fact, a product of our own conscious thought, meaning the thing in itself is nothing

¹⁰⁷ Rolf-Peter Horstmann, ‘The Unity of Reason and the Diversity of Life’, trans. by Allen Wood, in *The Cambridge History of Philosophy in the Nineteenth Century (1790-1870)*, ed. by Allen W. Wood and Songsuk Susan Hahn (Cambridge: Cambridge University Press, 2012) <<http://dx.doi.org/10.1017/CHO9780511975257>> pp. 61-92 (p. 74).

¹⁰⁸ Thain, ‘Birmingham’s Women Poets’, p. 50.

other [than] a postulation of our own consciousness'.¹⁰⁹ Hylo-Idealism maintains that 'man is the maker of his own Cosmos, and that all his perceptions – even those which seem to represent solid, extended and external objects – have a merely subjective existence'; however, these are 'bounded by the limits moulded by the character and conditions of his sentient being' (*I&D* 157). This, according to Naden, is 'Relative Idealism' (*I&D* 160), since the creative faculty is bounded by the nature of matter: as she states elsewhere, 'our mental powers are correlated [...] with material forces' (*FR* 124), such as heat, light, electricity, and chemical action. As a result, a foundational belief of Hylo-Idealism is the material basis of consciousness and perception.

Hylo-Idealism is therefore a Positivist creed with its foundations firmly placed in scientifically-verifiable physical processes. On the one hand it is important to consider Positivism in its specifically Comtean context, taking into account its historically-imposed limits. This fixed philosophical standpoint was augmented throughout the nineteenth century, particularly by individuals such as Lewes and Harriet Martineau who stood by central tenets while being aware of its failings.¹¹⁰ Nonetheless, Peter Allan Dale has made a strong case for the afterlife of Comte's theory by removing it from these contextual constraints and considering the positivist ideals that persisted throughout the century as a starting point for philosophers who sought a comprehensive belief system that might be termed a 'religion of science'.¹¹¹ Into this category falls Herbert Spencer's system of Synthetic Philosophy, despite

¹⁰⁹ Colin McQuillan, 'German Idealism', *Internet Encyclopedia of Philosophy* <<http://www.iep.utm.edu/germidea/>> [accessed 18 September 2016].

¹¹⁰ Several of the assumptions based upon science quickly became outdated, and problematic statements relating to social hierarchy and the place of women abound. Michael Taylor, *The Philosophy of Herbert Spencer* (London: Continuum, 2010), p. 43.

¹¹¹ Dale, p. 7.

his explicit attempt to dissociate it from Positivism and Comte.¹¹² So too does Naden and Lewins's Hylo-Idealism, though they do not engage with Comte directly. This broader view of Positivism rejects the metaphysical, building instead a sense of unity between mankind and the wider universe. In addition, the positivist approach to knowledge insists upon 'the application of the method of the natural sciences to the elucidation of human behaviour'.¹¹³ This was clearly important to Naden as she followed Spencer's engagement with and development of the fields of sociology and psychology. There is a link here to the concept of unity, as such a position highlights how traditionally artistic and religious considerations (introspection and human behaviour) might be reassessed in a scientific light. For Naden this often meant applying her knowledge of animal behaviour to social and cultural norms, both in her poetry (such as the 'Evolutional Erotics') and prose (for example 'The Evolution of the Sense of Beauty').

Hylo-Idealism also has parallels with the work of Hermann von Helmholtz, whom Dale likewise identifies as having important connections to Positivism, despite this usually being ignored in favour of characterising him as a materialist. Naden does not discuss his philosophy directly, save one (brief) reference to his theory of colour vision in 'The Evolution of the Sense of Beauty' (FR 85-86). There is, however, a strong resemblance between Hylo-Idealism and Helmholtz's sense of a physiological mechanism of perception, whereby 'perceptions of external objects being [...] of the nature of ideas, and ideas themselves being invariably activities of our psychic energy, perceptions also can only be the result of psychic

¹¹² See Herbert Spencer, *The Classification of the Sciences to which are added Reasons for Dissenting from the Philosophy of M. Comte* (New York: D. Appleton., 1864).

¹¹³ Dale, p. 14.

energy'.¹¹⁴ Thus, as summarised by Anthony K. Jensen, 'Experience is [...] an unconscious process of symbolic inferences by which neural stimulations are made intelligible to the human mind'.¹¹⁵ In a similar way, understanding that cognitions and inferences are solely physical neurological processes is central to Naden's reconciliation of idealism and materialism.

The universality of natural law was a tenet upheld by the majority of progressive thinkers from the mid-nineteenth century onwards, Spencer's system of philosophy, for example, building upon those of Mill and Comte.¹¹⁶ Spencer makes specific claims for the place of philosophy in unifying knowledge: 'Science consists of truths existing more or less separated; and does not recognize these truths as entirely integrated'; 'Science is partially-unified knowledge; Philosophy is completely-unified knowledge'.¹¹⁷ Thus, for Spencer, philosophy is deemed to be a necessary unifying process, standing apart from science. He is interested in the orderliness of nature, arguing that the universal principle of evolution applies to all scientific disciplines and is therefore the foundation of all organic and inorganic processes. In contrast, the Comtean approach to synthesis constructs a tree model of the sciences, whereby disciplines are branches and the central trunk is scientific method rather than any one universal law.¹¹⁸ Naden is concerned with unity in a slightly different way, since Hylo-Idealism draws on idealism, despite being an inherently materialist philosophy. Situating all possible understanding of external phenomena as necessarily mediated, and, in some sense, created by brain activity (resulting from nerve impulses that stem from the stimulation of

¹¹⁴ Hermann von Helmholtz, 'Über das Sehen des Menschen', quoted in Dale, p. 103.

¹¹⁵ Anthony K. Jensen, 'Neo-Kantianism', *Internet Encyclopedia of Philosophy* <<http://www.iep.utm.edu/neo-kant/>> [accessed 18 September 2016].

¹¹⁶ Taylor, p. 29; Dale, p. 15.

¹¹⁷ Spencer, *First Principles*, pp. 132-34.

¹¹⁸ Taylor, p. 47.

sense organs) entails a unity through which everyone holds the sense and being of everything else within them. The mirror analogy in Naden's essay 'Hylo-Idealism: The Creed of the Coming Day' (first published in 1884 in Annie Besant's periodical *Our Corner*) illustrates this:

Two interlocutors are like opposite mirrors. Each, among other objects, reflects its *vis-à-vis*, and therefore reflects its own reflexion. The mirrors may be cracked or clouded, convex or concave [...] Still, in however distorted a form, each may be said to *contain* its opposite neighbour, and, were mirrors sentient beings the mutual inclusion would be psychical as well as physical. (*I&D* 174)

This is not just a unity of scientific method or first principles then, it is a more fundamental binding together of organisms that accounts for the impossibility of true intersubjectivity. Naden's view of altruism as the key to an ideal society arises from this, positing in 'Evolutionary Ethics' that in the future there will be an absolute acceptance of fundamental similarities and shared traits between phenomena, processes, and people. This means that 'we may seek consolation in the prospect of a final unification of egoism and altruism, under the control of reason and science' (*I&D* 142), the ideal echoed by the final line of 'Undiscerned Perfection'. By underlining the need for a broadening of visual horizons, and subsequent reconsideration of our assumptions, Naden reiterates the goal of achieving 'perfect harmony' whereby binaries 'In one transcendent brilliancy unite' (*CPW* 129, ll. 12, 8).

There are therefore multiple forebears to Hylo-Idealism, and Naden's overview of the history of European philosophy (from the classical period through to her present day) in 'Induction and Deduction' shows that she was aware of and engaging with those touched upon here alongside many others. Yet in her most overtly Hylo-Idealist essays these influences are largely invisible; Naden rarely engages with specific philosophers or schools of thought when outlining her manifesto. In order to communicate her conviction that Hylo-Idealism represents

philosophical truth, its central tenets are instead supported by scientific theories that have experimental validity. Naden references those philosophical ideas that suit her needs rather than attempting to align herself with any one school of thought. Furthermore, when describing philosophies in ‘Induction and Deduction’ Naden does not endeavour to link these overtly to Hylo-Idealism. It is clear when certain concepts chime with her own, however, and the section entitled ‘The Kantian View’ is particularly interesting for its focus upon resolving the induction-deduction binary of scientific method into a more closely linked concept of recognition and cognition. Naden moves swiftly on from discussing Kant’s inconsistencies and lack of clarity to the critical development of ‘experience itself aris[ing] from a sentient and cogitant mind’ as conceived by the nineteenth-century philosophers Green and Jevons via William Whewell (*I&D* 77).

It is through what Naden chooses to elide in these philosophers’ bodies of work that the Hylo-Idealist element of ‘Induction and Deduction’ becomes clear. For example, Jevons ‘placed active minds, constructing scientific law if not the phenomena themselves, at the centre of the scientific enterprise’ and therefore ‘limited the validity of scientific knowledge’, and argued ‘that all scientific knowledge is approximate’.¹¹⁹ This is relevant to Naden’s discussion of the inductive and deductive scientific method but also problematises her conception of science leading inevitably to ideal truth. That she does not engage with it illustrates the deep-rooted commitment Naden had to her philosophical principles, suggesting that within the confines of an essay that called for overview rather than argument she was unwilling to include the details of contemporary theories without critical comment. It is notable that this approach is not apparent in essays written for other purposes. The highly critical ‘The Philosophy of Thomas

¹¹⁹ Donald Benson, ‘Facts and Constructs: Victorian Humanists and Scientific Theorists on Scientific Knowledge’, in *Victorian Science and Victorian Values*, pp. 299-318 (p. 304).

Carlyle' (published in *Journal of Science* in 1882), for example, demonstrates Naden's combative rhetoric whereby she asserts that 'The limitations and impatience of Carlyle's intellect are well exemplified by his total failure to penetrate the Kantian philosophy' (*I&D* 147). This willingness to engage with other thinkers while remaining critical is crucial to Naden's multifaceted intellectual relationship with Spencer.

Spencer's work encompassed sociology (a field in which he was a pioneer), moral philosophy, and psychology, and he applied developments in physical science to these disciplines. He was interested in how evolution and dissolution shaped the inorganic world, the ecosystem, and the human race, and was committed to 'equilibration', or balance, as an ideal. Michael Taylor characterises Spencer's synthetic philosophy as a 'comprehensive system of belief' which was a substitute for deist understandings of the universe, but, as outlined in *First Principles* (1862), Spencer nonetheless accepted that 'the reality existing behind all appearances is, and must ever be, unknown' and therefore 'transcend[s] those class-limits which Science, as currently understood, recognizes'.¹²⁰ This aspect of Spencer's philosophy was especially liable to shift over time; as Mark Francis highlights, Spencer contradicts himself between books, and his argument shifts between editions of the same volume.¹²¹ Naden described her approach as not 'questioning the substantial truth of Mr. Spencer's ideas' but rather an attempt 'to bring the neglected side into greater prominence' (*I&D* 122); her work was therefore often engaged in a dialogue with Spencer's concept of a synthetic philosophy.

¹²⁰ Taylor, p. 7; Spencer, *First Principles*, pp. 69, 272.

¹²¹ Mark Francis, *Herbert Spencer and the Invention of Modern Life* (Stocksfield: Acumen, 2007), pp. 175-86.

Hughes records that the ‘Birmingham Sociological Section for the study of Mr. Herbert Spencer’s system of “Synthetic Philosophy”’ ‘had a profound influence [...] on Miss Naden’s conceptions of the science of life, and its correlative, the science of society’ (*Memoir* 20). He casts Naden as a ‘diligent and enthusiastic’ student of Spencer, who was valued above all other members of the society. Naden was also active in attempts to establish a Spencer, or Evolution, Society in London, something that did not come to fruition as a result of her death less than a year after it was proposed (*Memoir* 45-47). Naden presented three papers on synthetic, evolutionary philosophy to the Sociological Section between 1884 and 1889 (‘Special Creation and Evolution’, ‘The Data of Ethics’, and ‘The Principles of Sociology’), which Hughes asserts were ‘well circulated among students of the doctrine of evolution in England and America’. I have not found any evidence for this claim, there being no record of these papers being published before her death. Nonetheless, Spencer is said to have taken ‘much interest, and frequently expressed his approval of them’, and Hughes relates that in the summer of 1889 Naden was in direct communication with Spencer, who asked her to write ‘a reply to Mr. [William Samuel] Lilly’s libel on Utilitarianism in the *Fortnightly*’ (*Memoir* 27, 47). This was not published due to her piece purportedly being too long but it was later included in *Further Reliques* under the title of ‘Pig Philosophy’; Hughes notes that Spencer commended it as ‘abreast, and indeed ahead, [...] of the epoch’ (*Memoir* 48).¹²²

Nour Alarabi states that ‘Spencer met Naden when she was still a student in Mason College’, but does not provide a reference for this in either her article or doctoral thesis.¹²³ Spencer’s letter to Lewins after her death certainly indicates a level of regard, if not a personal

¹²² Nour Alarabi provides some of the background for the title and content of this essay in ‘A God of their Own’, pp. 236-37.

¹²³ Alarabi, ‘Constance Naden’s Philosophical Poetry’, p. 849; Alarabi, ‘A God of their Own’.

relationship, since he compared Naden to George Eliot, stating that they shared a ‘union of high philosophical capacity with extensive acquisition’ (*Memoir* 89).¹²⁴ Francis notes that ‘when old, [Spencer] recalled the vast bulk of his correspondence and had it destroyed, preserving only that material by which he wanted to be remembered’, which may be why there is no extant correspondence between himself and Naden.¹²⁵ The only reference to Naden in David Duncan’s authorised *Life and Letters of Herbert Spencer* (1908) is the inclusion of his letter of condolence to Lewins, which Duncan uses to illustrate ‘his long-formed convictions regarding the intellectual powers of women’, epitomised by the statement in *Principles of Sociology* that there is ‘a somewhat earlier arrest of individual evolution in women than in men; necessitated by the reservation of vital power to meet the cost of reproduction’.¹²⁶ Duncan’s passing reference to Naden effectively obscures her individuality, giving no indication that she was a personal correspondent who sought to develop and promulgate Spencer’s synthetic philosophy. Duncan provides some context for Spencer’s request that Naden wrote a response piece to Lilly, however, stating that ‘If he could not enter upon a controversy himself he would contrive to induce one or other of his friends to do so, as when he got Professor Huxley to reply to Mr. Lilly’s article on “Materialism and Morality”’.¹²⁷ Although the extent to which Spencer was personally acquainted with Naden remains unclear, this parallel with his relationship with Huxley certainly indicates a high level of respect.

¹²⁴ It is notable that Spencer similarly ‘flattered his protégée, the young Beatrice Webb’: ‘he called her a “born metaphysician” and said she reminded him of Eliot’. Francis, *Herbert Spencer*, p. 59.

¹²⁵ *Ibid.*, p. vii.

¹²⁶ David Duncan, *The Life and Letters of Herbert Spencer* (1908; London: Williams & Norgate, 1911), p. 295.

¹²⁷ *Ibid.*, p. 276. Lilly (1840-1919) was a writer of religious essays and books, as well as the Secretary of the Catholic Union of Great Britain. He was particularly concerned with combatting materialism and any perceived degradation of morality; as such Lilly regularly became drawn into argumentative exchanges of letters in the pages of periodicals such as the *Fortnightly*. ‘Death of Mr. W. S. Lilly. Essayist and Catholic Champion’, *The Times*, 1 September 1919, p. 13.

Throughout her intellectual life Naden associated herself with Spencer. Her approach to using and developing his large corpus demonstrates her ability to synthesise ideas and interrogate popularly-held beliefs, and may also be read as a paradigm for her penetrating engagement with other philosophers. Spencer is one of the most commonly referenced writers in Naden's work, and while she can be critical of his ideas, there is an important thread of influence to be traced. At times Spencer implies that he holds a similar view to Naden regarding the relationship between the arts and the sciences. For instance, in his *Autobiography* Spencer claimed that 'The inability of a man of science to take the poetic view simply shows his mental limitation [...] The broader mind can take both [...] Goethe, predominantly a poet, was also a scientific inquirer'.¹²⁸ This is not however the same as saying that poetry and science must be synthesised to truly understand the universe, only that they are not mutually exclusive endeavours. That the integration of poetry, philosophy, and science is central to Naden's world-view indicates how the role of 'devoted disciple of Mr. Herbert Spencer' (as one obituary cast her) is far too simplistic.¹²⁹

Naden's close engagement with Spencer's work, as well as her willingness to write combative letters on his behalf, indicates that she saw him as a philosopher with similar aims regarding the creation of a philosophy that synthesised disparate aspects of the universe. For both there is an attachment to the ideal of unity, even as specialisation and disciplinarity came to characterise nineteenth-century intellectual culture. On the other hand, Spencer's work is rarely referenced in Naden's earlier essays which articulate the tenets and goals of Hylo-

¹²⁸ Herbert Spencer, *An Autobiography. Illustrated in Two Volumes*. Vol. I (New York: D. Appleton, 1904) *Online Library of Liberty* <<http://oll.libertyfund.org/titles/spencer-an-autobiography-vol-1>> [accessed 18 September 2016], p. 485.

¹²⁹ This statement, originally published in the *Herts Advertiser and St. Alban's Times*, is rebuked in a footnote by Lewins who argues that 'her own originality was such that she cannot properly be termed his "disciple"' (*CPW* Appendix 19).

Idealism, where she instead tends to draw on contemporary physical science. This transition over the course of the 1880s is discussed more fully in Chapter Three, in which I draw out how Naden's relationship with such works was informed by her study of science alongside philosophy and the arts.

In closing this section, I turn to the contemporary critical response to Naden's philosophical writings. This largely falls into two distinct camps, depending upon whether the critique addresses her promotion of Hylo-Idealism with Lewins, which she undertook anonymously, or in essays published posthumously under her own name (with biographical forewords). Illustrative of the former response is Naden and Lewins's correspondence with other readers of the popular science periodical *Knowledge* during the first half of 1885; a similar pattern can be found in their engagement with *Journal of Science*. Naden and Lewins's attempts to convince people that Hylo-Idealism was the 'creed of the coming day' and should be embraced by all rational thinkers were not particularly successful if we gauge impact by the responses printed. The primary objections raised against Hylo-Idealism by individuals such as W. Cave Thomas were that idealism is flawed because 'All educated thinkers recognise the limitations of the conscious Ego' and materialism unworkable because there is 'an essence, superior to, and dominant over, matter'.¹³⁰ While a belief in the unworkability of *either* absolute idealism or materialism is fundamental to Hylo-Idealism, the irreconcilability of these views with Naden's desire to see truth and unity in the two standpoints together meant that this debate came to a stalemate. As a result Richard Proctor was compelled, after publishing several missives, to print the following statement: 'With this letter the discussion must conclude.— ED.'¹³¹ Unsurprisingly, the readers of journals such as *The Agnostic* were

¹³⁰ W. Cave Thomas, 'The Fallacy of Materialism', *Knowledge* 7, 27 March 1885, p. 268.

¹³¹ *Ibid.*

significantly more welcoming of a philosophy that attempted to usurp the place of religion. While the periodical did not publish correspondence, in the column ‘Notes and Scraps’ the editor had cause to comment: ‘Numerous commendatory letters have reached us concerning [Hylo-Idealist articles], one correspondent declaring that, “for scholarship and research, they are absolutely unequalled.”’¹³²

The largest quantity of responses to Naden’s prose writings came after her death however, corresponding with the publication of volumes of her essays in 1890 and 1891. The circumstances significantly altered the tone of such critiques; they became generally supportive of the intellectual project, despite largely not subscribing to the views propounded therein. For example, a review of *Induction and Deduction* in *The Monist* concluded, ‘In taking leave of Miss Naden’s work, we must say that, much as we disagree with its Hylo-Idealistic views, it deserves to be read by all who are interested in the search for the key to the great problem of nature’, while *The Academy* review stated that ‘Whatever doubts may remain about [some of Naden’s conclusions], there can be none as to the ability of the writer. Philosophy, as well as poetry, has sustained a loss’.¹³³ The latter review is also typical in the critic’s desire to read Naden’s philosophical works and poetic career in tandem after her untimely death. Even overtly critical reviewers, such as the one writing for the *Journal of Mental Science* who disagreed strongly with Naden’s conclusion and her methods, nevertheless gave her some benefit of the doubt by suggesting that her work would have matured into something more satisfactory: ‘she did not live to put her thoughts into any final form, such as she doubtless would have desired to be known by in another age’.¹³⁴ In contrast,

¹³² ‘Notes and Scraps’, *The Agnostic* 1, March 1885, pp. 143-44 (p. 144).

¹³³ Ω, ‘Review: Induction and Deduction. With other essays’, *The Monist* 1, January 1891, pp. 292-94 (p. 294); ‘Some Books on Philosophy: *Induction and Deduction*’, *The Academy*, 4 July 1891, pp. 11-12 (p. 12).

¹³⁴ ‘Review: A New Philosophy’, *Journal of Mental Science*, 38 (1892), 275-79 (p. 276).

when Paul Carus wrote about Hylo-Idealism in 1894, ascribing the theory to Lewins (who had continued to promote it after Naden's death), he observed that, 'Hylo-idealism carries idealism and materialism to their utmost extremes and places them side by side; yet its upholders have not succeeded in showing to the world how the contradictions of these two systems should be reconciled.'¹³⁵

Despite sustained interest in Hylo-Idealism in certain circles into the closing years of the nineteenth century, the idea did not really outlive Naden and Lewins (the latter dying in 1895).¹³⁶ The purpose of this thread within my thesis is not to suggest that Naden's ideas mark an unrecognised turning point in philosophical thought – several individuals were converging on similarly synthetic ideas during this period. I nevertheless wish to stake a claim for Naden in the history of philosophy, a field in which women's voices are sorely lacking. C. Lloyd Morgan, ethologist and dean of Bristol's University College, wrote that 'she gave promise of taking a position in speculative philosophy to which no woman and very few men have attained' (*CPW* Appendix 8). Although she was relatively unsuccessful in expanding her synthetic ideas outside of a small coterie, Naden's call for synthesis and locating 'unity in diversity' (*I&D* 79) is nonetheless a crucial concept that underpins and illuminates her wider body of work.

¹³⁵ Paul Carus, 'Monism and Henism', *The Monist* 4, January 1894, pp. 228-47 (pp. 236-37).

¹³⁶ The most prominent echo of this philosophy into the twentieth century is in the subtitle of Oscar Wilde's short story 'The Canterville Ghost: A Hylo-Idealistic Romance'. As Josephine M. Guy has explained, this was added in 1891 and not attached to the original 1887 publication; the story was not therefore conceived as a critique of Hylo-Idealism, which is why the connection of the subtitle to the narrative is not clearly worked through. Wilde, Guy argues, 'was simply mocking the seriousness with which ghost stories in general used supernatural sensationalism for crude moralizing'. 'An Allusion in Oscar Wilde's "The Canterville Ghost"', *Notes and Queries*, 45 (1998), 224-26 (p. 226).

Naden's poetry – 'now reciting some fine passage from the poets'

It is notable that Lapworth describes Naden as reciting the words of others, rather than relating her own compositions. The opposition he constructs between Naden and 'the poets' suggests that she is not to be grouped with these illustrious individuals, positioning her as a reader rather than a writer. We are informed by R. W. Dale that 'For Sir Walter Scott she had a great love [...] She had also a great delight in Thackeray, in Bulwer, in Dickens, and George Eliot' (*FR* 222), and with regard to poetry 'she admired Tennyson' but felt most moved and inspired by Keats, Shelley, and Wordsworth (*FR* 225-26). This overview of Naden's literary tastes implies the context in which the reader is expected to place her works. This is pertinent to Chapter Four, in which I focus on how Naden viewed the role of the poet and consequently constructed herself as a poet in relation to Romanticism in particular.

In this chapter, however, I shall consider the reception of Naden's poetry during her lifetime and shortly after. This varied considerably, the overall trend being that those who knew her best believed her true calling to be philosophy, and demoted poetry to the role of a leisure pursuit. In contrast, newspaper obituaries and reviews of her posthumous volumes tended to celebrate her poetic achievements more unambiguously, while commenting upon her impressively wide-ranging intellectual career. Before drawing out how Naden's production of poetry was perceived by her contemporaries, I provide an overview of Naden's poetic corpus and publishing career, beginning with detailed descriptions of the three unpublished notebooks and sales of her two collections, since this information is not recorded elsewhere.

The first notebook, with 'Poems; by Constance C. W. Naden. 1875' written on the front page, consists of pages numbered 1 to 164, although one leaf has been removed so pages 143 and

144 are not present. It is 17.5 x 11 x 1.2cm and bound with blue embossed cloth boards. It contains fifty-two fair-copy poems: of the thirty-six original poems, thirty-one were unpublished, the remaining five subsequently appearing in *Songs and Sonnets* ('Sir Lancelot's Bride', 'The Abbot', 'Maiden Meditations', 'The Lady Doctor', and 'The Two Artists'). These drafts all match the published versions very closely, although there are some potentially telling word substitutions. In addition, there are sixteen English translations of French poems from the previous three centuries by Constant Dubos, J. B. Rousseau, De Vigny, Halevy, Victor Hugo, Delille, Florian, Rosset, Chênédollé, Reboul, Béranger, and De Saint-Victor. While *Memoir* tells us that Naden was fluent in French, these are the first examples of her translating French poetry into English, since only translations of German and Italian poems were subsequently published.

The second notebook, titled 'Poems; by Constance C. W. Naden. 1875-6-7', consists of 187 numbered pages; the '-7' on the front page is written in pencil, presumably added later, although still in Naden's handwriting. It is 17.5 x 11 x 1.5cm and bound with black embossed cloth boards; there is evidence that paper with writing on it was once pasted over the front and back covers, but this has been removed and nothing remains legible on the small scraps of paper that remain adhered. The notebook contains fifty-seven fair-copy poems, which includes thirty-five original poems that were not published, and one that later appeared in *Songs and Sonnets* ('Old Love Letters'). Interspersed among these are nine English translations of French poems (by Lamartine, La Fontaine, De Loy, Legouvé, Hugo, Delacroix, Mourier, Madame [Amable] Tastu, and André Chenier), ten unpublished English translations of Romantic-period German poetry (by Goethe, Schiller, Krummacher, Körner, J. Kerner, and

Matthisson), and two English translations of poems by Schiller that were included in *Songs and Sonnets* ('The Maiden's Complaint' and 'The Knight of Toggenburg').

In both of these notebooks the poems are clean versions rather than initial drafts, although there is some evidence of subsequent revisions, particularly regarding the translations. The poems themselves are characterised by chivalric narratives, comic poems, and sincere religious verse (the former two being most prominent). Unexpectedly, given Naden's fondness for the form in her published works, no sonnets are included. It may be noted that neither of the *Poems* notebooks is the 'MS. collection entitled "Songs of the Heart and Mind"', referred to in the *Memoir*, which contained 'Night' and 'Morning' and is said to have been written 'when the authoress was scarcely twenty-one' (*Memoir* 39); this remains untraced.

The third notebook is bound in tan-coloured embossed cloth boards, and measures 17.5 x 11 x 1 cm. It is untitled, and the ninety-one numbered pages of writing date from approximately November 1878 to August 1879. It is not possible to be sure of the exact period of composition because only a small proportion of the notes include a date or can be dated through context. *Notebook's* entries, numbered 83 to 147 consecutively by Naden, vary greatly in length and cover her often contentious thoughts on religion, philosophy, science, and literature. Alongside prose notes there are eighteen entries in verse; these range from a pair of lines to complete drafts. Of these, two appear in *Songs and Sonnets* ('The Pantheist's Song of Immortality', of which there are two versions, and 'The Letter' – both significantly revised for publication) and one in *Modern Apostle* ('Song', the published version of which is identical to the notebook draft), although these are all given entry numbers, rather than titles,

in the notebook. The presence of ‘Song’ is particularly striking because it offers an insight into Naden’s decision-making process regarding the publication of her works; it confirms that at least one of the poems in her later volume predates *Songs and Sonnets*, thus troubling the linear narrative of development that her contemporaries and modern critics have applied to her body of work. The entries are primarily written in English, but there are several paragraphs in French and German, as well as one German poem and a transliteration of an original poem into the Greek alphabet.

In 1877 Naden published ‘The Lady Doctor’ and ‘The Two Artists’ in *London Society* as C. N. and ‘Love versus Learning’ and the uncollected ‘The Poet of Nature’ in *St. James’s Magazine* as C. C. W. Naden; the latter also published ‘The Old Love-Letters’ and ‘Moonlight and Gas’ in 1878.¹³⁷ Her public profile as a poet only really came into being in April 1881, however, when C. Kegan Paul published *Songs and Sonnets of Springtime*. The print run of the first and only edition was for 500 copies, the standard quantity for most new poetry books during the nineteenth century.¹³⁸ It is recorded in the publication account book that by June, 120 copies had been sold at three shillings and seven pence, but sales dropped off quite quickly: by December 1882 a further twenty-nine had been sold, and then only three or four sold each year through to 1889, with the exception of 1887 when eight volumes were

¹³⁷ C. N., ‘The Lady-Doctor’, *London Society* 31, January 1877, pp. 81-82; C. N., ‘The Two Artists’, *London Society* 31, March 1877, p. 254; C. C. W. Naden, ‘Love Versus Learning’ *St. James’s Magazine*, 4th ser., 32, January 1877, pp. 620-21; C. C. W. Naden, ‘The Poet of Nature’, *St. James’s Magazine*, 4th ser., 32, August 1877, p. 152; C. C. W. Naden, ‘The Old Love-Letters’, *St. James’s Magazine*, 4th ser., 33, February 1878, pp. 202-03; C. C. W. Naden, ‘Moonlight and Gas’, *St. James’s Magazine*, 4th ser., 33, March 1878, p. 252.

¹³⁸ Lee Erickson, ‘The Market’, in *A Companion to Victorian Poetry*, ed. by Richard Cronin, Alison Chapman, and Antony H. Harrison (Oxford: Blackwell, 2002), pp. 345-60 (p. 345). The ledger records that Naden was sent a total of forty-seven copies, while five went to libraries and forty were sent for review. HS King Publication Account Book v.18, p. 164, UCL Special Collections, RKP 128.

purchased, interest likely being stimulated by the publication of *Modern Apostle*.¹³⁹ Naden's death at the end of 1889 led to a surge in sales and by June 1890 a further thirty-seven copies of *Songs and Sonnets* were sold and in the following two years twenty-eight and ten copies were purchased respectively.¹⁴⁰ The volume is characterised by sonnets, and these generally focus upon cycles in the natural world and lyrical expressions of Naden's developing philosophy. In addition to these, there is a proliferation of dramatic monologues and narrative verse, primarily centred upon the theme of religious doubt or nonconformity. The volume concludes with several translations of German poems by Schiller and Goethe, among others.

Naden published her poetry in periodicals over the course of the 1880s, the majority of these appearing in the *Mason College Magazine*. All but one of these were included in *Modern Apostle* (the *jeu d'esprit* 'Freethought in the Laboratory' was never collected). A notable exception on both counts is 'A Priest's Warning' which she published as C. N. in the freethinking journal *The Agnostic* in 1885, and was not collected until 1894 in the posthumous *Complete Poetical Works*. This poem is rather different in tone to Naden's broadly humorous or philosophical poetry, and the vehemence with which she attacks religious teaching indicates an awareness of both *The Agnostic's* readership, who would have embraced such a poem, and the rather different audience for those in her volumes adorned with a spray of bell-shaped flowers, which gestures towards the feminised and depoliticised realm of women's nature poetry.

In *Memoir* Hughes writes,

¹³⁹ HS King Publication Account Book v.18, p. 164; Kegan Paul Publication Account Book v.4, p. 192, UCL Special Collections, RKP 163.

¹⁴⁰ Kegan Paul Publication Account Book v.4, p. 194.

It may be mentioned, for the encouragement of future authors, [...] that an eminent firm of publishers in London declined her second volume of poems – although she offered to defray that whole cost of publication, as is usual with most young poets – fearing it would discredit their establishment! (*Memoir* 31)

Since both volumes were published on commission by the same London company, called C. Kegan Paul & Co. in 1881 and Kegan Paul, Trench & Co. in 1887, the series of events that occurred is unclear, especially given that the company archives contain very little correspondence and Naden's letters and contracts are not extant.¹⁴¹ Lee Erickson notes that it was not unusual for poets to move between publishers,

often because their previous volume had sold poorly and their publisher was unwilling to print a second volume, but also, since the poets were almost always assuming some of the publication risk, because they felt that another publisher would offer a better chance of success.¹⁴²

Given that Kegan Paul did publish *Modern Apostle*, we may conjecture that Naden's approach to a different publisher was for the latter reason.

A Modern Apostle; The Elixir of Life; The Story of Clarice, and other Poems was published in June 1887; it also had a print run of 500 and was priced the same, at three shillings and seven pence. There is a note in the publication ledger about 'Additional matter caused by some new poems', but it is unclear to what this refers.¹⁴³ The Kegan Paul account book records that 108 were purchased upon its initial release, and by the end of 1887 as further fifty-three had been sold.¹⁴⁴ In 1888 thirty-five copies were sold, and in 1889 only five. Upon Naden's death there

¹⁴¹ For the history of the company, details regarding the uneven preservation of their records, and an overview of the practice of publishing on commission, see Leslie Howsam, *Kegan Paul: A Victorian Imprint: Publishers, Books and Cultural History* (London: Kegan Paul, 1998), pp. 85-89.

¹⁴² Erickson, p. 353.

¹⁴³ HS King Publication book, v. 6, p. 133, UCL Special Collections, RKP 119.

¹⁴⁴ Kegan Paul Publication Account Book, v.13, p. 248, UCL Special Collections, RKP 171. The ledger records that Naden was sent thirty copies, while five went to libraries and fifty-one were sent for review.

was again a surge in sales, which meant that forty copies were sold in 1890; this tailed off more rapidly than *Songs and Sonnets* and after just two were sold in 1891 no further sales figures are recorded.¹⁴⁵ Overall this means that fewer were sold than *Songs and Sonnets* (248 compared to 299) but this happened over a much shorter period.¹⁴⁶ *Modern Apostle* is dominated by the three long character-driven narrative poems of the volume's title, but also includes sonnets, several of which draw on the dramatic monologue tradition, and the comic poems about evolution for which Naden is most well-known. The volume concludes with several translations of German poems by Schiller, Goethe, Rittershaus, and Geibel, and fragments of Dante's *Inferno*.

W. H. Hughes claims that Naden 'ceased to write poems in 1887' (*Memoir* 40) and Daniell observes that 'Since leaving College she seems to have altogether abjured poetry for philosophy, having since then never written a verse even as pastime.' (*I&D* xi). This is somewhat undermined by the appearance of the sonnet 'Rest' in *The Woman's World* in March 1888, although it is possible that Naden had already composed 'Rest' and did not write it specifically to meet Wilde's request. More significantly, since Naden died just two years later, it is impossible to know whether this hiatus would have been permanent or temporary. I return to this point of contention in Chapters Three and Four.

¹⁴⁵ Kegan Paul Publication Account Book, v.13, p. 249.

¹⁴⁶ Sales figures for non-canonical poets of the late nineteenth century are hard to come by, and so it is difficult to compare Naden's sales figures with those of her contemporaries; however, comparison with the sales figures of Emily Pfeiffer and A. Mary F. Robinson (who both had volumes of poetry published by Kegan Paul in the early 1880s) indicate that this speed and quantity of sales was quite usual.' H. S. King Publication Ledgers, Royalty and Commission Accounts v. 2, pp. 105, 249, 453, UCL Special Collections, RKP 130. That neither of Naden's print-runs sold out indicates that her works were not particularly successful, although this was not unusual. Charles Kegan Paul recognised that a volume of poetry usually struggled within the marketplace, remarking 'it is a miracle indeed if it attain success in life' and adding that 'Nor gods, nor men, nor booksellers' shops will have anything to do with middling poets'. C. Kegan Paul, 'The Production and Life of Books', in *Faith and Unfaith, and Other Essays* (London: Kegan, Paul, Trench, Trübner, 1891), pp. 191-224 (p. 218).

After Naden's death her friends chose to publish the *Memoir* and two volumes of essays before putting together *Selections from the Philosophical and Poetical Works of Constance C. W. Naden*, in which the philosophical extracts are prioritised in the ordering of the contents. It was not until 1894 that Naden's *Complete Poetical Works* appeared.¹⁴⁷ This is indicative of the way her friends often cast her poetry as of significantly less importance than her prose works, although this decision would also have been influenced by the fact that her poems were already available for sale. Mrs. Houghton is recorded as describing how *Songs and Sonnets* was 'composed at odd moments' between her devoted and 'systematic study of languages' (*Memoir* 16), Hughes remarks that 'after all, poetry was mere amusement to her, for she had, as we know, deeper and more exalted work for her intellectual powers' (*Memoir* 40), and Lapworth concurs that 'Poetry had gradually become to her more or less a recreation', to be written during 'hours of enforced leisure, when real work, as she termed it, was impossible' (*Memoir* xviii). Lewins takes this view to its extreme, and is reported to have written that

Poetry was not her forte – I will not call it her foible – but it was only her pastime – 'a passing phase or efflorescence of budding genius,' as Mr. Riddel of Glendridel wrote of Robert Burns. There is in it, indeed, an element of metaphor, fiction, and unreality which could not but be to some extent alien to her open, daylight mind, in which Truth was mirrored through colourless rays Her whole life and being was a grander *epos* than any of her works.¹⁴⁸

¹⁴⁷ All posthumous volumes (*Memoir*, *I&D*, *FR*, *Selections*, and *CPW*) were published by the London firm Bickers & Son. There is little information about this publisher and it has not been possible to locate archival material that would indicate the success or otherwise of these volumes in the market. Regarding the publication of her collected works, her editors noted that 'MESSRS. MACMILLAN, through their managing partner or director, Mr. Craig, peremptorily declined, in an interview with her literary executor, Dr. Lewins, to have anything to do with the publications of Miss. Naden, even on their own terms' (*CPW* Appendix 4).

¹⁴⁸ Related by the London correspondent of the *Glasgow Herald* and published anonymously as 'The Late Miss Naden', *Birmingham Daily Post*, 17 January 1890, p. 8. It is perhaps notable that this echoes the Prelude to *Middlemarch* in which Saint Teresa is described as having 'found her epos'. George Eliot, *Middlemarch*, ed. by David Carroll (Oxford: Oxford University Press, 2008), p. 1.

The Birmingham correspondent concludes, ‘The last sentence will be endorsed by all who knew Miss Naden personally.’¹⁴⁹ Naden may well have endorsed this pushing of her legacy in the direction of philosophy; nevertheless, the extent to which individuals protested against celebrating her creative works undermines Naden’s interdisciplinary methodology whereby her poetry and prose writings were undertaken with the same philosophical aim in mind.

The appendix to the *Complete Poetical Works* – ‘Some Personal and Press Opinions on the Works of Constance Naden’ – is testament to the way that her editors shaped her critical heritage. While this is an extremely useful resource from which to begin tracing reviews of Naden’s work, it is plain from footnotes and addenda that extracts have been chosen for their readiness to compliment Naden and, perhaps more importantly, her coterie. For example, following twenty-five positive reviews of *Selections* Lewins interjects: ‘After these authoritative eulogies the only censure I can find is contained in an insignificant print, *Sylvia’s Journal*, which is answered by me in the article here reproduced, entitled “Constance Naden and Materialism,” in which the criticaster’s ignorance and presumption are fairly exposed.’ (*CPW* Appendix 16). The review in question is printed and is indeed more critical than the majority of responses to Naden’s work: ‘the fact cannot be disguised that a very great deal has been made out of very little [... The editors, Emily and Edith Hughes,] appear sadly lacking in literary judgement in regard to the selection’ (*CPW* Appendix 16). Lewins’s response is primarily obfuscation – rather than addressing the reviewer’s stated concerns, they are pointed in the direction of Kant, Wöhler, and *Humanism versus Theism* (*CPW* Appendix 17-18) – adding credence, if anything, to the reviewer’s conclusion that ‘The book is a lamentable example of the old adage, “Preserve us from our friends”’ (*CPW* Appendix 17). A

¹⁴⁹ ‘The Late Miss Naden’.

further, unintentionally amusing, editorial footnote states: ‘I do not mention one or two scurrilous articles in the *National Observer*, [...] as the scurrility is directed, not against Miss Naden, whom it designates Titania, as against her Executor, vilified as “Bottom.”’ (*CPW* Appendix 16). The article ‘Bottom and Titania’ was a review of *Induction and Deduction* in which Naden is described as ‘the mouthpiece of Dr. Lewins’, who they brand an ‘atheistic prig’ who ‘has left his ugly mark over a good part of this volume in the shape of foot-notes which are a perfect mixture of commonplace and self-conceit’.¹⁵⁰ Lewins’s letter to the editor was duly published in the periodical, followed by a long editorial note recording that Lewins had sent them an example of a positive review ‘by way of showing us how the review *should* have been done’.¹⁵¹

Reviewers particularly took against Lewins’s attempt to enforce Hylo-Idealist readings of Naden’s poetry, criticising his overbearing foreword to her *Complete Poetical Works*:

we do not think Dr. Lewins’s Foreword either essential or attractive. The lyrical poems which cannot stand without a preliminary essay on Hyloidealism are foredoomed to failure – as poems. Many of Miss. Naden’s poems are charming, and we venture to think she will be remembered by them long after her philosophy has been forgotten, and many are capable of enjoying them who will only be repelled by the invitation to join in an anti-theistic propaganda.¹⁵²

This lays bare the extent to which Lewins *et al* sought to mould Naden’s posthumous reputation, and how this could backfire. It is my contention that Naden’s philosophical stance absolutely runs through her poetic works, and that these two strands intertwine with her scientific endeavours, thereby putting her unifying ideals into practice. The resistance to this

¹⁵⁰ ‘Bottom and Titania’, *The Scots Observer*, 9 August 1890, pp. 307-08 (p. 308). This periodical changed its name to *The National Observer* in 1890. The assessment was repeated a year later in reference to Lewins’s contribution to *Memoir*, ‘Philosophy’, *The National Observer*, 20 June 1891, pp. 125-26 (p. 126).

¹⁵¹ Robert Lewins, ‘Miss Naden’s Essays’, *The Scots Observer*, 30 August 1890, p. 385.

¹⁵² ‘Some Recent Verse’, *Birmingham Daily Post*, 28 December 1894, p. 7.

from her reviewers therefore indicates both Lewins's unwarranted heavy-handedness and the extent to which Naden's world-view was located at the freethinking peripheries of the society in which she lived.

The response to Naden's poetry generally fell into one of two camps. For some, Naden's comic register came to be her defining feature; one individual writing under the moniker 'An Old Literary Hand' declaring that, 'Miss Naden was that rarest of rare birds – a female humorist – and one of more concentrated power than Miss Kendall, who has made the mistake of writing too voluminously.'¹⁵³ For others, Naden's philosophical leanings came to overshadow her poetic works; George Saintsbury, in his *History of Nineteenth Century Literature* (1896), suggested that Naden 'commended herself chiefly [...] to those who like pessimist agnosticism'.¹⁵⁴ It may be noted that there are far fewer reviews of *Songs and Sonnets* in comparison to *Modern Apostle*, and many more reviews of Naden's *Complete Poetical Works* and *Selections* than either of these. This speaks to the trend noted by Joanne Shattock whereby 'There was less of an urge to seek out new talent, to review a single volume of poetry by a new poet. [...] P]oetry reviewers played safe' and primarily focused their attention upon high profile figures.¹⁵⁵ While Naden's untimely death did not ultimately launch her poetry into a position within the canon, it nonetheless meant that upon the publication of her posthumous volumes she was an individual around whom a narrative could be spun by a journalist looking for a hook on which to hang a poetry review.

¹⁵³ An Old Literary Hand, 'A Reader's Recollections', *The National Observer*, 9 February 1895, pp. 345-46 (p. 346).

¹⁵⁴ George Saintsbury, *A History of Nineteenth Century Literature (1780-1895)* (London: Macmillan, 1896), p. 316.

¹⁵⁵ Joanne Shattock, 'Reviewing', in *A Companion to Victorian Poetry*, pp. 378-91 (p. 386).

That *Songs and Sonnets* was not widely reviewed makes it difficult to garner a balanced sense of its reception. *Journal of Science* printed the most laudatory review, praising as ‘beautiful indeed’ Naden’s poetic rendering of ‘the highest conceptions of modern philosophy’ and ‘the man of science clinging with devotion to his chosen pursuits’. They acknowledge that it is unusual for the periodical to publish poetry reviews, but conclude with the assertion that their readers ‘are recommended to read it for themselves’, after which ‘they will doubtless give us full pardon’ for straying from their usual analysis of recent scientific tomes.¹⁵⁶ A less enthusiastic review in *The Academy* describes *Songs and Sonnets* as ‘very pleasant’, suggesting that while her ‘serious poems are good, if not very good’ there is much to be commended in her ‘lighter verse’.¹⁵⁷ In *The Graphic*, however, the volume is characterised as ‘unequal’, demonstrating ‘the thoughts of a refined and thoughtful gentlewoman’, ‘scholarly modern taste’, and some ‘true artistic feeling’, but otherwise exhibiting ‘symptoms of not too successful imitation’ of Jean Inglow and Charles Reade.¹⁵⁸ A laudatory short essay on ‘Miss Naden as Poet’ by Nellie C. Hayman printed within the back matter of *Complete Poetical Works* focuses entirely upon *Songs and Sonnets*, however. This implies that her literary executors may have believed it to be her better work, for even if Hayman’s essay predated Naden’s second volume it seems odd that they did not provide an equivalent overview of *Modern Apostle*, since in most other respects the appendix errs towards comprehensiveness rather than concision.

¹⁵⁶ ‘Analyses of Books: *Songs and Sonnets of Spring-time*’, *Journal of Science*, 3rd ser., 3, August 1881, pp. 495-97 (pp. 495, 497). It is notable that no connection is made between the volume’s author and C. N., under which initials Naden had been corresponding with the periodical earlier in the year.

¹⁵⁷ ‘Book Review: *Songs and Sonnets of Springtime*’, *The Academy*, 10 September 1881, p. 196.

¹⁵⁸ ‘Recent Poetry and Verse’, *The Graphic*, 23 July 1881, p. 102.

Naden's perceived success at writing comic poetry springs largely from the 'Evolutional Erotics', and there are few reviews of *Modern Apostle* that do not reference these directly. 'Solomon Redivivus' was particularly well received, which is interesting given that it is the poem in this grouping that has received least critical attention from recent scholars. In this vein, Andrew Lang declares that 'I am delighted with "The Queen of Sheba and King Solomon."' , although he admits that he has 'not had time to read the longer poems, but I admire the sonnets. Perhaps life is too short for long poems'.¹⁵⁹ Indeed, those reviewers who had read the narrative poems were mostly left unconvinced. While some reviewers enjoyed 'A Modern Apostle' as 'a novelette in octave rhyme with a good deal of vigour and epigrammatic sparkle', others suggested that the subject 'require[d] to be treated with more power than is yet at the author's command'.¹⁶⁰ A reviewer for *Saturday Review* mused,

Why this melancholy story should have been told in verse it is hard to say, though the verse is incisive and vigorous throughout. Put in good prose in the form of a tract, *Modern Apostle* might command a large circulation and prove a wholesome antidote.

They nonetheless agreed with the majority opinion: 'Miss Naden's powers are better shown in a series of humorous poems entitled "Evolutionary [sic] Erotics."' ¹⁶¹

One periodical that gave Naden a particularly positive reception was the *Women's Penny Paper*. As well as reviews of her work, Naden's name often appeared after she had relocated to London, documenting her contributions to suffrage events in particular. Upon her death

¹⁵⁹ Letter dated 1 June 1887, quoted in 'Miss Naden's Poems', *Birmingham Daily Post*, 7 June 1887, p. 4. The first half of the article reads: "We print, with the consent of the writers, the following letters relating to Miss Naden's recently-published volume "A Modern Apostle":- "Cobham, Surrey, June 1, 1887. Dear madam,-Your volume reaches me at a moment when I am very busy: but I have been looking through it, and I am struck with its showing a more than usual facility of poetic rhythm and expression. Believe me, faithfully yours, MATTHEW ARNOLD."

¹⁶⁰ 'Some Poets - and Others', *Pall Mall Gazette*, 4 July 1887, p. 3; 'Recent Poems', *The Morning Post*, 20 June 1887, p. 2.

¹⁶¹ 'Minor Poets' *Saturday Review*, 22 October 1887, pp. 566-67 (p. 567).

came letters of remembrance, and even an anonymous poem titled ‘Thoughts suggested by seeing Miss Naden’s Photograph in “Women’s Penny Paper”’ (an illustration having accompanied their ‘In Memoriam’ column).¹⁶² A sense of her prominence can perhaps be gauged by the fact that her obituary spanned a column and a half, while news pertaining to Robert Browning’s burial was pushed down below it.¹⁶³ A review of Naden’s poetry appeared in December 1889 – they note that the periodical was not in existence when the ‘charming volumes’ were initially published – and it begins by acknowledging that they are ‘glad to avail ourselves of an opportunity to pay out tribute to [...] an author who is so much in sympathy [...] with the progressive movement among women’. This is indicative of how such reviews are never neutral, and instead bound up with the politics of the editors and readership. The review approves of the variety of poetic modes adopted by Naden, and suggests that apart from rare instances of halting rhythm, she is as successful in writing in a ‘humorous vein’ with ‘playfulness of tone’, communicating ‘lofty conception, and psychological truth’.¹⁶⁴ A similar assessment of the two volumes appeared in *Open Court*, an American periodical ‘Dedicated to the Work of Conciliating Religion with Science’. While Naden’s atheist philosophy did not exactly fit this rationale, they were a freethinking journal that welcomed unorthodox approaches to understanding the world.¹⁶⁵ As such, they celebrated Naden’s willingness to address ‘the deep problems of life’ and her comic verse of ‘lighter moods’ by combining ‘her accomplishments as a poet [with] so profound a scientific knowledge’.¹⁶⁶

¹⁶² ‘Thoughts suggested by seeing Miss Naden’s Photograph in “Women’s Penny Paper”’, *Women’s Penny Paper*, 11 January 1890, p. 134.

¹⁶³ ‘Constance Caroline Woodhill Naden’ and ‘Funeral of Robert Browning’, *Women’s Penny Paper*, 4 January 1890, p. 125.

¹⁶⁴ ‘Reviews’, *Women’s Penny Paper*, 14 December 1889, p. 93.

¹⁶⁵ This is clarified by the editor Paul Carus in a parenthetical response to a letter from Lewins: ‘we understand by Religion not a special kind of “animism” but a conception of the world which will serve as a basis for ethics’. R. Lewins, ‘Entheism, or Immanence of God,=Autosism’, *Open Court*, 27 March 1890, pp. 2176-77 (p. 2177).

¹⁶⁶ ‘Book Reviews’, *Open Court*, 2 October 1890, p. 2555.

The way in which Naden was anthologised by her contemporaries is also revealing. Elizabeth Sharp included two of Naden's poems in *Women's Voices* (1887), subtitled 'An Anthology of the most Characteristic Poems by English, Scotch, and Irish Women'. In her preface Sharp explains how

In this volume it has been my endeavour not only to represent each woman with whose writings I am acquainted or with whose writings I have come in contact, but to do so characteristically. [...E]ach, I hope, is herein introduced by lines at once noteworthy for their own sake and eminently characteristic of the author's genius or talent.¹⁶⁷

Only *Songs and Sonnets* was available at the time of compilation, and Sharp chose 'Sunset' and 'The Pantheist's Song of Immortality', the latter being regularly cited as Naden's outstanding composition and 'probably the best known of her poetical works'.¹⁶⁸

Naden's work was also included in Alfred H. Miles's landmark anthology *The Poets and the Poetry of the Nineteenth Century* (1907), the introductions to which have been likened by Shattock to 'a digest of contemporary critical assessments'.¹⁶⁹ Richard Garnett's assessment is that Naden's poems 'are much less subjective than is usually the case with the productions of young poetesses, and contain much less of merely personal sentiment; while some of the best pieces belong to a department little cultivated by female votaries of the Muse – the humorous'.¹⁷⁰ As shall be discussed in Chapter Four, this is particularly significant given that Naden's work is included in the volume dedicated to poetry by women rather than humorous verse. Garnett claims that Naden's poems are 'more interesting as revelations of a noble

¹⁶⁷ Elizabeth Sharp, ed., *Women's Voices: An Anthology of the most Characteristic Poems by English, Scotch, and Irish Women* (London and Fellington-on-Tyne: Walter Scott Publishing, 1887), pp. vii-viii.

¹⁶⁸ 'Review', *MCM* 12, February 1894, p. 48.

¹⁶⁹ Shattock, p. 388.

¹⁷⁰ Richard Garnett, 'Constance C. W. Naden', in *The Poets and the Poetry of the Nineteenth Century*, ed. by Alfred H. Miles, 11 vols (New York: Routledge, 1907), IX, pp. 387-88 (pp. 387-88).

nature than as poetical inspirations’, and suggests that his selection of ‘The Pantheist’s Song of Immortality’, ‘Friendship’, and ‘Natural Selection’ accurately ‘express the three leading characteristics of her nature as illustrated by her verse – intellectual rapture, devoted affection, and gay fanciful humour’; ‘The Confession’ is also included in the anthology but is not commented upon directly.¹⁷¹

As is apparent in other reviews cited, Garnett’s attempts to read ‘characteristics of [Naden’s] nature’ through her verse is not unusual. This urge likely accounts for the frequency with which Naden’s purportedly autobiographical poem ‘Six Years Old’ is referenced by reviewers, particularly those writing after she had died. Naden’s wariness of the lyric ‘I’ and use of distancing techniques such as the dramatic monologue or the comic register often prevent the reader feeling as though they are getting beneath the surface of Naden’s well-crafted public persona. She seems to have been interested in being understood as an objective thinker rather than as a personality divulging her inner feelings in verse. As a result, while through her writings we know much about Naden’s intellectual achievements, philosophical ideas, and social attitudes, readers are left almost entirely in the dark about her personal life and the contours of her relationships with individuals. Friends apparently felt duty bound to uphold this separation of her public and private selves posthumously, refraining from offering many further insights into her adult relationships in *Memoir* or elsewhere. As B. A. Redfern wrote in his essay on Naden for the journal of the Manchester Literary Club, ‘Her verse is mainly subjective, intellectual rather than emotional; the expression of well trained [sic] thought rather than of natural feeling.’¹⁷²

¹⁷¹ Ibid., p. 388.

¹⁷² B. A. Redfern, ‘Constance Naden as Poetess’, *Manchester Quarterly: A Journal of Literature and Art*, 11 (1892), 164-73 (p. 169).

Reviewers or essayists hoping to get a sense of Naden the woman, rather than the intellect, were therefore drawn to a poem that friends including Dale identified as recalling specific events of her childhood (*FR* 220-21). As such, Redfern, who professes to be writing an essay on ‘Constance Naden as Poetess’, looks immediately to her biography and turns to ‘Six Years Old’ as an exemplar of how Naden ‘could recall her childhood and think again the thoughts of the clever and impressible child of six’.¹⁷³ This identification of woman with child, poet with precocious story-teller, demonstrates a trend in responses to Naden’s work that minimise her autonomy. Without ‘natural feeling’, Naden is lacking in the feminine attributes that her friends are so keen to associate with her in *Memoir*; the idea of a ‘poetess’ whose stock-in-trade is ‘well trained thought’ is both impressive and intimidating. Redfern concludes that Naden’s poems ‘are well worth that attention, if only as signs of what we may expect from that higher education of women for which there are now equal facilities as for that of men’.¹⁷⁴ While this is by no means all that is interesting in Naden’s poetry, that she embraced higher education for its own ends is nevertheless a significant departure from the majority of nineteenth-century women poets whose education in humanities subjects and certain scientific pursuits was largely self-guided, particularly after adolescence.¹⁷⁵

By tracing contemporary responses to Naden’s poetry I have shown the variety of ways that people reacted to her work. While those who knew her best sought to downplay the

¹⁷³ *Ibid.*, p. 164.

¹⁷⁴ *Ibid.*, p. 173.

¹⁷⁵ Virginia Blain describes how, despite a lack of access to formal education, ‘a surprisingly large number of future poets did manage to scrounge an education for themselves’; her exception is Amy Levy, who attended Newnham College, Cambridge. Blain incorrectly states that Naden is to be included with ‘clever daughters of rich men [... who] were allowed tutors of their own’. ‘Introduction’, in *Victorian Women Poets: A New Annotated Anthology*, ed. by Virginia Blain (Harlow: Pearson Education, 2001), pp. 1-16 (p. 9).

importance of poetry to her intellectual project, it is my contention that she was consummately self-aware and used her poetry as a methodology through which she was able to develop her ideas and reflect upon society and the world around her. Poetry does not need to have been Naden's calling in order for it to have been an integral part of her intellectual process, indeed the very idea of having a calling of any kind is something of an antithesis to Naden's approach to knowledge. Over the course of this thesis I shall explore further Naden's desire to bring poetry together with science and philosophy in order to achieve an ideal synthesis that championed reason over faith and enabled society to transcend its dependence upon religion.

Conclusion

In the essay of remembrance that introduces *Further Reliques* McCrie compares Naden to other notable women, but in each case the similarity is dismissed. This is perhaps the closest Naden's friends get to hagiography, as McCrie effectively describes Naden as incomparable in the pantheon of great women. He begins:

In respect of solid acquirements, perhaps the nearest name to hers in this connexion is that of the late Miss Harriet Martineau,— who, with unquestionable talent and ability, and under the guidance of the late Mr. Atkinson, did endeavour, if not to construct a philosophical system, at least to impress the public at large with some very pronounced views as to Mesmerism and kindred topics. It will not be seriously contended, however, that Miss Martineau's range of acquirement, or capacity for abstract thought, at all equalled Miss Naden's, even making allowance for the difference of their respective epochs. (*FR* xi-xii)

Then, quoting Spencer's letter, he turns to Eliot:

A closer examination, however, shews this well-meant comparison inapplicable. There was all the difference between the early and thorough scientific grounding, in the case of Miss Naden, and the scientific acquirements, picked up comparatively late in life, in the case of George Eliot. [...] Here, also, the question of mere acquirements apart, we have to contrast, as it were instinctively, the calm serenity,

the just balance and equipoise, of our author's mind with not a little wavering and hesitancy on the part of the distinguished psychological novelist. (*FR* xii-xiii)

McCrie draws out other distinctions between Eliot and Naden, focusing upon the former's relationship with Lewes in a way that suggests his disapproval of their unorthodox relationship; perhaps he labours the point to ensure that Spencer's linking of the two women did not invite lewd speculation about Naden's private life.

McCrie concludes with three further comparisons:

As Miss Naden did not essay the rôle of novelist, it would seem out of place to mention any of the Brontë family in this connexion, even if there were any link of association between the somewhat feverish genius of the daughters of Haworth Vicarage and the achromatic vision and faculty divine of Constance Naden. Pure specialists in science, like the late Mrs. Mary Somerville, cannot be classed with her, for she soared far above mere specialism – though she had the training of a specialist of the specialists, as it were, thrown in, to incline the balance of adjudication more markedly in her favour. And, at that other end of the vista, place beside her calm insight, beside “the vigour and sound sanity of her brain,” the pitiful autobiography of that spoiled child of modern society, Marie Bashkirtseff – that hectic record of genius, vanity, folly and despair. (*FR* xiii-xiv)

His final touchstone is the most surprising: Bashkirtseff was a Russian painter and sculptor who died in 1884 at the age of 25 and gained posthumous fame upon the publication of her notebooks in 1887, which were translated into English by Mathilde Blind in 1889. Here he contrasts Naden with another precocious young woman who died too soon, primarily with the intention of painting Naden in an even more positive light.¹⁷⁶ As such, McCrie moves swiftly on to state:

¹⁷⁶ One thing that draws the two women into proximity is William Gladstone's praise of the writing of both. His commendation of Naden's verse is frequently cited by her biographers, and in 1889 he referred to Bashkirtseff's published diaries as 'a book without parallel'. W. E. Gladstone, 'British Poetry of the Nineteenth Century', *The Speaker*, 11 January 1890, pp. 34-35 (p. 35); W. E. Gladstone, 'Journal de Marie Bashkirtseff', *The Nineteenth Century* 126, October 1889, pp. 602-07 (p. 602).

But, far more important than the petty details of literary comparison and estimate, remains the actual philosophical work performed by Miss Naden. [...] Poet she was, but her poetry suffers, not in comparison with the work of other women of letters in the same sphere, but with her own still more precious and enduring contributions to the literature of abstract thought. (*FR* xiv)

This assessment of Naden's achievements in poetry and prose is both overblown and sentimental. Indeed, in an otherwise positive review of her essays, one reviewer held up this introduction for particular ridicule, suggesting that, "Save me from my friends!" must surely be the deceased lady's most frequent ejaculation if any cognisance of these excesses should reach the still kingdom of the shades.¹⁷⁷ It would be unfair to suggest that Naden's legacy was damaged by her friends' efforts; certainly it would be far harder to revive her fortunes today were her essays scattered among diverse periodicals and the only easily accessible biographical information contained in short newspaper obituaries. Nonetheless, the propounding of Naden the philosopher over Naden the poet did not serve her well in the short term; as we have seen, reviewers were generally unwilling to engage seriously with her prose works. Furthermore, for all McCrie's adulation, he does not dare compare Naden to the men of letters to whom she seems to have aspired; I think here of her 1884 essay on 'Schiller as Philosophic Poet' and the links that might be made to the 'seers and singers' that were writing in both Germany and Britain several decades before her. As I discuss in Chapter Four, there are significant links to be made between Naden's unified world-view and that expounded by those we now call Romantics.

In the chapters that follow I therefore make a case for understanding how Naden fits into the nineteenth-century cultures of science, philosophy, and poetry that she inhabited. Her status as

¹⁷⁷ 'Philosophy', *The National Observer*, 23 January 1892, p. 257.

a woman in a resolutely patriarchal society of course affected Naden's path through life, and yet her achievements indicate that she wished to transcend the conversations about what she achieved as a woman and divert them towards engaging with her works in their own right. Despite – indeed, because of – previous scholars' focus on the politics of gender in relation to Naden's works, this thesis rarely strays into the territory of, to use Andrea Kaston Tange's memorable phrase, 'Mating the Woman of Letters with the Man of Science'.¹⁷⁸ Instead I focus on contributions to scientific, philosophical, and poetic thought which demonstrate a scholarly ability that is not confined by a gender binary. Naden's greatest achievement was to not so much to fully articulate or effectively disseminate a synthetic philosophy, but to demonstrate how one might apply an interdisciplinary approach to one's own work across apparently distinct realms of knowledge. It is this unifying project that I trace through the following chapters, considering how Naden's role as scientist, philosopher, and poet informed her corpus when taken as a whole.

¹⁷⁸ Tange, p. 200.

SCIENTIST

And see, wherever sun or spark is lit,
One Law, one Life, one Substance infinite.
(Constance Naden, *CPW* 143, ll. 13-14)

Constance Naden studied botany, chemistry, physiology, geology, physics, and zoology, while in the context of her philosophical and poetic endeavours she engaged in scientific thinking that appropriated the methodology articulated by John Tyndall in his 1870 address ‘The Scientific Use of the Imagination’.¹ Drawing upon her intensive education Naden was interested in performing the ‘leap[s] of the imagination’ that Tyndall identified as ‘the mightiest instrument of the physical discoverer’, applying this approach to developing her philosophy that combined materialism with relative idealism.² She combined her expertise in the most up-to-date science – drawn from independent reading, classes at the Birmingham and Midland Institute (BMI), and enrolment at Mason College of Science – with a deep knowledge of the history of philosophy. Naden’s works demonstrate how this education was undertaken in order to, in William Tilden’s words, ‘gather for herself the elements of the synthetic philosophy which she thought to pursue as a life-work’ (*Memoir* 68). She used her poetic writings as a creative space in which she could work through key ideas relating to the unifying aims of her developing interdisciplinary world-scheme, refining her ontological and epistemological positions and striving to make connections between the known and unknown.

¹ Tyndall and Naden were not, of course, the only people promoting such views during this period. As Jason Lindquist has argued, many Victorians writing about scientific ideas found the concept of imagination ‘useful because it describes a synthetic faculty capable of imbuing minute particulars with both epistemological and aesthetic significance’. He nonetheless goes on to acknowledge that Tyndall’s advocacy of the approach rendered him an ‘outlier’, and identifies how figures such as George Henry Lewes and John Ruskin pushed against this formulation. Jason H. Lindquist, “‘The Mightiest Instrument of the Physical Discoverer’: The Visual ‘Imagination’ and the Victorian Observer”, *Journal of Victorian Culture*, 13.2 (2008), 171-99 (pp. 174, 190).

² Tyndall, *Scientific Use of the Imagination*, p. 6.

These ideas would be more definitively expressed in her essays, which nonetheless maintain a literary sensibility as a result of, for example, her use of analogy and keen ear for cadence.

Tyndall's paper addresses the concern that not every phenomenon in the universe is observable. Some things are therefore inaccessible to the scientific observer, and it is only through 'the power of Imagination' – characterised by Tyndall as 'combining what the Germans call Anschauungsgabe [contemplation] and Einbildungskraft [creativity]' – that 'we can lighten the darkness which surrounds the world of the senses', 'binding the parts of nature into an organic whole'.³ It is this definition of the imagination which I shall dwell upon in this chapter, as it may be said to align directly with the most basic approaches of philosophy (contemplation) and poetry (creativity); this aspect of the scientific method can therefore be understood as a synthesis of the two, and in itself is a synthesising force. Naden's philosophy builds upon this approach to knowledge that spans disciplines and seeks unity in diversity.

Analogy is shown to be at the foundation of this type of theoretical visualisation; for example, Tyndall describes how Charles Darwin is 'Guided by analogy' into the 'dim twilight of speculation' in *The Origin of Species*, adeptly combining 'observation, imagination, and reason'.⁴ Tyndall's phrasing here indicates the importance of light as a metaphor for knowledge, which he employs from the very beginning of the address when he pronounces his ultimate aim to be 'establishing a kind of cohesion between thought and Light'.⁵ This speaks to the presence of an underlying unifying urge, and is also indicative of how light can be simultaneously a subject of scientific investigation via imagination and a metaphor for the

³ Tyndall, *Scientific Use of the Imagination*, pp. 6, 7.

⁴ *Ibid.*, p. 32.

⁵ *Ibid.*, p. 5.

action of the scientific imagination. In his introduction Tyndall asks how we are expected ‘to lay hold of the physical basis of light, since, like that of life itself, it lies entirely without the domain of the senses?’.⁶ His answer lies in the application of the scientific imagination, and as a result light becomes the key test case for Tyndall’s hypothesis. His identification of ‘that composite and creative unity in which reason and imagination are together blent’ is very close to Naden’s conception of unity, whereby ‘We may find a positive basis of scientific fact for what seems at first sight a mere poetic imagination [...] the essential content may be a germ of pure truth’ (*FR* 207).⁷

The climactic couplet of Naden’s sonnet ‘Starlight. II’ (1881) is indicative of the interests and concerns that she shared with Tyndall: ‘And see, wherever sun or spark is lit, / One Law, one Life, one Substance infinite.’ (*CPW* 134, ll. 13-14). It emphasises how ideal unity is inherently bound up with light, which is here employed as both subject and metaphor. By finding a point of connection between its largest and smallest forms – the properties of light are the same whether emitted from ‘sun’ or ‘spark’ – Naden draws upon science’s search for universal laws that transcend temporal, cultural, and geographical boundaries. In this chapter I focus upon how in Naden’s poetry and prose scientific light is a unifying concept used to explore diverse ideas simultaneously and emphasise their interrelatedness. Light’s simultaneous pervasiveness and indefinability embodies the tension between knowledge and imagination, the known and unknown, that underlies the outer reaches of human knowledge, and it is with this that Naden was preoccupied. Crucially, Naden stated that ‘Philosophy is that science which takes for its subject-matter the whole sphere of consciousness [...] that] must be shown to spring from one central law of reason’ (*FR* 137-38), and that the work of

⁶ *Ibid.*, p. 6.

⁷ *Ibid.*, p. 10.

the philosopher is ‘analysis for the purpose of synthesis’ leading to ‘the unification of life’ (FR 143). This is often manifested in a desire to draw together binaries such as object and subject, idealism and materialism; in her writings Naden’s uses light as a unifying concept that illustrates the duality of scientific knowledge within a single phenomenon. Light’s manifestations across scientific disciplines meant it was a phenomenon that was both reassuring in its all-encompassing aspect and convincingly anchored in scientific understanding.

Light is, furthermore, an exemplary instance of a cross-disciplinary concept: it suffuses a cross-section of scientific fields and pervades the discourses of art, philosophy, and religion. Alice Jenkins has demonstrated how light ‘crossed the boundaries of physics, optics, mathematics, and chemistry, as well as extending out into theological debate’, and was therefore an important vector through which scientists and non-specialists communicated ideas in the first half of the nineteenth century.⁸ Several recent works of scholarship have drawn out the centrality of light and vision to interdisciplinary conversations in the nineteenth century, including Isobel Armstrong’s *Victorian Glassworlds*, Christ Otter’s *The Victorian Eye*, Martin Willis’s *Vision, Science and Literature, 1870-1920*, and Srdjan Smajic’s *Ghost-seers, Detectives, and Spiritualists*.⁹ These books pursue themes regarding modes of seeing and technological developments that are specifically bound up with socio-cultural engagements with light. Furthermore, as Armstrong observes, ‘In order to grasp [light’s]

⁸ Alice Jenkins *Space and the ‘March of the Mind’: Literature and the Physical Sciences in Britain, 1815-1850* (Oxford: Oxford University Press, 2007), p. 187, see also pp. 186-98.

⁹ Isobel Armstrong, *Victorian Glassworlds: Glass Culture and the Imagination 1830-1880* (Oxford: Oxford University Press, 2008); Chris Otter, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800-1910* (Chicago: University of Chicago Press, 2008); Martin Willis, *Vision, Science and Literature, 1870-1920: Ocular Horizons* (London: Pickering and Chatto, 2011); Srdjan Smajic, *Ghost-seers, Detectives, and Spiritualists: Theories of Vision in Victorian Literature and Science* (Cambridge: Cambridge University Press, 2013).

abstract nature analogies had constantly to be found in matter'.¹⁰ As such, Otter argues that 'visuality is always a synthetic act, involving bodily, discursive, and material factors'.¹¹ This notion of synthesis feeds into Naden's use of light as a unifying concept, which draws from and connects art, philosophy, and science, illuminating several fields of thought simultaneously. It is this aspect of the nature of light that I contend resonated so strongly with Naden; striving towards light is bound up with the intertwining of light and knowledge – striving towards one indicates an urge for the other. It is this perspective on unity in diversity that provides a focus for this chapter's discussion about how Naden's scientific education underpinned her interdisciplinary endeavours. Light pervades Naden's writings in ways that demonstrate her scientific understanding of its properties and her identification of it as a symbol for the desire to unify knowledge.

The reciprocal nature of modes of thought is central to Naden's world-view and underpins her synthetic philosophy. This is most clearly articulated in the late essay 'Cosmic Identity' in which she argues that:

The cosmos, as we know it in space and time, displays wealth of variety, yet is synthesised as the one in many are by the persistence of fundamental relations. [...] This conception is essentially poetical and is the meeting point of science and poetry. The scientific spirit diverges from the poetic spirit at the outset, because it is analytic, while poetry cares only for the general impression, or uses analysis as a means to some new and beautiful synthetic effect. Science cares for objects as parts of a whole, as symbols of a law, not for their own beauty or majesty [...] But, in the end, science too becomes synthetic, and treats of unity manifested in diversity, but not lost or weakened in its embodiments and not subject to further analysis. The cosmos thus constructed is the ideal of science; yet, when poetry catches a glimpse of it from afar, she finds that it is also her own ideal, and that the consummation of rational endeavour is also the fulfilment of poetic aspiration. (*FR* 188-89)

¹⁰ Armstrong, *Victorian Glassworlds*, p. 283.

¹¹ Otter, p. 46.

The ideas of analogical ‘fundamental relations’, shared ideals, and the desire to locate and explore the ‘meeting point’ between disciplines are essential to Naden’s work. She does not suggest that science and poetry follow the same path, but instead makes claims for their unity of purpose. It is notable that this analysis comes at the end of an essay that began with a verse epigraph – Tennyson’s ‘Flower in a Crannied Wall’ – thus emphasising how this poetic rendering of an ideal – to ‘understand / What you are, root and all, and all in all’ (*FR* 162) – shares its purpose with the philosophical prose and scientific ideas that follows: their concluding desire to synthesise and unify knowledge is a shared one.

In an 1890 letter to Charles Lapworth, Naden’s geology instructor and friend, Robert Lewins concluded that ‘Without Mason College [...] Miss N[aden] c[oul]d never have developed as she did’.¹² Despite the breadth of her education, previous scholarship about scientific themes in Naden’s poetry has tended to focus on the influence of evolutionary theories, particularly within the ‘Evolutional Erotics’ from *Modern Apostle*. Certainly, Naden was interested in the impact of evolution on the way humans see themselves in the context of the world around them. Her works demonstrate an intellectually engaged, scientific approach to understanding the ramifications of both Darwin’s famous publications of 1859 and 1871 and Herbert Spencer’s application of evolution within his synthetic philosophy. Evolution is itself a unifying process: Naden praised Darwin as ‘that great scientific philosopher’ who ‘discover[ed] the grand generalisation which unites all particulars’ (*I&D* 153, 154), something that is most clearly illustrated by his branching tree diagrams that lead back to a common ancestor.¹³ Furthermore, influenced by Spencer, Naden wished to extend the scope of this

¹² Robert Lewins, ‘Letter to Charles Lapworth’ (6 June 1890), verso. Lapworth Museum of Geology Archive, L25.

¹³ Charles Darwin, *On the Origin of Species*, ed. by Gillian Beer (1859; Oxford: Oxford University Press, 2008), p. 90.

unifying theory to encompass the larger structure of society. The linking together of concepts underlies much of Naden's philosophy and is a central theme in her poetry. In the context of my argument I shall not dwell on Naden's writings on evolution, for that has already been done admirably well by others.¹⁴ Instead I look to light, which is a key theme in Naden's work and features prominently in the syllabi of her classes at the BMI and Mason College. Within scientific discourses light is simultaneously pervasive and unknowable; it underpins life and as a result Naden embraces it as a symbol of universal truth. Light functions as both subject and metaphor, and is a motif that expresses the unifying urge that underpins Naden's works. It is therefore productive to consider how this perspective is supported by her scientific education.

Andreas Blühm and Louise Lippincott observe that 'a history of light is really a history of the human perception, understanding, and manipulation of light', and, furthermore, 'no other era saw such thoroughgoing revolutions in light and lighting than the years between 1750 and 1900'.¹⁵ Naden's scientific education during the 1880s therefore endowed her with a panoramic view across a period in which society's understanding of and interaction with light changed dramatically. In line with this, the most comprehensive recent history of optics (the science of light and vision) devotes almost half of its space to developments that occurred during the nineteenth century. As Olivier Darrigol explains, at the turn of the century debates surrounding the nature of light were stimulated by Thomas Young's discoveries regarding the principle of interference (based on the analogy of light and sound), which favoured the undulatory, or wave, theory of light. However, slightly later research by Simon de Laplace

¹⁴ See for example, Thain, "Scientific Wooing"; Holmes, *Darwin's Bards*, pp. 189-97; Birch.

¹⁵ Andreas Blühm and Louise Lippincott, *Light! The Industrial Age 1750-1900: Art & Science, Technology and Society* (London: Thames and Hudson, 2000), pp. 11, 12.

and Etienne Louis Malus on the polarization of light provided additional support for the earlier Newtonian corpuscular, or particle, theory.¹⁶ It was the work of Augustin Fresnel in the 1810s that refined and reinvigorated aspects of Young's theory by demonstrating the predictive power of a model based upon transverse waves travelling through ether, although he did not wholly disprove the Laplacian schema.¹⁷

In order to construct theories on the nature of light it was necessary for scientists to engage with energy, force, and matter, and the explanations underpinning each of these fundamental concepts underwent significant shifts across the period due to developments in electromagnetism, atomic theory, and conceptions of ether. At the foundation of this was a unified model of physics. This was, as P. M. Harrison highlights, 'grounded on an awareness of the relationships and connections among heat, light, electricity and chemistry' that was in the late eighteenth and early nineteenth century based upon the theory of imponderable fluids, and from the 1830s onward came to underpin the concept of the luminiferous ether through which light waves were understood to travel.¹⁸ Ether functioned as a unifying concept; it was required to pervade all of space and matter and it is was integral to understanding how optics developed as a field during the Victorian period.¹⁹

There were several competing theories of ether but by 1861 James Clerk Maxwell, building on the work of Michael Faraday, had developed a 'mechanical model of the electromagnetic

¹⁶ Olivier Darrigol, *A History of Optics from Greek Antiquity to the Nineteenth Century* (Oxford: Oxford University Press, 2012), p. 166.

¹⁷ *Ibid.*, p. 206.

¹⁸ P. M. Harman, *Energy, Force and Matter: The Conceptual Development of Nineteenth-Century Physics* (Cambridge: Cambridge University Press, 1982), p. 33.

¹⁹ An excellent introduction to the development and employment of ether theories during the nineteenth century is *Conceptions of Ether: Studies in the History of Ether Theories 1740-1900*, ed. by Geoffrey Cantor and Michael Hodge (Cambridge: Cambridge University Press, 1981).

ether that reproduced known laws of electromagnetic forces and induction', and by 1865 he had formulated an equation that expressed light as an electromagnetic wave.²⁰ Its validity soon came to be widely accepted, partially as a result of Hermann von Helmholtz's recapitulation of Maxwell's equations in the first part of *On the Theory of Electrodynamics* (1870), in which he demonstrated the utility of this model. It was within this context that Naden received her education in optics; while the electromagnetic theory of light was deemed highly credible in 1885 when Naden is recorded as enrolling in her first physics class, it was not entirely demonstrable. It was only upon Heinrich Hertz's production and analysis of electromagnetic waves under experimental conditions in 1887 that George Francis Fitzgerald felt compelled to announce at the BAAS meeting of 1888 that the ethereal theory of electromagnetism, and thus light, had been proved.²¹ This was something of an overstatement, for Hertz was aware that his model was unable to explain all optical phenomena, but it is nonetheless indicative of a fundamental desire to explain light in a unified manner.

Naden was drawn towards and developed a unifying philosophy, and so it is logical that she was attracted to scientific models that sought to order the universe in such a way. As I explain later in this chapter, ideas surrounding the development of the eye and the physiology of visual perception were also tied to a unifying theory, namely evolution. Physics and physiology each inaugurated fundamental shifts in the socio-cultural understanding of light during the nineteenth century. These scientific developments emboldened Naden to construct a philosophy that used light as its key illustrative subject and foundation for descriptive metaphors; it was both reassuring in its all-encompassing aspect and indicative of the parallel unifying urge underlying scientific endeavour.

²⁰ Darrigol, pp. 241, 243.

²¹ Harman, p. 112.

In this chapter I read Naden's poetry and essays alongside one another, arguing that Naden's scientific education and engagement with the concept of the scientific imagination were integral to the development of her ideas. I begin by identifying Naden's perspective on the concept of the scientific imagination as developed by Tyndall. I then demonstrate how light as a scientific subject and as a metaphor for knowledge underpins her published writings.

Naden's earlier poems engage with light through the lenses provided by botany and astronomy, connecting plants' heliotropism with the analogous way in which humans are drawn to stargazing. The focus here is upon light as a distinct phenomenon and the relatively simple cause-and-effect relationship between naturally-occurring light and living organisms, whether plant or human. Naden's perspective changed, however, once she had enrolled at Mason College. Upon considering light's role in physiology and physics, she then sought to understand what we mean by the very idea of light. The propagation and perception of light were not (and are not) fully understood by scientists, and as a result Naden's philosophical relationship with the phenomenon became more complicated. Rather than symbolising absolute truth, light came to represent for Naden the complex and multifaceted nature of knowledge which she sought to unify. This shift between light, and truth, being singular and then multiple is the key to understanding Naden's developing synthetic philosophy.

Naden and the Scientific Imagination

Naden's only direct reference to Tyndall does not clearly acknowledge his connection to the scientific imagination. In 'The New Orthodoxy' (published in 1885 in *Mason College Magazine*, and later in *Modern Apostle*) the fifth of the eight trochaic stanzas runs:

Oh, the wicked tales I hear!
Not that you at Ruskin jeer,

Nor that at Carlyle you sneer,
 With his growls dyspeptic:
But that, having read in vain
Huxley, Tyndall, Clifford, Bain,
All the scientific train—
 You're a hardened sceptic! (*CPW* 312, ll. 33-40)

Here Tyndall's identification as one of the 'scientific train' implies that from Amy's perspective – that of a Girton-educated young woman writing an epistolary poem to her 'dear doubting Fred' (*CPW* 313, l. 63) – anyone with an interest in contemporary empirical thought would have recognised the legitimacy of his views. Ursula DeYoung identifies the foundation of these to be that 'science should form the basis of education and that scientists should be viewed as the most competent judges of everything to do with the natural world', an opinion Naden shared.²² Jonathan Smith has noted, 'So powerful was Tyndall's formulation that by the end of the decade the "scientific use of the imagination" had become a catchphrase, used by the *Encyclopaedia Britannica* to capture all that was lacking in Baconian induction'.²³ This had not been an uncontroversial position, however, his address having been widely reported and debated by the press.²⁴

Naden does not explicitly reference Tyndall elsewhere, suggesting that she did not view him as influential in the way that she acknowledged Darwin and Spencer, for example, who are frequently quoted in her essays (and, perhaps not incidentally, apportioned their own stanzas in 'The New Orthodoxy'). Naden does, however, use the phrase 'scientific imagination' twice in her published essays. In the first instance it appears in quotation marks (suggesting a direct

²² Ursula DeYoung, *A Vision of Modern Science: John Tyndall and the Role of the Scientist in Victorian Culture* (London: Palgrave Macmillan, 2011), p. 11.

²³ Smith, p. 35.

²⁴ See extracts from the press response included in John Tyndall, *Essays on the Use and Limit of the Imagination in Science* (London: Longman, Green, 1870), pp. 1-12.

reference to Tyndall) during her discussion of the role of hypothesis in the conclusion to ‘Induction and Deduction’:

Without a prior conception of some relation between facts there can evidently be no recognition, consequently no progress in knowledge; and where experience does not supply sufficient materials, the lack must be eked out by the ‘scientific imagination.’ The imagination must of course not be unbridled; it must contain an element of true cognition. (*I&D* 98)

This is clearly aligned with Tyndall’s caveat that imagination must be ‘Bounded and conditioned by cooperant Reason’ if it is to be of use to the scientific process; Lorraine Daston traces this back to the Enlightenment view that in neither art nor science ‘should the imagination be allowed to invent at will. Or rather, *against* will’.²⁵ Naden’s desire to combine materialism and relative idealism chimes with this, for she asserts that while the universe we perceive is ‘a more or less coherent vision’, it changes ‘not according to caprice, but according to law’; it is stable and shared because ‘Reasoning from analogy, we may justly conclude that thought, imagination, action, are normally directed and modified by physical forces’ that science tells us are stable across time and space (*I&D* 172, 169, 171). As such, the human brain is creative but nonetheless materially limited in its powers of imagination. The phrase also appears in ‘Ontology and Scepticism’, one of the ‘Philosophical Tracts’ that may have been the beginning of Naden’s unfinished book (*Memoir* 48), to which I shall return later in this chapter.

The approach to understanding the scientific method demonstrated here by Naden and Tyndall is upheld by the historian of science Gerald Holton. He has persuasively argued that, despite common belief to the contrary, alongside ‘logic, experimental skill, and mathematics’,

²⁵ Tyndall, *Scientific Use of the Imagination*, p. 6; Lorraine Daston, ‘Fear and Loathing of the Imagination in Science’, *Daedalus*, 127.1 (1998), 73-95 (p. 79).

scientific enquiry is dependent upon ‘*the visual imagination, the metaphoric imagination, and the thematic imagination*’.²⁶ The first is essential to interpretation – what can be seen in the mind’s eye – while the second underlies the transference of meaning whereby metaphor and analogy are used as a ‘creative but risky’ strategy to develop new theories in their early stages. The third identifies how and why certain connections are made as a result of an individual’s ‘controlling tendencies’, and Holton aligns this with the ‘willing suspension of disbelief for the moment which constitutes poetic faith’ that Coleridge proposes in *Biographia Literaria*.²⁷ The latter is connected to the ‘leap of imagination’ that Tyndall describes as underpinning moments of scientific revelation such as ‘Newton’s passage from a falling apple to a falling moon’.²⁸ As Daston has shown, this was a contentious idea in the 1870s and 1880s since imagination had come to be systematically opposed to science. During the eighteenth century it was largely accepted that:

the imagination, despite its perils, was as essential to philosophy and science – the pursuits of reason – as to the arts. [...] Both science and art were, in the view of most of their eighteenth century practitioners, dedicated to revealing the truths of nature; imagination enlisted to this aim was a sound, sane one, that is to say, an imagination subject to rules.²⁹

This outlook upon the search for truth resonates with Naden’s championing of reason and the need for reconciliation rather than division of modes of thinking. According to Daston, the turning point came between 1780 and 1820, when a ‘new polarity of the objective and subjective’ came into being, and with it a rejection of imagination’s utility in scientific investigation.³⁰ From this perspective it may be suggested that Naden looked backwards

²⁶ Gerald Holton, *Einstein, History, and other Passions: The Rebellion against Science at the End of the Twentieth Century* (Reading, MA.: Addison-Wesley, 1996), p. 78.

²⁷ *Ibid.*, pp. 95, 100.

²⁸ Tyndall, *Scientific Use of the Imagination*, p. 6.

²⁹ Daston, p. 78.

³⁰ *Ibid.*, p. 85.

rather than forwards in her intellectual desires, for she was interested in unifying such binaries and synthesised disciplinary approaches to overcome such divides.³¹ This is how Alice Jenkins characterises the interdisciplinary character of Romantic science that ‘tended to promote an explanatory model that favoured unity over disjuncture, commonality over fragmentation’.³² Naden’s course of study can be understood in these terms since she remained a student of various sciences for several years; this helped her to develop an all-encompassing philosophical model rather than a research career that would inevitably have led to choosing a specialism.

Jenkins has made important claims about the ‘two contradictory movements in the organization of knowledge’ during this earlier period, whereby alongside ‘a clear shift towards increasing specialization and insulation of one area of learning from the others’ there were also ‘significant efforts towards unifying and harmonizing these different specialisms’; science necessitated ‘an attempt to become all embracing, comprehensive and universal’.³³ These trends are applicable both within the sciences and between the science and arts. Jenkins is right to highlight how this altered significantly in the second half of the nineteenth century, asserting:

the pace of change, in both the content and nature of disciplines, was becoming too rapid for the existing structures of dissemination and assimilation of knowledge to cope with. By some time around 1860, even the attempt to cope had been given up.

³¹ Within the sciences this anxiety is clearly demonstrated by William Whewell who, in his 1834 review in which he coined the word scientist, laments: ‘the tendency of the sciences has long been an increasing proclivity to separation and dismemberment [...] The disintegration goes on, like that of a great empire falling to pieces; [...] physical science, loses all traces of unity’. Despite the eventual success of his proposed ‘general term’ to describe the gentlemen of the BAAS, half a century later it had not averted the increasingly specialised nature of scientific disciplines. William Whewell, ‘Review of *On the Connexion of the Physical Sciences* by Mrs. Somerville’, *Quarterly Review*, 51 (1834), 54-68 (pp. 58-59).

³² Jenkins, *Space*, p. 21.

³³ *Ibid.*, p. 58, 18.

On the whole literature and science settled into considering one another as definitely different systems of knowledge, with no individual expected to master both.³⁴

Naden, however, was one of the exceptions, and as a result it remains helpful to consider her interdisciplinary approach within the contexts drawn out by Jenkins in *Space and the 'March of the Mind'*. This is in part because Naden's published use of science is restricted to word-based contexts. While Mason College taught Naden to understand and utilise equations, and she would therefore have been able to comprehend new research that conveyed findings in that form, Naden only ever publicly communicated her scientific ideas via philosophical prose and poetry.³⁵ The cultural shift that occurred, whereby the results of major scientific work came to be presented primarily in equations, did not affect Naden in the way that it did those that might be considered professional scientists.³⁶

In the early part of the nineteenth century, 'Assuming nature's uniformity made extraordinary leaps of the scientific imagination possible, because even parts of nature that were inaccessible to observation via the senses could be explored by reasoning.' Jenkins calls this 'belief in a homogenous universe [...] a temporary stage in the onward march of science', but during the late 1870s and 1880s Naden was nevertheless committed to working through its implications in her poetry and philosophy.³⁷ The scientific landscape of the second half of the nineteenth century was not so wedded to the idea of homogeneity, but there remained a desire to demonstrate universal laws, for this is fundamental to the functioning of science. This underlies Naden's desire to demonstrate 'unity in diversity' (*I&D* 79), a phrase that connects

³⁴ Ibid., p. 233.

³⁵ It is notable that while Tyndall studied mathematics he too would 'abjure the discipline' by focusing on 'experimental approaches'. Brown, *The Poetry of Victorian Scientists*, pp. 102-03.

³⁶ Jenkins, *Space*, p. 17.

³⁷ Ibid., p. 91.

the binary states of homogeneity and heterogeneity. While she appreciated that, in Jenkins's terms, 'specialization was the way to increase the knowledge of phenomena', through her philosophical approach Naden attempted to perceive how these may be 'different facets of a single principle'.³⁸ Naden sought to communicate the importance of shared underlying processes, for the discovery of such laws is the objective of scientific investigation, and it also facilitates the pairing of reason and imagination within the sciences.

Naden positions science – understood to encompass both reason and imagination – as the one true explanatory force, taking the place that religion held in many preceding philosophies: 'Physical Science affords accurate information hitherto unattainable, and provides a sure starting point for reforms of thought and of practice.' (*I&D* 138). This involved seeing aspects of human nature through the lens of her diverse scientific education, the resultant breadth of knowledge enabling a fuller appreciation of cross-disciplinary similarities. As Tilden notes, 'No inducements seemed sufficient to prevail upon her to become a mere scientific specialist', her purpose was to acquire the 'fundamental principles' of each discipline that formed the foundation of her synthetic philosophy (*Memoir* 68). In addition, as George M. McCrie explains in his introduction to *Further Reliques*, Naden took 'the latest acquirements in modern science [...] concentrating them in the elaboration of a "world scheme" or Cosmic synthesis' (*FR* x).

Tyndall began his address on the scientific uses of the imagination by describing his experience of turning to Goethe's *Farbenlehre* [*Theory of Colours*] and Alexander Bain's

³⁸ *Ibid.*, p. 99.

Logic as he developed his theory of the propagation of light while in the Alps, referring to them as ‘two volumes of poetry’.³⁹ To subsume works of science and philosophy into the category of poetry indicates Tyndall’s willingness to push against assumptions about disciplinary boundaries. Just over a decade later Matthew Arnold would argue that in regard to education the term literature should be used in an all-encompassing sense that included scientific writing, which speaks to a similar interdisciplinary desire to free works by great thinkers from the confines of categorisation.⁴⁰ Tyndall states that his appreciation of the former ‘glorious’ work was marred by Goethe’s refusal to accept Newton’s theory of the propagation of light and colour. Tyndall professes, however, that he was enamoured with Bain’s work, which he describes as ‘shining generally with a dry light’. This metaphorical connection of thought with light lays a path for the proliferation of such imagery that follows. He describes being struck by Bain’s exhortation that ‘Your present knowledge must force the links of connection between what has been achieved and what is now required’, and responds to this challenge by attempting to ‘re-form an alliance, and finally succeed in establishing a kind of cohesion between thought and Light’.⁴¹

Scientific imagination is therefore connected to light in two ways that are often conflated by both Naden and Tyndall. The first involves striving upwards towards a light source that is aligned with higher knowledge, and the second is about conceiving imagination as a light source that shines into the unknown. Two fundamental conceptions of the process of knowledge acquisition exist in these terms: one is that finding truth requires being able to see

³⁹ Tyndall, *Scientific Use of the Imagination*, p. 3. Tyndall subsequently inserted a footnote acknowledging that a critic has remarked ‘that he does not see the wit’ in calling these poetry, and responds ‘Nor do I’, establishing that this was not merely meant as a playful aside, *Use and Limit of the Imagination*, p. 13.

⁴⁰ Arnold, ‘Literature and Science’, p. 84.

⁴¹ Tyndall, *Scientific Use of the Imagination*, pp. 3, 5.

clearly (which is aligned to the former idea, whereby haze dissipates the nearer one is to the light source, aiding observation), and the other is that to find truth one must shine light into darkness (which is aligned to the latter conception). Both of these ways of describing the search for knowledge are used by Naden, and her contemporaries. We find, however, that Naden's earlier writings speak more clearly to the former, particularly regarding the themes of heliotropism and astronomy, while her later works enact the search for knowledge in more abstract ways that primarily address the latter.

Naden sought a materially-grounded sense of unity, and scientific theories such as electromagnetism and evolution provided this. Naden identifies this in 'Pig Philosophy' (an unpublished letter sent to the editor of the *Fortnightly Review* in 1889), beginning her epistle: 'The task of the present age seems to be the identification of apparently opposite modes of thought' (*FR* 1). She goes on to argue that 'True identification differs *toto cælo* from compromise. [...] It consists in showing that the two ideas are two aspects of one philosophy; and that, while each preserves its distinctive value, there is a unity of import clearly visible in the midst of the diversity' (*FR* 1). Naden is careful in establishing what can be achieved in the name of unity, and in 1881 wrote that 'men of science [...] are often too apt to literalise metaphors and regard abstractions as entities' in the case of 'that natural tendency to personification which [...] elevate[s] force, which is but a function, to the rank of agent' (*FR* 192). She thus pragmatically assessed the linguistic components of philosophy and science, and was attuned to identifying such rhetorical devices. When using them herself Naden is careful to spell out their pedagogic function, often undercutting imagery to emphasise its artificiality. In 'Hylo-Idealism: The Creed of the Coming Day', Naden declares 'in these grey thought-cells lives the God who says, "let there be light"' (*I&D* 170). She then states:

I have spoken of the God within the hemispheres almost as though he were a separable being; but in truth this was mere “poetic licence,” [...] The God within is simply the energy stored up in the thought-cells; and this energy is no separable spiritual being, but a specialised form of that cosmic vitality which is inherent in matter called dead, as well as in matter called living. (*I&D* 171)

Naden is clearly reticent to allow this personification to stand, demonstrating her unease with slippages between force and agent.

Jenkins has recently argued that ‘Analogy is perhaps the central gesture of literature and science studies. It underpins our methodological proceeding and is often a key part of our form of argument’, and creates a fundamental ‘methodological challenge’ to the ‘explanatory procedures’ within the field.⁴² ‘Victorian natural philosophers’ too, Andrea Henderson observes, ‘regarded the principle of analogy as a crucial conceptual tool [...] The purview of analogy, moreover, included not just the relations of physical phenomena to each other, but also the relations of those phenomena to representations of them’. She goes on to suggest that ‘In this culminating moment in the development of classical physics, the concrete and the formally abstract, and the real and its representations, were brought into an extraordinary intimacy with each other’.⁴³ This negotiation and synthesis between binary concepts is central to Naden’s own engagement with analogy.

The technique of analogy had been encouraged by Naden’s training in systematic physiology at Mason College. In her March 1883 examination on the subject she was required to ‘Contrast the function of the spinal cord of a frog with that of a man’; in order to answer this

⁴² Alice Jenkins, ‘Beyond Two Cultures: Science, Literature, and Disciplinary Boundaries’, in *The Oxford Handbook of Victorian Literary Culture*, ed. by Juliet John (Oxford Handbooks Online, 2015) <<http://dx.doi.org/10.1093/oxfordhb/9780199593736.013.30>>, pp. 10, 2.

⁴³ Andrea Henderson, ‘The Physics and Poetry of Analogy’, *Victorian Studies*, 56 (2014), 389-97 (pp. 389, 390)

question, she would have needed to identify their underlying similarities before drawing out where they diverged along the evolutionary line. Naden praised Darwin for his ability to regard ‘Every truth [...] not as a solitary phenomenon, but as related to all other truths, known and unknown’ (*I&D* 153), and sought to follow his unifying method that is essentially based in the application of analogy. For example, in ‘The Brain Theory of Mind and Matter’ (published in *Journal of Science* the same month that she sat her systematic physiology exam) Naden asserts that ‘Between man and the cell a very instructive parallel may be drawn’ because ‘man is distinct from his environment only as a cell may be said to be distinct from the matrix, or intercellular matter, which form its home, and supplies it with nutriment’ (*I&D* 162).⁴⁴ Naden continues by identifying several biological parallels between these two forms of living matter, creating a sense of the connection between species, and their environment. The essence of this comparative approach to science is the engagement of the imagination to visualise the grand schemes underlying natural diversity.

Naden argues that science works together with poetry and philosophy to form a unified approach to understanding the universe and our place within it, taking cues from the type of thinking advocated by Tyndall and placing light – as subject and metaphor – at the centre of her works. Light has both an explanatory and unifying function across Naden’s writings, and she approaches it from the perspective of someone highly educated in the sciences and of a rationalist philosopher co-opting the rhetoric of religious revelation and applying it to the action of scientific thought as light.

⁴⁴ This is a characteristically Spencerian analogy, see ‘The Social Organism’ (1860). For a useful overview of the nuances of Spencer’s use of this analogy see Walter M. Simon, ‘Herbert Spencer and the “Social Organism”’, *Journal of the History of Ideas*, 21 (1960), 294-99.

Heliotropic Urges

In the 1881 collection *Songs and Sonnets*, Naden demonstrates her belief that scientific knowledge, symbolised by light, is the harbinger of truth. It is here that Naden most explicitly engages with scientific discourses through the motif of light; two notable recurring themes being heliotropism and stargazing. In the case of the former, light has an observable function; botany does not bring the nature of light into question and the scientific imagination is not clearly utilised. Astronomy, on the other hand, forces us to consider what cannot be observed; light itself comes to be analysed and the scientific imagination facilitates the development of theories. This interplay between scientific observation and imagination in Naden's first volume of poems builds the foundation for the way her thinking went on to develop over the course of the 1880s.

Naden's 'Year in Sonnets' cycle is of particular interest regarding heliotropism, and their composition between 1878 and 1881 overlapped with her enrolment in Botany classes at the BMI.⁴⁵ We know that here Naden was taught about heliotropism, the process by which most plants bend towards the sun, and light in general.⁴⁶ Early twentieth-century research confirmed that this is due to the plant growth hormone auxin being destroyed by light; the stem becomes bent because the growth rate of the side nearest a light-source is reduced while the shaded side continues to grow at the usual rate. Conway McMillan states in his 1888 article 'Heliotropism' for *Popular Science Monthly* that, 'It was well known to the ancients

⁴⁵ This sequence of twenty sonnets is untitled but they nonetheless form a coherent cycle from 'January, 1879' to 'December, 1879', and I therefore refer to them throughout as Naden's 'Year in Sonnets' (*CPW* 109-28). This date of composition takes into consideration the dates in the titles of half the poems in this sequence, alongside the fact that no sonnets appear in *Poems 1875* or *Poems 1875-77*.

⁴⁶ No significant work on the intersections between late-nineteenth century scientific interest in tropisms and literature has yet been carried out, with the exception of Harlan R. Patton, 'Tropismes and the Satire of Scientism in *Les Caves du Vatican*', *South Atlantic Review*, 48.1 (1983), 35-42.

that plants exhibited a remarkable sensitiveness to light, for Aristotle mentions it, and indeed, in its more apparent forms, it is conspicuous even to the naïve observer of to-day.⁴⁷ The movement of the sunflower's head to face the sun over the course of a day is one such 'apparent form' of this phenomenon; this is not, therefore, a process that requires leaps of the scientific imagination, for it is observable to the untrained eye.

The basic biological mechanism underpinning this was well understood by the second half of the nineteenth century. In 1881 Naden sat the Elementary and Advanced Botany examinations set by the Science and Art Department, which included the compulsory question 'State why the absence of light is injurious to plants'.⁴⁸ A correct answer must encompass the process of photosynthesis (a term that had not yet been coined, although the function of chlorophyll in plant cells had been determined) and gesture towards the movement of plants in relation to a light source. Whilst there is no record of the Botany syllabus at the BMI, it is reasonable to assume that the 1881 Elementary course at Mason College would have been very similar.⁴⁹ *An Elementary Text-Book of Botany* by Karl Prantl, prescribed by Professor T. W. Bridge, head of Mason College's Biology department 1880-82, is therefore indicative of the kind of instruction Naden received. It states that the 'co-operation of light is indispensable to the formation of the green colouring-matter' (chlorophyll) and resultant formation of starch that provides a green plant with energy.⁵⁰ Prantl emphasises that light actually retards cell growth in most plants, but it is this that causes a stem to curve towards a light source since the side

⁴⁷ Conway McMillan, 'Heliotropism: The Turning Motion of Plants', *The Popular Science Monthly* 33, September 1888, pp. 674-82 (p. 674).

⁴⁸ Committee of the Council on Education, p. 71.

⁴⁹ Neither required enrolled students to have prior knowledge of the subject, and Waterhouse states that initially the main difference between the two institutions was demographic: Mason College was more expensive, and expected enrolled students to spend significantly more time in class (p. 79).

⁵⁰ K. Prantl, *An Elementary Text-book of Botany*, trans. S. H. Vines, 2nd edn (London: W. Swan Sonnenschein & Allen, 1881), pp. 100-01.

‘more feebly illuminated [...] consequently grows longer’.⁵¹ Although plants can also exhibit negative heliotropism, in Naden’s writing (and contemporary discussions of the phenomenon) the focus is placed upon the positive draw, which is, I argue, linked to her conflation of light with knowledge and truth.

Harlon R. Patton notes that the word ‘tropism’ did not enter common parlance until the 1890s, which explains why the term does not appear in Naden’s writings.⁵² The concept was nevertheless under scrutiny during the period in which *Songs and Sonnets* was published, since Charles Darwin’s 1880 work on *The Power of Movement in Plants* (the result of years of experiments in collaboration with his son) theorised about the specifics of heliotropic plant movement. Darwin’s book refuted ‘the observations and explanations of the same phenomena offered by the German plant physiologist Julius Sachs in his influential *Lehrbuch der Botanik* (1868, English translation 1875)’.⁵³ This certainly pushed the subject into general awareness as it was discussed as the leader in *The Times*.⁵⁴ Naden’s scientific education at the BMI enabled her to develop a clear understanding of the mechanism underlying heliotropism, bringing a level of specificity to this commonly observed phenomenon.

The pairing of life and light is both a fundamental scientific truth and an orientating concept that runs through Naden’s poetry, reaching beyond the commonplace towards the realm of universal truth. This is demonstrated in ‘To the First Snowdrop’, which celebrates how when ‘the sun appears’ there ‘Now springs to life and light each buried joy’ (*CPW* 111, ll. 4, 9); the

⁵¹ Prantl, p. 91.

⁵² Patton, pp. 35-36.

⁵³ Soraya De Chadarevian, ‘Laboratory Science versus Country-House Experiments. The Controversy between Julius Sachs and Charles Darwin’, *British Journal for the History of Science*, 29.1 (1996), 17-41 (p. 17).

⁵⁴ J. S. Heslop-Harrison, ‘Darwin and the Movements of Plants: A Retrospect’, in *Plant Growth Substances*, ed. by F. Skoog (Berlin: Springer-Verlag, 1979), pp. 1-14 (p. 1).

alliteration and assonance cements the words' bond. In this sonnet and those that follow Naden emphasises that light always follows dark, exhorting the reader to remember that no concept is intelligible without its equal and opposite. The cyclical motions found within nature and the effect of these on the natural world are therefore a recurring theme in *Songs and Sonnets*. The movement of the earth in relation to the sun that causes seasonal changes and the daily transitioning between day and night is reflected in the sonnet form itself: the octave and sestet are balanced, each taking a different tone and form (in terms of stanza length and rhyme scheme) but together forming a complete poetic whole. Amy Christine Billone has emphasised the inherently oppositional nature of the sonnet tradition, identifying its 'dance between incoherence and clarity, brevity and wholeness, blankness and song'.⁵⁵ Nineteenth-century commentators often emphasised the sonnet's unity, however. Despite the break between the volta, highlighting division, the sonnet 'stands out in detached unity and integrity', its dual character maintaining the potential for reconciliation.⁵⁶

The flower in 'To a Hyacinth in January' is displaced, losing its connection to the seasonal cycle of growth and decay as a result of a human wish to cultivate flowers in winter by harnessing a plant's heliotropism.

Sweet household hyacinth, whose dainty breath
 Steals through my spirit like an April dream!
 Each day I watch another snowy gleam,
 That dawns and brightens through thine emerald sheath:
 The encircling air, the water from beneath,
 The fireside glow, the pallid noon-day beam,
 Arise transfigured in thy white raceme,
 Safe from the New Year's wind, whose touch were death.

⁵⁵ Amy Christine Billone, *Little Songs: Women, Silence, and the Nineteenth-Century Sonnet* (Columbus: Ohio State University Press, 2007), p. 159.

⁵⁶ 'On the Sonnet', *Christian Remembrancer* 2, November 1841, pp. 321-29 (p. 325).

The bells of Spring are not so sweet and fair,
 For they with wind and rain and hail must cope,
 That all too soon their tender life destroy;
 But thou, warm sheltered from the frosty air,
 Art like some delicate and hidden hope,
 More full and fragrant than the promised joy. (*CPW* 110)⁵⁷

While it is suggested that the plant is saved from destruction by being kept indoors – ‘Safe from the New Year’s wind, whose touch were death’ (l. 8) – this belies the fact that to be forced to bloom in mid-winter is unnatural. The reader must therefore look beneath the surface of the sonnet, towards the method by which the winter hyacinth is cultivated. This is outlined in *Cassell’s Household Guide to Every Department of Practical Life* (c.1880):

Keep [the bulb] in the dark until well rooted [... then] remove the pots to the light, and the flower and foliage stems will soon show. [...] If the flowers of the hyacinth begin to show before the stem has sprung up far enough to let them develop fully, you can force its growth by twisting a paper funnel and placing it over the plant; *flowers always seek the light*, so the hyacinth will strain to reach the greatest light as shown by the aperture at the top of the funnel.⁵⁸

The idea of the hyacinth ‘strain[ing]’ towards the light, of which it has been starved, is a clear indication of the control human caprice can wield over the natural world. This manifests in the sense of discord that is introduced into the poem through its rhyme scheme, for the simplicity of the A-rhymes that work on paper are in reality divided into two pairs when read aloud: ‘breath’ / ‘death’, ‘sheath’ / ‘beneath’ (ll. 1, 8, 4, 5). The former pair, which brackets the octave, emphasises the mutuality of creation and destruction, bringing to the fore the tension between life and death that underlies natural forces. ‘[D]estroy’ / ‘joy’ (l. 11, 14) serves a similar function in the sestet, emphasising and consolidating the duality of the power

⁵⁷ In the language of flowers the hyacinth is often related to constancy; there is a suggestive play of words here in relation to Naden’s name; however, the hyacinth in this poem is clearly a ‘snowy’ white rather than the intense blue that traditionally lent itself to embodying this virtue.

⁵⁸ Lee Jackson, ‘Digitised: *Cassell’s Household Guide to Every Department of Practical Life* c. 1880’, *The Victorian Dictionary* <<http://www.victorianlondon.org/cassells/cassells-11.htm>> [accessed 18 September 2016], pp. 81-82 (my emphasis).

wielded by the individual who has planted the bulb. This ability to shape and dominate nature is emphasised by Naden's inclusion of botanical terminology, 'raceme' (l. 7) being the technical word for the hyacinth's distinctive flower cluster (the separate flowers attached by short equal stalks to a broader central stem). The botanist's approach to obtaining knowledge is one in which hierarchy and power are implicit; they group their objects of study into strict classifications, asserting order over the natural world.⁵⁹

Despite the power wielded by humans over the hyacinth, the plant draws the poet to it – 'Each day I watch' (l. 3) – along with the attention of the reader, complicating the direction of influence within the sonnet. The cultivated flower has done the bidding of the person who kept it in darkness and decided when to expose it to light and force it to flower; there is also a protective impulse expressed as the hyacinth is kept 'safe' 'warm sheltered' from the inclement January weather (ll. 8, 12). And yet the poet is transfixed by the brightness of the growing hyacinth and its perfume that evokes the memories of past springs that consequently enable them to look forwards to the 'promised joy' of the spring to come (l. 14). The powerful influence it wields indicates the poet's attraction to the flower, which is conceived as the strongest light source during dark winter days and moves Naden to write a dedicatory sonnet in its honour.⁶⁰ In the act of growth, the hyacinth flowers are likened to the sun: the cluster 'dawns and brightens', emerging from behind the leaves as though they were the horizon, and symbolic of the promise of new life that accompanies the warmth and light of spring. In this analogy, through which light is a symbol for knowledge, Naden suggests that those who are not given access to ideal truth (epitomised by the spring sun) nonetheless seek out other forms

⁵⁹ Naden's later resistance to this role becomes apparent in 'Poet and Botanist', published in *Modern Apostle* and discussed in Chapter Four.

⁶⁰ The Greek myth of Hyacinth links the flower to Apollo, god of light and the sun (and indeed poetry), emphasises the intensity of its indwelling brightness.

of knowledge ('pallid noon-day beams' and the 'fireside glow') that, while weaker individually, can be synthesised. The white flower thus emits the brightest light in the poem, outshining the winter sun and firelight which the plant has absorbed and 'transfigured' into a more intense light, symbolising the higher knowledge by which Naden is transfixed; she is overcome with a heliotropic urge (towards the hyacinth and, metaphorically, to knowledge) which corresponds to the cultivated plant's own heliotropism.

In addition to the developing biochemical understanding of plant heliotropism, in the 1880s and 1890s there was significant research taking place on analogous phenomena in animals, particularly by Jacques Loeb. One often repeated example was the behaviour of moths, which Naden comments upon in 'The Evolution of the Sense of Beauty' (1884); she places their attraction to light on a continuum from light sensitivity in single-cell organisms to human beings' appreciation of beauty (*FR* 85). In this essay Naden discusses the origins of the 'love for light and colour' that manifests in most organisms, explaining how 'Mr. Romanes tells us that the tiny *Euglena Viridis* – a mere speck of jelly – "definitely seeks the light["]' and uses this as the starting point for working up 'the scale of existence' to illustrate how our identification and appreciation of beauty likely evolved (*FR* 84-85).⁶¹ The *Saturday Review* highlights Darwin's conclusion that it is impossible 'not to be struck by the resemblance between the foregoing movement of plants and many of the actions performed unconsciously by lower animals', and the *Times* identifies Darwin's work on tropisms as endeavouring to 'break down the sharp divisions supposed to exist between the animal and vegetable

⁶¹ It is interesting to note that Naden states that 'it is difficult to credit our little *Euglena* with what is usually called *sensation*' and that only as 'we ascend the scale of existence, consciousness emerges' (*FR* 84-85), indicating that the same drive exists across this elusive but stark divide.

kingdoms' so that 'unity reigns'.⁶² This latter theme is prominent in Naden's poetry, as she shifts between the natural and human world, using the motif of heliotropism to emphasise the linking of light, life, and knowledge. The concept was also being applied to the human eye, as Loeb undertook experiments on the retina, demonstrating that 'The protoplasm in the background of the human eye is positively heliotropic; pigment and cones press forward, if illuminated'.⁶³ This documented urge of the human body towards light expands, as one reviewer of Loeb's work notes, the 'new and attractive field, wherein we hope to see psychology gradually strike many strong and deep roots into the rich soil of general biology'.⁶⁴ While these particular experiments were not published until 1890, several years after Naden wrote the poems under consideration here, her writings indicate that the potential for analogy to facilitate conceptual leaps from plant, to insect, to mammal were under discussion much earlier.

In 'Undiscerned Perfection' the concept of heliotropism is used to comment more specifically on the relationship between light and mind. 'The land where Poetry and Science meet' is characterised by its 'magic light', and it is this that guides the indefatigable poet through the realm of darkness towards higher, although inevitably incomplete, knowledge (*CPW* 129, ll. 3, 4). The impetus is therefore transferred from the botanical processes that cause plants to grow towards a light source, onto a human attraction to light that symbolises the urge for truth and knowledge that underlies the pursuits of art and science. This resonates with Tyndall's desire to establish 'a kind of cohesion between thought and Light'.⁶⁵ At the end of

⁶² 'Darwin's Power of Movement in Plants', *Saturday Review*, 8 January 1881, pp. 57-58 (p. 57); 'Of all our living men of science...', *The Times*, 20 November 1880, p. 9.

⁶³ 'Review: *Der Heliotropismus der Theire, und seine Uebereinstimmung mit dem Heliotropismus der Pflanzen*, von Dr. J. Loeb', *The American Journal of Psychology*, 3.1 (1890), 128-29 (p. 129).

⁶⁴ *Ibid.*

⁶⁵ Tyndall, *Scientific Use of the Imagination*, p. 5.

‘Springtide’ Naden exclaims ‘My thoughts are sunbeams’ (*CPW* 60, l. 21), echoing Tyndall’s formulation, and suggesting that light (along with odour and sound) is indwelling, a manifestation of ‘truthful dreams, / Inspired by Nature in the human soul’ (*CPW* 59, ll. 15-16). In this twenty-two-line, irregularly-rhymed poem Naden describes the unifying nature of light:

While bud the flowers, while May-tide sunshine beams,
Through all the world of mind and body streams
One constant rapture of melodious thought,
One fragrant joy, with summer promise fraught,
And one eternal love illumines the whole; (*CPW* 59, ll. 10-14)

Thus, sunlight, while not the source of thought, signifies the bestowal of knowledge onto both mind and body, the ideal and the material, while unifying love takes on the properties of light as it illuminates the world. Tyndall claims that subscribers to ‘the Evolution hypothesis’ ‘would probably assent to the position that at the present moment all our philosophy, all our poetry, all our science, and all our art – Plato, Shakspeare [sic], Newton, and Raphael – are potential in the fires of the sun’.⁶⁶ This pronouncement shifts our understanding of these intellectual endeavours by equating the highest human achievements with the ultimate light-giver. It suggests that philosophy, poetry, science, and art are united by their shared material basis, and their illuminating powers are a function of this. Furthermore, it implies that by partaking in these discourses we are being drawn upwards, back towards the begetter of these diverse human achievements.

In ‘Starlight. I’ Naden describes looking to the stars as climbing from ‘sun to sun’ (*CPW* 142, l. 13), highlighting that while we orbit the particular star that makes our planet habitable,

⁶⁶ Tyndall, *Scientific Use of the Imagination*, p. 38.

humanity strives to understand all the light visible in the night sky. The heliotropic urge therefore broadens as the stars – symbolic of knowledge, and, as Naden acknowledges in her later poem ‘Scientific Wooing’, each ‘A sun to some revolving planet’ (*CPW* 309, l. 54) – are shown to have the same pull on the human mind as sunlight has upon the hyacinth, stimulating growth (metaphorically in one case and literally in the other). The action of striving towards light is given a more concrete form in ‘The Astronomer’, in which the search for knowledge is overtly connected to the act of looking to points of light in the night sky. In *Thomas Hardy’s Novel Universe* Pamela Gossin discusses the concept of ‘astronomical terror’ in the Victorian era.⁶⁷ This is not, however, how Naden responds to the sheer scale of the night sky. Instead she describes it in her poems as a source of awe and wonder that tempts the astronomical observer with the possibilities of a broader and deeper understanding of the universe.

Naden did not formally study astronomy; however, the discipline clearly fascinated her and she often writes about light in the context of stargazing. Astronomy was a popular scientific activity, in part due to the potential for members of the public to make important discoveries long after the discipline had started to become professionalised. Allan Chapman describes the involvement of ‘a large number of less well-off individuals who still enjoyed active participation in the science’ – the self-taught working classes, to whom public lectures were often addressed, and the educated middle-classes who set up many provincial astronomical societies – alongside the ‘Grand Amateurs’, his term for the independently wealthy who

⁶⁷ Pamela Gossin, *Thomas Hardy’s Novel Universe: Astronomy, Cosmology, and Gender in the Post-Darwinian World* (Aldershot: Ashgate, 2007), p. 80. For a reading of Gwendolen’s astronomical terror in *Daniel Deronda* see Anna Henchman, *The Starry Sky Within: Astronomy and the Reach of the Mind in Victorian Literature* (Oxford: Oxford University Press, 2014), pp. 176-77.

undertook original research.⁶⁸ Amateur interest in the discipline was facilitated by the popular press. For example, *Knowledge* (in which Naden's 'The Evolution of the Sense of Beauty' first appeared) published a weekly 'Map of the Night Sky' so that interested readers could chart shifting constellations.⁶⁹ The lack of astronomical specificity in Naden's poetry exposes her relative lack of education in the subject; there is no equivalent of the botanical word 'raceme' for example. It is therefore the human figure of the astronomer and the act of stargazing, rather than the knowledge attained, that is made central. In reality, as noted by Chapman, by the late nineteenth century far more astronomy was being done looking down at spectrograph plates or paper filled with figures than looking up through a telescope.⁷⁰

In 'The Astronomer' the fraught consequences of choosing to engage with the night sky and abandon the tangible world are played out over several pages. He deems his home to be the 'White, cold, and sacred [...] eternal dome' and professes to only know 'the tranquil stars', domesticity increasingly becomes a burden, leading to the neglect of his 'earth-contented' wife and children (*CPW* 3-4, ll. 1-3, 6, 20). In the opening stanzas the compulsive urgency with which the astronomer is drawn towards his 'mountain throne' is made clear, his is a 'home-sick, sharp desire', a 'fevered yearning to depart, / To dwell once more alone and free' (*CPW* 4, ll. 24, 23, 29-30). As one *London Daily News* review explained 'the "Astronomer"

⁶⁸ Allan Chapman, *The Victorian Amateur Astronomer: Independent Astronomic Research in Britain 1820-1920* (Chichester: John Wiley & Sons, 1998), pp. xiii, xii.

⁶⁹ 'Night Sky for April (First Map of a Pair)', drawn by Richard Proctor, and the accompanying 'First Star Lessons' appear on the same pages as the first instalment of Naden's 'The Evolution of the Sense of Beauty', *Knowledge* 7, 10 April 1885, pp. 306-09. Proctor, the editor of *Knowledge* conducted astronomical research, leading to a particularly high proportion of astronomy articles in the periodical; for an overview see Bernard Lightman, 'Knowledge confronts Nature: Richard Proctor and Popular Science Periodicals', in *Culture and Science in the Nineteenth-Century Media*, ed. by Louise Henson and others (Aldershot: Ashgate, 2004), pp. 199-210.

⁷⁰ Chapman, p. 122.

[...] got so interested in the stars he lost all capacity for the ordinary joys of earth'.⁷¹ Naden emphasises how this astronomer's motivation to read from 'heaven's book' lacks scholarly detachment, thus establishing the dream-vision in which Urania ('Heavenly One') appears to him as 'The glorious incarnation of [his] thought' (*CPW* 5, l. 39). She is the muse of astronomy, but also a figure associated with divine truths, and, via Milton, Christian poetry, signifying a fusion of creative and contemplative thought, the basis of scientific imagination.⁷² These associations link the striving upwards for astronomical knowledge to an urge to attain the truth that light symbolises; as such 'o'er the poet-soul was vaguely cast / A shadow of the truth.' (*CPW* 7, ll. 88). Urania embodies light:

Her atmosphere of white unswerving rays
 Athwart the fading moonlight swims;
 Rare vapour, like a comet's luminous haze,
 Floats round her argent limbs.

Her clear celestial eyes look deep in mine,
 Her brow and breast gleam icy pure. (*CPW* 5, ll. 45-50)

Her physical self is both reflective (gleaming moon-like but outshining that celestial body), and attracts light, which wraps in swathes around her. And yet Urania is not representative of a potentially attainable truth that teases the astronomer with her proximity. Instead he is actively aware that this vibrant vision is 'What, save a lustrous mirage of the mind, / My slave, whom I create?'; and 'Yet from such dear illusions Wisdom springs' (*CPW* 6, 7, ll. 71-72, 73). From this point onwards the poem blends astronomy, religion, and philosophy to

⁷¹ The anonymous author goes on to insinuate that through her pursuit of science and philosophy Naden has followed a similar path, and in death 'may regret, vainly and foolishly, perhaps, what seems a waste of life to many'. 'The Modern Young Woman', *London Daily News*, 3 April 1891, p. 5.

⁷² Matthew K. Dolloff, 'Meditating the Muse: Milton and the Metamorphoses of Urania' (unpublished doctoral thesis, University of Texas, 2006), p. 107. See also Gossin, pp. 28-29, 201, 240. It should be noted that Naden was writing several years before the epithet 'Uranian' was co-opted by the fin-de-siècle Oxford poets Lord Alfred Douglas, Aubrey Beardsley, C. M. Fox, Gleason White, Charles Kains-Jackson, and Theodore Wratishaw (Dolloff, pp. 109-10).

create a hybrid world-view which is founded on the search for the ‘elemental Power’ behind the heavens, and a ‘universal plan’ that orders our lives (*CPW* 8, 9, ll. 100, 125). The details of this are not clearly laid out, but what is fundamental is the active role stars play in the process of revealing these unifying truths: ‘man shall hold communion with the stars’ while ‘the orbs their fiery past reveal’ (*CPW* 9, ll. 131, 121). To unravel and wield this universal knowledge requires the astronomer to engage in an active process of looking:

In one deep gaze to concentrate the whole
Of that which was, is now, shall be,
[...]

My sight, love-strengthened, Time and Space controls. (*CPW* 8, ll. 105-09)

Since the seventeenth century, the emission theory of vision (whereby it was argued that rays of light were emitted by, rather than entered, the eyes) had been completely discredited, something that Naden provides an overview of in ‘Induction and Deduction’ (*I&D* 50-51) and identifies as ‘Obsolete now, like Magic, black and white’ in ‘The Story of Clarice’ (*CPW* 273, I, l. 65). As a result seeing is often characterised as passive. In Naden’s writing, however, it regains its dynamism. Furthermore, the act of looking is given a temporal, as well as spatial, power.

The fact that astronomy causes light to be understood in a way that encompasses both time and space is similarly important in the pair of sonnets, ‘Starlight. I’ and ‘Starlight. II’, with which Naden closes *Songs and Sonnets*. Here she does away with the distancing technique of a narrative persona, describing how through perceiving starlight we imaginatively ‘climb’ up through the atmosphere into the wider universe. A different tone is struck to that of ‘The Astronomer’, since in these sonnets there is no place for God. ‘Starlight. II’ asserts:

Man needs no dread unwonted Avatar

The secrets of the heavenly host to show;
From waves of light, their lustrous founts we know,
For every gleaming band and shadowed bar
Is fraught with homelike tidings from afar;
Each ripple, starting long decades ago,
Pulsing to earth its blue or golden glow,
Beats with the life of some immortal star.

A life to each minutest atom given—
Whether it find in Man's own heart a place,
Or past the suns, in unimagined space—
That Earth may know herself a part of Heaven,
And see, wherever sun or spark is lit,
One Law, one Life, one Substance infinite. (*CPW* 143)

Here scientific observation usurps religious impulse, and Naden brings her knowledge of optical physics to bear upon this description of stargazing. The poem is therefore a form of time-travel; the astronomer-poet perceives what occurred 'long decades ago' (l. 6). It is here that the power of the scientific imagination comes to the fore, since the ability to leap back in time is both a literal function of the propagation of light and an aspect of the imaginative function of poetry and science.

The first half of the sestet can be read in the context of discoveries made possible by the spectroscope, which demonstrated how light could be analysed chemically; the result was that, in the words of Edward Dowden in 1877, 'The spectrum of the sunbeam reveals the existence in the sun of the same metals and gases that we know on earth' – literally 'homelike tidings from afar' (l. 5).⁷³ This fundamental truth revealed by scientific investigation into light points towards the oneness of the universe, and is an instance of how decoding the basis of

⁷³ Dowden, 'The "Scientific Movement" and Literature', p. 100 (originally published in the *Contemporary Review*).

light develops and unifies our knowledge of the universe and our place within it.⁷⁴ Astronomy requires both contemplation and creativity in order to develop theories that, as Jenkins describes, came to have predictive powers too. As such, astronomy:

linked the individual human mind with the most remote and immense events observable in the cosmos, showing that science was capable not only of understanding but even of foretelling these events. [...] Astronomy broadened and dignified the mind of the astronomer, combined observation and abstraction in satisfying proportions, had a claim on everyone's aesthetic sensibilities via the beauty of the stars, and made sense not only of past observations but had a grip on the future as well.⁷⁵

In 'Cosmic Identity' Naden calls this 'the persistence of fundamental relations' which 'is the meeting point of science and poetry' (*FR* 188), and the emphasis upon oneness in the closing lines of 'Starlight. II' speaks directly to this wealth of interdisciplinary resonances. It nonetheless indicates the somewhat naïve understanding of light that Naden held at this time, for the propagation of light was, and is, not fully understood and cannot be described as following 'One Law' (l. 14); it does not therefore equate to ideal, unified knowledge.

The influence of light upon human emotion reaches its peak in 'Starlight. I':

Night works like Time: hushed is the busy street;
Grey are the walls, whose yet untarnished red
Glared in the sun; for shadows overspread
All hues of earth, that wearied eyes may meet
The restful heavens; that mortal hearts may greet
Eternal truth: while darksome paths I tread,
The light of other worlds is round me shed,
The glow of distant æons guides my feet.

⁷⁴ Naden references the spectroscope directly in 'Scientific Wooing' (*CPW* 309, ll. 58). While during Naden's life spectroscopy had revealed elements that were not thought to be terrestrial – for example 'nebulium' (which was later discovered to be ionised nitrogen and oxygen) and helium (which was only found to exist on Earth in 1895) – the ability to discover the composition of bodies in outer space forges an inextricable link between light, matter, and knowledge that supports Naden's conception of the unified material universe. Chapman, pp. 115, 124.

⁷⁵ Jenkins, *Space*, p. 87. Naden gestures towards this function of astronomy in 'The Elixir of Life': 'As though the Present were a telescope / Through which appeared the Future's nebulous haze' (*CPW* 239, I, ll. 14-15).

The silent stars my ecstasy control;
 No daring hopes, no awe-struck fears intrude
Upon the calm rejoicing of the soul:
From sun to sun, from age to age I climb,
 Until for Space I see Infinitude,
And feel Eternity, where was but Time. (*CPW* 142)

The first line of the sestet emphasises the entirely visual act of perceiving stars and the way in which this affects the observer. The reader is encouraged to identify the poetic ‘I’ with Naden as the description of movement – ‘tread’, ‘climb’ (ll. 6, 12) – is linked to the ‘feet’ that emphasise both the physicality of striving towards starlight, and gesture towards the metrical feet that underlie the form of the sonnet. This is therefore an intensely active poem, describing both bodily exertion and cerebral creation. As identified at the end of the octave, it is light itself that enables this: ‘The glow of distant æons guides my feet’ (l. 8). This striving outwards and upwards, through time and space, is emphasised in the sestet that describes how ‘from sun to sun, from age to age I climb’ (l. 12). Naden frequently returns to the human urge to look skywards and better understand the light in the night sky. Stars are particularly interesting as a source of light, since they are a purely visual phenomenon for the Earth-bound human and are also a measure of time. Naden conceives them as distant suns, which are without perceptible warmth and therefore, from perspective of humans, perhaps the purest kind of light. The striving of the astronomer to more clearly perceive and understand the ‘silent stars’ (l. 9) and other celestial bodies therefore underscores light’s function in this quest for knowledge.

Naden’s desire to look ‘past the suns, in unimagined space’ (l. 9) may be read in the context of Tyndall’s assertion that ‘the distances of stellar space give us simply a bewildering sense of

vastness without leaving any distinct impression on the mind'.⁷⁶ Naden acknowledges that the human mind has not yet fully addressed the magnitude of the universe, but the poem nevertheless encourages the reader to turn their eyes and minds towards the unknown. We should aspire to look outwards, and Naden's pair of sonnets pushes us to apply our imagination in order to consider the universe in its totality, for, as Tyndall's address shows, it is the scientific imagination that enables the scientist to think beyond the realms of observation.⁷⁷ By writing about scientific ideas in the medium of poetry Naden wished to stimulate the unification of these two modes of thought – she is demonstrating how the application of the imagination may develop scientific ideas.

The pervasive presence of light in Naden's first collection of poetry is notable. In

'Undiscerned Perfection' she expresses her overwhelming desire to develop 'fuller sight' (l. 14):

Beyond the realm of dull and slumberous Night
I long have wandered with unwearied feet;
The land where Poetry and Science meet
Streaks the far distance with a magic light:
Fair visions glide before my dazzled sight,
And shine, and change, and pass with motion fleet,
But never clear, and steadfast, and complete
In one transcendent brilliancy unite.

I know, the seeming discord is but mine;
The glory is too great for mortal eyes,
All powerless to discover the divine
And perfect harmony of earth and skies:
I know that each confused and tortuous line,
To fuller sight, in true perspective lies. (*CPW* 129)

⁷⁶ Tyndall, *Scientific Use of the Imagination*, p. 25.

⁷⁷ While Tyndall acknowledges the 'bewildering sense of vastness', in the address he focuses primarily upon imagining the unobservable in relation to extremely small things that cannot be viewed under the strongest microscope, *Scientific Use of the Imagination*, p. 31.

This sonnet indicates how light works as analogy for unified knowledge. While it is admitted that the ‘transcendent brilliancy’ (l. 8) of ideal and complete unity is not available to the poet (perfection remains undiscerned), she nonetheless remains committed to the task of attempting to achieve ‘fuller sight’ that will bring us closer to perceiving clearly the ‘fair visions’ (ll. 14, 5). Importantly, Naden assigns a creative role to the astronomer – the task is not simply one of documentation and contemplation – and so the poems foreground the imaginative act. As with lines ‘for Space I see Infinitude, / And feel Eternity, where was but Time’ (*CPW* 142, ll. 13-14) in ‘Starlight. I’, the speaker is engaged in creating and shaping the universe through scientific imagination, transforming the perception of waves of light into a fuller, human understanding of the world.

Botany and astronomy were both deemed to be scientific disciplines particularly suited to female study; Gossin states that astronomy was promoted ‘as a scientific pursuit suitable “for ladies,” second only, perhaps, to botany’.⁷⁸ It is not a great surprise, therefore, that it is with these disciplines that Naden began her engagement with the sciences. She did not go on to study them at Mason College, however, turning instead to physics, physiology, chemistry, and geology. Naden concludes her prefatory note to *Induction and Deduction* by stating that the ‘central point’ of Hylo-Idealism is: “‘man is to himself, on the relative theory of knowledge, the measure of all things,” in the light of modern physic, physics, and physiology’ (*I&D* xxii). It is telling that the first half of this sentence is taken from one of Lewins’s pamphlets, but the second part is Naden’s formulation, in which science is shown to illuminate our understanding of the universe – both literally and metaphorically. In the next section of this

⁷⁸ Gossin, p. 92.

chapter I demonstrate how the science of optics, as pertaining to both physics and physiology, complicated Naden's analogy between light and knowledge.

Physics and Physiology

In contrast to Naden's engagement with light as a singular phenomenon in botanical and astronomical contexts, in her subsequent works Naden uses light to engage with the question of knowns and unknowns in science. In 'The Brain Theory of Mind and Matter', she characterises it as 'The unknown force which we call Light, and picture intellectually as a series of ethereal vibrations, without thereby advancing a step towards the knowledge of its essential nature' (*I&D* 159). This act of picturing intellectually forms the foundation of scientific imagination. Similarly, in 'Hylo-Idealism: The Creed of the Coming Day' she states that 'Objective existence of light-waves and sound-waves does not, perhaps, much concern us; for these conceptions are only convenient modes of classifying certain phenomena' (*I&D* 172). This approach to light has its roots in contemporary scientific literature, for example the section on optics in A. Privat Deschanel's *Elementary Treatise on Natural Philosophy* – assigned by J. H. Poynting for the Higher Junior and then Middle Class of Physics in the years that Naden studied the subject at Mason College – begins with a chapter on the propagation of light, which he has no choice but to address speculatively: 'Light, like sound, is believed to consist in vibration [...] This hypothetical fluid is called *æther*'.⁷⁹ This approach was necessary because there were (and are) no absolute answers when explaining the precise physical form of light. Nonetheless, these transitions in scientific discourse between what is and is not known provide Naden with an approach to developing her philosophy by using analogy as a methodology in the same way she had observed in her

⁷⁹ A. Privat Deschanel, *Elementary Treatise on Natural Philosophy*, trans. and ed. 'with extensive modifications' by J. D. Everett, 6th edn (London: Blackie & Son, 1882), p. 947.

textbooks. Her scientific studies thus inaugurated a shift in her work over the course of the 1880s, as she transitioned to engaging with unknowns rather than seeking absolute truths.

By the time Naden published *Modern Apostle* in 1887 she had completed six years of classes at Mason College. During this period she gained an increasingly assured and in-depth knowledge of scientific ideas, including those relating to optical physics and visual perception, and yet the poems that she composed during this period engage far less overtly with light as a scientific concept than those in *Songs and Sonnets*.⁸⁰ Between 1876 and 1881 Naden's eyes were being opened to macro and microcosmic vistas lending a sense of awe to much of her first collection of poetry. *Modern Apostle* establishes more prosaic engagement with science; this is most clearly identifiable in her 'Evolutional Erotics', which can be read as caricatures (or, more kindly, comic portraits) of her fellow students. These demonstrate how the application of science to the everyday of human relationships can rapidly lead one to the realms of the mundane or the absurd. The notable exceptions to this – 'The Double Rainbow' and 'The Nebular Theory' – take the scientific perspective as a starting point but move past this to consider the boundaries of observation, suggesting that poetry acts as a testing-ground for ideas that look beyond the horizon of the known universe. This is the scientific imagination in action. Optical science nevertheless lies at the foundation of Naden's development of philosophical ideas, her essays proliferating with references to specific theories, scientists, and publications. These show how Naden's philosophical prose writings function in a complementary, rather than equivalent, way to her poetry, demonstrating her

⁸⁰ It is notable that a similar shift has been remarked upon (but not entirely explained) by Michael Whitworth regarding the twentieth-century poets William Empson and Michael Roberts; they trained in maths and science and these fields constituted a major preoccupation early in their poetic careers that was later set aside. 'The Value of Science in the Field of Poetry, 1900-1999', British Society for Literature and Science conference, University of Liverpool, 17 April 2015.

desire to apply the methods and findings of science to the philosophical realm, and to discuss the unification of poetry and science in a bid to achieve higher knowledge.

In his essay of remembrance McCrie asserts that ‘Physiologically almost every modern discovery, especially in the department of Optics, tells in favour of Hylo-Idealism’ (*FR* 242). This link between Naden’s philosophical endeavours and scientific studies is borne out in the way she worked to synthesise different aspects of optical science. At Mason College these were studied within distinct subjects; she achieved first-class examination results in physiology, then physics, and finally zoology over the course of six years. Naden began ‘Systematic Physiology’ classes in 1882. In the spring term the course covered ‘the formation of images in the eye’ and the ‘central nervous system’, and her knowledge of the biological processes that allow organisms to perceive light suffuse the majority of her published essays.⁸¹ It is recorded that Naden studied Physics from 1884; however, as discussed in Chapter One, it seems that the *Mason College Calendar*’s listings are not definitive (the records of the Chemistry Department that show to be her enrolled in additional classes being a case in point). This is particularly pertinent regarding Physics, since Naden appears to have gone directly into an intermediate course without formal foundational instruction. It is therefore likely that she was studying Physics before the 1884-85 session. This is borne out by several references to physics in the flurry of published essays that appeared in 1883: ‘The Brain Theory of Mind and Matter’, ‘What is Religion?’, ‘Paracelsus’, and ‘Scientific Idealism’. In the final year at Mason College Naden completed a Zoology course, which supplied her with more applied knowledge: the class used a rabbit as the basis from which to

⁸¹ Haycraft, pp. 85-86.

learn about the anatomy and physiology of animal organs, including ‘Organs of relation. The nervous system and organs of special sense’.⁸² By investigating the contents of these courses via examination papers and set textbooks, it becomes clear how this series of classes facilitated a detailed, scholarly knowledge of the many perspectives from which light can be understood.

From the reports of student societies in the *Mason College Magazine* it is clear that Naden regularly attended papers and discussions with the academic staff, where they discussed contemporary developments in the sciences. At the inaugural Physical Society meeting in 1884 a paper by Poynting titled ‘The Growth of the Modern Doctrine of Energy’ concluded with the observation that ‘The next great step will be the discovery of the relation between these energies and gravitation.’⁸³ This concept of universalising theories in physics is particularly relevant to Naden’s desire to synthesise scientific and philosophical concepts. As Michelle Boswell has described, Naden ‘was a product of the specialization of scientific disciplines, and while she excelled in all of them [...] she could not have united them synthetically except within the larger confines of philosophy’.⁸⁴ The scientific push in the nineteenth century to explain the propagation of light as either wave or particle demonstrates the need to subsume it within a wider unified scientific understanding; attempts to align it with either particle physics or electromagnetism show the resistance to it being deemed ‘other’ and isolated.⁸⁵ The wish articulated by Poynting to bring the process of gravitation into the fold speaks to this same urge.

⁸² Bridge, p. 116.

⁸³ ‘Growth of the Modern Doctrine of Energy’, p. 67.

⁸⁴ Boswell, p. 196.

⁸⁵ Fundamental to our understanding of light today is its dual nature, as it behaves both as wave and particle.

Throughout the 1880s Naden uses scientific theories to describe or suggest things outside of their original scope, and universalising concepts gave her the impetus to develop such analogies. Robert Purrington calls this push towards scientific unification ‘a powerful tool’ in the development of nineteenth-century physics.⁸⁶ In particular, the wave theory of light had meant using analogies to build a theory that transitioned from describing the movement of liquids to light (via sound, which it was discovered did not work as a model due to its longitudinal, rather than transverse waves). Naden noted in ‘Cosmic Identity’ that ‘Forms of energy so diverse as light, heat, and electricity are but the varying forms of a central unity’ (FR 173). Elsewhere she asserts that ‘Absolutely nothing is known of the cosmic *fons et origo* of light’, it can only be pictured in hypothetical terms, facilitated by the scientific imagination; all we know is ‘that light is the peculiar sensation produced by every stimulation of the optic nerve’ (I&D 128). The question of origins shifts the discursive focus, however; as Naden stated in one of her earliest published articles ‘Hylozoism *versus* Animism’ (1881), light is conceived as ‘an inalienable function of Matter’. She asserts: ‘I believe in the effects which I see and feel, not in a hypothetical and wholly superfluous “cause.”’ (FR 193).⁸⁷ In dispensing with the search for first causes – proclaiming ‘It is time that the pseudo-science of Ontology should be superseded by physiology and psychology’ (I&D 165) – Naden is able to pursue the questions that interest her regarding the functioning of the universe as it currently exists, making the striking claim that we must ‘behold in the orderly arrangements of the Cosmos only a supreme glorification of matter’ (I&D 166). This dismissal sets her free of any expectations of providing an origin story for the universe in her philosophy, and while Naden does write about the nebular hypothesis, the development of consciousness, and the process of

⁸⁶ Robert D. Purrington, *Physics in the Nineteenth Century* (New Brunswick, NJ: Rutgers University Press, 1997), p. 5.

⁸⁷ There is a similarity here to Darwin’s comment in *On the Origin of Species* that ‘How a nerve comes to be sensitive to light, hardly concerns us more than how life itself first originated’, p. 140.

evolution, she is not obliged to find a first cause (which reconciles with religious views or otherwise).

In contrast, Tyndall concludes his address on the scientific imagination with a religious sense of that ‘which he can neither analyse nor comprehend’.⁸⁸ DeYoung defines this as Tyndall’s ‘half-agnostic, half-deistic view of Nature’.⁸⁹ Although this introduction of God does not square with Naden’s rejection of dualism, the search for scientific truth remains fundamental and the sense of awe evoked by Tyndall is certainly applicable to Naden’s position taken in poetry and essays. Nonetheless, his view that ‘You cannot crown the edifice by this abstraction’ and desire for first causes means that Tyndall’s seemingly secular approach to the scientific imagination concludes with a turn towards religion:

in his “Origin of Species,” [Darwin] placed at the root of life a primordial germ, from which he conceived the amazing richness and variety of the life that now is upon the earth’s surface might be deduced. If this were true it would not be final. The human imagination would infallibly look beyond the germ, and enquire into the history of its genesis.⁹⁰

As a result, although Naden and Tyndall share views on the function of the imagination in science and the usefulness of the vocabulary of light to communicate, it is important to recognise that the conclusions that they draw from this are at odds. Tyndall believes that imagination inevitably pushes beyond the realm of reason into that of belief, whereas Naden claims that imagination simply pushes the frontiers of reason further outwards.⁹¹

⁸⁸ Tyndall, *Scientific Use of the Imagination*, p. 42.

⁸⁹ DeYoung, p. 2.

⁹⁰ Tyndall, *Scientific Use of the Imagination*, pp. 11, 32.

⁹¹ McCrie quotes Tyndall in order to dismiss his position in a retrospective article on Naden’s world-scheme. He describes Naden’s view as being that ‘special positivism which, disregarding the trite warning that “the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable,” takes the whole subject-matter, alike of philosophy and science – the empirical with the metempirical – and therefrom constructs a cosmical unity’. McCrie, ‘World-Scheme’, p. 3336. The quotation is from John Tyndall, ‘The Rev. James Martineau and the Belfast Address’, in *Fragments of Science*, II, pp. 226-52 (p. 236).

The impossibility of separating the physics of the propagation of light and the physiology of visual perception is fundamental within Naden's writings; the boundary between external and internal is blurred. This entails an emphasis upon subjective vision, an important nineteenth-century trend in the physical sciences that Jonathan Crary has assigned to the development of physiological optics, and movement away from the geometrical optics of the seventeenth and eighteenth centuries.⁹² Naden asserts that this synthesis occurs on a material level, for example in 'Paracelsus' (1883) when she explains how 'eye, ear, and brain are not separate from the so-called "external" world'. They are constantly exchanging with their environment matter for matter, and force for force'. This sense of permeability emphasises the unity that is an essential part of Hylo-Idealism, whereby 'the laws of optics' apply 'just as much to the eye as to the spectacles' (*FR* 207-08); this turn of phrase works particularly well as it emphasises the clear analogy to be made between the natural and man-made lenses that sit a mere centimetre or two apart. Furthermore, it underscores the idea that her philosophy does not 'deny the existence of aught that is corporeal' but 'declares that the only Cosmos known to man, or in any way concerning him, is manufactured in his own brain-cells' (*I&D* 160). Hylo-Idealism is therefore relative, not absolute, idealism – an epistemological position that is concerned with the knowledge, rather the existence, of matter. This is an example of the synthetic nature of Naden's intellectual approach, drawing on the tangible links between disciplines to better illuminate both. As a result, sentences and paragraphs that begin with

⁹² Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth-Century* (Cambridge, MA: MIT Press, 1990), p. 16. Willis has argued against this dominant view of nineteenth-century culture shifting from objectivity to subjectivity in *Vision, Science and Literature*. Although I would agree that the narrative of visual perception in the nineteenth century is significantly more complicated than the binary that Crary establishes, Naden nonetheless fits within the trend of subjectivity that he identifies.

external light waves end with the functioning optic nerve, as is the case for any individual engaged in the act of seeing.

Naden responds to T. H. Huxley's argument for materialism in 'On the Hypothesis that Animals are Automata, and its History' and 'On Sensation, and the Unity of Structure of Sensiferous Organs' in her essay 'Animal Automatism' (1882). She asserts that his 'negative conclusions drawn from positive premises appear illogical and unsatisfactory' (*I&D* 193). Naden observes that 'The physiologist or physician is therefore practically an observer of two sets of phenomena,— those which belong to the physical frame of the patient, and those which belong to his mental constitution' and warns against the way in which Huxley 'confounds material phenomena, which cannot exist without a percipient mind, with matter itself' (*I&D* 198-99, 200). Naden thus seeks to maintain a distinction between the hyle (substance) and the ideal (sensation), unifying but not conflating them. Maxwell provides a starting point for integrating these two perspectives, stating in 'On Colour Vision' (1872) that:

I do not profess to reconcile this discrepancy between ordinary and scientific experience. It only shews that it is impossible by a mere act of introspection to make a true analysis of our sensations. Consciousness is our only authority; but consciousness must be methodically examined in order to obtain any trustworthy results. [... T]hough it is impossible to become acquainted with a sensation by the anatomical study of the organ with which it is connected, we may make use of the sensation as a means of investigating the anatomical structure.⁹³

This is the view of nineteenth century science that Martin Willis explores in *Vision, Science and Literature, 1870-1920: Ocular Horizons* whereby 'science in practice was never solely aiming for objectivity but made pragmatic use of subjective responses'.⁹⁴

⁹³ James Clerk Maxwell, 'On Colour Vision' [1872], in *The Scientific Papers of James Clerk Maxwell*, 2 vols (Cambridge: Cambridge University Press, 1890), II, pp. 267-79 (pp. 275-76).

⁹⁴ Willis, *Vision, Science and Literature*, p. 230.

Naden similarly does not believe that perceptual subjectivity undermines the scientific project. In ‘Hylo-Idealism: The Creed of the Coming Day’ (1884) she confidently states, ‘Science steps in with a solution’, when responding to a hypothetical ‘natural man’ who is struggling with the idea that perceived phenomena are not understood by the observer solely on the basis of their inherent qualities and that the universe is ‘part of your mind and of mine’ (*I&D* 169). ‘She says: “You are wrong. No two people ever see the same sun[”]’ and this personification of Science goes on to speak of ‘ethereal waves’, ‘the optic nerve’, and ‘cerebral hemispheres’ that mean that the brain ‘is not a First Cause, since a stimulus is needed to set him in action; but he is certainly the only authentic Creator of the world as yet discovered by science, philosophy or religion.’ (*I&D* 169-70). This synthesis is an important technique in Naden’s rhetorical arsenal, as she attempts to convince the sceptical (presumably religious) reader that these three disciplines aspire towards the same goal. And yet science is cast as the victor here, for Naden goes on to state that the ‘the God within the hemispheres [...] was mere “poetic licence”’ (*I&D* 171); in this one sentence religion is banished from the realm of reality, downgraded to metaphor alone. In this equivocal description poetry is deemed to facilitate explanation, but also to cloud truth. Here Naden references the poetic mode in the context of scientific analogy; it is a tool of the scientific and philosophical method and it also has a pedagogical function that enables clear explanation to the confused and unconvinced.

Naden calls upon the scientific imagination directly when she discusses sight in ‘Ontology and Scepticism’. She highlights the central difficulty of discussing mind and matter: ‘before asking *what* these are, we have to ask *whether* they are’. From this perspective, she suggests

that ‘The scientific imagination is unlimited in its own direction’ (*FR* 159). Naden goes on to equate a scientist’s eyes and ears with his experimental apparatus, asking:

how can he affirm that what he sees and hears may not be due to some occult flaw in his instruments? Nay, dispense with the instruments, and strengthen his sight and hearing a myriad-fold; can he trust his eyes and ears? These organs are sometimes oddly creative; how does he know that they are not always creative? (*FR* 159)

Naden’s Hylo-Idealist approach, which emphasises the subjectivity of every uniquely perceived universe, means that she does not prioritise some modes of perception as more correct than others. For example, ‘A colour-blind person has perceptions which are quite as true as those of the most subtly discriminative landscape painter; but the retina “colour-box” of the former has no tints corresponding with the green and crimson [... Light] acts impartially upon the retina of both’ (*I&D* 159).⁹⁵ This is a credible analysis of individual perception through the lens of Hylo-Idealism; however, it also has an impact on assumptions surrounding the reliability of scientific method.⁹⁶ It emphasises the subjectivity of all observation, which highlights how, outside purely mathematical disciplines, the potential for science to equal proof (or truth) is problematic, yet this is nonetheless what Naden strives towards. Regarding her answer to the question posed in ‘Ontology and Scepticism’, she bases the ability to know on the ability to reason, undermining the sceptic’s chain of argument: ‘Starting with an assumption, he has gone on to argue as though he had started without

⁹⁵ The differences in colour perception between individuals was highlighted in the textbook assigned by Poynting: ‘Colours may be similar as seen by one observer, and dissimilar as seen by another’. Deschanel, p. 1093

⁹⁶ While Darwin introduces the eye as one of the ‘Organs of extreme perfection and complication’, he acknowledges that ‘The correction for the aberration of light is said, on high authority, not to be perfect even in that most perfect organ’. Gillian Beer notes that Darwin inserted a paragraph ‘with great relief and delight’ into the final edition of *Origin* that summarised Helmholtz’s 1855 findings regarding the ‘inexactness and imperfection in the optical machine’, as it supported his argument for adaptation rather than design. Darwin, pp. 140, 151; Gillian Beer, “‘Authentic Tidings of Invisible Things’: Vision and the Invisible in the Later Nineteenth Century”, in *Vision in Context: Historical and Contemporary Perspectives on Sight*, ed. by Teresa Brennan and Martin Jay (London: Routledge, 1996), pp. 83-98 (p. 90).

assumptions. Then he turns round and questions that primary assumption [...] He is proving by ocular evidence that sight is impossible' (*FR* 160).

Naden's use of optical science in her essays facilitates her blurring of the distinction between poetry and prose. She employs extended scientific metaphors in a fruitful, scientifically-informed manner; for example, in 'What is Religion?':

Error is but refracted truth, and the manifold colours of the spectrum blend into one white sunbeam. [...] We must make our mental lens as achromatic as possible, that the interference of a rainbow-hued error with clear sight may be reduced to a minimum. (*FR* 131-32)

This exemplifies not only Naden's familiarity with the physics of light, but also her deft poetic touch in the act of writing a scientifically-informed philosophy, demonstrating her commitment to both content and form. This concept was included in 1883-84 Lower Junior Physics examination at Mason College, which asked 'What is Chromatic Aberration, and how may it be corrected?'.⁹⁷ Chromatic aberration is a type of distortion in which a lens fails to focus all colours to the same convergence point, which manifests as fringes of colour along boundaries that separate dark and bright parts of an image. On the basis of the reference in 'What is Religion?' Naden clearly knew how to correct this, the answer being an achromatic lens. This is a compound lens, which assembles materials with differing dispersion (such as crown and flint glass) to minimise chromatic aberration, although it is important to note that a perfect lens is impossible since diffraction limits the extent to which light waves can be focused on a specific point.⁹⁸ The resonance of this imagery is attested to

⁹⁷ 'Examination Papers, 1883-1884', *MCC 1884-85*, Appendix p. xix. Naden is not recorded as having sat this examination, but, in the absence of extant attendance records for the department, the fact that she completed the Middle Class in physics the following year strongly suggests that she attended this junior class.

⁹⁸ William L. Wolfe, *Optics Made Clear: The Nature of Light and How We Use It* (Washington: International Society for Optical Engineering, 2007), pp. 34-38.

by McCrie's description of Naden's 'achromatic vision' in his introduction to *Further Reliques* (FR xiv). Thus Naden is not simply advocating for thinking clearly when she uses this metaphor, she gestures towards the deeper implications of chromatic aberration by stating the importance of not using a single type of lens, or discipline, when attempting to establish truth. The potential for error can be significantly reduced, it is implied, if we bring together disciplines that offer different approaches to a particular idea.

Analogy is central to the way Naden explains how light is understood, indeed she states in 'Evolutionary Ethics' that 'A light wave [...] would be inconceivable unless we already possessed the concept of wave-motion, which could only be gained from experience of visible and tangible waves' (I&D 128). From a scientific perspective Naden is identifying how although the wave motion of light can be shown on both a theoretical and an experimental level, it cannot literally be seen; the scientific imagination must step in and the mind's eye take over from the physical one. The first strong evidence to support the wave theory of light came from Young's 1801 double-slit experiments which looked for interference patterns that were analogous to those of water waves.⁹⁹ Naden would have been aware of this fact due to the manner in which Mason College taught the wave theory of light: the 1886 Middle Class examination contains a two-part question in which the student is first required to 'Give a general explanation of the reflexion of light in the wave theory' and then respond to: 'A series of waves on the surface of a reservoir strike obliquely against a vertical wall and are reflected. Explain the *lumpy* appearance of the water when the direct and reflected waves are passing over the surface at the same time.'¹⁰⁰ Poynting was therefore directly conflating these

⁹⁹ Harry Varvoglis, *History and Evolution of Concepts in Physics* (Cham, Switzerland: Springer, 2014), p. 51.

¹⁰⁰ 'Examination Papers, 1885-1886', *MCC 1886-1887*, Appendix p. lv. Although this is the paper for the year after Naden sat the Middle Class Physics examination, since the syllabus did not change significantly between

analogous but distinct waves in his examination paper. Naden revelled in the possibilities that this afforded her, and in 'Evolutionary Ethics' she goes on to construct a parallel process through which the perception of light becomes an analogy for our ability to comprehend the universe: 'What is true of sight is true not only of the other senses, but of the capacity for reason and for emotion. Another kind of brain would construct another kind of cosmos' (*I&D* 128).

This framework underlies the way in which Naden expands upon 'Starlight. I' in her 1884 essay 'Hylo-Idealism: The Creed of the Coming Day'. It is also indicative of the shift in form and tone regarding her textual engagement with science over the course of the 1880s.

Certainly the movement from sonnet to essay has a great impact upon the construction; however, the change is more deep-rooted than that. 'From sun to sun, from age to age I climb' describes the act of scientific imagination (*CPW* 142, l. 13), while the essay demonstrates the results of such a methodology. The process of the propagation of light waves – that light has a speed – means that the universe we perceive is temporally fragmented. Naden explains, with unabashed scientific enthusiasm, how:

the pavement will give you a nearly instantaneous report of its present state; but the sun telegraphs an account of its condition at the time you began your walk, about 8 $\frac{1}{4}$ minutes ago. Jupiter takes *circa* 40 minutes to send his dispatches, and Sirius takes more than 20 years, while you may receive telescopic messages which have taken centuries or millennia in their transit. So that our universe is a chaos of shreds and patches, not even contemporaneous. [...] But the mind weaves and stitches them all together into a seemly garment. (*I&D* 170-71)

1884 and 1885 the same approach to teaching the wave theory of light would also have applied to Naden's cohort.

Naden thus emphasises the reciprocal processes that engender perception, with the human mind having just as much input into shaping the world around us as the light waves that reach us from the sun and distant stars.

Naden refers to Jules Bernard Luys's *The Brain and its Functions* (1876) as the source for her recapitulation of the doctrine of specific nerve energies in 'Scientific Idealism' (FR 214).¹⁰¹

The theory that the sensory nerves are physiologically distinct asserts that a uniform cause garners different sensations according to the kind of nerve being stimulated, entailing a 'fundamentally arbitrary relationship between stimulus and sensation'.¹⁰² It is therefore shown that 'one and the same cause, such as an electric shock or abnormal distension of the capillaries, will produce different effects in the various organs of sense' (I&D 159). The specifics of the eye's physiological functions therefore play a significant role in Naden's conception of vision and the way in which this shapes our perception of the external world.

Naden was well acquainted with the details of this, since in her 1883 systematic physiology examination she was required to 'Construct a drawing of those parts of the eye which can be observed with the assistance of a low power lens (magnifying 10 diameters).'¹⁰³ Looking at an eye at this level of magnification is the equivalent of using a magnifying glass, rather than a microscope, meaning that the different layers and structures are visible while cells are not. Less than two years later Naden published 'The Evolution of the Sense of Beauty' in six parts in *Knowledge*; this contains an extended discussion of the evolution of the structure of the

¹⁰¹ A discussion of Luys's work and its context is provided by André Parent, Martin Parent, and Véronique Leroux-Hugon, 'Jules Bernard Luys: A Singular Figure of 19th Century Neurology', *Canadian Journal of Neurological Sciences*, 29.3 (2002), 282-88.

¹⁰² Crary, p. 90.

¹⁰³ 'Examination Papers, 1882-1883', *MCC 1883-1884*, Appendix p. xxxviii.

eye, and accurately explains the Young Helmholtz theory of colour perception. This, she warns the readers, is not the definitive explanation of the functioning of the retina (physiological evidence for the theory was not identified until 1956 by Gunnar Svaetichin); however, it provides a basis for her discussion of what we perceive to be beautiful, and why. The hypothesis states that the retina has three kinds of nerve fibres, which are each chiefly stimulated by a different range of wave lengths, and Naden notes that that ‘the pleasure derived from chromatic combination is generally due to what is known as *Successive Contrast*’ (FR 86). Naden discusses and builds upon this with the evolution-based theories of Grant Allen, specifically those found in his 1877 book *Physiological Aesthetics*, and James Sully’s critique of this in *Mind* in July 1879. Remarkably this section of the essay contains the only published example of Naden ‘ventur[ing] to suggest a theory’ that is intended to move a physical science discipline forwards (FR 88), rather than her overarching commitment to developing the field of sociology and the pairing of philosophy and science. She suggests a physical explanation for the pleasure derived from colour and pattern that had been demonstrated by others as hinging upon the contrast between adjacent colours and the effects of fatigue on stimulated nerves. Naden’s willingness to develop our understanding of how the retina is affected by ‘ether-waves’ of different frequencies illustrates her impressive knowledge of light and vision in a scientific context. Although the existing theories proposed by Helmholtz and Allen were fundamentally physiological, it is notable that Naden’s contribution emphasises that ‘some physical disturbance’ of nerve fibres accentuates the discomfort of perceiving ‘colour discord’ (FR 87-88). Her focus is therefore on how physiological function creates our perception of matter, indicating that organisms with different optical structures perceive an entirely different external world.

The question of alternate perspectives is given additional resonance by the epigraph of Naden's essay 'Hylo-Idealism: The Creed of the Coming Day' (1884). It is taken from George Henry Lewes's *Problems of Life and Mind* (1874), and reads:

The world is to each man as it affects him: to each a different world. Fifty spectators see fifty different rainbows, and all believe they see the same one. Nor is this unanimity delusive, for 'the same' here means the similarity in their states of consciousness. (*I&D* 167)

In its original context this example is used by Lewes to argue that although 'the objective world is to each man the sum of his visionary experience', this should not encourage scepticism but rather positivism, since it is science that is most able to transcend this subjectivity.¹⁰⁴ The parallels with Naden's writing are immediately clear. Naden does not often include such extended quotations in her essays, and this particular one identifies a prime conceit through which she supports the Hylo-Idealist approach – the rainbow is used as a clear, accessible, and scientifically-grounded example of how every individual perceives a different external world. It is an image that she returns to in the essay, commanding the reader:

Look at the jewelled arch of the rainbow. It is built of countless rain-diamonds, and the waves of reflected and refracted light issuing from each are sorted according to their lengths. But your eye receives only one set of light-waves at a time from one drop; while a friend, half a head taller, will receive from the same source quite a different set of waves, corresponding to a different colour. [...] Everyone sees his own rainbow; everyone *makes* his own rainbow, for the sensations of light and colour are products of the thought-cells. (*I&D* 170)

What is notably different in Naden's explanation of this phenomenon, in comparison to Lewes, is her emphasis on the creative act of perceiving a rainbow, which contrasts with the epigraph's focus on how the external world 'affects' each man. In propounding her Hylo-

¹⁰⁴ Smajic offers an extended reading of this passage, and situates it more broadly in the context of Lewes's positivist philosophy, pp. 83-85.

Idealist creed Naden is interested in the creativity of the human brain, the centrality of imagination in producing our 'purely subjective' universe made up of unique perceptions and interpretations (*I&D* 170). Light thus becomes a stimulus for creation, not a fixed entity; the process of the propagation and perception of light may be materially the same for all individuals, but the product constructed from this stimulus is unique.

In Naden's sonnet 'The Double Rainbow' (published in *Modern Apostle*) the rainbow is linked to blinding light that represents a high intensity of both feeling and available knowledge:

I saw the passions and desires of Man
 Blent in a thousand-coloured arc of light,
 A double rainbow; but so jewel-bright
The scarf of Iris had been pale and wan
Beside it: not the torrent-bows that span
 A river-fall at noon; nor birds whose flight
 Gleams ruby and gold; nor columned chrysolite
In caves enchanted; nought, since light began,

Could match its glories: but the inner arch
 With Joy and Anguish too intensely burned
For eyes that love the cloudy robes of March
And April, and calm Autumn's golden dress:
 Half-blinded, to the outer bow they turned,
Soft with remembered Grief and Happiness. (*CPW* 334)¹⁰⁵

Naden's act of poetically interpreting the rainbow is a worked example of how every individual's perceived image of the rainbow is different, something that is underscored by the defiantly prophetic opening lines. The phenomenon of a double rainbow is awe-inspiring but

¹⁰⁵ The concept of the blinding light of true knowledge also appears in 'Semele', in which she demands 'Dispel the haze / That shields too tenderly my mortal sight: / If life be darkness, let it cease in light.' (*CPW* 137, ll. 14-16) and in 'The Astronomer', who questions the possibility of attaining true knowledge when man's 'sight were blinded, if the sun should blaze / With unrefracted beams' (*CPW* 6, ll. 63-64).

also, Naden reminds us, nothing more than matter and energy organised in a certain way. Any mythic notions associated with rainbows are soon dismissed – ‘The scarf of Iris had been pale and wan / Beside it’ (ll. 4-5) – and the physical takes its place, which is emphasised by associating it with other natural sources of prismatic colour, the ‘torrent-bows’ of a waterfall, bird wings, and ‘columned chrysolite’ (ll. 5, 7). And yet the double rainbow surpasses all these, as it projects into the eye and mind of the observer, and the observer projects back their individual interpretation of this manifestation of light. The volta marks a shift from the strong ‘I’ of the octave, who sees truth in the brightness of the inner bow, to the perception of those whose ‘eyes that love the cloudy robes of March’ (l. 11) and so turn to the dimmer outer bow. Those observers are less clearly associated with the poetic voice, as they are unable or unwilling to struggle to reach the highest reaches of human knowledge and instead settle for its dim reflection that provides only tempered insight: ‘Grief and Happiness’ rather than ‘Joy and Anguish’ (ll. 10, 14). The higher knowledge is not therefore described in wholly positive terms, but for Naden it is not so much the content of such revelations as the intensity of their truth that is craved. The Hylo-Idealist standpoint of matter causing unique sensations is maintained here. Deschanel explains how ‘a line joining the observer to the sun is the axis of the bow or bows’, and it is this direct connection between the internal and external that is of utmost importance to Naden.¹⁰⁶ The rainbow is a visual manifestation of the connection forged between an individual and the sun as they look skywards, and the rainbow that results from light’s interaction with correctly positioned water droplets (relative to the observer) is paradigmatic of the subjective nature of our perception, and creation, of the universe.

¹⁰⁶ Deschanel, p. 1083.

By the time *Modern Apostle* was published in 1887 Naden was considering the reaches of astronomy in a new way, her outlook having expanded considerably. Instead of using the point of view of an individual looking up at the night sky, in the sonnet ‘The Nebular Theory’ Naden takes a god-like perspective, watching the beginning of the universe as it transitions from dark to light, and appropriating Biblical language in the process:

This is the genesis of Heaven and Earth.
In the beginning was a formless mist
Of atoms isolate, void of life; none wist
Aught of its neighbour atom, nor any mirth,
Nor woe, save its own vibrant pang of dearth;
Until a cosmic motion breathed and hissed
And blazed through the black silence; atoms kissed,
Clinging and clustering, with fierce throbs of birth,
And raptures of keen torment, such as stings
Demons who wed in Tophet; the night swarmed
With ringèd fiery clouds, in glowing gyres
Rotating: æons passed: the encircling rings
Split into satellites; the central fires
Froze into suns, and thus the world was formed. (*CPW* 328)

The nebular hypothesis of the formation of solar systems was first conjectured by Immanuel Kant in the mid-eighteenth century, and Pierre Laplace proposed a more scientifically grounded version of this theory in 1796. He claimed that the solar system began as a slowly rotating, near-spherical nebula (a cloud of gas and dust at very low density) that slowly collapsed under its own gravitational forces, the momentum causing it to spin more rapidly and flatten, the material eventually forming rings and accumulating into planets orbiting a central mass.¹⁰⁷ The form of this sonnet, which unusually for Naden does not signal the volta typographically, reflects the ‘clinging and clustering’ (l. 8) inherent in the theory; the octave and sestet coalesce, undermining the traditional transition from proposition to resolution.

¹⁰⁷ M. M. Woolfson, ‘The Origin and Evolution of the Solar System’, *Astronomy & Geophysics*, 41.1 (2000), 12-19 (p. 12).

Versions of this theoretical model dominated the field throughout the nineteenth century, although it came under criticism from prominent figures such as Maxwell, who went some way to disproving the underlying mathematical assumptions of the nebular hypothesis in the essay ‘On the Stability of the Motion of Saturn’s Rings’ (1856).¹⁰⁸ Spencer supported and attempted to develop the theory, as demonstrated by his essay ‘Recent Astronomy, and the Nebular Hypothesis’ published by the *Westminster Review* in 1858; he incorporated this into *First Principles* (1862) as an illustration of the trend in evolution to move from simplicity to complexity, and confusion to order.¹⁰⁹ That this is an essentially unifying theory, whereby all matter in the solar system was originally a singular (though heterogeneous) entity, underlies Naden’s attraction to this hypothesis. That almost the whole sonnet comprises of a single sentence, with the end-stopped first line functioning much like a subtitle, further emphasises unity as the central theme. Naden’s appropriation of phrases and imagery from Genesis and *Paradise Lost* instantiates science as the new unifying force in the universe, superseding religion. Further, this sonnet demonstrates the farthest reaches of the scientific imagination, for the creation of the universe can never be observed and so can only be conjectured upon through the twin forces of contemplation and creativity.

¹⁰⁸ James Clerk Maxwell, *On the Stability of the Motion of Saturn’s Rings: An Essay* (Cambridge: Macmillan, 1859). Several alternative hypotheses were put forward during the twentieth century, but the nebular hypothesis (today called the Solar Nebular Theory) came back into favour in the 1970s and remains the currently accepted explanation for the formation of the solar system, although more recently the Capture Theory has gained support. Woolfson, pp. 14-19.

¹⁰⁹ [Herbert Spencer], ‘Recent Astronomy, and the Nebular Hypothesis’, *Westminster Review* 70, July 1858, pp. 185-225. See also ‘Letter from Herbert Spencer to Maxwell, December 4, 1873’, in *Maxwell on Molecules and Gases*, ed. by Elizabeth Garber, Stephen G. Brush, and C. W. F. Everitt (Cambridge, MA: MIT Press, 1986), pp. 136-38 (p. 137).

Tyndall argues that ‘the human mind itself – emotion, intellect, will, and all their phenomena – were once latent in a fiery cloud’, and suggests that while this stance, when articulated in an ‘unclothed and unvarnished’ manner, represents ‘an absurdity too monstrous to be entertained by any sane mind’ there is clear validity in such a theory.¹¹⁰ For Naden the idea that life force and the human mind were latent in matter before the world was formed was an intellectually fruitful one. In ‘The Nebular Theory’ she builds upon this conceptualisation by giving emotional traits to atoms, identifying the basis of human relations in the action of particles: before ‘cosmic motion’ bestowed life upon the universe atoms are described as without ‘any mirth, / Nor woe’, but after its coming ‘atoms kissed’, ‘fierce throbs of birth’, and ‘raptures of keen torment’ (ll. 6, 4-5, 7, 8, 9). Nevertheless, Naden here takes the widest, most impersonal view of the universe, no longer tied to Earth but emboldened by science to imagine what no human could ever possibly see. Here there is no need to strive towards light, since the visual field is filled with ‘cosmic motion [/ that ...] blazed’, ‘ringèd fiery clouds’, and ‘glowing gyres’ (ll. 6-7, 11). Expectations are subverted as ‘central fires / Froze into suns’ (ll. 13-14); in this act of unification the reader contemplates a counterintuitive notion whereby hot and cold are bound together. This is indicative of Naden’s use of poetry to do things that she cannot in her essays, for while she is not averse to engaging with the furthest reaches of scientific thought in her philosophical prose, poetry is an outlet for experimenting with the newest ideas to which she was being introduced by her studies at Mason College.

Compare this sonnet with the conclusion of ‘The Brain Theory of Mind and Matter’, which also describes the unknown prehistory of the universe:

Matter would still, as in geologic and pregeologic ages, continue its immortal existence; but matter, untouched, unseen, unperceived by sensation or thought, must

¹¹⁰ Tyndall, *Scientific Use of the Imagination*, p. 38.

be a void and formless chaos, until the first living eye gives it shape and colour.
(*I&D* 166)

This vocabulary bears certain similarities to the opening of ‘The Nebular Theory’ and yet here Naden is restrained, focusing upon what it is the ‘living eye’ can perceive, not the chaos that came before. As I have described, science had become, for Naden, an illustrative or explanatory device, grounding philosophical theory in demonstrable, experimentally-sound knowledge. There is little room for speculation, since Naden is principally invoking the ‘truths’ of optical physics and visual perception to convince the reader that Hylo-Idealism is a workable – indeed, the only possible – explanation for how the universe exists and functions.

Conclusion

In an 1894 review of Naden’s *Complete Poetical Works* W. H. Hardings perceptively argued that poetry ‘has no cause nowadays to dread, as formerly, the cold dissection of materialism. Modern science “decomposes but to re-compose” [...] hint[ing] of infinite depths hitherto undreamt of. There is room in Nature for a two-fold infinity of aspect’.¹¹¹ Using visual terminology he thus identifies in Naden’s poetry the Hylo-Idealist approach that does not set science against poetry but rather views them both as complementary components of human cognition. As I have shown in this chapter, the pervasiveness of light through botany, astronomy, physics, and physiology allowed Naden the flexibility to make connections and draw analogies that ultimately enact her universalising philosophical perspective. This process is equally clear in my subsequent chapters, as I draw upon Naden’s description of this philosophical stance in ‘Cosmic Identity’, in which a synthetic understanding of the universe is the ideal of both science and poetry: ‘the consummation of rational endeavour is also the

¹¹¹ Hardings, p. 188. He quotes here from Robert Browning’s ‘Epilogue’ to *Dramatis Personae* (1864).

fulfilment of poetic aspiration' (*FR* 189). Her philosophy's close association with the 'scientific imagination' – through which power 'we can lighten the darkness which surrounds the world of the senses'¹¹² – provides a basis for this. Tyndall's identification of 'that composite and creative unity in which reason and imagination are together blent' is very close to Naden's conception of unity as articulated in 'Paracelsus', which meant that 'We may find a positive basis of scientific fact for what seems at first sight a mere poetic imagination [...] the essential content may be a germ of pure truth' (*FR* 207).

In October 1885 E. A. Sonnenschein gave an address titled 'Culture and Science' at Mason College's annual prize-giving event. Speaking to the assembled students he asserted that science and poetry provide complementary modes of thinking, and in order to 'grasp the "spirit that binds things together"' they must look to the method of poetry, which 'bodies forth conceptions of wholes, rejecting all definition by limitation' and aims 'to build up again in his own soul the unity of things, which science is always breaking down'. He suggests that oftentimes 'poetry anticipates science; the vision of the poet dimly traces out the lines along which the science of the future will march' and 'some of the highest generalisations of science appear to me to be in a large degree of the nature of poetry – anticipations of nature'.¹¹³ Sonnenschein thus outlines the reciprocal relationship that has come to be the foundation of much recent scholarship on literature and science, placing it alongside the centrality of the scientific imagination.¹¹⁴

¹¹² Tyndall, *Scientific Use of the Imagination*, p. 6.

¹¹³ Sonnenschein, pp. 11, 12.

¹¹⁴ In writing of literature and science I refer to the historically-informed research that may broadly be said to have developed in the wake of Gillian Beer's *Darwin's Plots*, which is founded upon an awareness of a reciprocal interdisciplinary relationship.

Naden was present at this address. In her review, which appeared in *Mason College Magazine*, she asserted that ‘It deserves careful and thoughtful perusal by every student of literature and physical science’ and concludes that ‘All will unite in the hope that the ideal University attractively pictured towards the close of the address may not long remain a Utopian dream’.¹¹⁵ In this short article she enthusiastically agrees with Sonnenschein’s position; in the poem ‘Science and Philosophy’, published in 1887 during her final term at Mason College, she develops upon her reaction to his argument. This parable constructed from biblical imagery is, upon first glance, an unexpected addition to the otherwise secular sonnets of *Modern Apostle*, but the incongruous title forces us to look beneath this surface. Religious tropes are subverted; the Eucharist – the mystic body and blood of Christ – is co-opted by Naden to articulate her secular desire for knowledge.

We went a-begging for a nobler creed,
 We craved the living bread and wine of thought,
 That Eucharist which is not sold or bought,
 But freely given; yet, did any heed,
 ’Twas but to offer pence, or bid us feed
 From empty sacramental vessels, wrought
 Of gold or brass; we spent our prayers for nought,
 Faint and athirst with spiritual need.

Then some brought grapes, and some brought corn and yeast,
 Plenteous and good; yet still we murmured, “Give!
 This is scant fare when thirst and hunger cry:
 Teach us to change our garner to a feast,
 Preparing food by which the mind may live,
 Perennial loaves, and flagons never dry.” (CPW 333)

The three disciplines that Naden sought to reconcile are clearly identified; the sonnet form indicates that ‘and Poetry’ might be added to the title pairing, and this is borne out in the poem’s arc. The octave demonstrates the motivations underlying philosophy – abstract desires

¹¹⁵ Naden, ‘Culture and Science’, p. 113.

for ‘the living bread and wine of thought’ that would fulfil a ‘spiritual need’ (ll. 2, 8) – and the first two lines of the sestet are suggestive of science’s desire to identify the building blocks of life, offering the raw ingredients of the desired wine and bread. The unifying power of poetry is drawn out in the closing lines, for, Naden implies, it creates a sustaining and sustainable ‘feast’ (l. 12) from the constituent parts provided by science. The two sets of rhymes in the octave suggest that the pairing of just philosophy and science curtails the search for knowledge; the eighth line ends in the same place as the first, there has been no observable progression. In contrast, the three pairs of rhymes in the sestet and corresponding stepped pattern created by the staggered line indents gesture towards the idea that Naden’s trinity of approaches to knowledge – philosophy, science, *and* poetry – build upon each other and enable us to reach higher understanding. This therefore renders in poetry what Naden states in ‘Cosmic Identity’: poetry ‘uses analysis as a means to some new and beautiful synthetic effect. Science cares for objects as parts of a whole, as symbols of law, not for their own beauty or majesty’ (*FR* 188).

In like manner, Sonnenschein argued that:

Nature, then, is not exhausted by the most complete inquiry into her laws taken separately. It still remains to conceive her as a whole – to apprehend her by the imagination; and some of her secrets reveal themselves less to the microscope than to the poetic eye.¹¹⁶

Science has never existed in a cultural vacuum. This is, of course, a fundamental tenet of the rapidly-expanding field of literature and science. It also underlies some of the most high-profile addresses given by scientists during the nineteenth century: Tyndall’s ‘The Scientific

¹¹⁶ Sonnenschein, p. 12. It is notable that the sentence following this one draws upon the same lines from *Hamlet* that Naden had employed at the climax of her 1883 essay ‘The Brain Theory of Mind and Matter’: ‘this majestic roof, fretted with golden fire’ (*I&D* 166).

Use of the Imagination’ and Huxley’s ‘Science and Culture’. Even an institution such as Mason College, founded with the express purpose of training people in the application of science to industry, began teaching arts subjects almost immediately; its staff and students felt compelled to discuss interdisciplinary ideas and ideals within the pages of their magazine and at prize-giving ceremonies. This combining of perspectives in the hope of more fully understanding the universe and humanity’s place within it drove Naden’s desire to obtain a rigorous scientific education, for she believed that a philosophy that did not adequately address material understandings of the world around us would be inherently flawed. She believed, too, that quantitative experiments could only ever provide a partial view of the world, and so imaginative discourses and thought processes were equally valuable. The poetic and the scientific were not deemed equivalent, but when reconciled their common purpose expressed Naden’s ideal, ‘unity in diversity’ (*I&D* 79). She used poetry and prose for intertwined, but not identical, purposes – reading Naden, we find that science is both an explanatory force and a force to be explained.

Naden demonstrates science’s ability to illuminate the world around us; placing it in a position of power that replaced the unifying explanatory role taken by religion. For Naden the pursuit of knowledge through reason was not a dry and staid method of investigation, but a medium via which the beauty and awe inherent in the universe could be communicated. An important aspect of this perspective relied on the idea that science is intertwined with poetry and philosophy: these ‘seemingly rival spheres constitute but one Cosmos’ (*I&D* xxii). In his concluding remarks Tyndall states that if scientists

know the strength of science, and rely upon it with unswerving trust, they also know the limits beyond which science ceases to be strong. They best know that questions offer themselves to thought which science [...] has not even the tendency to solve.

For Tyndall this means that scientists ‘have as little fellowship with the atheist who says there is no God, as with the theist who professes to know the mind of God’.¹¹⁷ Naden did not agree that scientists could not be avowed atheists, however. As I shall expand upon in the following chapter, she sought to demonstrate how a synthetic philosophy, with its roots in science and poetry, empowered her to dismiss the claims of religion absolutely.

¹¹⁷ Tyndall, *Scientific Use of the Imagination*, p. 41.

PHILOSOPHER

I cannot say when it will be finished, [...] for ideas have
an uncomfortable habit of developing as one writes.
(Constance Naden, *Memoir* 48)

Early in 1879 Constance Naden wrote in her notebook: ‘What we are, we can never know, but the conflicting claims of Experience & Intuition are clearly ~~solved~~ reconciled by the thesis of Unity’ (N78-9 17). This is one of the earliest surviving expressions of her philosophical position. It is defined by a unifying urge that is carried through Naden’s prose and poetry across the following decade. The deletion is significant; her clear, flowing hand indicating that the sentence was first written in its entirety, ‘solved’ was then scored out and replaced by ‘reconciled’ in superscript. The resultant shift in meaning is indicative of Naden’s stance on the scope of human knowledge: while a complete or absolute answer is unachievable, the application of reason enables synthesis, expanding our understanding of the material world and our place within it. Over the course of her writing career Naden used the rhetoric of unity to persuade readers to engage with her philosophy, encouraging them to synthesise different types of knowledge arising from different forms of writing. A few pages later Naden asserts that ‘Religion is a matter of false reasoning, not of false feeling’ (N78-9 23), articulating her attitude to faith. She does not share the aggressive stance towards religion of the most prominent freethinkers of the period, but instead tries to understand why, from an evolutionary standpoint, religious belief developed (in different forms) across human society. Nevertheless, Naden argues that one must confront this false reasoning and realise that the morals and sentiments that underpin religion are not bound to belief in a divine power but

instead arise from our innate ‘moral emotional intuitions’ (N78-9 22). They should therefore be embraced from a humanist perspective.

Notebook is one of Naden’s earliest extant pieces of writing, the attitudes recorded forming the foundation of her system of beliefs. At no point in her life was this system static and fully-formed, however. Naden embraced the practice of writing as a way of interrogating and exploring her own ideas, drawing on a wide range of reading and synthesising this on the page. When complimented on her poetry Naden is recorded to have quoted Milton, responding ‘that she meant her real mission to be philosophy, “not harsh and crabbed as dull fools suppose, but musical as is Apollo’s lute”’ (*Memoir* 23).¹ Her comment breaks down the assumed boundaries between philosophical prose and poetry and speaks to Naden’s interest in the practice of writing, attending to form as well as content. This can be traced through her transition from a Nonconformist religious upbringing via pantheism and agnosticism to the atheist freethinking philosophy she initially labelled Hylo-Idealism; although by the end of her life she had distanced herself from the latter term. In the preface to *Induction and Deduction*, written after moving to London, Naden refers to Hylo-Idealism as Robert Lewins’s ‘system’ to which she is simply ‘indebted’ (*I&D* xxii).

In a letter to William R. Hughes dated July 1889, Naden is reported to have written,

My book gets on slowly, but I hope surely. I cannot say when it will be finished, though it won’t be a ‘mag. op.’ at all, for ideas have an uncomfortable habit of developing as one writes, and of requiring alterations in their clothing. (*Memoir* 48).

¹ The same phrase from Milton’s ‘Comus’ is used by *The Times* when praising Tyndall’s address on the scientific imagination; reproduced in Tyndall, *Use and Limit of the Imagination*, p. 12.

Hughes suggests that the resultant book was *Induction and Deduction* (1890), but this seems unlikely because while Naden certainly planned the volume, as the signed ‘Prefatory Note’ attests (*I&D* xxi-xxii), it principally consists of essays written before 1888. It seems most likely that the four essays titled ‘Philosophical Tracts’ published in *Further Reliques* formed the basis of her proposed book, since they were not published elsewhere, are each constructed like chapters with a ‘Summary’ at the end, and demonstrate a movement towards a less dogmatic philosophy grounded in science that adheres to ‘one central law of reason’ (*FR* 138). Her growing discomfort with Hylo-Idealism is obliquely but significantly explained early in her introductory essay:

But, if a system of thought, which *can* be a system only in the sense of being valid for the whole race, is understood by its author, and misunderstood by a few sympathetic disciples, while the outer world cares not a rush for the entire fabric, that system has not so far fulfilled its purpose. (*FR* 135)

Naden’s final public address was a lecture on ‘The Principles of Sociology’ at the Birmingham Sociological Section on 22 October 1889, and she was due to give a paper ‘On Mental Physiology and Its Place in Philosophy’ to the Aristotelian Society in early 1890. These subjects further indicate that Naden’s Hylo-Idealism was morphing into a broader, scientifically-led philosophy without a clear label. I do not wish to undermine the importance of Naden’s role in developing Hylo-Idealism or suggest that she came to reject its tenets outright. Nonetheless, this new perspective on Naden’s philosophical stance emphasises the independence of her philosophical work, which was more concerned with synthesising her wide-ranging reading than identifying with a single school of thought. It therefore complicates

the narrative woven by obituary essays (and accepted by most recent scholarship) that Naden was a committed Hylo-Idealist throughout the 1880s.²

Naden's secular philosophy must also be understood in the context of contemporary religious discourses, and I shall chart her movement from Nonconformist Christianity to freethinking atheism over a fifteen-year period. This trajectory underpins Naden's philosophical view of human history, for she feels assured that 'We are now in a state of transition from the old theological to the new scientific period' (*I&D* 138). In 'What is Religion?' Naden clearly expresses this teleological view of social evolution in relation to religion:

Simpler states of society may well be guided by those unreasoned principles [...] serving the same purpose as the instincts of lower animals. [...] But in our own day, when art, morality, thought, politics, and education are finally separated from religion [...] salvation lies in the conscientious endeavour to draw new life from nature, and to make science itself a well-spring of ideal truth. (*FR* 132-33)

In her writings, Naden's childhood consequently becomes equated with the childhood of man and her older, educated perspective aligns with the position she believes to be fitting for modern society. Reflections on her intellectual progress are therefore bound up in her vision of the world, past, present, and future. Naden insists that it is only by finding experimentally-verifiable explanations of phenomena that we can discard older, supernatural ways of comprehending the universe.

Marion Thain has described how 'Naden and Lewins were working firmly under the influence of Herbert Spencer and materialist philosophy during the "golden age of Secularism," in the

² Lewins writes that Hylo-Idealism 'coloured and inspired all her utterances, in prose or rhyme' (*Memoir* 71) and George M. McCrie calls it 'Miss Naden's life-creed' (*FR* xv). James Moore established this as a touchstone within modern criticism, in 'Constance Naden and Hylo-Idealism', pp. 225-57. In 'Scientific Wooing' Thain defines Hylo-Idealism as Naden's 'life's work' (p. 153), and LaPorte follows her lead regarding this (p. 434).

days of Charles Bradlaugh's leadership of the National Secular Society, from the 1860s to the 1880s'.³ Certainly Lewins, Spencer, materialist philosophy, and Bradlaugh were all influential, but fundamental to my argument is the notion that there was no single abiding influence upon Naden's philosophical thought. Her underlying principle was that it is only by reconciling and unifying seemingly disparate secular ideas that we can reach something approaching truth. This synthetic, accessible approach led to a discomfort with overcomplicated vocabulary and labels, distinguishing Naden's writing from that of her Hylo-Idealist counterparts. Her wariness of adhering to such philosophical paraphernalia is borne out in 'A Modern Apostle', in which polysyllabic rhymes are used to undermine the unwieldiness of the term 'Pantheistic Socialism' (as I discuss later in this chapter). This echoes the potential for ridicule in the very phrase 'Hylo-Idealism', which was rendered 'high-low-idealism' by the periodical *Funny Folks* in 1894.⁴ Naden's later writings show that she was more interested in drawing philosophical conclusions from her breadth of reading and sense of reason than allying herself with any one existing school of thought.

In 1884 Naden wrote of Schiller: 'The union of seer and singer in one personality is, indeed, sufficiently rare; but now and then a twy-souled mortal is born who possesses both vision and voice.'⁵ This is a convenient way of conceiving her own unifying philosophy, the pairing technique implying that the terms are inextricably linked but may also be considered opposites – there is unity in diversity. The phrase 'twy-souled mortal' confers a quasi-divine

³ Thain, 'Scientific Wooing', p. 153, quoting from Edward Royle, *Radicals, Secularists and Republicans: Popular Freethought in Britain, 1866-1915* (Manchester: Manchester University Press, 1980), p. x.

⁴ 'The philosophical people who deal in agnosticism, positivism, and so forth, are given to discussing a branch of study known as hylo-idealism. It is a fearsome theme, to which the ignorant and frivolous are strangers. To them, possibly, high-low-idealism suggests nothing more than an aesthetic taste in Oxford shoes.' 'The philosophical people...', *Funny Folks*, 24 February 1894, p. 14. A similar observation was made by Blavatsky in an editorial note appended to McCrie's 'Hylo-Idealism – The Secret of Jesus', *Lucifer*, 15 January 1888, pp. 421-22 (p. 422).

⁵ C. C. W. N., 'Schiller', pp. 1-2.

status of one inhabited by two intertwined souls, an ideal unification. Naden's syntax assigns the terms 'seer' and 'vision' to 'philosopher', while 'poet' is labelled with 'singer' and 'voice'. When discussing the designation of philosophers as seers David Michael Levin remarks upon the word 'vision':

The word can refer not only to sight, to visual perception, but also to a certain moral capacity; a vivid, articulate, imaginative understanding of the world, of life, of reality; [...] the capacity to think about things with a sense of how they all hang together, how everything comes together to form a whole; and the capacity to imagine a different and better world, life, reality. A seer is one who can speak of, with, and out of 'a vision'.⁶

Visions – in this elevated sense of both 'imaginative understanding' and 'how everything comes together to form a whole' – enable Schiller, in Naden's opinion, to be a consummate intellectual who can synthesise and articulate his conception of the universe. Naden does not define herself in these terms, but occupies a similar unifying position whereby she pursues the light of reason and clearer vision via poetry, philosophy, and science.

Although Naden's poetic and prose writing were only truly read in parallel after her death (facilitated most obviously by the 1893 *Selections from the Philosophical and Poetical Works of Constance C. W. Naden*), doing so was acknowledged as fruitful by the majority of obituaries. Indeed, the interaction between these two modes was noted by a reviewer of *Further Reliques* in 1892; they remarked upon her 'freedom and felicity of expression' and that 'Miss Naden had developed her [prose] style by poetical composition'.⁷ Naden's philosophical writings have not found the readership that Schiller's did, however, and the

⁶ David Michael Levin, 'Introduction', in *Sites of Vision: The Discursive Construction of Sight in the History of Philosophy*, ed. by David Michael Levin (Cambridge, MA: MIT Press, 1997), pp. 1-67 (pp. 19-20). It is interesting to note the similarity of phrasing in this passage to that of Naden's translation 'The Better World' (CPW 172).

⁷ 'New Books: *Further Reliques of Constance Naden*', *Mind*, 1 (1892), 145-46 (p. 146).

views expressed by a reviewer of Naden's essay collections for *Journal of Mental Science* (1892) go some way to articulating the problems that contemporary readers had with her work. They are troubled by the difficulty of 'reconcil[ing] her two cardinal lines of thought', which is to say her ostensible fusing of idealism and materialism, and while sympathetic to Naden – 'her essays contain many fresh and vigorous things which will repay perusal' – they conclude unconvinced, suggesting that Naden as a person is more interesting than as a philosopher.⁸ This is not wholly unfair since it is by reading her life and works in their entirety, appreciating how her philosophy stands alongside her scientific education and poetry, that what McCrie subsequently called Naden's 'life-theory' truly becomes apparent.⁹ Naden sought to unify and synthesise the multifaceted world around her; it is only by reading her corpus and biography together that we come to appreciate her commitment to this project.

This chapter follows two key strands of Naden's philosophical development: freethought and scientific rationalism. After introducing Naden's Nonconformist upbringing and other early influences as a starting point for her philosophical pursuits, I consider each strand in turn in the context of her poetry and prose. The chapter concludes with an analysis of 'A Modern Apostle' (1887), showing how the long poem illuminates Naden's approach to her intellectual development and experience of being a Nonconformist, a scientist, a poet, and a philosopher.

Starting Points

Naden was brought up by her maternal grandparents; R. W. Dale notes that her Baptist grandfather was 'of the old Nonconformist type', and inclined towards a puritan lifestyle (*FR*

⁸ 'Review: A New Philosophy', pp. 277, 279.

⁹ George M. McCrie, 'Constance Naden's Essays: A Rejoinder', *Journal of Mental Science*, 32 (1892), 473-76, (p. 476).

227). The dissenting tradition was particularly strong in Birmingham. Naden was therefore brought up in a community that respected her right to question orthodox religious practices. She spent much of her childhood attending a small Unitarian school, and this is significant firstly for demonstrating the ties between these Nonconformist groups during the period. Kathleen Callanan Martin observes that ‘Dissenters enjoyed a state of relative unity from 1830 to 1880, a period in which there was an observable Nonconformist consensus on matters of society and morality’; James Martineau continued this practice by co-founding the National Conference of Unitarian, Liberal Christian, Free Christian, Presbyterian and other Non-Subscribing or Kindred Congregations in 1881.¹⁰ Ruth Watts notes that between 1841 and 1893 Birmingham had twenty-three Unitarian mayors, their remit shaped by Unitarianism’s ‘passionate commitment to political and social reform [...] especially social and educational change’ (indeed their public toast was, and remains, ‘civil and religious liberty the world over’).¹¹ The impact of Unitarianism, and Nonconformists more broadly, upon Birmingham was therefore significant, and Naden’s outspoken defence of social revolution in *What is Religion?* demonstrates the influence of an upbringing that encouraged the search for truth wherever it may lead. Furthermore, Naden’s commitment to social change is shown by the causes with which she involved herself towards the end of the 1880s: she was a member of the Working Ladies’ Guild (a society for mutual help and united work), the Denison Club (concerned with the condition of the poor), and the National Indian Association (Naden had a particular interest in the position of Indian wives) (*Memoir* 50-51).¹²

¹⁰ Kathleen Callanan Martin, *Hard and Unreal Advice: Mothers, Social Science and the Victorian Poverty Experts* (Basingstoke: Palgrave Macmillan, 2008), p. 24; Jeremy Goring and Rosemary Goring, *The Unitarians* (n.p.: Religious and Moral Education Press, 1984), p. 24.

¹¹ Watts, p. 108.

¹² The bequests in her will to those other than her half-siblings and Madeline Daniell, amounting to five £2000 gifts to women designated ‘Spinster’, imply that Naden wished her money to be a force for social change by helping women be independent and perhaps to not feel financial pressure to marry. ‘Constance Caroline Woodhill Naden – Last Will and Testament’, 16th August 1888.

Naden's schooling indicates her grandparents' desire for her education to be broad and progressive. Although it has not been possible to trace the particulars of the private school she attended, Watts provides this overview of a nineteenth-century Unitarian education:

girls, like boys, had to have an education which taught them to think for themselves. Likewise, when pioneering modern history and science, they taught them to females as well as men. Thus they reserved neither education for citizenship nor an understanding of the scientific principles on which a brighter future hopefully rested, to men only. Nor did they withhold classics from females [...] Unitarians as a whole consistently favoured rational education.¹³

Asking questions is a key part of Unitarianism, borne out in texts such as James Freeman Clarke's 1884 *Manual of Unitarian Belief*, in which each list of propositions regarding the faith is followed by an equal number of questions designed to stimulate discussion about the nature of their belief. Indeed, questioning the Bible itself is integral to their faith. Clarke asks readers to ponder the errors and contradictions in the text, stating 'Unitarians do not believe in the infallibility of the Bible. Inspiration leads to the sight of truth and reality, but not necessarily to a perfectly accurate description of what is seen'.¹⁴ Thus Unitarianism is a form of rational Christianity, the legacy of which is evident in Naden's repeated references to reason in the tenets of her own philosophy.

Naden's adult religious views differed from, but should be read in dialogue with, the faith instilled by her upbringing. Such insights are offered by the two notebooks filled with her first forays into poetry between 1875 and 1877. Previous scholarship has been unable to clearly

¹³ Watts, p. 52.

¹⁴ Clarke, p. 14. His opening caveat that 'As Unitarians have no creed, and as their union is one of sympathy and co-operation, and not of formulas, no one among them has any right to define the views of others' explains why there are not many contemporary texts that clearly state the views of Unitarians (p. 3). While I use this publication to demonstrate the core beliefs of Unitarians, I therefore do so with due caution.

ascertain how far Naden subscribed to Christianity during her early years, the only documentation of her life before 1877 (when her first poems were published) being *Memoir* and other obituary essays. Dale, writing for the *Contemporary Review* in an 1891 essay, emphasises how Lewins ‘at once acquired a remarkable ascendancy over [Naden’s] mind’ (*FR* 233), implying that she was religious before encountering him but rapidly dismissed this faith. This assertion is refuted by McCrie in the same journal, using his position as executor of her papers to ‘state, authoritatively [...] that *before* her meeting with Dr. Lewins at Southport in 1876, she had worked herself free from the creed of Christendom – so far as she ever had accepted it’ (*FR* 237).¹⁵ Both perspectives were subsequently published as appendices to *Further Reliques*, leaving the reader to make up their own mind about Naden’s intellectual relationship with Lewins, taking into consideration the respective vested interests that a family friend and a fellow Hylo-Idealist would have held. Academics have taken opposing views, for while Thain (among others) grants Naden significant intellectual independence, James Moore, on the basis of little clear evidence, casts Naden as an ‘impressionable student’, Lewins having made a ‘shipwreck of her inherited beliefs’.¹⁶ Catherine Birch offers a more nuanced version of Moore’s thesis based on the letters in *Humanism versus Theism* whereby over a ‘few years Lewins gradually converted Naden to his theory [...] It appears that Naden was initially resistant to giving up the religion of her childhood’.¹⁷ Birch’s position is nonetheless based on the tone of Lewins’s letters alone, since Naden’s side of the correspondence, never published, is now lost.

¹⁵ The closing aside here may be in reference to her Nonconformist beliefs and Unitarian background; although these had become more widely accepted by British society in the second half of the nineteenth century (denying the trinity was no longer considered blasphemous), these religious communities were nonetheless outliers with a non-traditional belief system that did not align with that of most individuals. However, in a footnote McCrie goes on to assert more bluntly: ‘I have the best authority for stating that the early religious faith, which Dr. Dale attributes to her, was never hers.’ (*FR* 238).

¹⁶ Thain, ‘Scientific Wooing’, p. 153; Moore, ‘Constance Naden and Hylo-Idealism’, pp. 225-26.

¹⁷ Birch, p. 47.

The unpublished poems from before Naden met Lewins therefore offer a new perspective on her transition from associating with Birmingham's vibrant Nonconformist community to engaging with the freethought movement. Seven of these early poems were published in *Songs and Sonnets*, but the majority never appeared in print. A barrier to later publication was that many of these poems unquestioningly accept religion, her subsequent shift towards atheism distancing her from these themes. For example, 'A Simile' opens with the stanza:

From stormy seas & rivers bright,
The watery vapours heavenward rise
Unseen & silent, through the skies
Drawn upward by the source of light. (P75 23, ll. 1-4)

This demonstrates an understanding of the sun's role in the water cycle, an indicator of Naden's Unitarian desire to find truth in science alongside scriptures. The third stanza, however, elaborates on this as the titular simile for souls entering heaven:

So to the realms of bliss above
Our souls shall wing their eager flight
And the great Source of life and light
Shall draw them to His heart of love. (P75 23, ll. 9-12)

Thus the sun is conflated with God, both bestowing distinct but analogous 'life and light' upon the world, the alliteration underscoring their connection.¹⁸ The seventeen-year-old Naden was therefore drawing uncritically upon traditional Christian imagery and engaging with God and the soul as literal presences.

'The Voices of Nature' further emphasises Naden's positive relationship with religion, describing how a poet may commune with God through the medium of nature. Naden casts

¹⁸ This is a common pairing in Naden's work, appearing without religious connotations in published poems 'Springtide', 'To the First Snowdrop', and 'Starlight. II'.

herself as distinct from the masculine poet, a mere writer of verse, and I will discuss the implications of this characterisation in Chapter Four. When addressing the flowers she therefore asserts:

Ye do not speak to human ear
But unto God alone.

And yet, into the poet's soul
Your solemn murmur steals
Some fragments of a glorious whole
His noble verse reveals.

And we, who dare not hope to gain
The poet's mystic powers,
May seek with no enquiry vain,
The lesson of the flowers. (*P75 76*, ll. 19-28)

The poet thus becomes a quasi-religious figure, the amanuensis who captures communication between nature and God. Most important here, however, is the poem's moral of pious hope – 'Live on in patience, brave yet meek, / For God is always near' (*P75 77*, ll. 35-36). The proliferation of such poems in 1875 contradicts McCrie's assertion that 'she had worked herself free from the creed of Christendom' before meeting Lewins the following year. And yet these beliefs draw upon a Unitarian reverence for the earth and nature – 'Natural religion is that which is awakened by the sight of the order and beauty of nature, of its adaptations to the use of living beings, of its variety and unity' – and willingness to pursue 'full and free enquiry'. Naden embraces the 'freedom to seek the truth anywhere, everywhere, and always' encouraged by Unitarianism rather than accepting the edicts of authorities.¹⁹ As a result, the book of nature becomes a holy text, an indicator of Naden's later forays into pantheism.

¹⁹ Clarke, pp. 7-8, 30, 53.

A note of caution must be struck because the notebooks provide an incomplete record from which to extrapolate the development of Naden's religious views. I am not claiming that Naden's adolescent poems accurately depict the full extent of her beliefs and character at the time, although ten years later she did claim in 'Evolutionary Ethics' that when writing a poem 'My *object* is not satisfaction to myself, but the true expression of my thought' (*I&D* 105). It might be objected that Naden's use of Christian imagery is primarily evidence of her practicing composition by embracing poetic tradition, in the same way that she uses the stock characters of knights and princesses on neighbouring pages. This may be true to an extent, but there is nonetheless a tonal shift between the poems of the notebooks and those found in her two published collections, and I ascribe this to significant changes in her religious views. Her dissenting upbringing started her on the path to interrogating religion as a social construct, but did not give her the tools to dismantle it. These were bestowed upon Naden by her informal philosophy education, which began in earnest in 1876, and by her science education which commenced a few years later. Unitarianism gave Naden the opportunity to play with light imagery, for example. The most persistent function of light in Christian discourse is the representation of Christ: as a liturgical symbol 'The act of kindling the light is a ritual gesture symbolizing the coming of Christ to humanity to enlighten us and to blaze the way to the Father through his own death and resurrection'.²⁰ Since Unitarians dismiss orthodox readings of the trinity – they 'do not believe that Jesus is God the Son, equal with the Father, or that he is the Supreme Being'²¹ – Naden was at liberty to question the symbolism of light. She was taught to seek truth via reason, and interrogate the resonances of words; the Sun/Son

²⁰ Christopher Irvine, 'Light', in *The Use of Symbols in Worship*, ed. by Christopher Irvine (London: Society for Promoting Christian Knowledge, 2007), pp. 57-78 (p. 61).

²¹ Clarke, p. 12.

homophone that I discuss later in relation to freethought writings lends itself to such subversion.

The early stage of Naden's transition is exemplified by comparing 'The Voices of Nature' with 'The Poet of Nature', which are both composed of iambic quatrains and comprise of ten and nine stanzas respectively; the latter is one of only three poems published in Naden's lifetime that was not subsequently collected in *Songs and Sonnets*, *Modern Apostle*, or the posthumous *Complete Poetical Works*.²² 'The Poet of Nature' appeared in *St. James's Magazine* in August 1877, and shares aspects of form and imagery with the earlier poem while demonstrating a marked shift towards pantheism. The association between God and plants has developed into 'Nature' being personified, the poet being privileged with access to 'all the secrets of her heart' communicated by 'tender whispers', rather than the 'silent trees' and 'pensive flowers' speaking 'unto God alone' (*P75 75-76*, ll. 1-2, 20).²³ The poet is described as one 'who once has seen the vision bright', conflating the religious imagery of saintly visions with the Romantic conception of divine inspiration for the poetic genius.²⁴ In the final stanzas, however, Naden expresses a belief in some higher power, for at the moment of revelation:

But she who reigned a goddess and a queen,
Shall serve as priestess of a faith sublime.

But long, perchance, must her disciple wait,
In lofty musing, in courageous strife,
Till open springs the dark mysterious gate,
That bars the spirit from the perfect life.²⁵

²² The other two are 'Freethought in the Laboratory' and 'Rest'.

²³ C. C. W. Naden, 'The Poet of Nature', *The St. James's Magazine*, August 1877, p. 152, ll. 3, 4.

²⁴ *Ibid.*, l. 17.

²⁵ *Ibid.*, ll. 31-36

Thus Nature (matter personified) is not the absolute begetter of life, and death is followed by ascension into the ‘perfect life’ of heaven. The publication of this poem a year after meeting Lewins therefore indicates that Naden continued to engage with the notion of a divine godhead during their early correspondence.

Neither Dale nor McCrie seem to have had a clear sense of Naden’s shifting perspective on religion during the second half of the 1870s. Her unpublished poems suggest that she maintained a strong connection to her childhood faith, and it is plausible that ‘The Poet of Nature’ was not collected by Lewins in her *Complete Poetical Works* for this very reason. Although Naden persisted in using religious imagery in her poetry of the 1880s, these are reduced to conventional tropes sitting alongside an avowedly freethinking rhetoric. There is a parallel here with how, according to Martin Priestman,

many ‘Romantic’ writers use religious, ‘supernatural’ terminology to describe objects, experiences and ideas which they know to be purely ‘natural’, thus turning the language of religion against itself by directing the feelings of reverence and attachment it has traditionally demanded towards the ‘world’ it has traditionally downgraded.²⁶

Furthermore, Isobel Armstrong has observed that even James Thomson, the model Victorian ‘Atheist poet’, recognised that the construction of ‘a new symbolic language and a wholly new mythological system [...] had to be made out of existing forms of thought, images and language’ and used ‘the traditional language of spiritual experience to overturn it’.²⁷ Naden’s decision not to publish the devout early poetry was therefore a concerted one, and it is only now her handwritten notebooks have come to light that we can appreciate her willingness to

²⁶ Martin Priestman, *Romantic Atheism: Poetry and Freethought, 1780-1830* (Cambridge: Cambridge University Press, 2000), p. 3.

²⁷ Isobel Armstrong, *Victorian Poetry: Poetry, Poetics and Politics* (London: Routledge, 1993), p. 461.

‘sound our Saviour’s praise’, as proclaimed by the final line of ‘A Christmas Carol’ (P75 54, l. 32).²⁸

Naden’s adolescent interest in mysticism is an additional lens through which to consider her engagement with religion, spirituality, and philosophy during the 1870s. Hughes writes that ‘Among the many books which Miss Naden read in her early years, those relating to Mysticism had a great attraction for her [...] The “Hours with the Mystics,” [...] was always an immense favourite’ (*Memoir* 11).²⁹ One definition of mysticism (in use since the mid-eighteenth century) is ‘belief in the possibility of union with or absorption into God by means of contemplation and self-surrender; belief in or devotion to the spiritual apprehension of truths inaccessible to the intellect’.³⁰ This approach is rather at odds with the Unitarian desire to ‘test every belief in the light of our reason’.³¹ It is consistent, however, with Naden’s later philosophy which focuses on unity and accepts that not all truths are accessible to the intellect alone. While Naden asserts that reason is fundamental to knowledge, she maintains that it is only by accommodating the imaginative perspective of art alongside science and philosophy that the universe can be truly understood.

Hughes does not conjecture what attracted Naden to *Hours with the Mystics*, but its influence is impressed upon the reader by a two-page notice ‘of local interest’ about its author Robert

²⁸ Although Unitarians do not believe in Jesus as divine saviour they nonetheless acknowledge him as a moral exemplar. The concept of ‘our Saviour’ is particularly pertinent in the context of Birmingham Unitarianism, due to the importance of the Church of the Saviour in the city during the nineteenth century; this church was founded by Nonconformist (but not Unitarian) preacher George Dawson and he was succeeded by Unitarian ministers from the 1870s onwards. R. D. Woodall, *Midland Unitarianism and its Story 1662-1962* (Sutton Coldfield: Norman A. Tektor, 1962), p. 33.

²⁹ In a letter from 1890 Lewins reported that Naden maintained an interest in Vaughan’s work ‘during her scientific *curriculum* at Mason Science College’ too. R. Lewins, ‘Entheism, or Immanence of God,=Autosism’, *Open Court*, 27 March 1890, pp. 2176-77 (p. 2177).

³⁰ ‘mysticism, n.2’ *OED online*, 3rd edn (June 2003) <<http://www.oed.com/view/Entry/124654>>.

³¹ Clarke, p. 53.

Alfred Vaughan (1823-1857), his work, and his residence in Birmingham. Vaughan wrote from a Nonconformist position familiar to Naden, and his book takes the form of a conversation about mysticism in history and culture between three men: the host, an artist, and a literary man. In his preface to the first edition Vaughan introduces mysticism as ‘almost everywhere synonymous with what is most visionary in religion and most obscure in speculation’, which ‘though an error, has been associated, for the most part, with a measure of truth so considerable, that its good has greatly outweighed its evil’.³² This is an investigation into a socio-cultural phenomenon, and does not suggest mysticism is a workable path to higher knowledge. Naden’s interest in the book does not, therefore, imply that she wished to practice mysticism, but indicates her willingness to consider alternative approaches to understanding the universe. A decade later Naden concluded that:

Mysticism, whether philosophical or wholly religious, is always an attempt to find the one in many, and so far represents the natural effort of the mind to rise from Fact to truth. The mistake has been in the kind of unity sought for. [...] But the only kind of unity, which can thus be realized in and through varying phenomena, is not a unity of substance or of being [...] but a unity of relation, which at once implies diversities, and renders them intelligible. (*FR* 187-88)

She therefore she used works such as Vaughan’s as a stepping stone to her own philosophy, drawing on certain elements (here the concept of unity) while interrogating their foundations and searching for alternatives that complemented her rational approach.

Naden exposed herself to a wide variety of influences during the 1870s, all of which left traces in her published works and contributed to her rationalist and atheist views. A crucial, but not final, stage of this was Hylo-Idealism, developed in partnership with Lewins. Hughes

³² Robert Alfred Vaughan, *Hours with the Mystics: A Contribution to the History of Religious Opinion*, 2 vols, 2nd edn (London: John W. Parker & Sons: 1860), I, pp. v, vi.

stresses ‘the important influence exercised by her devoted friend and accomplished mentor’ (*Memoir* 14) but this is a particularly fraught aspect of the biographer’s task when reconstructing Naden’s life. The conflicting accounts of her religious transition demonstrate this, leading to much speculation but few definitive answers regarding the nature of their intellectual relationship. In their pamphlet *Humanism versus Theism* (collaboratively published in 1887 with the Freethought Press) there are several edited letters from Lewins to Naden dating from November 1878 to February 1879, as well as an introductory essay on Hylo-Idealism by Naden.³³ It has been a source of frustration that her side of this correspondence has not been preserved; the contents of *Notebook*, which covers this letter-writing period, therefore provides satisfying insights into Naden’s response. It is not a coincidence that this notebook was preserved, a note on the inside cover stating:

There is very little here that is was not in substance contained in my letters during the past year: but as you miss the ‘red book,’ you may perhaps like to see this. I will write soon, & this shall supply the place of an extra letter. I have sent the L. D. to Miss H. (*N78-9* n.p.)

There are several unknowns in this short note, including the intended recipient, the identity of the ‘red book’, the meaning of ‘L. D.’, and the identity of ‘Miss. H.’ (although this may be Emily or Edith Hughes who edited *Selections*, and were the daughters of William R. Hughes). What is clear, however, is that this notebook accompanied a set of concurrent letters, and may well have been used in the preparation of *Humanism versus Theism* for publication.

Lewins’s letters sought to convince Naden to adopt his philosophical stance, and their later publication shared this intent on a larger scale. Lewins drew on sources from philosophy, science, and art to make a convincing argument for what he originally called Hylo-Zoism. His

³³ Hughes informs us that Naden also selected the letters to be included in the pamphlet (*Memoir* 76).

letters are rife with jargon and obscure phrases, such as ‘apodeixis’, ‘Sacerdotalism’, and ‘palingenesia’ (*HvT* 14, 22, 32), but these do not appear in Naden’s *Notebook*.³⁴ This implies that she was not blithely subscribing to Lewins’s system of beliefs, but rather engaging critically with the ideas she was communicating with him about. Furthermore, Naden does not comment extensively upon other writers, whether philosophers, scientists, or poets; though *Notebook* is not without such references it nevertheless contrasts with the frequent quotations in Lewins’s letters and Naden’s own published works. The sixty-five entries, ranging from a couple of sentences to a few pages in length, therefore record Naden’s private process of working through ideas developed in conversation with Lewins rather than documenting a straightforward adoption of his doctrine.

Naden later reflected upon this process in ‘Philosophical Tracts: Introduction’: ‘It is just as possible to be “converted” by a rational ideal as a mystical one, and the conversion brings with it the same sense of new joy, new strength, and new life. This is a matter not of theory, but of actual experience.’ (*FR* 140). Birch argues that this rhetoric, which is fundamental to *Humanism Versus Theism*, suggests that Naden ‘required some persuasion’ to renounce religion:

[Lewins] speaks in biblical metaphors and assures her that he also experiences ‘that sense of indwelling divinity, without which you say you could not live’ (*[HvT]* 31) but that his spiritual moments occur ‘in places like Kew Gardens and Natural History museums’ (*[HvT]* 13).³⁵

³⁴ There is some evidence that Naden found such rhetoric intimidating, entry 102 concluding: ‘it is exquisite delight to the man of abstract thought if he finds but one cognate & sympathetic mind, into which he can grow his own. No wonder if he over estimates the qualities, mental & moral, of this one congenial friend.’ (*N78-9* 25). One interpretation is that Naden lacked confidence in her ability to discuss ideas with Lewins. This self-doubt was not previously observable, and while surprising in the wider context of her work is less so if we consider the impact on an intelligent but not highly-educated woman of being subjected to a large volume of letters from the often bombastic Lewins. *Notebook* therefore offers an insight into Naden’s personal growth in parallel with her intellectual development.

³⁵ Birch, pp. 47-48.

This overstates the matter, since Lewins appeals to the rational side of Naden's Unitarian upbringing that acknowledges the Bible to be a fallible text which must be read critically. As such, he reiterates how his idealist-materialist philosophy 'realises Christ's sublime dictum: "The kingdom of heaven is within you"', in the knowledge that subverting this piece of holy writ by aligning it with 'the article in this quarter's *Edinburgh Review* on "Mental Physiology"' will not offend her (*HvT* 23; repeated in substance 22 and 31-32). Naden writes that:

This is the sublime & eternal Unity, ~~of which Pantheists dreamt, whereof the dreamt~~ of by Pantheists, sought by Mystics, dimly apprehended by the greatest thinkers of all ages. This is the perfect reconciliation of Materialism & Idealism, of Reason & Intuition, of Free-will & Necessity. (*N78-9* 8)

This falls in the right place in *Notebook* to suggest that it formed the substance of Naden's letter that preceded Lewins's correspondence dated 29 January 1879, since Lewins concludes 'As you say, everything in heaven and earth and in ourselves proves this sublime unity, thus discrediting duality or trinity' (*HvT* 22). Naden's notebook entries therefore indicate that corresponding with Lewins gave her an outlet for discussing beliefs she had already begun to form, Hylo-Zoism principally appealing to ideas rooted in her anti-Trinitarian, rational upbringing.

Lewins's letters to Naden emphasised the poetic beauty and awe inherent in a scientific understanding of the universe. On 29 January 1879 he wrote, 'Does it not make you tremble with awe to feel that in every drop of water – in every tear you shed – there is electricity enough locked up to form a considerable thunder-clap and lightning flash[?]' (*HvT* 22).

Lewins's quasi-religious phrasing is suggestive of the way science was pitched as replacing theistic approaches to unity, knowledge, and inspiration. Upon rejecting religion Naden cast

off the unifying force of God as creator of everything in the heavens and on Earth. She rejects this on the basis of reason, stating candidly in *Notebook* that ‘when our reason contradicts our belief, faith becomes a crime’, ‘I am repelled by what I feel to be [Christianity’s] injustice and cruelty. [...] This conscientious use of reason is in itself a virtue, & one which is not recognised in the Scriptures’ (*N78-9* 60, 62-63). Taking religion’s place is science. While, as Alice Jenkins has described, many early nineteenth-century scientists were interested in seeking universal laws as a way of ‘bring[ing] humanity closer to the divine mind’, for Naden the idea of natural unity was fundamentally based upon overturning this association between scientific endeavour and religious adherence.³⁶

During this period Naden convinced Lewins that the term Hylo-Idealism was more appropriate than Hylo-Zoism, and the two continued to develop this philosophy during the 1880s. The central tenets of Hylo-Idealism are a rejection of dualism (and therefore the tenability of religion) and the conviction that our universe can be explained by reconciling relative idealism and materialism. The view that ‘our mental powers are correlated with material forces’ (*FR* 124) entailed a rationalist perspective that appealed to Naden’s scientific sensibilities, while the idea that ‘man is the maker of his own Cosmos’ (*I&D* 157) corresponded with her secular idealist beliefs. For much of the 1880s Naden therefore called herself a Hylo-Idealist, and sought to propound this new doctrine alongside Lewins and a handful of others. In the final years of Naden’s life, however, she no longer felt beholden to this creed, and the phrase falls out of usage in her publications. There are two conversations to be traced across Naden’s writing life: one that arises from her engagement with religious thinkers and the freethought movement, the other from her responses to canonical and

³⁶ Jenkins, *Space*, p. 98.

contemporary philosophers. Although these discourses overlap in places, each caused Naden's philosophy to develop in different ways under the auspices of Hylo-Idealism and beyond.

The Path to Freethought

Naden's dialogue with religion from 1878 onwards is principally interrogative and derives from a position of unbelief. The clearest rejection of her Nonconformist upbringing appears in the unpublished *Notebook*. In the concluding part of entry 138, from the summer of 1879, she states:

In the cases of the immortality of the soul, desires are mistaken for instincts, & the simple longing for life is taken as proof ~~that it will~~ of its the necessity of its own gratification. The Atonement, Salvation by Faith, Prayer, the Punishment of Unbelief by tortures after death, the idea of a Personal & yet Infinite God, are some of the insurmountable objections to the acceptance of Christianity. Whatever may be the proofs of a religion which contains doctrines like these, it must be rejected. If Xtianity is rejected, there remains no proof of the existence of spirit as distinct from matter, while there are overwhelming proofs of the opposite theory. If it is unphilosophical to deny the existence of spirit, it is also unphilosophical to deny that of fairies & ghosts, & pre-eminently unphilosophical, – nay, absurd – to refuse the possession of spirit to the lower animals & to vegetables, which possess vitality. Nay, every particle of matter possesses inherent vitality. (N78-9 66-67)

This tearing down of the principles of Christianity is something for which there is no analogue in Naden's published works, despite later writing for outspoken freethinking periodicals such as *The Agnostic*. On this basis Naden makes two distinct logical deductions about the non-existence of spirit; firstly, that believing in the soul is equivalent to believing in supernatural manifestations that are dismissed as superstitions, and secondly, that there is no good case to be made for human exceptionalism if we are to consider the soul as equivalent to life force. Naden's focus on the existence of the spirit is telling, since it revolves around the

question of what is observable; she requires proof to be scientifically and rationally verifiable, not founded upon belief.

Naden's attack on religious assumptions is supplemented by an addendum, apparently inserted some time after the above was finished since the part in parenthesis is squashed into the margins:

Spoke to S. Rogers^X on the subject June 12th. Had previously spoken to Clara (X I wrote a letter to him also, for the return of which I might ask, if I wished to imitate his behaviour! though it was of course purely argumentative. He was very much pleased & thanked me for "the spirit in which it was written." He told me that the rejection of Xtianity would ruin his moral character, but he was quite sure it could not possibly have any bad effect upon mine; from his p[oin]t of view the highest comp[lemen]t[†]he c[oul]d have paid me.) (N78-9 67)

The meaning of this note is not entirely clear because Naden's relationship with 'S. Rogers' is not certain, although it is likely that she is referring to Showell Rogers (1855-1899), a Birmingham solicitor who attended her funeral with his brother Ernest (*Memoir* 64).³⁷ The tone and context of his comment are debatable, but indicate that Naden was aware of the incendiary nature of her atheistic statements. While Rogers may be assured that such beliefs would not spoil her moral character (whether because he deemed it beyond reproach or retrieval), his comment implies that a published declaration would have a negative impact upon her public image. An alternative reading would be that Rogers is less sure that he can rely on 'the oracle of our own conscience, when we would know if an action be right or

³⁷ Hughes recalls that a Sociological Society excursion was cancelled in October 1889 'to the disappointment of many, as [Naden's] friend, Dr. Showell Rogers, had promised to read an interesting paper' (*Memoir* 54). Rogers studied Classics at Cambridge between 1873 and 1877, and went on to receive an LLM and LLD before returning to Birmingham to practice. After his death in 1899 his friend J. Cuming Walters published a collection of Rogers's poetry, 'Christmas Greetings and Other Verses' (Birmingham: Cornish Brothers, 1902). Intriguingly, reference is made in Ernest's diary to an unidentified 'Clara'. Clare College, Cambridge, 'Christmas Greetings' (December 2011) <<http://www.clare.cam.ac.uk/December-2011/>> [accessed 18 September 2016].

wrong' (N78-9 73) than Naden professes to be, leaving him unsure about her argument that the Bible is obsolete. Rogers thus plays into the hands of his contemporaries who opposed the freethought movement partially on the grounds of the immorality that, they argued, would ensue were atheism to take hold in society. Both interpretations nevertheless highlight the fraught distinction between public and private statements of belief and unbelief, and the resultant effect upon Naden's declarations of her own freethinking philosophy.

The radicalism of Naden's *Notebook* does not clearly translate into *Songs and Sonnets*, the poems for which were being written from 1875 onwards. Nonetheless, her transition from Nonconformist to atheist is visible in her subversion of religious figures and tropes in these poems. A mid-point for Naden was pantheism; natural diurnal and seasonal cycles provided an observable basis from which to develop her materialist beliefs. 'The Pantheist's Song of Immortality' explores this most overtly, and was (according to *Mason College Magazine's* review of *Selections*) 'probably the best known of her poetical works'.³⁸ William Mander observes that pantheism 'is not a single codifiable position'; while religiously-inclined pantheists subscribe to 'the view that God is identical with the cosmos', for others including Naden the 'deep reverence for and sense of identity with the world in which we find ourselves' engenders an agnostic attitude.³⁹ Naden is not seeking God in nature but rather the eternal essence or energy that runs through all life. Indeed, Martin Priestman, writing in reference to Wordsworth, argues 'that we are in danger of forgetting how crucial the substitution of "Nature" for "God" was in atheist discourse'.⁴⁰ An entry positioned between the two drafts of this poem indicates that Naden was equivocal about this stance: 'Pantheism

³⁸ 'Review'.

³⁹ William Mander, 'Pantheism', *The Stanford Encyclopedia of Philosophy* (2016), ed. by Edward N. Zalta <<http://plato.stanford.edu/entries/pantheism/>> [accessed 21 September 2016].

⁴⁰ Priestman, p. 156.

is the only possible theology for us; indeed no theology, properly so called, is possible.’ (N78-9 34). This corresponds with Michael P. Levine’s view of pantheism as neither theism or atheism, but rather ‘non-theistic monotheism, or non-personal theism’.⁴¹ It is therefore a natural stage between Naden’s Unitarianism and later atheism, one that emphasises unity through the identification of ourselves with the world we inhabit.

In ‘The Pantheist’s Song of Immortality’ life force is an ‘uncreated Source’ that ‘Through everlasting change abides the same’ (CPW 44, l. 32). Naden describes death as ‘unconscious Life, that waits for birth’ (CPW 43, l. 14), invoking material decomposition and the natural transfer of energy. This is not Revelation as taught by the Bible, or even reincarnation, but renewal. Naden thus reassures us that an agnostic life does not condemn one to a futile existence. She emphasises that even if we are no longer remembered by the living, ‘earth is not as though thou ne’er hadst been’ for every ‘wavelet [...] / Has changed for evermore the river bed’ (CPW 44, ll. 24, 27-28). Furthermore, in the final stanzas Naden shifts her focus onto the ‘almighty forces’ of the universe, which while material – ‘They hold the suns in their eternal courses’ – also have a spiritual quality, the concluding call to ‘Rejoice in thine imperishable being, / One with the Essence of the boundless world’ implying an individual permanence (CPW 44, 45, ll. 33, 35, 39-40).

Naden’s *Notebook* provides an opportunity to contextualise and analyse the development of ‘The Pantheist’s Song of Immortality’ in a manner not possible for any other piece of Naden’s work. There are two drafts that date from March 1879, and neither match the final published version, since they are missing what would become stanzas four, five, and seven. The clearest

⁴¹ Michael P. Levine, *Pantheism: A Non-Theistic Concept of Deity* (London: Routledge, 1994), p. 3.

textual developments are, however, most clearly observable in what was to be stanza eight in

Songs and Sonnets:

Ah, wherefore grieve, although the form & fashion
Of what thou ~~art~~ seemest, like these ~~white~~ flowers must fade?
The workings of the knowledge & thy passion
Through all eternity shall not be stayed. (*N78-9* 28, ll. 13-16)

Ah, wherefore grieve, although the form & fashion
Of what thou seemest, fades like sunset flame?
The uncreated source of toil and passion,
Through everlasting change abides the same. (*N78-9* 36, ll. 21-24)

Ah, wherefore weep, although the form and fashion
Of what thou seemest, fades like sunset flame?
The uncreated Source of toil and passion,
Through everlasting change abides the same. (*CPW* 44, ll. 29-32)

The cyclical ‘fades like sunset flame’ is absent in the earliest draft, the alternative phrasing being ‘like these flowers must fade’. Naden therefore shifts the imagery from evoking the biological cycle of plant life and death (which is closer to the physical reality of our own bodies) to a simile predicated upon the sun’s eternal cycle. And yet instead of providing a comforting image of renewal there is an apocalyptic undertone to the sun fading, rather than setting, undermining that in which we place so much faith. The third and fourth lines of this stanza also change between the two drafts, with the second version sharing the lines of the published poem. The earlier draft does not speak to changeful yet changeless nature in the same way, offering a more overtly atheist perspective. Furthermore, ‘Source’ is only capitalised in the published poem; this choice reflects much Victorian agnostic writing that transforms an uncountable noun into a proper noun to suggest some adherence to a deity figure, a notable contemporary example being Herbert Spencer’s ‘Unknown’. This redrafting process is indicative of Naden’s rapidly shifting views regarding different theological and

philosophical positions, and makes tangible her assertion that writing was an essential part of her thought process, ideas inevitably ‘developing as one writes’ and redrafts (*Memoir* 48).

Pantheism is articulated more abstractly in the poems in the second half of *Songs and Sonnets*, her ‘Year in Sonnets’ cycle documenting the themes of energy in dormancy and life in death through the seasons. Reading these sonnets in conjunction with ‘The Pantheist’s Song of Immortality’ allows us to see past what might be read as Romantic tropes that find God’s work in nature or as markers of the natural religion of Unitarianism. We find instead a focus on terrestrial and celestial cycles that emphasises the material unity of energy that can neither be created nor destroyed. These nature sonnets can therefore be read in a more radical way than it might first appear.

‘Sunshine’ employs religious vocabulary and yet sunlight is the object of this fervour, not representative of a higher power:

Come, tender sunlight of the spring, and shine
Through all my thoughts; my inmost being fill,
Teaching my heart to glow, and yet be still,
With that victorious quiet which is thine.
Oh that my hand had cunning to combine
The tints wherewith thou robest copse and hill!
But I, so rich in love, am poor in skill,
And praise fair Truth, yet may not build her shrine.

But every spirit, worshipping aright,
Must glory in the gifts that others bring;
So would I triumph – not as one apart,
But with the kindred throng who love the light,
Joying in beauty that transcends my art,
And mutely dreaming notes I cannot sing. (*CPW* 118)

Light is paired with truth, gesturing towards the etymologies of terms such as enlightenment and revelation. Naden also reflexively considers the ability of art to reflect the natural world, touching upon the achievements of painter, poet, and musician. The concluding line speaks of a failure to capture the transcendent beauty of sunlight; within these *Songs and Sonnets* Naden admits that there are some notes she ‘cannot sing’ (l. 14) and can only be gestured towards. However, the repeated emphasis placed upon ‘my’ and ‘I’ throughout this sonnet implies that a shared unity of expression – poetry as a whole rather than Naden’s singular poetic voice – might aspire more fully to achieve this.⁴² As Naden recognises, the appreciation of the sun as giver of light and life (both literally and figuratively) is not new or unique: she is ‘not as one apart, / But with the kindred throng who love the light’ (ll. 11-12). Sun worship does, however, form the basis of an interdisciplinary philosophy that identifies how unifying concepts such as light are at the heart of scientific, philosophical, and artistic conceptions of the world.

Pantheistic ideas may also be identified in ‘September, 1880’, as Naden adopts and subverts Christian imagery, applying it to the natural world in a manner that suggests her developing agnostic reverence for the material universe’s power. The forces of nature figure here as the sole stimuli for change, growth, and renewal:

To still September comes a dream of joy:
The breath of dying roses in the calm
And sultry air, seems changed to hyacinth-balm;
Fresh beams and breezes waken, such as toy
With amorous wind-flowers and May-lilies coy:
Raise, oh ye birds, a wild conjubilant psalm!
Autumn has reached the goal, has gained the palm,

⁴² Her concentrated use of the first person in this sonnet is unusual. In Chapter Four I discuss Naden’s wariness of adopting the lyric ‘I’; the decision to embrace it in ‘Sunshine’ is therefore indicative of her desire to distinguish between what she can accomplish through poetry and the achievements and socio-cultural importance of poetry as a whole.

And Winter comes not surely to destroy.

Nay, prosperous Autumn! not for thee shall ope
 May's blossoms; nor for thy dull ear shall sing
Her choir of birds; thine own winds whirl away
Thy golden vapours, and thy rich decay,
 Till Winter come, stern pioneer of Spring,
Renewing Earth by terror and by hope. (*CPW* 123)

Naden's dismissal of Christian faith is introduced by her description of bird-song in the octave: 'Raise, oh ye birds, a wild conjubillant psalm!' (l. 6). Thus she bestows natural sounds with quasi-religious meaning and renders a sacred verse secular. The phrase 'choir of birds' (l. 11) emphasises this reading; nature's springtime song that heralds rebirth takes the place of an angelic, heavenly choir. In the final two lines the conventional secular figure of Old Man Winter becomes explicitly God-like by recalling both the 'terror' of the Old Testament and the 'hope' of the New Testament (l. 14). Divine attributes are thus embodied by natural cycles. In this sonnet the physical world becomes, somewhat obliquely, Naden's holy book; without explicitly stating her rejection of religion she demonstrates how Nonconformism has given way to a pantheistic agnosticism through which it is the psalms of the birds, not the Bible, that resonate most strongly.

Elsewhere Naden uses the voices of religious figures to test the boundaries of theology, the framing of doubt, and the potential for unbelief. The blinding light with which 'Semele' concludes indicates that the desire for knowledge cannot be satisfied by simply looking, one must be able to understand and assimilate what has been revealed:

[...] Dispel the haze
 That shields too tenderly my mortal sight:
 If life be darkness, let it cease in light (*CPW* 137, ll. 12-14)

George Levine writes that the acquisition of ultimate knowledge has long been equated with death, and explores this at length in *Dying to Know: Scientific Epistemology and Narrative in Victorian England* (2010). This idea, he holds, is evident in the Christian tradition of revelation, but is also central to narratives of self-renunciation that pervade much nineteenth-century writing on the practice of science.⁴³ It is this dual meaning that Naden navigates in her poem. Semele is not a scientist, but nor is she a Christian; rather she is characterised by the desire to attain truth through whatever means necessary. The religious connotations of unobtainable divine knowledge are rejected as the tools for understanding are acquired, enabling us to improve the human condition and strive towards higher knowledge. Fundamentally this is what the freethought movement, and their attendant promotion of science, hoped to accomplish.

Naden was not content to proffer alternatives to orthodox religion in her poetry, however – she also tests received ideas through subversive characterisations of religious figures, undermining their devotion and introducing doubt. In ‘The Carmelite Nun’ Naden does this by describing the unhappiness that overwhelms the nun as she struggles to commune with God. The forty-line monologue is performed from within a ‘lonely cell’ (*CPW* 23, l. 18) which, although the name given to any small room in a convent, evokes the nun’s physical and psychological imprisonment by orthodox religion and her consequent separation from the natural world. That Naden specifically identifies the nun as Carmelite, a mendicant (begging) order, is pertinent to the poem’s climactic quatrain, a prayer for revelation in which the nun begs:

Oh, for the vision of the Master’s face!

⁴³ George Levine, *Dying to Know: Scientific Epistemology and Narrative in Victorian England* (Chicago: University of Chicago Press, 2010), p. 3.

Oh, for the music of the heavenly throng!
I have but lived on earth a little space,
And yet I cry, 'How long, O Lord, how long?' (*CPW* 24, ll. 37-40).

It is an urge towards pantheism that undermines the nun's faith – 'Too dear I held each earthly sight and sound' (*CPW* 22, ll. 13) – the physicality of nature causing a theological crisis.

Naden emphasises the contradiction in what the nun has been taught to believe: 'Yet why, O Lord, were earth and sky so bright, / Winning the soul that in Thyself should dwell?' (*CPW* 23, ll. 19-20). Furthermore, Naden's nun confesses that this is not her true calling, for 'when I prayed to Him I had not found, / I called Him in my heart "the mountains' King."' (*CPW* 22, ll. 15-16). Her desire to replace this pantheistic reverence with an orthodox vision of God is left unrequited, and indicates the problem with a society that touts both faith and reason as positive values.

'The Abbot' is a companion piece to this poem, as Naden again highlights hypocrisy within a religious institution without condemning the individual. She describes in eleven quatrains the implications of physical love for a person who has dedicated their life to the spiritual, telling the story of an elderly abbot who has a long-held secret, signified by a lock of hair that has not lost its lustre despite years of wearing:

What saw they on that wasted breast
That gleamed so golden gay?

No shining cross, no image fair,
Those eager brethren found;
Only a tress of golden hair,
With a black ribbon bound. (*CPW* 74, ll. 19-24)

It brings about a different kind of enlightenment for the abbot (who by holding on to this personal relic acknowledges his true self) and those around his deathbed, to whom the truth is

revealed. Naden therefore emphasises the strength of human nature; religion cannot forestall physical urges and we cannot transcend our material being. This poem does not take the mocking tone that characterises much freethought writing (and materialises in Naden's later poem 'The Priest's Warning'); its force comes from the recognition that the abbot's life is symbolised not by religious light but a gleaming secular subversion. Naden thus undermines readers' assumptions about religion while maintaining a sympathetic portrayal, rendering the nun and abbot more human, more familiar. By doing so Naden obliges the reader to reconsider any condemnation of religious doubt and unorthodox beliefs by acknowledging the permeable boundaries between divine inspiration, pantheistic reverence, secular passion, and scientific awe. This position lays the foundations for Naden's more radical pronouncements in her essays that reject religion and explicitly promote freethought.

In 1883 Naden was interested in the implications of pantheism, stating in *What is Religion?* that it arises from 'the instinctive poetry of primitive minds':

Sun and rain are translated by imagination into smiles and tears; the glow of summer and the gloom of winter seem to express the joy and grief of the world-spirit. Man sees himself mirrored in nature, and bows down before his own image, which seems to respond to his devotion.⁴⁴

This echoes the rhetoric of Naden's 'Year in Sonnets' cycle. She ultimately rejects pantheism, however, asserting that while the 'sublime thinkers' of every age 'all found in Pantheism their spiritual home' it is not tenable because it 'is but the mystical converse of Materialism' (*WR* 19). This marks the transition in *What is Religion?* from a historical overview of faith in

⁴⁴ C.N., *What is Religion? A Vindication of Freethought*, annotated by Robert Lewins (London: W. Stewart, 1883), p. 18. For the purposes of this section, which discusses the publication of *What is Religion? A Vindication of Freethought*, I provide references to the 1883 pamphlet, which includes the appendices, hereafter cited parenthetically as *WR*. The full text of the essay (including Lewins's annotations) is reprinted in *FR* as 'What is Religion? A Vindication of Neo-Materialism', pp. 102-33.

society to an analysis of the function of physical science and materialism. In the remaining pages she demonstrates how reason undermines religion, necessitating the adoption of secularism. Naden aims to answer the titular question and explain society's dislike of atheism with anthropology and philosophy, reasoning that by understanding why this is the *status quo* the grounds for rejecting atheism can be assessed critically and rejected as irrational.

What is Religion?, 'By C. N. Annotated by Robert Lewins, M.D.', was published with an appendix of short essays on the subject of Hylo-Idealism. The publisher was well known for supporting freethinking authors since it was owned by W. Stewart Ross, editor of prominent agnostic periodical the *Secular Review*.⁴⁵ Naden maintained a professional connection with Ross by publishing *Humanism versus Theism* with his Freethought Publishing Company in 1887 and contributing three essays between 1885 and 1889 to the *Agnostic Annual* under his editorship. The role of Naden and Lewins within the freethought movement has largely been overlooked by historians, save for J. M. Robertson's brief references in *A History of Freethought in the Nineteenth Century*, which indicate their definite, though peripheral, role.⁴⁶ While Thain has discussed the importance of freethought to Naden, she does not develop upon this by placing her Hylo-Idealist writing in the context of the movement's publications.⁴⁷ Upon doing so the impact of such works' rhetoric on Naden's approach becomes apparent. In *What is Religion?* she references Charles Bradlaugh in relation to 'the conventional dislike of atheism' (*WR* 8); he was well known for having been elected as MP for Northampton in 1880 but denied his seat until 1886 as a result of his refusal to take his

⁴⁵ Moore, 'Constance Naden and Hylo-Idealism', pp. 242-43.

⁴⁶ J. M. Robertson, *A History of Freethought in the Nineteenth Century* (London: Watts, 1929), pp. 393, 435.

⁴⁷ Thain, 'Scientific Wooing', p. 154.

oath on the Bible.⁴⁸ Perhaps surprisingly, Naden argues that the situation demonstrates how late nineteenth-century Britain can be characterised as ‘a nation of practical secularists [who] can tolerate passive religion better than active atheism’ (*WR* 7). Indeed, she berates those who equivocate upon religious issues, railing against the agnosticism that characterises her 1881 poems as well as notable figures, such as Matthew Arnold, who chose not to make the final steps towards professed atheism: ‘highly-praised Agnostic thinkers, who [...] cast, wistfully, regretful glances upon what they deem “a creed outworn,” instead of filling eyes and heart with the glory of ascertained truth, should not be commended for their faltering testimony’ (*WR* 31).⁴⁹

Naden was concerned with making her ideas accessible, her analogies and examples lending themselves to this explanatory technique because they are familiar to the vast majority of individuals. Naden is thus teacher and expositor, favouring simplicity over complex vocabulary and rhetorical flourishes. This recalls the style of other freethinkers and contrasts with that of her fellow Hylo-Idealists who complicate rather than simplify, confounding much of their readership. Essays by G. W. Foote, Annie Besant, and Bradlaugh appeal to reason and set out to support learning through the forthrightness of their approach. Foote is particularly clear in this regard, stating in ‘The Gospel of Freethought’ that ‘Real Freethought is impossible without education. [...] Knowledge is power’.⁵⁰ Indeed *The Freethinker* (a journal that gained notoriety due to blasphemy cases against Foote and Bradlaugh) tended to print

⁴⁸ See Joss Marsh, *Word Crimes: Blasphemy, Culture, and Literature in Nineteenth-Century England* (Chicago: University of Chicago Press, 1998) for an extended discussion of this case, in particular pp. 132-35.

⁴⁹ ‘a creed outworn’ is a quotation from Wordsworth’s ‘The World is Too Much With Us’, *The Major Works*, p. 270 (l. 10).

⁵⁰ G. W. Foote, *Flowers of Freethought* (London: A. Forder, 1893), p. 102; reprinted in *Atheism in Britain*, ed. by David Berman, 5 vols (Bristol: Thoemmes Press, 1996), V.

aphorisms instead of extended philosophical analysis. This hallmark of freethought writing therefore associates Naden more closely with what David Berman has called the ‘militant’ (rather than ‘academic’) strand of atheism that grew during the Victorian period.⁵¹

The freethought movement revered the light of reason, co-opting metaphors of enlightenment and revelation from theology. Particularly common is an appeal to the sun’s liminal position between light and Lord. This was not a new observation and Christian texts regularly make the connection to illustrate Christ’s position as bringer of light and life. When it appears in an essay such as Foote’s ‘The Rising Sun’, however, it becomes a tool for undermining the basis of Christianity, drawing out sun worship’s ‘heathen’ beginnings and asserting that ‘the Rising Sun will outlast the Rising Son. The latter is gradually, but very surely, perishing’.⁵² The view that belief is the equivalent of opening up oneself to divine light is also regularly undermined.

Besant’s polemical *On the Nature and Existence of God* begins:

reason may force us to see contradictions where we had imagined harmony, and may open up our eyes to flaws where we had dreamed of perfection; [...] But every step we take outwards towards a more reasonable faith and a surer light of Truth leads us nearer and nearer to the problem of problems, ‘What is THAT which men call God?’⁵³

The symbolism of opening one’s eyes to truth echoes across Naden’s work, for example in this equally polemic statement from *Notebook*:

But woe to him who shuts his eyes against the light, because its white radiance shows as illusions, what he dreamt were realities! He who wars with the Inevitable must be crushed, & the voice that cries out against Truth will be silenced. (N78-9 11)

⁵¹ David Berman, *A History of Atheism in Britain: From Hobbes to Russell* (Kent: Croom Helm, 1988), p. 212.

⁵² Foote, pp. 139, 140.

⁵³ Annie Besant, *On the Nature and Existence of God* (London: Thomas Scott, 1875), p. 1; reprinted in *Atheism in Britain*, V.

Another striking instance of Naden employing this rhetoric is her translation of ‘The Better World’ by Austrian poet Hieronymus Lorm.⁵⁴ The second of its two stanzas encapsulates the tension between reason and religion fundamental to Naden’s approach to knowledge.

Religion, in deep midnight furled,
A better World but prophesies;
Reason, with clear and open eyes,
Is in itself a better World. (*CPW* 172, ll. 5-8)⁵⁵

This is the only translation included in *Complete Poetical Works* that was not published in her lifetime, and I contend that the resonance of this Lorm poem with Naden’s philosophical perspective is the reason for its presence.⁵⁶ Significantly Naden secularises the final lines of Lorm’s poem by translating ‘Der Geist’ (literally, ‘the spirit’) as ‘Reason’. The idea that religion is darkness and reason brings us closer to the light of truth is an enduring feature of Naden’s later rhetorical approach, and it is persuasive because, following the lead of more prominent freethinkers, it appropriates and inverts the language of religion that saturated nineteenth-century British culture.

This vocabulary and imagery reappears with particular vigour in ‘The Priest’s Warning’, a poem that demonstrates Naden’s awareness of a freethought audience’s expectations.

Published in *The Agnostic* in 1885, and only collected in the *Complete Poetical Works*, this seventy-six-line poem greatly contrasts with her other dramatic monologues in both form and

⁵⁴ Pseudonym of Heinrich Landesmann (1821-1902), lyric poet and philosophical writer.

⁵⁵ An almost contemporary translation that is more faithful to the original German runs: ‘Belief, night-shrouded, scarce awake, / A better life can only hope; / The Soul, whose clear eyes widely ope, / A better world itself can make.’ Henry Phillips, *German Lyrics* (1892; London: Forgotten Books, 2013), pp. 82-83.

⁵⁶ There are thirty-four unpublished translations of French and German poems in *Poems 1875* and *Poems 1875-6-7*, and likely many more that are not extant. ‘A Better World’ is presumably from the earlier part of her writing career because Lewins inserts it between the poems of *Songs and Sonnets* and *Modern Apostle* (rather than at the end of the collected volume with the other three additions).

tone.⁵⁷ Rather than highlighting the internal conflicts and contradictions of religious figures as in ‘The Carmelite Nun’ and ‘The Abbot’, it is a remarkably scathing satirical attack that, for Naden, is uniquely vitriolic. In it she champions, in the words of G. H. Holyoake, the right to ‘the unrestricted application of the powers of the intellect to any subject [and] the absence of any threat or penalty, legal, spiritual, or social for the exercise of thought.’⁵⁸

The poem’s sentiments parallel those of *What is Religion?*, in which Naden questions the ‘relation of genuine faith to genuine reason’ and asks ‘whether a Christian can consistently regard the latter as the judge of revelation. [Since w]ithout such freedom he is obviously forbidden to investigate the highest problems accessible to the intellect of man’ (*WR* 9). In ‘The Priest’s Warning’ she criticises Christianity by highlighting the inconsistency of exulting in the world God created whilst teaching adherents to ‘close in shame thine eyes, / [...] / Lest haply thou shouldst see – and disbelieve’ (*CPW* 356, ll. 5-8). Naden writes the poem as a polemical attack upon the reader of *The Agnostic* by the priest. The hyperbolic nature of the address to the reader – for example ‘Thou, by unhallowed thirst for truth consumed / With thieves, and cheats, and liars shalt be doomed’ (*CPW* 357, ll. 43-44) – satirises the degree of public animosity faced by freethinkers.⁵⁹ The poem is a travesty of religion, taking the Biblical proverb ‘if thine eye offend thee, pluck it out’ (Mark 9. 47) and exaggerating it:

Better be deaf and blind than leave the Church.
Pluck out thine eyes, lest they should see too clear;
And lest thine ears mislead thee, cease to hear.
Better, a sightless cripple, save thy soul,

⁵⁷ C. N., ‘The Priest’s Warning’, *The Agnostic* 1, February 1885, pp. 69-70.

⁵⁸ George Jacob Holyoake, ‘Secularism’, quoted in Charles William Stubbs, *Christ and Free-thought, an Address to Secularists* (London: Frederick Verinder, 1883), p. 9.

⁵⁹ For an understanding of the verbal, and sometimes physical, abuse faced by freethinkers who actively spoke out against religion see, for example, Annie Besant’s *Autobiographical Sketches*: ‘Mr. Bradlaugh lectured [in Congleton in 1875] to an accompaniment of broken windows; I was sitting [...] in front of the platform, and received a rather heavy blow at the back of the head from a stone thrown by someone in the room.’ (London: Freethought Publishing Company, 1885), p. 102.

Than enter fires of hell, though sound and whole. (*CPW* 358, ll. 56-60)

By lampooning the rhetoric of the Church, Naden questions the logic of an ideology that seems to warn against using the faculties that it teaches are God given. Furthermore, its repeated reference to eyes and seeing pick up on the strained discourse surrounding secular and religious revelation, enlightenment, and the search for truth. The closing threat – “[‘]Wilt thou be free? then Christ is not thy Lord: / Wilt thou be true? let Hell be thy reward!” (*CPW* 359, ll. 75-76) – paradoxically encourages a rejection of orthodox religion and extols the virtues of being free and true to one’s enquiring eyes and mind.

A later poem, ‘Resipiscentia’, explores the conflicts between and within individuals as a result of their search for religious and philosophical contentment. Constructed as a discussion between voices, the conversational structure echoes Bradlaugh’s *Doubts in Dialogue*, which were printed in the *National Reformer* throughout the 1880s. Bradlaugh’s dialogues sought to undermine theological positions by exposing their illogical foundations, for example an ‘Unbeliever’ presses a ‘Christian Priest’ to explain why they believe that ‘God, having blinded my eyes, will forgive me if I repent that I have not seen, and if I will believe that I see when I do not?’⁶⁰ Naden’s poem comprising of twenty-two quatrains strikes a less combative tone, naming the interlocutors ‘First Voice’ (V1), ‘Second Voice’ (V2), and ‘Third Voice’ (V3) to give them a universal quality, and employing an iambic meter to suggest naturalistic conversation. It articulates the tension between theistic and secular thought, V1 being counselled by V2 and V3 about how to overcome their pessimistic understanding of sin as a

⁶⁰ Charles Bradlaugh, *Doubts in Dialogue* (London: A. & H. Bradlaugh Bonner, 1891), p. 11; reprinted in *Atheism in Britain*, V.

‘virus’ that is inescapable even if one repents. V2 is a born-again Christian whose moment of revelation came when upon uttering

[...] an unbelieving prayer,
Half blasphemous, half mad – straight there shone
Into my soul’s despair

A strange, pure light [...] (*CPW* 291, ll. 6-9)

V2’s advice is to follow this example of repentance. V3 adheres to a rational freethinking philosophy, however, arguing that having a ‘free mind, and insight keen’ means one need not commune with God to be redeemed because a scientific understanding of cell death and renewal means ‘Daily thy tissues die – are born afresh’ (*CPW* 295, ll. 74, 77). Thus Naden undermines the religious view of external redemption, replacing it with ‘insight’ that is active and rational.

What is Religion? was Naden’s first public expression of her alliance with freethought, and it is here that she most clearly discusses her position on religion and atheism, although the movement informs her whole corpus.⁶¹ While Hylo-Idealism is referenced towards the end of the essay, it is principally brought to the reader’s attention via Lewins’s footnotes and appendices such as ‘Hylo-Idealism; or the Egoistic Theorem of Mind and Matter’ (*WR* 38-44). This implies that Naden was more interested in discussing the repercussions of faith and freethought on a grand scale than dogmatically converting her readership to Hylo-Idealism.⁶² Hylo-Idealism is an overtly atheist philosophy, attracting negative responses such as that from *Knowledge*’s editor in the ‘Letters Received and Short Answers’ column:

⁶¹ By publishing the pamphlet under the initials ‘C. N.’, however, Naden kept her connection somewhat hidden; the pamphlet was not explicitly attributed to her until its publication in *Further Reliques* (1891).

⁶² This is a trait that was acknowledged by her friends, for example Hughes refers to Naden sharing her mother’s ‘impatience of dogmatism’ (*Memoir* 13).

DR. LEWINS. You compel me to speak plainly. [...] If I were to favour my readers weekly with columns of declamation in favour of Atheism pure and simple, I should speedily have so very limited a number of such readers as to render the paper a ruinous loss to its proprietors, which I could assuredly plea no justification for doing.⁶³

And yet, Naden's arguments against the trappings of religion and for the freedom of rational atheism are not predicated on an investment in Hylo-Idealism. As a result, she does not debate with the increasingly exasperated editor of *Knowledge*, instead focusing on publishing further articles and letters that maintain the scientific agenda specified by the periodical. Her ability to avoid much confrontation by focusing on the ways science informs her broader atheistic philosophical stance demonstrates both her awareness of audience expectations and her discomfort with adhering dogmatically to a single creed.

A Synthetic Philosophy

Naden's philosophical essays are informed by an impressive breadth and depth of reading, but her argument relies on the persuasiveness of her philosophical synthesis and supporting scientific evidence. She was publishing essays from 1881, the first being 'Hylozoic Materialism' in the June issue of *Journal of Science* under the initials 'C. N.'. A critique of this by J. H. Barker was printed in July, and in September Naden wrote a rebuttal, later republished in *Further Reliques* as 'Hylo-Zoism versus Animism'.⁶⁴ The points on which she argues with Barker are telling: she focuses on making 'A scientific argument' (*FR* 196), as might be deemed proper in the *Journal of Science*. Naden rejects discussion of the supernatural in favour of explaining the inherent vitality in the material world, taking

⁶³ [Richard Proctor], 'Letters Received and Short Answers', *Knowledge* 8, 7 October 1885, p. 36.

⁶⁴ C. N., 'Hylozoic Materialism', *Journal of Science*, 3rd ser., 3, June 1881, pp. 313-18; J. H. B., 'Animism versus Hylo-Zoism', *Journal of Science*, 3rd ser., 3, July 1881, pp. 427-31; C. N., 'Hylozoism versus Animism', *Journal of Science*, 3rd ser., 3, September 1881, pp. 521-26.

umbrage with the idea that we could be “superior to matter” (FR 193). She argues that ‘the forces of magnetism and electricity, of heat, light, gravitation and muscular motion, are not independent and separable entities, but special forms of that universal activity which is an inalienable function of Matter’ (FR 193). By drawing these forces together and demonstrating their equivalence Naden seeks to show how everything that occurs in the universe can be described in material terms with no recourse to “spirit” (FR 193). Her use of quotation marks emphasises the illusoriness of such a concept.

Although this is Naden’s earliest published philosophical writing, it is in tune with her later essays. In particular, the potential for ‘truths’ to be ‘corrupted into the errors of Dualism’ (FR 195) is railed against throughout Naden’s work, as she sought to synthesise all types of rational thinking while rejecting religion. As such, she refuses to engage with Barker on the possibility of ‘an *Omnipresent* Deity’ because ‘It signifies little whether this one and indivisible reality be spoken of as god, force or matter [...] for *to us* it is practically non-existent’ (FR 196). The aim of life and thought, therefore, is to make sense of what we are able to perceive using our faculty of reason, drawing on all stimuli to make as full an assessment of reality as possible. Naden’s attested philosophical project was therefore to accumulate and synthesise the fullness of culture and nature, applying reason in order to create a unifying theory. The sheer breadth of this project is difficult to comprehend, and for someone who did not live to see another decade pass she was impressively successful in achieving it.

There is a marked contrast between Naden’s and Lewins’s styles of writing. Naden shared the direct approach taken by contemporary freethinkers, whereas Lewins was indebted to the

dense style of Continental philosophy, developing new terminology or adopting foreign terms to explain Hylo-Idealist ideas to ‘serious inquirers’ (*Memoir* 82). Even in his contribution to the *Memoir*, which he introduces with the intention to describe Hylo-Idealism ‘in as few and clear words as possible’ (*Memoir* 71), Lewins descends into over-complicated and repetitive sentences completely unlike those used by Naden. For example:

It is just as clearly *solidaire* with the predicate that each individual sentient being, on the relative or cerebro-ideal plane of ideation, *bien entendu*, is the Maker or Creator, or Demiurge of the only universe – abstract or concrete, visible or invisible, to which it has access. (*Memoir* 74)

In contrast, Naden’s prose style is clear and lucid, offering accessible explanations that do not simplify or condescend, but utilise the full rhetorical force of pared-back language. Lewins often states that it is his desire to convince the masses of Hylo-Idealism’s veracity, but it is Naden who puts this into practice. For example, her explanation of the concept underlying the Lewins sentence above reads:

No one has ever been able to deny [...] that man is the maker of his own Cosmos, and that all his perceptions – even those which seem to represent solid, extended, and external objects – have a merely subjective existence, bounded by the limits moulded by the character and conditions of his sentient being. (*I&D* 157).

It is this talent for writing about philosophy in ‘straightforward style and language’ that impressed H. P. Blavatsky when she published a letter from Naden in *Lucifer* after previously receiving ‘the turgid effusions of such [Hylo-Idealist] writers as G. M. McC[rie]’.⁶⁵ I contend that this is a direct result of Naden’s poetic endeavours for, as R. G. Collingwood argued in 1933, ‘the philosopher must go to school with the poets in order to learn the use of language, and must use it in their way: as a means of exploring one’s own mind, and bringing to light

⁶⁵ Blavatsky, ‘Editors’ Note’.

what is obscure and doubtful in it'.⁶⁶ Indeed, McCrie's 'Introduction' to *Further Reliques* describes Naden's writing style as one of 'mature deliberation and calmness', explaining that 'If the highest art be to conceal all traces of art, the profoundest philosophical ability conceals all evidence of acquirement – is simply informed, and speaks from knowledge' (*FR xi*). The power of lucid and accessible writing is integral to Naden's intellectual project, and her poetic approach to language, form, and imagery facilitated this.

Naden's intellectual project emphasised the unity of poetry, philosophy, and science, but while scientific terms appear in Naden's poetry, philosophical terms largely do not; in particular, the phrase 'Hylo-Idealism' is conspicuous by its absence. Contemporaries stressed how this philosophy is reflected in her poetry, with readers of the *Memoir* directed by Hughes to 'an original poem in German of great beauty and power, "Das Ideal", expressive of her hylo-ideal *rationale* of existence' (*Memoir* 38); a translation of this poem can be found in the Appendix. Published in *Songs and Sonnets*, 'Das Ideal' uses a first-person voice that the reader is invited to associate with Naden's, the dedication to 'my esteemed friend Dr Lewins' creating an implicit link between the narrative 'I' and the creator of the poem. Exultations are addressed to physical matter – 'earth', 'nature' – rather than any spiritual concept, and she makes bold pronouncements such as 'Man can only start to exist / When he starts creating as a God'.⁶⁷ This condenses arguments found in Naden's essays; for example, in 'Hylo-Idealism: The Creed of the Coming Day' the idea that man 'is not a First Cause, since a stimulus is needed to set him in action; but he is certainly the only authentic Creator of the world' (*I&D* 170). Freethought rhetoric also suffuses this poem, for example 'the smoke of lies' highlights

⁶⁶ R. G. Collingwood, *An Essay on Philosophical Method* (1933; Oxford: Oxford University Press, 2005), p. 214.

⁶⁷ 'Erst kann der Mensch entstehen, / Wenn er als Gott erschafft' (*CPW* 77, ll. 19-20). See Appendix for full English translation of 'Das Ideal', with thanks to William Hooker and Lindis Kipp, pp. 306-07.

how religion impedes clear, rational thought, thus emphasising Hylo-Idealism's alignment with the movement.

'Das Ideal' is the only published verse written by Naden in German.⁶⁸ Since this serves to conceal its meaning and prevents a proportion of readers understanding it, it must be asked why she considered it the most appropriate poetic medium to express Hylo-Idealism. One reason is that it emphasises her debt to Lewins, since he encouraged Naden to pursue further education and learn German, in which he was fluent.⁶⁹ From this perspective 'Das Ideal' is Naden's tribute to Lewins in which she demonstrates the fruition of his guidance.

Furthermore, it aligns Naden with German Idealist philosophers. Thain notes that 'A very clear model for Naden's unification of the affairs of poetry and science in the service of a greater aim can be seen in her fascination with German idealist poet-philosophers'.⁷⁰ By writing a poem in their language, Naden acknowledges this debt while referencing their views on the creative function of the brain. Thain goes on to discuss some parallels between Naden's synthetic philosophy and that of Schiller in particular, but Naden's self-governed philosophical education was more wide-ranging than this.

The scope of 'Induction and Deduction' demonstrates that Naden was very familiar with the history of philosophy and could trace the merging and dividing of streams of thought from the ancient Greeks to her British contemporaries (*I&D* 1-100). This facet of her intellectual development began in dialogue with Lewins and bolstered her Hylo-Idealist standpoint alongside her scientific education, and yet by 1887 her adherence to this creed had become

⁶⁸ A further poem in German is recorded in notebook entry 97 dating from February 1879 (*N78-9* 20).

⁶⁹ Moore, 'Constance Naden and Hylo-Idealism', p. 239.

⁷⁰ Thain, 'Scientific Wooing', p. 163.

less absolute and a less dogmatic synthetic philosophy took its place. As a result of Naden being awarded Mason College's Heslop Gold Medal for 'Induction and Deduction' the three distinct parts of her intellectual life united, since it caused Naden's philosophical work to be publically attributed to her for the first time. At Mason College Naden was known as a science student and poet; her philosophical writings (published in different outlets since 1881) being a distinct, anonymous body of work. Thain has outlined likely reasons for her choosing anonymity, focusing on how Naden sought to straddle the respectable domains of minor literary success and scientific study and the largely disreputable freethought publishing realm.⁷¹ (This distinction provides an additional explanation for Naden choosing to write 1881's 'Das Ideal' in German.) However, Thain does not consider the importance of the prize-winning essay as bridging this gap.

'Induction and Deduction' is a review essay that draws upon an impressively large corpus of philosophical writing. There is limited scope for independent critique from Naden because its purpose is synthesis and a renegotiation of terms. Naden provides a new way of thinking about the processes of inductive and deductive reasoning, drawing together an astounding quantity of reading for a twenty-eight-year-old who had spent the preceding ten years primarily studying languages and sciences. There are no records of Naden having studied philosophy at Mason College or elsewhere, although (as indicated by *Humanism versus Theism*) she was reading a range of relevant texts from 1877 and likely before.⁷² Much of

⁷¹ Ibid.

⁷² A report of a paper given at the Physiological Society titled 'Will' was published in the *Birmingham Daily Post*, but this is a primarily scientific treatise ('Will. Physiological Society, Mason College', *Birmingham Daily Post*, 22 February 1887, p. 4). Naden's enrolment in the Physiology department at Mason College means she was likely aware of John Berry Haycraft's 1885 'Class of Mental Philosophy', which proposed to cover the aspects of psychology that has 'been approached experimentally', including 'the discoveries of Bell, Hall, Weber, Fechner, Bain, Herbert Spencer, Wundt, Goltz, and Ferrier' (*Mason College Calendar, 1885-1886*, p. 132). This course does not appear in subsequent years' examination results, suggesting that it did not run; it is nevertheless

‘Induction and Deduction’ relies upon judicious quotations and summary of texts, but Naden is not just showing how relevant philosophies build upon each other – she demonstrates how this entails a new approach to analysing scientific and philosophical understanding. She begins with the Greek cosmologists Heraclitus and Anaximenes, then turns to the methodological innovations of Plato and Aristotle. Naden states that ‘The history of philosophic method from the death of Aristotle, in 322 B.C., to the 16th Century A.D. may be very briefly told’ (*I&D* 26) and offers a concise overview before arriving at Francis Bacon. Bacon’s work is roundly dismissed by Naden: ‘He has been called the father of inductive philosophy; let us rather call him the father of English prose’ (*I&D* 35). She turns therefore to ‘The Scientific Renaissance’ to illustrate how the discoveries of Copernicus, Kepler, Galileo, and Newton do not correspond to ‘the Baconian ideal’ (*I&D* 47), and then expands upon the deductive methods of Descartes and Locke. The next three sections cover John Stuart Mill, W. Stanley Jevons, and Kant in some detail before Naden closes the historical survey with her contemporary T. H. Green. The final section is a ‘Summary of Results’ that synthesises these developments in philosophical method in order to provide new definitions of induction and deduction.

This academic essay functions as a survey, and so does not provide Naden with the freedom to state her own philosophy or employ her distinctively poetic prose. She is constrained by the format, for, although Mason College did not set submission criteria for the medal, there are stylistic and thematic expectations imposed that do not hinder Naden elsewhere. She argues that rather than the traditional definition of induction ‘as the passage upward from less general to more general truths’ and deduction ‘as the passage downward from truths more general to

notable that the subject matter aligns closely with the kind of philosophy Naden evaluates in ‘Induction and Deduction’ and elsewhere.

truths less general' (*I&D* xxv), induction and deduction should be understood as 'mutual relations', describing them as 'a process of cognition involving recognitions' and 'a process of recognition involving cognitions' respectively (*I&D* 100). In this dense essay Naden employs the terminology of academic philosophy instead of descriptive vocabulary, indicating her awareness of audience as she writes for a judging panel of Mason College professors rather than lay readers of periodicals.

Both induction and deduction are fundamentally concerned with universality, since they assume that we can identify patterns and make connections between and across phenomena. Naden asserts that philosophy of science clarifies the methods of attaining scientific truth which 'accounts for all known facts, and enables us to predict new combinations' (*I&D* 45), intimating that a scientific philosophy (of which Hylo-Idealism, not mentioned by name, is just one kind) will bring us closer to a unifying and absolute truth.⁷³ Furthermore, her redefinition of induction and deduction positions her in the context of universalising theories which characterise much nineteenth-century philosophical endeavour. Naden's awareness of the scope for unifying concepts in philosophy and science, and her sensitivity to the process and outcomes of such theorisation, lies at the heart of Hylo-Idealism and underpinned the philosophy that she developed out of it.

The scope and scale of 'Induction and Deduction' makes it too large to consider in detail here. I shall instead focus on how the importance of unifying urges in Naden's work is borne out by her discussion of Green towards the end of the essay, and is indicative of her wider

⁷³ Naden does acknowledge, however, that absolute truth is ultimately 'unattainable and unimaginable', despite it being the point to which the philosophically-inclined are inevitably drawn (*I&D* 45).

methodology. Green, as characterised by W. David Shaw, was an ‘advocate of holistic theories of knowledge’, particularly concerned with the concept of unity.⁷⁴ In addition, he argued that sensation resulted from an actively creative, not passively receptive, brain: in his 1874 work on Hume, Green concluded that ‘all reality is mind-made’.⁷⁵ There are clear connections between this and Naden’s own conception of mind and matter. As Naden summarises in ‘Induction and Deduction’, ‘There can, indeed, be no perception without conception’; she quotes directly from Green to assert that “‘The real thing, then, is individual because universal[’...] All science, then, is but a continuation of the mental process involved in simple perception, a progressive determination of objects by relations’ (*I&D* 83). There is a fundamental difference between them, however, for Naden divorces her theory from religion while Green builds his theory on the assumption that there is ‘an eternal consciousness called God’.⁷⁶ Indeed, Bernard M. G. Reardon identifies Green as ‘a religious teacher as well as an academic philosopher’, with the caveat that Green nonetheless rejected ‘the “two world” view of reality’, refusing to ‘admit the traditional theistic distinction between the natural and the supernatural’, which does echo Naden’s secular thinking.⁷⁷ Naden chooses to focus on the aspects of a philosopher’s work that support her views; rather than argue against their perspectives she expands upon select elements that correspond with her own theories.

Green was also interested in the shared aims of poetry and philosophy, stating in his

Prolegomena to Ethics (1883):

A moral philosopher may be excused for finding much excellent philosophy, in his special sense of the word [i.e. ‘the application of ideas to life’], in such poems as the

⁷⁴ W. David Shaw, *The Lucid Veil: Poetic Truth in the Victorian Age* (London: Athlone Press, 1987), p. 100.

⁷⁵ *Ibid.*, p. 101.

⁷⁶ *Ibid.*, p. 102.

⁷⁷ Bernard M. G. Reardon, ‘T. H. Green as a Theologian’, in *The Philosophy of T. H. Green*, ed. by Andrew Vincent (Aldershot: Gower, 1986), pp. 36-47 (pp. 36, 41).

“In Memoriam” of Lord Tennyson and Mr. Browning’s “Rabbi ben Ezra,” to say nothing of the more explicitly ethical poetry of Wordsworth.⁷⁸

Furthermore, Shaw has identified the importance of Green to Victorian poetics via his tutelage of Gerald Manley Hopkins at Oxford University. Particularly influential in this regard was Green’s holistic idea that successive sensations appeal to a continuous consciousness, forming a simultaneous whole.⁷⁹ The compilation of visual impressions in Hopkins’s poems (which Shaw illustrates with ‘Dun Scotus’s Oxford’) has no real corollary in Naden’s less experimental corpus, but the theory of unity and wholeness is embraced thematically in her poetry and prose.⁸⁰ In ‘Induction and Deduction’ Naden appeals to Green’s conclusion that “[‘]The unity of the world is the unity of the thinking subject”’ (*I&D* 83). And yet Green resists ‘the temptation to treat [Moral Philosophy] as a part of natural science’ and is unwilling to accept that ‘the moral susceptibilities of man’ might be reduced ‘to the rank of ordinary physical facts’.⁸¹ This runs quite contrary to Naden’s view that philosophy, art, and science share a unity of relation. Thus we can perceive how Naden’s methodology encouraged critical thinking and promoted rational selectivity over dogmatic adherence to any one world-scheme.

This is the key to Naden’s intellectual relationship with Spencer, whose work approached sociology, moral philosophy, and psychology from the perspective of physical science.

Spencer was one of the most influential thinkers of the Victorian period, but his was a quickly

⁷⁸ T. H. Green, *Prolegomena to Ethics*, ed. by David O. Brink (Oxford: Oxford University Press, 2003), p. 2.

⁷⁹ Shaw, pp. 102-04.

⁸⁰ There are several compelling parallels to be drawn between the intellectual interests of Hopkins and Naden (as well as many great differences), although the limitations of space mean that there is not room to pursue these here. Daniel Brown has discussed in detail Hopkins’s desire for unity, interest in the functioning of analogy, and engagement with both physics and idealism in *Hopkins’ Idealism*.

⁸¹ Green, pp. 3, 8.

fading star (although there has recently been significant research into his life and legacies).⁸² Although Naden was by no means as famous as Spencer, their shared trajectory into obscurity is indicative of how synthetic philosophies fared in the twentieth century. Spencer was interested in how the twin forces of evolution and dissolution shape the inorganic world, the ecosystem, and the human race. While Spencer's synthetic philosophy was developed as a system of belief that replaced religion, he nonetheless accepted that scientific truths cannot 'convey an idea of the Cosmos: meaning by this word the totality of the manifestations of the Unknowable'.⁸³ In refusing to uphold an entirely materialist philosophy Spencer embraced the relativity of knowledge and upheld the existence of an unknown essence shorn of its religious associations. Naden's engagement with Spencer's work became an important part of her own philosophy, and yet she rejected his dualist notion that the universe includes things outside the material reaches of science.

Naden's essay 'Evolutionary Ethics' is her most explicit and extended consideration of Spencer's work, and clearly illustrates her intellectual engagement with his synthetic philosophy. It begins as a review, wherein Naden provides an overview of Spencer's 'The Data of Ethics' (1879). These first ten pages primarily paraphrase his arguments about the evolution of morality, and the way individual character and behaviour is both constructed by and influential upon society. The central idea is that three basic 'external controls' of 'primitive life' – religious, political, social – shaped individual conduct. Even in this introductory section, Naden is moved to offer her own examples of key concepts, underscoring her desire to clearly articulate the details of Spencer's often dense prose. Naden

⁸² *Herbert Spencer: Legacies*, ed. by Mark Francis and Michael W. Taylor (Abingdon: Routledge, 2015) and *Global Spencerism: The Communication and Appropriation of a British Evolutionist*, ed. by Bernard Lightman (Leiden and Boston: Brill, 2016).

⁸³ Spencer, *First Principles*, p. 273.

states that she writes ‘so that what has hitherto been the dark side of his Synthetic Philosophy may be rendered clear and luminous’ (*I&D* 127-28). Thus over the following twenty pages Naden shifts her approach, noting where and how his philosophy may be flawed or lacking, and in the final ten pages ceases referencing Spencer to advance her own thesis that, while clearly influenced by ‘The Data of Ethics’, pulls away from his conclusions to explain more fully the workings of both society and relationships (of both humans and other orders of organisms).

When describing how individuals view and shape the world, Spencer explains how ‘sensuous’ (perception via the senses) and ‘intellectual’ inputs build our sense of the ‘real’ world. Naden asserts that the ‘emotional’ aspect must be considered as equally important in influencing our perceptions (*I&D* 129). These three aspects can be mapped onto the three disciplines that she is attempting to unify (science, philosophy, and art respectively), and, although she does not make this specific connection, Naden repeatedly draws art into the essay. This can be illustrative: when explaining the distinction between ‘the *final* cause and the *efficient* cause of the action’, for example, she describes the difference between inclination and object when painting a picture or writing a poem (*I&D* 105). Elsewhere, however, imagination is central to developing upon Spencer’s philosophy. Thus Naden’s main addition to ‘The Data of Ethics’ hinges upon the importance of sympathy and altruism in constructing a functional society, building on Leslie Stephen’s discussion of the subject in his 1882 book *Science of Ethics*. In her motivation to reconcile binaries, Naden asserts that ‘Egoism and altruism are not merely conciliated, but identified’, as in the character of ‘Highly imaginative persons’. As a result, imagination becomes the key to sympathy: in persons where the imaginative instinct coexists with ‘practical and ideal power’ an individual will be moved to spend their life both in

‘contemplation and creation’ and ‘seeking to modify the conditions of life’. Naden does not suggest that all artists achieve this – indeed she berates those who settle for ‘mere contemplation of the smaller self, of the fictitious joys and sorrows of romance’ – but in her opinion Spencer’s lack of engagement with this side of human nature means that his philosophy is not fully unified (*I&D* 132).

Connections between Spencer’s synthetic philosophy and Naden’s approach to understanding the world are articulated in *Songs and Sonnets*. Specifically, Naden addresses the concept of the ‘Unknown’ in ‘The Agnostic’s Psalm’, reproduced here in full:

Oh Thou, who art the life of heaven and earth,
Eternal Substance of all things that seem;
Or but the glorious phantom of a dream
That in the brain of mortal man has birth:
To know that Thou dost live were little worth,
Not knowing Thee; yet oft the heart will deem
That through its inmost deeps Thy light doth stream,
Bestowing peace for grief, calm joy for mirth.

E’en thus rich music enters tuneless ears,
Tuneless, and all untrained by ordered notes;
Yet its ethereal essence inward floats,
And mingling with the secret source of tears,
Awhile endues the spirit’s wistful sight
With dim perceptions of unknown delight. (*CPW* 140)

By positioning this poem in the midst of several character-driven monologues Naden distances herself from the agnostic speaker. The title indicates that this sonnet entails an appropriation of a Christian verse form, implying that agnosticism is both an alternative to orthodox belief and an evasion of true atheist rationality. This is emphasised by Naden’s reworking of the first line of the Lord’s Prayer, addressing an ‘Eternal Substance’ (l. 2) that corresponds to Spencer’s ‘Unknown’. The glorifying ‘Oh’ transforms into an interrogatory

‘Or’, undermining the opening lines with equivocation as to whether this undefined divine figure ‘art the life’ or merely ‘glorious phantoms’ (ll. 1, 3). And yet the capitalised ‘Thou’, ‘Thee’, and ‘Thy’ leaves little doubt of the speaker’s belief in the existence of an omnipotent presence. There is a tension between ‘the spirit’s wistful sight’ that indicates the willed, artificial nature of the belief, and ‘tuneless’ and ‘untrained’ ears that suggest this is a natural state of mind (ll. 13, 10).⁸⁴ The crux of the poem is that agnostic belief entails only ‘dim perceptions of unknown delight’, undermining Spencer’s agnostic faith by highlighting its unscientific basis. Thus, while Naden’s writings often demonstrate how she was influenced by Spencer’s synthetic system of knowledge, she rejected its dualist aspect.

Nonetheless, Naden takes cues from Spencer in significant ways, particularly in her understanding of the process of evolution. Charles Darwin is not referenced in ‘Evolutionary Ethics’, and is principally mentioned in passing within her other philosophical writings.⁸⁵ Francis and Taylor have independently argued that Spencer’s views were not Darwinian, not least because he began devising and publishing his synthetic philosophy before *The Origin of Species* was published in 1859.⁸⁶ Despite coining the phrase ‘survival of the fittest’, Spencer

⁸⁴ This aligns with Spencer and T. H. Huxley’s agnostic perspectives respectively. The latter’s agnosticism was roughly equivalent to rationalism while Spencer maintained that the Unknown could be discussed as a specific concept. This distinction is articulated by Huxley in ‘Agnosticism and Christianity’ in which he distanced himself from an earlier adherence to Spencer’s view by stating: ‘The extent of the region of the uncertain [...] will vary according to the knowledge and the intellectual habits of the individual Agnostic. I do not very much care to speak of anything as “unknowable”.’ T. H. Huxley, *Collected Essays*, 9 vols (London: Macmillan, 1904) V, pp. 309-65 (p. 311). Francis states that Huxley ‘attempted to remove the religious content from Spencer’s “Unknown”’, *Herbert Spencer*, p. 148. See also Bernard Lightman, *The Origins of Agnosticism: Victorian Unbelief and the Limits of Knowledge* (Baltimore: John Hopkins University Press, 1987).

⁸⁵ When Darwin is referenced there is an assumption that the reader will be familiar and in agreement with his writings, however. For example, Naden notes that a ‘Hylo-Idealistic conception of human nature cannot, in truth, be either new or startling to any cultured Englishman, since it is implicitly asserted in the Darwinian theory of evolution’ (*WR* 23).

⁸⁶ Spencer’s *Social Statics* was published in 1851, and *Principles of Psychology* in 1855. It is important to note that Spencer’s conception of evolution was neither Darwinian nor Lamarckian; for an excellent overview of the complexities of this issue see Mark Francis, ‘Introduction’, in *Legacies*, pp. 1-15 (pp. 9-15). See also Francis, *Herbert Spencer*, pp. 295-97 and Taylor, pp. 57-75.

never truly aligned himself with Darwin's evolutionary theory – as a result the concept of 'Social Darwinism' when applied to Spencer is a misnomer. Naden had an assured understanding of natural and sexual selection, as evidenced in her four 'Evolutional Erotics' poems, but Spencer's approach sometimes took precedence. This is illustrated by her contribution to the union debate 'That the evidence in favour of the Darwinian Theory does not justify its acceptance as scientific truth'. It is reported that Naden concurred with Miss Jordan's support of Darwin, but concluded that "'Natural Selection" by itself was not sufficient to explain the phenomena of evolution' since 'the "internal factor," of Spencer must be taken into account'.⁸⁷ Her somewhat combative view of Darwin matches David Stack's description of nineteenth-century responses to evolutionary theory, whereby 'A positivistic framework that treats Darwinism as a hermetically sealed doctrine, to be accepted or rejected *in toto*, is an outdated way in which to think about [the reception of] any scientific theory'.⁸⁸ This report highlights Naden's critical admiration for Spencer's work alongside that of Darwin, which is important in light of much recent academic work that has focused on Darwinian themes in Naden's poetry. Nevertheless, as Birch discusses, Naden does not unconditionally accept Spencer's conception of 'survival of the fittest' since 'she explicitly opposes Spencer's ideas about the positive effects of competition in the capitalist system' in 'Evolutionary Ethics'. Birch asserts, 'Although she accepted most of Spencer's ideas about a scientific framework for morality, on social questions Naden did not base her opinions on a Spencerian interpretation of evolution'.⁸⁹ This demonstrates Naden's critical approach to all she read, engaged with, and utilised within her synthetic scheme.

⁸⁷ The result of which was '12 ayes to 29 noes', 'The Union. February 5th, 1886', p. 37.

⁸⁸ David Stack, *The First Darwinian Left: Socialism and Darwinism, 1859-1914* (Cheltenham: New Clarion Press, 2003), p. 7.

⁸⁹ Birch, 'Evolutionary Feminism', pp. 69-70.

Hylo-Idealism was a philosophy of ‘theoretical and practical ethics’, claiming to introduce a ‘complete reversal of the theological standpoint’ (*I&D* 176). This necessitated reassurance that sympathy and morality was nonetheless central to the human condition, so she avers that ‘mentalising our fellow-creatures [...] possesses supreme intellectual and moral significance’ (*I&D* 175). Naden’s philosophy therefore argues for evolution through collaboration rather than Spencer’s competition: ‘Without sympathy, there could be no mutual understanding, and therefore no concerted course of action.’ (*I&D* 133). Spencer’s synthetic philosophy does, however, constantly seek ‘truths which unify concrete phenomena belonging to all divisions of nature’.⁹⁰ The unifying forces of evolution and dissolution (applied to all matter, organisms, and phenomena) and his focus on ‘equilibrations’ indicate his interest in order and the identification of a universal principle that explains all organic and inorganic processes. Spencer’s theories therefore hinge upon unity of method rather than the mutual relationship that Naden highlights in her own writings: ‘the only kind of unity, which can thus be realized in and through varying phenomena, is [...] a unity of relation, which at once implies diversities, and renders them intelligible’ (*FR* 188). While Spencer makes claims about the process of philosophy unifying knowledge, Naden reformulates this idea so that philosophy sits alongside science and art, these three ‘seemingly rival spheres’ each facilitating increased understanding of the universe (*I&D* xxii). In the introduction to ‘Scientific Idealism’, Naden asserts that ‘It is a far cry from Buddha to Berkeley, from Angelus Silesius to Herbert Spencer; yet all four tell the same tale in different language’ (*FR* 210). Naden thus brings Spencer into dialogue with writers with whom it is unlikely he perceived a connection, which is itself a synthetic approach.

⁹⁰ Spencer, *First Principles*, p. 273.

In 'Evolutionary Ethics' Naden refers to Spencer as 'the Synthesist' (*I&D* 101) and it is useful to consider her intellectual relationship with him in light of this honorific. Spencer read notoriously little philosophy or science however, and did not have the depth or breadth of knowledge that Naden cultivated. As Taylor explains, 'in a period of rapid professionalization [...] he appeared more and more the amateur, the interloper, who lacked the essential qualifications necessary to make a meaningful contribution' to scientific disciplines.⁹¹ Their contrasting educational backgrounds mean that Naden's desire to build a strong foundation for her philosophy stands at odds with Spencer's independent development of his theories and limited wider reading.⁹² Nevertheless, Naden understood Spencer to be the leading voice in disseminating theories of unity, and she used her own writings to engage critically with and develop his work.

While some called Naden Spencer's 'devoted disciple', Lewins argued against this on the grounds of her originality (*CPW* Appendix 19), and McCrie asserted that 'To say that the bent of her mind was "Spencerian" is but inadequately to convey an idea of her mental grasp, which was more than equal to the problems of the newest philosophic schools' (*FR* x). Indeed, in a retrospective essay on the first fifty years of the Aristotelian Society Naden is not included in a list of nineteenth-century members who would have classed themselves as Spencerian, despite her being mentioned elsewhere.⁹³ Crucially, Naden engaged with a range

⁹¹ Taylor, p. 146.

⁹² This is a major criticism levelled at Spencer's work, particularly by nineteenth-century scientists. For example, the botanist Joseph Hooker was a friend of Spencer, and yet in a letter to Darwin he asserted that 'The man is I think often out of his depth', 'Hooker, J. D. to Darwin, C. R. 24 Jan 1864. Letter 4396', *Darwin Correspondence Project* <<http://www.darwinproject.ac.uk/letter/DCP-LETT-4396.xml>> [accessed 18 September 2016]. On a more jovial note, Spencer himself retold an 'anecdote in which [...] T. H. Huxley, had said that Spencer's idea of a tragedy was a hypothesis killed by a fact', Francis, *Herbert Spencer*, p. 100.

⁹³ Indeed H. Wildon Carr casts doubt upon how true to the spirit of philosophy Spencer's work was, however, observing that in the context of the Aristotelian Society Spencer 'represented the dogmatic scientific spirit and not the speculative historical character of philosophy'. 'The Fiftieth Session: A Retrospect', *Proceedings of the Aristotelian Society*, n.s., 29 (1928-29), 359-86 (pp. 368, 369).

of philosophical schools but ‘identified herself with none of these’ (*FR* xi). Naden’s novel approach to philosophy drew upon and synthesised multiple perspectives in her committed pursuit of original thinking. If, as Hylo-Idealism taught, all perceptions ‘have a merely subjective existence, bounded by the limits moulded by the character and conditions of [our] sentient being’ (*I&D* 157), it seems only logical that Naden would be unwilling to subscribe to a world-scheme devised by anyone but herself.

‘A Modern Apostle’

Over the course of this chapter I have shown some of the ways Naden adopted the medium of poetry to test and develop her religious and philosophical thinking. The dramatic monologues that populate *Songs and Sonnets* demonstrate Naden’s ability to ventriloquise faith and doubt, working through a range of philosophical positions. The place for persuasive, rather than speculative, rhetoric was nonetheless primarily the pages of periodicals, where Naden’s clear and lucid prose echoed that of the freethought movement. Her poetic project was certainly bound up with her philosophical one; she wrote in 1887 of how the ideal is for ‘philosophy and poetry [to] meet and clasp hands’ (*I&D* 112). This does not mean, however, that they have equivalent functions, and Naden was keenly aware of their differing ability to engage and persuade. In *Modern Apostle* (1887) she uses poetry for a different purpose to that in *Songs and Sonnets*; instead of working through her philosophical viewpoint as it transitioned from Nonconformist faith to atheistic doubt, poetry became a place to reflect on the ramifications of applying one’s ideas (scientific, religious, and philosophical) to society. As Michelle Boswell has suggested, in *Modern Apostle*

Naden moves beyond expressing Hylo-Idealism merely as the subject matter or theme of many of her Romantic lyrics and sonnets and instead puts these

philosophical notions into practice within her poetic characters' lives [...] Naden enacts a poetics of her philosophy.⁹⁴

'A Modern Apostle' is indicative of this alternative use of poetry, and it plays an important role in Naden's writing life. It is her longest poem at 167 eight-line stanzas (split into six sections), and opens the volume. Furthermore, it is the only poem of Naden's that we know to have also existed in prose form – indeed, the short story 'A Modern Apostle', published in *Mason College Magazine* in May 1886, is the sole extant prose fiction attributable to Naden.⁹⁵ This is a narrative, then, that Naden spent significant time revising, and I argue that the poem is an orienting text that speaks to, describes, and interrogates the development of her philosophical beliefs from her dissenting upbringing, via her scientific education. 'A Modern Apostle' expresses many of Naden's concerns regarding the development of a new creed. More specifically, it articulates her discomfort with labelling her philosophical beliefs and binding them to Lewins's dogmatic Hylo-Idealist position. Both iterations of the story focus on the troubled romantic and intellectual relationship between a young man (Arthur in the short story, Alan in the poem) who has developed a world-scheme called Pantheistic Socialism, and a young woman (Claudia in the short story, Ella in the poem) who is a secular materialist schooled in science.⁹⁶ There are elements of Naden's own experiences in both

⁹⁴ Boswell, p. 191.

⁹⁵ Constance Naden, 'A Modern Apostle', *MCM* 4, May 1886, pp. 47-53.

⁹⁶ I focus on the poem as the more expansive and successful version of the narrative. Despite Naden's facility in weaving analogies into her essays and imagery into her poetry, it did not translate easily into this third genre. The set-up of the short story is much the same as the poem, although there are some crucial differences (such as Arthur having a 'small fortune' in contrast to Alan's impoverished background). Significantly, however, it does not have the poem's dramatic climax, since the story's narrative ends when the couple's relationship is broken off. Without the denouement Naden has less scope to develop the interior life of characters or draw out the story's emotional resonances. There are several instances where phrases from the short story are transposed into the poem – for example 'the apostle will shake the dust from his feet, and gird himself, and go his way' is rendered 'he will gird / His loins in silence, and will shake the dust / From off his feet, and go his lonely way' (*CPW* 209, IV, ll. 133-35) – but largely the prose does not have the descriptive qualities of the poetry. Naden seems more at ease with philosophical rather than fictional prose writing (the short story is marred by awkward signposting and abrupt phrasing) and ultimately the narrative only becomes diverting and of clear merit in its eventual poetic form. Naden, 'A Modern Apostle', pp. 48, 50-51.

characters, but this should not be understood as a thinly-veiled autobiographical narrative; it is a more nuanced reflection of and on her intellectual development.

Alan begins the narrative as a devout Christian; his fall is precipitated by the lure of books.

Naden therefore draws on Biblical tropes but renders them secular, and somewhat absurd:

A second-hand bookstall was his fatal tree
Of knowledge, bearing divers kinds of fruit:
Peaches soft-rinded, melting lusciously,
Yet bitter-flavoured; on another shoot
Ruddy-cheeked apples, innocent to see,
But yielding potent cider; from one root,
It seemed, grew stimulants and anodynes,
Green opium capsules, and rich-clustered vines. (*CPW* 177, I, 49-56)

The accessibility of knowledge in this era of cheap print is thus a key factor in Alan's corruption; knowledge has become a purchasable commodity. Furthermore, the fruits' description recalls the wheedling cries of Christina Rossetti's goblins, whose fruit is sweet but addictive and ultimately leads to ruin. Just as in the allegory of 'Goblin Market' (1862), Naden draws on the Biblical story of the Fall, which she makes explicit in the closing lines of the two subsequent stanzas: 'The serpent tempted him, and he did eat.' and 'He reasoned; thus accomplishing his fall, / For Reason is the Sin Original.' (*CPW* 177, 178, I, ll. 64, 71-72); the latter couplet's strained rhyme undermining the conviction of such a statement. In this opening section it is not clear to the reader whether Alan's 'lawless appetite' for knowledge is a positive or negative force; certainly it is 'a thing accurst' according to his religion, emphasised by the drug-like nature of the fruit (*CPW* 177, I, ll. 60, 46).⁹⁷

⁹⁷ See Virginia Berridge, *Opium and the People: Opiate Use in Nineteenth-Century England* (London: Allen Lane, 1981) for late nineteenth-century attitudes to opium use, which became largely negative after its sale was restricted by the 1868 Pharmacy Act.

Naden emphasises the breadth of knowledge made accessible to Alan. Her interdisciplinary approach is reflected in the lack of boundaries to this new knowledge, which is communicated through ‘prose or rhyme / Prating of “Cosmos” or “Protoplast”’ (*CPW* 178, I, ll. 67-67), a nod to Naden’s use of both genres to discuss both subjects. Thus Alan’s burgeoning propensity to reason is guided by philosophy and science, running the gamut of freethought from ‘Pale Christianity’ to ‘Faint Unbelief’ to ‘metaphysic lore’ and finally to the climactic ‘Carlyle he conned, and—guilt of dye intenser! / Dallied with Darwin and with Herbert Spencer’ (*CPW* 178, I, ll. 75, 76, 77, 79-80). The ‘good and ill’ consequences of this study inaugurates the fight between Faith and Reason at the centre of the narrative (*CPW* 178, I, l. 74), which is internalised by Alan and externalised as the two protagonists exhibit these traits. While this establishes parallels between Alan’s story and Naden’s own, the poem is far more nuanced and knowing that this would imply.

Alan’s exclamatory responses such as ‘guilt of dye intenser!’ mark it out as a caricature and the metrical choice of *ottava rima* signals the poem’s position within the mock-heroic tradition. Charles LaPorte has identified how Naden

exploits a comic gap between the formalism of its *ottava rima* verses and Alan’s earnest democratic principles: his denunciations of religious and social form are ironically rendered in the strictest meter. This is, of course, the tradition of Byron’s *Don Juan* – at once widely accessible and socially condescending – and Naden lets few of her readers forget his influence.⁹⁸

Furthermore, the polysyllabic rhyming of ‘guilt of dye intenser!’ / ‘and with Herbert Spencer’ appropriates Byron’s use of what Jim Cocola calls ‘encoded renunciations’.⁹⁹ Cocola discusses the effect of such formulations, noting the how Byron plays with

⁹⁸ LaPorte, p. 434.

⁹⁹ Jim Cocola, ‘Renunciations of Rhyme in Byron’s “Don Juan”’, *SEL*, 49 (2009), 841-62 (p. 846).

rhymes of ‘fact as well as verse’ throughout *Don Juan*, using verse as a coded index to advance the fact of his renunciation toward society’s most venerable establishments and its most venerated institutions. Thus, Byron wryly mocks antiquity and enlightenment alike, via such equivalent rhymes as ‘intellectual’ / ‘hen-peck’d you all,’ ‘Plato’ / ‘potato,’ [...] (1.22.175, 176; 7.4.26, 28 [...]).¹⁰⁰

This use of rhyme gives the narrative voice an ironic tone, preventing the reader from taking Alan’s ‘Pantheistic Socialism’ (a ‘novel schism’, as the rhyme remarks) entirely seriously (*CPW* 198, III, l. 103).

Gillian Beer has argued that ‘rhyming responds to, and forms part of, Victorian anxieties about belief and origins’, and is founded upon the ‘combination of affirmation and instability [that] makes rhyme apt both to comedy and to authority’.¹⁰¹ Naden exploits her assured grasp of rhyme, drawing out the potential for comic effect in the earlier sections by pairing incongruous words and phrases. And yet, the end of ‘A Modern Apostle’ shifts away from the mock-heroic tradition. LaPorte argues that:

Naden’s willingness to locate these potentially jarring rhymes at the emotional climax of her poem serves to remind the reader of the detached amusement with which she began, and it makes the emotionally moved reader disavow that former detachment and irony. [...] The simple rhyme concluding this stanza (‘the very soul of each / Shone visible, disrobed of veiling speech’) belies the arch ridiculousness of earlier couplet rhymes [...] and by contrast it resonates with a profound level of humility and tenderness.¹⁰²

While I agree that the shift in tone is integral to the arc of the poem’s narrative, there is a greater formal difference than LaPorte acknowledges; specifically, Naden omits the polysyllabic rhymes that undermine in favour of ‘simple rhyme’ words. This instantiates the

¹⁰⁰ Cocola, pp. 845-46.

¹⁰¹ Gillian Beer, ‘Rhyming as Resurrection’, in *Memory and Memorials, 1789-1914: Literary and Cultural Perspectives*, ed. by Matthew Campbell, Jacqueline M. Labbe, and Sally Shuttleworth (London: Routledge, 2000), pp. 189-207 (pp. 190, 192).

¹⁰² LaPorte, p. 438.

shift from Alan's rhetorically complex and divinely inspired creed to Ella's rational and lucid commitment to continuing his legacy. The poem is underpinned by tensions between orthodoxy, dissenting religions, and secular philosophy, and between deeds and words, the material and the spiritual. These form the crisis of Ella and Alan's relationship, as articulated in the closing scenes, in which the dying Alan calls on Ella to continue his legacy of Pantheistic Socialism, despite her earlier rejection of it (and him) on the grounds that she could not subscribe to its religious agenda. In the final stanza of the poem, as the mantle of 'Modern Apostle' shifts from Alan onto Ella, the quasi-religious rhetoric falls away and the term 'Pantheistic Socialism' is absent.

A riot brings about Alan's revelation that addressing the plight of the poor requires deeds not words, political rather than religious change, and so he asks that Ella becomes 'Truth's radiant herald' who will sustain the creed, but also improve upon it by ridding it of error.

Be no sign granted, saving to unseal
The meaning of the ages, and unshrine
All errors, all illusions—theirs, my own:
For though the wine-press that I trod alone

'Held blood-red grapes from the volcano's edge,
Yet the true purple full-ripe fruit I missed:
Seek you and find; oh give this one last pledge—
Ella, my Love—my Wife!' His lips she kissed
With tender lingering pressure: sacrilege
It seemed, to mar that silent Eucharist
By uttered vow; the very soul of each
Shone visible, disrobed of veiling speech. (*CPW* 233, VI, ll. 173-84)

There is an echo of the Biblical 'Seek, and ye shall find' (Matthew 7. 7) but, crucially, Alan does not explicitly ask Ella to maintain the religious content of Pantheistic Socialism with which she so vehemently disagreed. He trusts her ability to uncover and fix the faults in his

version of the creed, using the metaphor of ripening to underscore the potential to develop his ideas fruitfully. The stanza describes a movement between speech and silence, finding eloquence in each, and thus a balance in the binary that causes much of the tension in the poem. Ella's response to Alan's exclamation 'my Love—my Wife!' (VI, l. 80) is a kiss, the first that she initiates, stopping his words at the poem's emotional climax.¹⁰³ And yet her response to Alan's other petition – that she takes on his life's work – must be articulated clearly, requiring more than a kiss of assent. Thus,

At length she spoke— 'Myself I dedicate
To this great service: all my spirit's power—
Through joy and grief, in good or evil fate,
Whether the desert pathways bud and flower,
Or the fair fields be ravaged by man's hate—
Shall bear the superscription of this hour:
I give whate'er I have of strength and skill;
Trust me in this—what Woman can, I will.' (*CPW* 234, VI, ll. 201-08)

This speech focuses on the rhetoric of balancing binaries (joy and grief, good and evil, desert and field, strength and skill) and is more reminiscent of a knight taking on a quest than a woman's promise to her dying lover. This shift in tone demonstrates how the mind/heart and reason/faith dichotomies can be resolved through measured speech and the application of rational thought even in the depths of emotion.

The comic, polysyllabic rhymes that characterised earlier sections disappear at this point, allowing sincerity to establish itself. If Ella is to apply her 'strength and skill' to this cause, the reader knows that her powers lie in scientific reasoning and rational thinking. Earlier in the poem a description of Ella's 'riven self' suggests that her heart and mind cannot be

¹⁰³ This is also a politically significant moment as Alan proposes and Ella affirms what is effectively a secular marriage.

reconciled, although the masculine, reasoning side of her character is defined as the stronger of the two:

She pined with strange distress—the woman’s heart
Throbbled, quivered, bled; while the logician’s mind
Worked on relentless, heeding not the smart. (*CPW* 210, IV, ll. 141, 137-39)¹⁰⁴

In the climatic lines, however, the two sides unite in order to accede to Alan’s dying wish; ‘what Woman can’ (VI, l. 208) emphasises Ella’s strength, not her limitations. Alan has faith that Ella will be able to identify and overturn the ‘errors’ and ‘illusions’ of past philosophies, and she begins this mission by refusing to be constricted and defined by labels. The final couplet, ‘Long time she knelt; when at last she rose / Her features almost mirrored his repose’ (*CPW* 235, VI, ll. 215-16), indicates the unity inherent in Pantheistic Socialism’s brotherhood of man, though the rogue ‘almost’ emphasises the difference between Alan’s original creed and its new beginning in Ella’s hands.

Throughout ‘A Modern Apostle’ Naden describes the conflict between speech and silence, and explores characters’ anxieties about articulating their convictions. Ella’s short-lived initial conversion occurs in the midst of Alan’s exhortations for her to ‘tell’, ‘assure’, and ‘speak’, to reassure him that she shares his Pantheistic Socialist beliefs (*CPW* 206, IV, ll. 59, 61, 64).

Ella does not blithely comply with these demands, instead

She faltered ‘I believe’ with head low-drooped,
And tearful eyes—new longings and alarms
Athwart her inward vision swiftly trooped. (*CPW* 207, IV, ll. 65-67)

¹⁰⁴ This gendering of heart and mind is by no means unusual; it is notable, however, that some phrases used in this section recall Naden’s friends’ descriptions of her character, although they deem her womanly heart to be well-balanced with her masculine intellect. Lapworth asserted that ‘Scientific as was the bent of Miss Naden’s mind, [...] She was always womanly, with many of the instinctive proclivities, and all the tender sympathies of her sex’ (*Memoir* xvi), while Hughes averred that ‘Like George Eliot, she had the intellect of a man, but the heart of the most womanly of women’ (*Memoir* 63).

Naden is keenly aware that in agreeing to share Alan's creed Ella is no longer independent, the word 'trooped' suggesting an invasion by external forces. Alan is unperturbed by this unenthusiastic response, and although she stands 'mute' he 'kissed her lips, and clasped her in his arms' (*CPW* 207, IV, ll. 69, 70). The inability to reconcile Ella's heart and mind undermines her ability to express her true feelings. Alan, as a preacher, is well-practiced in the art of persuasion, while Ella's response is

[...] not made
In speech articulate; no word she spoke
For Alan's ears, but on his breast she laid
Her head, as though she sought at once to cloak
And to express her passion. (*CPW* 207, IV, ll. 73-77)

This woman who has been defined by her intellect is rendered speechless, her convictions suppressed to the point that her gestures cannot be understood, our interpretation limited to 'as though'. It would be incorrect to deem Ella an unwilling participant in this relationship, but her association with Alan nonetheless impacts negatively upon her ability to articulate thoughts and feelings.

Ella's love for Alan as a person does not, however, translate into a fervour for the realities of his creed:

And when she coned the pages of his book,
And saw his cherished thoughts, all printed clear,
Robbed of that glow suffused of voice and look
Which made their mellow misty atmosphere. (*CPW* 209, IV, ll. 113-16)

Alan's conversion to Pantheistic Socialism is precipitated by a vision, while Ella is convinced by Alan's words. She is not, however, willing to accept his ideas as holy writ, and the reintroduction of Ella's dormant intellect demonstrates the centrality of reason to Naden's narrative. The way a philosophy is expressed on paper thus becomes crucial, reflecting the

importance of comparing Naden's and Lewins's rhetoric. Ella comes to separate heart and head, a moment of revelation convincing her that loving Alan does not translate into fervour for his creed. Pantheistic Socialism is for Ella a cult of personality, and reason soon regains its rightful place in her mind. A comparable transition can be traced in Naden's relationship with Lewins; the initially attractive fervour with which Lewins wrote to Naden about Hylo-Zoism lost its lustre as their friendship progressed, leading to her development of an approach that questioned the wisdom of over-complicating an otherwise rational concept.

The central part of the narrative hinges upon the phrase 'Ella spoke as ne'er before' (*CPW* 211, IV, l. 163). She is shown to have regained her voice, and Alan is shocked by her dissent. He subverts the rhetoric of dreams mistakenly clung to in waking life, which is evident in Naden's freethinking writings and the wider freethought movement. Rather than religious individuals sleepwalking through life until awakened to truth by secular thinkers, Alan sees Ella's stance, guided by the reason he has shunned, as 'some fevered nightmare dream'; he exhorts her to 'Wake and believe, dear Ella! wake and see' (*CPW* 211, IV, ll. 170, 171). Unlike the efficacy of such demands in the scene of Ella's conversion, here she restates her position, articulating her rational conclusions rather than accepting Alan's vision. Ella affirms 'I try / To tell my thought' (*CPW* 211, IV, ll. 183-84), instantiating her commitment to truth over dogma, relying on her intellect over and above the tenets of a specific school. In the final scene at Alan's deathbed, Naden chooses to leave the reader with the living voice of Ella, unmediated by a response from Alan; he has already professed his faith in Ella and so it is on her words that we dwell. This triumph sits uncomfortably with Naden's posthumously

published essays, on which Lewins's footnotes intrude.¹⁰⁵ The verbosity and obscurity of these addenda serve to highlight the concision and clarity of Naden's own philosophical writing style honed by her poetic endeavours.

In contrast to the shorter songs and sonnets of Naden's first volume of poetry, the extended narrative of 'A Modern Apostle' provided the space to draw out multiple ramifications of practicing as well as preaching one's world-view. The importance of voice in the poem emphasises this theme: Alan's 'Vision' concludes with a 'Voice' that instils in him the power to communicate his new creed and attract Ella (*CPW* 183, I, l. 201), while Ella, initially silenced by Alan, learns the worth of articulating her own secular position. Speaking publically about one's philosophy is not, however, shown in a wholly positive light, as it precipitates both the breakdown of the couple's relationship and Alan's death. This negativity is emphasised in the short story:

It is a pity that the apostle of a religious or social creed must in these days be heralded by flaming posters; that he must speak in a crowded and gas-lighted hall to an enthusiastic audience, and be reported with exasperating incorrectness by the morning papers.¹⁰⁶

This condemnation of the reception of religious and freethinking zealots speaks to Naden's own wariness about publishing her Hylo-Idealist work under her full name, and her adoption of a more nuanced perspective that resisted labels.

¹⁰⁵ An anonymous reviewer remarked 'We cannot help regretting that Dr. Lewins has not performed his editorial work with more discretion. Why could he not withhold his quite unnecessary annotations?' 'Review: Induction and Deduction', *The Spectator*, 11 October 1890, p. 45.

¹⁰⁶ Naden, 'A Modern Apostle', p. 47.

Conclusion

In 1892, a perceptive reviewer in the *Journal of Mental Science* noted the pattern of development across Naden's essays, and argued that hers was not a static or resolved philosophy because 'she did not live to put her thoughts into any final form'.¹⁰⁷ From her later published works, and the 'Philosophical Tracts' included in *Further Reliques*, it is clear that Naden was moving away from Hylo-Idealism as a codified set of ideas and pursuing related theories that did not fall entirely under its remit. Her broadening sociological and psychological interests initiated a shift in philosophical perspective, and although she retained many of Hylo-Idealism's conceptual tenets – monism, relative idealism, materialism – the phrase had disappeared from her lexicon by the end of her lifetime. It is notable that no poem in *Modern Apostle* is labelled as Hylo-Idealist by her friends – they are forced to look back to 1881's 'Das Ideal' to stake their claim. Hughes writes that 'She ceased to write poems in 1887', stating that Naden had 'deeper and more exalted work for her intellectual powers' (*Memoir* 40); reinforcing her legacy as the consummate Hylo-Idealist. And yet, whether or not Naden had intended to permanently give up writing poetry, she never made an absolute distinction between this and her prose. Naden believed that 'the reconciliation of poetry, philosophy, and science' (*FR* 126) was necessary in order to realise a better society with its foundations in rational thought rather than dogmatic faith, whether religious or secular, and her works promote a dialogue between these modes of writing.

Naden's views were never static for, as she explained in 1889, 'ideas have an uncomfortable habit of developing as one writes' (*Memoir* 48). This does not imply incoherence, but that Naden's philosophy was synthetic and cumulative, and it had not reached an end point upon

¹⁰⁷ 'Review: A New Philosophy', p. 276.

her untimely death. Working from a Hylo-Idealist position, Naden was aware that her aspiration to perceive a singular ‘Truth’ was not logically attainable, every individual’s perceptions being contingent upon their own brain processes. And yet Naden persisted in reaching for more knowledge to synthesise in order to enhance her understanding of the universe and her place within it. By demonstrating the connections between individuals and concepts within the increasingly fragmentary society of nineteenth-century Britain Naden strove to show how secular ideas unify rather than divide. This urge runs through Naden’s writing life, from the notebook of 1878-79 to an unfinished paper for the Aristotelian Society. The latter was published after her death, it having been intended to be Naden’s address to their first meeting of 1890. In it she writes that her philosophical aim was ‘to exhibit human nature, not as a duality, but as an [sic] unity under different aspects’.¹⁰⁸ The phrasing of this sentence is not inherently poetic, and yet it is indicative of her understanding of the power of rhetorical precision. Naden’s ability to communicate complex ideas in accessible ways arose both from the sheer breadth of her education and her commitment to a synthetic method, encompassing poetry, philosophy, and science. In these few words Naden expresses the transition from a Nonconformist childhood, via pantheism, agnosticism, and Hylo-Idealism, to a secular philosophy of her own design.

¹⁰⁸ Naden, ‘On Mental Physiology’, p. 82.

POET

My inclination prompts me to paint a picture or write a poem; but I do not take the inclination twice over, and make it into an object. My *object* is not satisfaction to myself, but the true expression of my thought.
(Constance Naden, *I&D* 105)

This passage, from ‘Evolutionary Ethics’, is a rare, and therefore notable, occasion upon which Constance Naden casts herself explicitly in the role of painter and poet. It is significant that it is when provided with the distance of philosophical prose that Naden is willing to identify most fully with such creative roles.¹ In this chapter I focus on how Naden conceived of herself as a poet, for though she also painted (and had this work exhibited Royal Birmingham Society of Artists in 1878) none of this work survives and she does not write at length about this activity in the way that she does about poetry. Her stance on the production of art provides an insight into Naden’s writing process: she claims that when she chooses to write poetry she is motivated by a need to explore the ‘true expression’ of her thoughts. This demonstration of Naden’s remarkable self-awareness is an example of how, over the course of her writing life, she was preoccupied with what it means to be a poet, and what poetry might achieve. She continues,

This expression will indeed bring me satisfaction, but I shall not work so well if I think very much about the ultimate end. [...] The results of my picture or poem, if it be good work, will be, let us say, beneficial to society; and yet benefit to society was not my object. (*I&D* 105)

¹ Her choice to use the personal pronoun here is interesting when one considers her use of pseudonyms to dissociate her identities as poet and philosopher by preserving anonymity in her philosophical publications, while all her poetry was published under her full name. See Thain, ‘Scientific Wooing’, p. 154.

This has its roots in the self-deprecating tone of her early unpublished poetry, and highlights how Naden can be a somewhat contradictory figure who makes claims for the power of poetry as a methodology for understanding the universe while simultaneously undermining the success of her own poetic endeavours. Furthermore, this passage echoes significant themes in Victorian criticism. In 1853 Arthur Hugh Clough asked why poetry was no longer the favoured literature of the masses. He concluded that ‘the modern novel is preferred to the modern poem, because we do here feel an attempt to include [...those] positive matters of fact, which people, who are no verse-writers, are obliged to have to do with’. Clough suggests that this elevation of the everyday to the subject of literature means that conversely poetry considers only ‘the rare facts of human nature’; in order for it to become relevant to the average novel-reader poetry should ‘not content itself merely with talking of what may be better elsewhere, but seek also to deal with what *is* here’.² Thus he challenges the Victorian poet to reconsider the proper subject of poetry; a challenge that comes to fruition in much of Naden’s works as she engages with the widest reaches of philosophy and science.

Clough also emphasises that poetry can, and must, be distinct from prose because its propensity to affect means that it can impact the reader in a way that prose cannot. As a result, prose is ‘thrown away indeed tomorrow, but devoured today’, in contrast to the endurance of good poetry.³ That Naden’s poetry might convey emotions and affect the reader in a way that her philosophical writings might not was perhaps a factor in its composition. Instead of the scientifically-minded rational thought that she applied to her prose, as described in Chapter Three, when writing poetry she felt more able to consider a range of theistic positions without

² Arthur Hugh Clough, ‘Recent English Poetry: A Review of Several Volumes of Poetry by Alexander Smith, Matthew Arnold, and Others’, in *The Broadview Anthology of Victorian Poetry and Poetic Theory*, ed. by Thomas J Collins, and Vivienne J. Rundle (Ontario: Broadview Press, 2005), pp. 1254-69 (p. 1255).

³ *Ibid.*

being obliged to interrogate their validity rigorously. It is therefore through her poetry that the reader can perhaps glimpse what Naden considered to be ‘the true expression’ of her thoughts as her philosophical beliefs evolved over the course of her short life. While for Naden the role of the poet was fundamentally related to that of the philosopher, this did not result in introspective verse. Rather than expressing the feelings of a (male or female) individual she sought to transcend specificity, attempting to communicate a wider sense of the human condition. Naden’s poetry may therefore move readers to reflect upon connections within the world and elicit moments of recognition that signal unifying bonds transcending space and time. In Naden’s terms, successful poetry is not a didactic tool, but it should prompt a re-evaluation of our place in society and the universe at large. Poetry also speaks to Naden’s desire for unity in diversity, for, as Peter McDonald observes, the central component of rhyme is ‘similarity with dissimilarity, or dissimilarity with similarity’.⁴ Strength of rhyme and metre is a constant across the range of poetic forms used by Naden, with these repetitive elements suggesting that the articulation of her thought was closely associated with a desire to find points of unity within this expression.

At the heart of Naden’s work is an interrogation of the poet’s place in this network of connections, assessing and reassessing the idea of the poet that had come down to her from the most prominent figures of the Romantic period. This chapter is therefore in large part about Naden’s interrogation of how the lyric ‘I’, and alternatives to it, construct our understanding of what a poet can and should aim to achieve. It is significant that Naden suggests that poetry enables her to tell her thoughts, rather than her feelings, for she adopts techniques that engender a sense of distance between her personal and public self. Most

⁴ Peter McDonald, *Sound Intentions: The Workings of Rhyme in Nineteenth-Century Poetry* (Oxford: Oxford University Press, 2012), p. 11.

prominently she favours poetic forms that mask or undermine the sincerity of the authorial voice, thus producing many dramatic monologues, narrative poems, and comic verses. In the relatively few poems that can be defined as lyrics Naden uses 'I' sparingly, often substituting it with a more unified and inclusive 'we'. As a result, her lyrics take on a universal quality that provides a sense of philosophical detachment. Furthermore, dramatic monologues offer insights into characters and types that generate psychological readings, while extended narratives place characters in specific societal contexts, creating the space for cultural critique with sociological underpinnings.⁵ Through an investigation of Naden's complex engagement with the lyric 'I', I endeavour to demonstrate how her poetic output drew on and developed her wider intellectual interests.

The comic mode is an overarching theme that demonstrates Naden's willingness to depart from societal expectations surrounding individuals, especially women, who wrote poetry. Comic poetry is liberating at a formal and a social level. Humour, particularly in the rhymed verse that Naden embraced, facilitates connections by collapsing boundaries between registers and disciplines. Gillian Beer has argued that 'The comedy of rhyme lies in its refusal of established categories', and Naden's rhyming comic poems demonstrate both formally and thematically her desire to undermine the social order of both gender expectations and disciplinary divides.⁶ By writing in the comic mode, and so outside of the canon, Naden stood apart from the strictures enforced by literary tradition. While comic poetry was enormously

⁵ This idea is considered in depth by Ekbert Faas, who observes that dramatic monologue originated at approximately the same time as the mental sciences; indeed some such poems were analysed in psychiatric journals. *Retreat into the Mind: Victorian Poetry and the Rise of Psychiatry* (Princeton, NJ: Princeton University Press, 1989), p. 12.

⁶ Gillian Beer, 'Rhyming as Comedy: Body, Ghost, and Banquet', in *English Comedy*, ed. by Michael Cordner, Peter Holland, and John Kerrigan (Cambridge: Cambridge University Press, 1994), pp. 180-96 (p. 195).

popular in the nineteenth century, it was often deemed that a poet must either be serious or funny, as Donald Gray has observed: ‘It was difficult for Victorian readers [...] to imagine someone making a significant body of poetry by doing both at the same time.’⁷ Comic poetry introduces expectations of shallowness and detachment, and so Naden’s desire to express herself in both modes therefore complicated her reception. She embraces this mode in order to question assumptions and undercut frames of reference, prompting a reassessment of social norms on the part of the reader. James Williams has argued for

the importance of comedy to nineteenth-century culture, not just as a source of idle amusement, but as an introspective mode by which Victorian writers investigated questions of moral and social weight, in which they asked themselves who they were and what they valued.⁸

It is this use of the comic register that this chapter returns to throughout, showing how Naden steps out from under the shadow of the *idea* of the poet and is consequently able to work through her concerns about poetic, religious, and gender identity using her keen ear for comic rhyme and characterisations.

I draw out the respective functions of these largely distinct types of poem across the three quite clearly demarcated periods of Naden’s extant poetry: the unpublished notebooks (1875-77), *Songs and Sonnets* (1881), and *Modern Apostle* (1887).⁹ The principal shift that I shall discuss is in how Naden positions herself in relation to the poet figure and the utility of poetry as a medium for celebration and communication. Overall there is a move away from being beholden to the Romantic conception of male poet as genius and the traditional gender roles

⁷ Donald Gray, ‘Victorian Comic Verse; or, Snakes in Greenland’, *Victorian Poetry*, 26 (1988), 211-30 (p. 212).

⁸ James Williams, ‘The Jokes in the Machine: Comic Verse’, in *The Oxford Handbook to Victorian Poetry*, ed. by Matthew Bevis (Oxford: Oxford University Press, 2013), pp. 817-33 (p. 818).

⁹ *Notebook* occupies a liminal position in terms of date having been written in 1878-79, approximately the same period as *Songs and Sonnets*, with the majority of poems being drafts that later appear in print. I therefore discuss these notebook entries in conjunction with Naden’s first published volume of poetry.

principally upheld by the medieval revival. While in her earliest poems Naden accepts much of what was prescribed by literary tradition, testing the parameters of genre, form, and subject, in her later works she adopts a reflexive mode that uses a critical gaze to interrogate and unpick these ideals. Poetry thus became a flexible questioning medium for Naden; it represented a space of relative freedom, enabling her to pursue unknowns (whether philosophical, sociological, or psychological) rather than necessitating definitive answers. Poetry enables the writer to reflect back the world around them, and in doing so to highlight both beauty and absurdity, allowing the poem to function as portrait or cartoon, love letter or social commentary. Poetry also provides space for internal reflection, resulting in poems that interrogate the act of cognition. The reflexivity of Naden's poetry highlights this complex network of reflection and refraction that enabled her to communicate the interrelations between her philosophical world-view and the natural world, her place in society, and her cultural situation. As a result, in Naden's philosophical writings the poet plays a crucial role in her world-scheme, for while poetry cannot provide all the answers, nor can philosophy or science on their own. These realms need to be synthesised in order to achieve a higher understanding of the universe that is not bound up in a theological system.

In the previous two chapters I have charted the development of Naden as a scientist and a philosopher, exploring how she drew on a wide range of sources in order to synthesise concepts into a unified world-view. In this chapter, I argue that Naden approached the act of writing poetry with a similarly analytical mind-set, working through a variety of potential approaches to literary production, critically assessing these, adopting some and augmenting others to fit her developing philosophical ideas. At some points Naden makes a case for unity of purpose, but at others she seems less convinced of the potential for this to be realised.

Poetry is therefore a method through which Naden can test her ideas about what a poet can hope to achieve, just as she uses it to interrogate the reaches of scientific knowledge and philosophical ideas. There is, however, a sense of a struggle between Naden writing poetry and adopting the mantle of poet, which arises in part from issues surrounding disciplinary boundaries and gender roles, both of which she hoped to transcend in the pursuit of her synthetic philosophy. I therefore pursue two main questions: how did Naden view the role of the poet, and consequently construct herself as a poet? And how did poetry interact with Naden's development of a synthetic philosophy? I begin by outlining how Naden's poetry should be read in the context of discourses surrounding Romanticism, gender, and comedy during the nineteenth century. I then consider in turn poems in the notebooks from 1875-77, *Songs and Sonnets*, and *Modern Apostle*, alongside contemporaneous prose. I track her engagement with poetic voice, and consider how she responds to and reworks the poetic ideal articulated by Romantic poetry, there being a clear shift from her identifying primarily with Keats, then Wordsworth, and then Byron. Naden's perception of the poetic ideal remained a work-in-progress, but nonetheless we find that by the late 1880s the idea of 'unity manifested in diversity' had come to the fore (*FR* 189); this, she argues in 'Cosmic Identity', is the shared ideal of science and poetry. Through poetry Naden therefore aspires to communicate ideas that are no longer subjective and embodied, but universal and truly synthetic.

Romanticism, Gender, Comedy

The introduction to Naden's poems by Richard Garnett in Alfred H. Miles's anthology *The Poets and the Poetry of the Nineteenth Century* (1907) demonstrates how the interlinked forces of Romanticism, gender, and comedy came to bear upon her work. Naden's poems are deemed

much less subjective that is usually the case with the productions of young poetesses, and contain much less of merely personal sentiment; while some of the best pieces belong to a department little cultivated by female votaries of the Muse – the humorous.

He goes on to claim that her ‘two volumes [are] more interesting as revelations of a noble nature than as poetical inspirations’.¹⁰ The idea of ‘poetical inspirations’ has its roots in the Romantic figuration of the poet-genius. The Romantic poets of both generations provide a starting point for thinking about Naden’s engagement with this role, not least because they wrote self-reflexively, and in poems, letters, and prefaces laid out their beliefs about what poets might hope to achieve. In many ways Romanticism set the tone for poetry across the nineteenth century, whether it was taken up as a model or something to write against. We are informed by R. W. Dale that there were no

distinct indications of the ascendancy over her mind of either of the two great poets, whose power might have been expected to cast a spell upon a young imaginative mind of this generation. [... N]either Browning nor Tennyson had ever taken possession of her; [...] though she admired Tennyson, he had never moved her to enthusiasm. She felt far more deeply the charm of Keats and of Shelley, and she was strongly drawn to Wordsworth. (*FR* 225-26)

This is the most explicit indication we have of Naden’s reading preferences and influences, and it rings true as we read her poetry today. In the notebooks from 1875-77 there is the perceptible influence of Keats, alongside Tennyson, on the medieval narratives that proliferate. Looking outwards to other Romantic poets, Byron’s rejection of Romantic assumptions in *ottava rima* is a key influence upon the narrative poems of *Modern Apostle*. It was Wordsworth and Shelley, however, that had the most sustained and nuanced impact.

¹⁰ Garnett, pp. 387-88.

Naden returns to Wordsworth at every stage of her writing life. This thread of Romanticism is fundamental to Naden's perception of what a poet can and should aspire to achieve; she does not wholeheartedly accept a Wordsworthian model, and yet his influence is pervasive.

Naden's most direct engagement with the poetry of the Romantic period is her inclusion of the following stanza from Wordsworth's 'Ode to Duty' in two of her essays:

Serene will be our days and bright,
And happy will our nature be,
When love is an unerring light,
And joy its own security.
And they a blissful course may hold
Even now, who, not unwisely bold
Live in the spirit of this creed,
Yet find that other strength, according to their need. (*I&D* 112; *FR* 14)¹¹

This stanza, quoted in 'Evolutionary Ethics' (1887) and 'Pig Philosophy' (1889), is used by Naden to draw together 'the aspirations of the utilitarian philosopher' and those 'of the poet or idealist' (*FR* 13-14). From Naden's secular perspective, Wordsworth's appeal to morality is an 'ideal [that] is certainly unimpeachable' (*FR* 14) and offers 'a beautiful and, let us hope, a prophetic picture' (*I&D* 112). The manner in which Naden wields this stanza in the conclusions of these two essays implies that she viewed Wordsworth as lending an air of irrefutability to her argument. Her willingness to defer to another poet's formulation indicates both her enthusiasm for the poetry of the Romantic period, and her awareness of Wordsworth's cachet within late nineteenth-century culture.

¹¹ A variant final line 'Yet seek thy firm support, according to their need.' was introduced by Wordsworth in 1836. This shift erases the poem's call to draw upon our indwelling capabilities, instead looking outwards to an indefinable 'thy' that appeals to an external, divine presence; it is perhaps significant that Naden chose to repeat the version that provides space for a secular reading. See William Wordsworth, *Poems, in two volumes; and other poems, 1800-1807*, ed. by Jared Curtis (Ithaca, NY: Cornell University Press, 1983), p. 105 (l. 24).

Naden looked to Romantic philosophy too. A notable parallel to her active theory of perception is the Romantic understanding of mind whereby, in M. H. Abrams's words, it 'contributes to the world in the very process of perceiving the world'.¹² Coleridge's definition of the secondary imagination would have therefore appealed to Naden, for her stance bears comparison with the famous description in *Biographia Literaria*: 'It dissolves, diffuses, dissipates, in order to recreate; or where this process is rendered impossible, yet still at all events it struggles to idealize and unify.'¹³ Wordsworth's description in the *Prelude* of the relationship between the world and his mind further exemplifies this: 'I had the world about me—'twas my own, / I made it, for it only lived to me'.¹⁴ It is significant for Naden too that Wordsworth proposes the eventually unified purpose of poetry and science: 'If the time should ever come when what is now called Science [...] should be ready to put on, as it were, a form of flesh and blood, the Poet will lend his divine spirit to aid the transfiguration'.¹⁵ Naden's rejection of an adversarial view of the disciplines indicates her belief that this moment had arrived, writing of 'The land where Poetry and Science meet' (*CPW* 129, l. 3), and prophesising the time when 'philosophy and poetry meet and clasp hands' (*I&D* 112).

This sense of assimilation and synthesis is, according to John Holmes, a key attribute of the 'unifying element' in 'our idea of "Romanticism"'. Holmes argues that this is transcendence 'pursued by the individual on his or her own terms and not within the received framework of

¹² M. H. Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (New York: Oxford University Press, 1953), p. 56.

¹³ Samuel Taylor Coleridge, *Biographia Literaria*, ed. by J. Shawcross, 2 vols (Oxford: Oxford University Press, 1965), I, p. 202.

¹⁴ The subsequent line asserts the omniscient presence of God sharing this world with him, however, creating a significant rupture between Naden's and Wordsworth's conception of cognition. 'Prelude', *The Major Works*, p. 408 (III, ll. 142-46).

¹⁵ Wordsworth also states that 'The remotest discoveries of the Chemist, the Botanist, or Mineralogist, will be as proper objects of the Poet's art as any upon which it can be employed', 'Preface to *Lyrical Ballads* (1802)', *The Major Works*, p. 607.

Christian theology or any other pre-existing transcendental system’, while ‘mak[ing] use of other such systems and their authors’. He concludes with the assertion that ‘From the 1860s onwards, Victorian poets saw in science a new Romantic revelation’.¹⁶ William St Clair has further shown the links between the secularisation of intellectual culture and changes in nineteenth-century readers’ responses to Romantic poets:

By the middle of the Victorian period Shelley and Wordsworth had become the most esteemed authors of the liberal intellectual and scientific aristocracy [...] The romantic poets offered them reassurance that a secular culture need not lack beauty, or moral idealism, or a strong ethical basis.

In the old canon, the link between literature, sublimity, feeling, and morality had been constantly emphasised, and any hint of irreligion condemned and excluded. In this new Victorian canon the morally improving power of literature was still emphasised, but except in expurgated ‘family’ editions, *Queen Mab* and *Don Juan* were readily accessible. Wordsworth, the theist, shared the glory of Byron who, in *Cain*, had put convincing arguments in the mouth of Lucifer.¹⁷

The irreligious strand of Romanticism championed by Shelley and Byron chimed strongly with Naden’s secular philosophy. Furthermore, as Joss Marsh remarks, by the 1880s literature was

asked to provide the authority once found in religion. Wordsworth naturally would figure at the head of the new literary canon [...] as the model of the authoritative writer who creates social harmony by ‘trac[ing] out the links of good by which all human things are bound together’.¹⁸

¹⁶ John Holmes, ‘The X Club: Romanticism and Victorian Science’, in *(Re)Creating Science in Nineteenth-Century Britain*, ed. by Amanda Mordavsky Caleb (Newcastle: Cambridge Scholars Publishing, 2007), pp. 12-31 (pp. 17, 27).

¹⁷ William St Clair, *The Reading Nation in the Romantic Period* (Cambridge: Cambridge University Press, 2004), p. 428.

¹⁸ Marsh, p. 193. Quoting Thomas Noon Talfourd’s preface to *Ion in Tragedies* (1840; London: Routledge, 1889), p. 24. This binding together of *all* things was encouraged by Lewins in his letters to Naden (see *HvT* 13), but very much at odds with Spencer’s view of natural forces. Francis has explained how ‘Spencer’s attempt to capture nature by definition had strongly anti-Romantic qualities. Images and forces that had so struck Romantics – clouds, volcanoes, the seas, mountains and glaciers – left Spencer unmoved.’ *Herbert Spencer*, p. 205. The contrast between this and Naden’s response to the beauty of nature and her sympathy with seasonal changes and weather systems indicates the importance of appreciating where the two synthetic thinkers disagree.

This type of secular thinking exerted a significant influence upon Naden; *Notebook* indicates that by 1878 she had rejected the authority of religion; poetry, alongside freethinking philosophy and science, filled that ideological vacuum. Indeed the connectivity that Marsh draws out of Wordsworth's writings is at the foundation of Naden's philosophy, and recurrent allusions to Wordsworth in her poetry and quotations from him in her prose testify to this.

The development of Naden's poetic identity can be linked to Shelley's pronouncement in 'A Defence of Poetry' (1840) that poets are 'philosophers of the very loftiest power'.¹⁹ This is significant for Naden, since it indicated that poetry would enable her to express her ideas and influence the world around her. The rhetoric used by Shelley to describe the function of poetry would have appealed to Naden's desire to engage with the concept of universal truths. For example, he writes of how a story is 'partial', 'a catalogue of detached facts'; in contrast, poetry 'is universal and contains within itself the germ of a relation to whatever motives or actions have place in the possible varieties of human nature'. Poetry is also described as an active force, for Shelley writes of its 'effects upon society', suggesting that such writing is crucial to reform.²⁰ Furthermore, poetry is positioned as being uniquely interdisciplinary, and thus able to underpin the synthetic project with which Naden was concerned: it 'is at once the centre and circumference of knowledge; it is that which comprehends all science, and that to which all science must be referred. It is at the same time the root and blossom of all other systems of thought'.²¹ As Alasdair D. F. Macrae has observed, Shelley 'wished poetry to include scientific knowledge rather than be in opposition to it'.²² Moreover, Paul Hamilton

¹⁹ Percy Bysshe Shelley, 'A Defence of Poetry', *Percy Bysshe Shelley: Selected Poetry and Prose*, ed. by Alasdair D. F. Macrae (London: Routledge, 1991), p. 210.

²⁰ *Ibid.*, p. 210.

²¹ *Ibid.*, p. 227.

²² Macrae, 'Introduction', in *Shelley: Selected Poetry and Prose*, pp. 1-18 (p. 9).

argues, ‘Poetry convinces Shelley that, ironically, we express ourselves most adequately when least definitively: in terms not bound by present interpretations but also awaiting activation by future audiences and circumstances.’²³ This perspective speaks clearly to our understanding of how Naden approached poetry as a method through which she might refine her philosophical thinking and communicate her ideas without resorting to didacticism.

Naden also shared a significant portion of Shelley’s philosophical views; it was the growth of the freethought movement that led to a resurgence of interest in several of his more incendiary works during the second half of the nineteenth century. Hamilton writes of

Shelley’s desire, from an early age, to escape from the ideological contamination he saw to be inherent in current cosmologies. [...H]is principal target was Christianity, or, as he understood it, Christian interference in the strictly logical business of making sense of the world.²⁴

This adherence to rationality above faith is a key feature of Naden’s philosophical ideas that manifest themselves in both poetry and prose. Macrae notes that for Shelley poetry ‘seems to operate as a substitute for a discredited religion’, and Gavin Hopps highlights how ‘we find [Shelley] ferociously attacking the Church, its doctrines, and the God of wrath, whilst also affirming an “eternal world” pervaded by an “active, living spirit”’.²⁵ There is a strong resemblance between this and Naden’s view of religion as a sociocultural construct, from which she argues that ‘we shall not clothe this proplasm with divine attributes and bow in worship of the Absolute and Unknowable’ (*FR* 122), while early on maintaining a pantheist desire to ‘Rejoice in thine imperishable being, / One with the Essence of the boundless world’

²³ Paul Hamilton, ‘Literature and Philosophy’, in *The Cambridge Companion to Shelley*, ed. by Timothy Morton (Cambridge: Cambridge University Press, 2006), pp. 166-84 (p. 177).

²⁴ *Ibid.*, p. 173.

²⁵ Alasdair D. F. Macrae, ‘Critical Commentary’, in *Shelley: Selected Poetry and Prose*, pp. 235-52 (p. 241); Gavin Hopps, ‘Religion and Ethics: The Necessity of Atheism, A Refutation of Deism, On Christianity’, in *The Oxford Handbook of Percy Bysshe Shelley*, ed. by Michael O’Neill, Anthony Howe, and Madeleine Callaghan (Oxford: Oxford University Press, 2012), pp. 117-32 (p. 130).

(*CPW* 45, l. 40). In Naden's poetry this perspective establishes a unifying tone that transcends individual subjectivity, indicating a congruence of belief with Shelley.

It was in the Victorian period that Romantic myths of the artist solidified. Andrew Radford and Mark Sandy argue that many assumptions surrounding the Romantic creative process 'were reinforced, even initiated, by Victorian editors and biographers'.²⁶ This was compounded by the publication of Wordsworth's *The Prelude* in 1850, which related, as per its subtitle, 'the growth of a poet's mind'. The idea that a poet must undertake introspective contemplation soon crystallized into a truism, and the essential masculinity of the poet – in Wordsworth's terms 'He is a man speaking to men' – was perpetuated.²⁷ Indeed, in *Women Writers and Poetic Identity*, Margaret Homans argues that 'women's otherness [was] reinforced' by a Romantic tradition that emphasised 'her association with nature and her exclusion from a traditional identification of the speaking subject as male'.²⁸ This masculine creative tradition effectively silences women as poets, for although the 'Mother Nature' figure wields great power she remains muse/object in this dynamic. I am not suggesting that there was no female counter-tradition to the male Romantics, for there is significant scholarship demonstrating precisely the contrary.²⁹ By the second half of the nineteenth century, however, this had been successfully effaced and the dominant discourse surrounding Romanticism propounded a male canon, which persisted across the twentieth century.

²⁶ Andrew Radford and Mark Sandy, 'Introduction: Romanticism and the Victorians', in *Romantic Echoes in the Victorian Era*, ed. by Andrew Radford and Mark Sandy (Aldershot: Ashgate, 2008), pp. 1-14 (p. 2).

²⁷ Wordsworth, 'Preface', *The Major Works*, p. 603.

²⁸ Margaret Homans, *Women Writers and Poetic Identity: Dorothy Wordsworth, Emily Brontë, and Emily Dickinson* (Princeton, NJ: Princeton University Press, 1980), p. 12.

²⁹ Seminal works include Marlon B. Ross, *The Contours of Masculine Desire: Romanticism and the Rise of Women's Poetry* (New York and Oxford: Oxford University Press, 1989) and Anne K. Mellor, *Romanticism and Gender* (New York and London: Routledge, 1993). Stephen D. Behrendt's chapter 'Poetry' in the *Cambridge Companion to Women's Writing in the Romantic Period*, ed. by Devoney Looser (Cambridge: Cambridge University Press, 2015), pp. 1-15 provides an overview of more recent research on this topic.

Two strains of poetry written by women developed in response to the male canon: the domestic ‘poetess’ model, linked to writers such as Letitia Landon and Felicia Hemans, and later women poets who wrote counter to this, such as Elizabeth Barrett Browning and Christina Rossetti. Naden did not clearly work within either of these traditions, although she would be more clearly aligned with the latter.³⁰ In ‘Personal and Press Opinions of the Works of Constance Naden’, appended to Naden’s *Complete Poetical Works*, the word ‘poetess’ appears only once: the *Chatham and Rochester Times* write that Naden was ‘a lady of undoubted genius, not only as a poetess, but in the more abstruse paths of philosophy’ (*CPW* Appendix 19). Even E. Cobham Brewer, who begins his short remembrance with an overt description of Naden’s femininity – ‘so fair, so young [...] so frail and short-lived, cut off in the very bud of womanhood’ – goes on to state that ‘Miss Naden was a poet born’ (*CPW* Appendix 4).

Susan Brown has claimed that from the 1870s onward, the poetess became a less important category, giving way to new configurations of the ‘woman poet’ toward the end of the nineteenth century.³¹ She argues that:

³⁰ While several obituaries draw links between Naden and George Eliot there is no clear thread of influence. Naden does refer to Eliot as ‘a great writer’ in a brief addendum to a short letter to *Knowledge*, in response to another correspondent’s disparaging comments, Constance C. W. Naden, ‘The Weak Point of Darwinism’, *Knowledge* 7, 19 June 1885, p. 531. Naden was also one of the judges for a Mason College competition to submit the most successful analysis and criticism of a George Eliot novel, ‘Prize Competition’, *MCM* 2, May 1884, pp. 66-67. In addition, LaPorte has argued that ‘Eliot’s unusual combination of sentimental piety and religious skepticism gives [Naden and Mathilde Blind] a particularly useful model’ for reclaiming the mid-century poetess tradition, p. 427.

³¹ Susan Brown, ‘The Victorian Poetess’, in *The Cambridge Companion to Victorian Poetry*, ed. by Joseph Bristow (Cambridge: Cambridge University Press, 2000), pp. 180-202 (pp. 196-98). It should be noted, however, that Anne K. Mellor makes a similar case for the category ‘female poet’ in relation to the Romantic period in ‘The Female Poet and the Poetess: Two Traditions of British Women’s Poetry, 1780-1830’, *Studies in Romanticism*, 36.2 (1997), 261-76.

The remarkable shifts in tone and the startling variety of theme, form, and technique in the texts of late-Victorian women poets such as Mathilde Blind, Mary Coleridge, Amy Levy, Constance Naden, and A. Mary F. Robinson may be due to a sense that women no longer need define themselves against the figure of the poetess.³²

While Brown's view of Naden is applicable to much of her published poetry, the *Notebooks* reveal the earlier, unpublished struggles Naden undertook to work herself free of these earlier gender constraints; this manifest particularly in her medieval narratives, as well as her invariably gendering the poet as male. This alternative angle aligns with Marion Thain's opposing assessment in her influential essay 'What Kind of a Critical Category is "Women's Poetry"?' that 'the poetess continues to be an important idea, poetically and critically'. Thain argues that 'women poets, even New Women poets, do continue to engage with the role of the poetess, and measure themselves against it (even if only to mark their distance from it) through to the end of the century'.³³ Accordingly, although the bravura of comic poetry in Naden's later works seems to have overcome the stultifying enclosure that the term 'poetess' brings, her notebooks indicate the difficulty with which this position has been reached, as I go on to show.

It may seem odd that Naden's anxiety surrounding gender in poetry is not similarly evident in her scientific and philosophical works. One reason for this, I argue, is that the very small number of women visibly engaging in these latter fields during this period meant that Naden could carve her own path and shape a role for herself; she could not be pigeonholed as 'scientess' or 'philosophess'. In contrast, the increasing prominence of women in the literary realm over the course of the nineteenth century meant that the label, and therefore stereotype,

³² Susan Brown, p. 198.

³³ Marion Thain, 'What Kind of a Critical Category is "Women's Poetry"?', *Victorian Poetry*, 41 (2003), 575-84 (p. 579).

of 'poetess' existed clearly in the popular imagination. Once access had been gained to a field in which women were not expected to work there were therefore, perhaps counterintuitively, fewer assumptions against which Naden needed to push. One cannot be both an anomaly and a stereotype. This understanding of Naden's approach to shaping a public identity further accounts for her sustained engagement with the comic mode, in contrast to her discomfort with adopting the lyric 'I'.

While significant scholarship exists on humorous poets of the nineteenth century, they have nonetheless tended to be marginalized by literary scholars and their extremely popular poetry has not been given as much attention as it might. Furthermore, there has been a tendency for critical work to focus on nonsense and parodic verse within discussions of the overwhelmingly male field of comic poets during this period (the major figures are Edward Lear and Lewis Carroll, alongside Austin Dobson, Bon Gaultier, William S. Gilbert, and C. S. Calverley).³⁴ Accordingly, Miles introduces May Kendall's poems in his volume of 'Humour, Society, Parody and Occasional Verse' by expressing his surprise:

It is a singular fact [...] that, among the many avowedly humorous poets of the century, and those whose humorous verse bears a sufficient proportion to the general body of their work, or is sufficiently characteristic to entitle them to separate representation in a volume devoted to poetic humour, Miss Kendall is the only woman. A glance at other collections of the humorous poetry of the century shows that [...] no woman poet of the century receives more than passing mention for humorous work. This would seem to go far to prove the contention often made that women are distinctly lacking in a sense of humour.³⁵

³⁴ See the special issue of *Victorian Poetry*, 26.3 (1998) on comic verse edited by Ina Rae Hark, as well as Mark Storey's *Poetry and Humour from Cowper to Clough* (London: Macmillan, 1979) and Daniel Brown's *The Poetry of Victorian Scientists*.

³⁵ Alfred H. Miles, 'May Kendall', in *The Poets and the Poetry of the Nineteenth Century*, 11 vols (London: Routledge, 1905), X, pp. 613-14.

That Naden appears in Miles's volume of women's poetry, despite Garnett's view that her 'best pieces belong to [...] the humorous', is therefore extremely interesting.³⁶ One reason for Kendall's inclusion in the volume of comic verse could be that *Punch* published her poems – 'The Lay of the Trilobite' and 'Ballad of the Ichthyosaurus' both appearing in its pages in 1885 – but not Naden's. *Punch* was the most high-profile distributor of comic writing in nineteenth-century Britain, and the majority of contributors to it were male. Indeed, Richard Noakes described *Punch* as 'a periodical written largely by men for a predominantly male audience', characterising the high-profile writers as the 'Punch Brotherhood' who 'poked fun at social convention and class'.³⁷ This perpetuation of assumptions about the gender of individuals who write and appreciate satirical writing indicates how far Naden's comic social commentary poems would have been perceived (as with Kendall's) as an anomaly. In comic poetry it is possible to be more subversive than might otherwise be acceptable; as Linda M. Shires observes, comic forms such as 'fantasy, nonsense, and parody are engaged in dissolving the signifying practices of culture, the ways in which it establishes and fixes meaning'.³⁸ It is for this reason that much critical writing on Naden has focused on the way she interrogates politics of gender in relation to science and education in the 'Evolutional Erotics'.³⁹

Naden had to negotiate expectations surrounding what kind of poetry most befitted her class and gender, since these did not align with the critical comic mode to which she seems most drawn. The notebooks reveal her early compositions that do not seem to have been written

³⁶ Garnett, pp. 387-88.

³⁷ Richard Noakes, 'Punch and comic journalism in mid-Victorian Britain', in *Science in the Nineteenth-Century Periodical*, ed. by Cantor, pp. 91-122 (pp. 102, 101).

³⁸ Linda M. Shires, 'Fantasy, Nonsense, Parody, and the Status of the Real: The Example of Carroll', *Victorian Poetry*, 26 (1988), 267-83 (p. 271)

³⁹ See Murphy; Thain, 'Scientific Wooing'; Holmes, *Darwin's Bards*, pp. 189-97; Tange.

with an eye on publication, and these tend to fall into two camps. On the one hand there is derivative medievalism and lyricism, modes that rapidly fell out of favour with Naden: there is almost a complete absence of chivalric poems in her published works, and the limited lyric poetry that she published tends to complicate assumptions surrounding subject and object. On the other hand, there is comic poetry that, in contrast, is written in a distinctive voice, and is far more mature in terms of both form and subject. Surprisingly, humorous verse does not feature heavily in *Song and Sonnets*, and yet Naden's poetry in periodical publications is defined by this genre.⁴⁰ In the situation where she had the largest readership, therefore, it was with comic poetry that she expressed herself under her own name. This speaks to a concern with audience expectations, for while a volume of poetry by a young woman might be expected to communicate earnest sentiment, periodicals were more inclined to welcome humour. That comic poetry is a key component of *Modern Apostle* – drawing on the tradition of satirical poetry in *ottava rima* as well as the overtly humorous 'Evolutional Erotics' – is indicative of Naden's increasing self-confidence as a writer of comic poetry; it was the genre through which she was best able to express her sociocultural critiques.

Dramatic monologues proliferate in *Songs and Sonnets* and make up a significant proportion of *Modern Apostle* (in terms of number of poems, rather than pages), although there are notably few in Naden's unpublished notebooks. Kate Flint has observed that:

a major distinguishing feature in [Victorian women poets'] writing is a readiness to inhabit the voices, the subject positions of others. They do not readily take on the

⁴⁰ The exceptions here are 'The Voice of Nature' and 'Rest'; perhaps relatedly, these are two of the three poems by Naden that were published but not included in the posthumous *Complete Poetical Works*.

role of seer speaking with their own, personal authority of experience; of celebrants of their own creative imaginations.⁴¹

This is significant because we know that in Naden's philosophical writings, she does aspire to the role of seer (and champions Schiller for his hybridity as 'seer and singer').⁴² A philosopher is rarely expected to be introspective on an individual level, but instead attempts to make totalising statements about the place of the human race within the universe. It is this desire that is supported by the dramatic monologue form, itself a tool for, in Flint's words, 'exploring the fact that identity may be something imaginatively, generously, experimentally dispersed and diffuse, reachable through writing and reading which can stretch both writer and reader well beyond the bounds of personal experience'.⁴³ In order to speak to and for multitudes, Naden was compelled to inhabit the identities of others, imaginatively working through the thought processes of men and women and attempting to draw from these a higher truth.⁴⁴ That Naden was not drawn to this form in the early stages of her writing life aligns with our knowledge that she does not seem to have begun thinking seriously about philosophy until later in the 1870s. Furthermore, Naden's evident attraction to Romantic poetry in her notebooks and subsequent interrogation of its core attributes in her published works might be said to follow the trajectory that Rosie Miles attributes to the poetry of the nineteenth century, whereby 'The seemingly authentic lyric "I" of Romantic poetry is looked askance at in the emergence of the monologue in the 1830s.'⁴⁵

⁴¹ Kate Flint, "'...As a rule, I does not mean I': Personal Identity and the Victorian Woman Poet', in *Rewriting the Self: Histories from the Middle Ages to the Present*, ed. by Roy Porter (London: Routledge, 2002), pp. 156-66 (pp. 157-58).

⁴² C. C. W. N., 'Schiller', p. 1.

⁴³ *Ibid.*, p. 159.

⁴⁴ This is in keeping with much of Isobel Armstrong's argument in her seminal chapter "'A Music of Thine Own" Women's poetry – an expressive tradition?' in *Victorian Poetry: Poetry, Poetics and Politics* (London: Routledge, 1993), pp. 318-77.

⁴⁵ Rosie Miles, *Victorian Poetry in Context* (London: Bloomsbury, 2013), p. 28.

Naden's troubled relationship with the figure of the poet stems in part from her early conception of poetry as the domain of the male genius, and an accompanying resistance to identifying herself as a 'poet'. Tensions surrounding women's identification as poets proliferate across the Western literature. As Sarah Parker demonstrates in her study of the lesbian muse and the lyric tradition:

For centuries, the active, shaping task of poetic creation has been associated with masculinity, while the role of silent, inspiring muse has been associated with femininity. Therefore, reconciling female and poetic identity has often seemed a difficult task for women who want[ed] to write.⁴⁶

Naden's internalisation of this historical precedent is made clear by her invariable depiction of poet characters as male in her works. The way she situates herself in relation to them comes into particular focus in the notebook poems: she acknowledges that 'to the poet's awful height / My feet shall never climb' (*P75* 2, ll. 17-18). There is, however, a distinction to be made between the way I discuss gender in this chapter – which centres upon Naden's desire to find a poetic voice that is not defined as male or female – and the way in which many scholars have sought to identify the voice of the woman poet. While Naden was responding to a poetic tradition that positioned the poet as male, she did not contend with this by adopting an identifiably feminine voice, such as those that Angela Leighton draws out so persuasively in *Victorian Women Poets: Writing Against the Heart* (1992).⁴⁷ Instead, Naden employed masking techniques, which took four major forms: the long narrative, the ungendered philosophical mode, the dramatic monologue, and the comic voice. The prominence of each of these rose and fell over the course of Naden's writing life, and it is the comic mode that is most consistently identifiable and, I argue, successful.

⁴⁶ Sarah Parker, *The Lesbian Muse and Poetic Identity, 1889-1930* (London: Pickering and Chatto, 2013), p. 12.

⁴⁷ Angela Leighton, *Victorian Women Poets: Writing against the Heart* (London: Harvester Wheatsheaf, 1992).

Naden's Notebooks

In one of Naden's first published poems – 'The Poet of Nature', which appeared in the *Saint James's Magazine* in 1877 – the 'poet-child' is a 'he', while his muse 'Nature' is emphatically female.⁴⁸ The trope of the male poet remains a constant across her published and unpublished poetry. In this way the male poet figure is clearly distinguished from Naden's poetic 'I', often identified as a mere versifier who cannot hope to reach the pinnacle of the 'Poets' Mountain' (P75 1-2). Nonetheless, throughout her early works, Naden regularly writes about the act of creating poetry; she reflects and is self-aware about the process. Crucially, her creative production is not, as Wordsworth conceived it, 'the spontaneous overflow of powerful feelings [...] recollected in tranquillity'.⁴⁹ Work and effort underpin Naden's act of creation in a manner that aligns poetry with her other intellectual endeavours, such as educating herself about existing scientific and philosophical ideas and applying them to her own ends. Furthermore, Naden's poetic development demonstrates the hallmarks of assimilation and synthesis, establishing it as part of her overarching world-scheme.

Naden's unpublished notebooks from 1875-77 can be classified as juvenilia on the basis that she wrote them before the age of twenty.⁵⁰ Christine Alexander has shown it to be 'natural that young writers will experiment by impersonating different voices and imitating different genres', and has persuasively argued that this 'major characteristic of youthful writing [...] is often misunderstood'.⁵¹ This was an acknowledged part of the development of the poet during

⁴⁸ C. C. W. Naden, 'The Poet of Nature', *The St. James's Magazine* (August 1877), p. 152.

⁴⁹ Wordsworth, 'Preface', *The Major Works*, p. 598.

⁵⁰ This is the definition used by the Juvenilia Press; their precedent is followed by Lesley Peterson and Leslie Robertson, 'An Annotated Bibliography of Nineteenth-Century Juvenilia', in *The Child Writer from Austen to Woolf*, ed. by Christine Alexander and Juliet McMaster (Cambridge: Cambridge University Press, 2005), pp. 269-303 (p. 270).

⁵¹ Christine Alexander, 'Defining and representing literary juvenilia', in *The Child Writer from Austen to Woolf*, pp. 70-97 (pp. 78, 77).

the nineteenth century as well; in *Aurora Leigh* Elizabeth Barrett Browning has Aurora explain:

And so, like most young poets, in a flush
Of individual life, I poured myself
Along the veins of others, and achieved
Mere lifeless imitations of verse.⁵²

This is a particularly negative portrayal of the process that, for Naden, led her to test many different poetic forms and genres (although notably not sonnets), and to try on a variety of voices. While not her most innovative or uniformly successful works, the poems in *Poems 1875* and *Poems 1875-6-7* demonstrate both her range – from Petrarchan blazon to extended medieval narrative, the conventions of common meter to those of comic verse – and burgeoning skill.

Although these poems were largely unpublished, it seems that they were written to be read by others. The thirty-two line ‘Introduction’ indicates that she shared her poems with friends and family: ‘And yet my humble ray, though seen by few / Shall glow contented in its narrow sphere’ (‘Introduction’ *P75-6-7* 3, ll. 24-25) gestures towards the domestic context of its production and consumption.⁵³ Furthermore, ‘A Lament’, comprising of six quatrains, concludes with the stanza:

Yet will I write my simple lays
My pencil shall not rest,
For it is sweet to win the praise
Of those I love the best. (*P75-7* 74, ll. 21-24)

⁵² Elizabeth Barrett Browning, *Aurora Leigh* (Oxford: Oxford World Classics, 1998), p. 32 (I, ll. 971-74).

⁵³ In addition, the ‘Dedication’ to her grandparents that opens *Songs and Sonnets* states that they ‘treasure yet / Quaint sayings, sketches rude, and childish lays’ (*CPW* xxiii, ll. 10-11), implying that Naden shared her unpublished poetry with them.

Indeed, the earlier two notebooks' fair-copy format suggests that these could be presentation copies. If she was writing with such an audience in mind it may explain the conventionality of many of these poems, which contrast with the outspoken defiance found in the more private 1878-79 *Notebook*.

The first poem in the earliest notebook, titled 'The Poets' Mountain', indicates Naden's perception of the poetic tradition in relation to herself, the figure of the male poetic genius looming large. She begins by describing 'the spot where poets dwell':

Within fair Fancy's empire blest
A wondrous mountain stands
All brilliant shines its awful crest
And lights the neighbouring lands. (*P75* 1, ll. 1-4)

In this Naden delineates the relationship she perceives between disciplines, for the 'neighbouring lands' illuminated by the heights of poetry are conceivably those of science and philosophy. Certainly it constructs an entirely positive view of the poet's highest achievements. The poem continues:

Scarce to the base may some attain,
Some climb with footsteps bold,
But few the crowning heights may gain,
That shines like burnished gold.

And those, like me, who dare not hope,
The flaming crags to scale,
May safely tread the gentle slope
That rises from the vale.

Though to the poet's awful height
My feet shall never climb,
I yet may roam, with footsteps light
The humble paths of Rhyme. (*P75* 1-2, ll. 9-20)

These self-deprecating stanzas, while simple, are technically-assured, and yet they claim that her subsequent poems are not worthy of the name, they are mere 'Rhyme'.

The stress placed upon 'never' in the fifth and final stanza instils a sense of conclusion; Naden does not envisage herself as undertaking a poetic apprenticeship, rather, she offers a finalised view of what she hopes to achieve in the realm of poetic composition. By preempting criticism of her work, and her position as a young woman seeking to engage with this rarefied pursuit, Naden concedes to the Romantic idea of the inspired poetic genius, an invariably male figure with which she struggles to identify.⁵⁴ I argue that this gender-based anxiety has a strong influence on Naden's unwillingness to define herself as 'poet', for to do so would open her up to potentially being categorised as a 'poetess', a term with which she never identifies. By downgrading her poetry to humble 'rhyme' she rejects both halves of this binary, removing any necessity for identifying with either gender explicitly and providing Naden with the flexibility of having an indeterminately-gendered poetic voice.

Similar comments about her writing abilities found in 'Introduction', 'A Lament', and 'Pebbles and Diamonds' establish the sincerity of such remarks (*P75-7* 1-3, 73-74, 164-65); this is not false modesty. These may be compared to Keats's early poems, in which his self-critique strikes a similar note to Naden's. There is a key difference, however, for Keats nevertheless aspires to achieve the role of poet. For example, in 'Sleep and Poetry' he writes:

O Poesy! For thee I hold my pen
That am not yet a glorious denizen

⁵⁴ There are potential parallels to be drawn here with Romantic era poets such as Mary Leadbetter and Mariann Dark, who both commemorated their abandonment of poetry in poems, a rhetorical gesture that Behrendt claims 'mirrors many comparable gestures of self-erasure that women poets make in poems *that they then publish*'. Stephen D. Behrendt, 'Poetry', in *Cambridge Companion to Women's Writing in the Romantic Period*, ed. by Devoney Looser (Cambridge: Cambridge University Press, 2015), pp. 1-15 (pp. 12-13).

Of thy wide heaven [...] ⁵⁵

For Keats there is a sense of deferral in his assertion that he is simply ‘not yet’ a poet, in contrast to Naden’s deflection of the label, she ‘dare not hope’. This contrasts too with the sense of entitlement that is found in Wordsworth’s oeuvre where he inserts himself into the pantheon of poets with regularity. One instance occurs in ‘Resolution and Independence’: ‘We Poets in our youth begin in gladness’ (here he refers specifically to the ‘deified’ ‘Chatterton, the marvellous boy’).⁵⁶ The phrase ‘like me’ is therefore crucial in ‘The Poets’ Mountain’, since the self-deprecation inherent in the phrase is symptomatic of how Naden characterises herself within her unpublished poetry. The subordinate clause both emphasises her place in the hierarchy she outlines and indicates her peripheral position.

The lack of engagement with scientific ideas in *Poems 1875* and *Poems 1875-6-7* indicates that Naden had not yet developed her later interests, or, at least, did not yet desire to draw such ideas into dialogue with her poetry. In the light-hearted poem ‘Past and Present’ she responds to recent technological innovations, comparing them with the wonders of old: ‘Why should our steam-engine be less terrific / Than the huge dragons, that they used to slay?’, ‘But which of all their wonders strange & awful / Could rival the Electric Telegraph?’ (*P75-7* 102, ll. 7-8; 103, ll. 19-20). She is, however, dismissive of science as a whole:

Alas, the brilliant age of dreams is dying,
Before grim Science it shall fade away,
Shall we have nought in place of what is dying?
Where shall we seek the poet of to-day? (*P75-7* 106, ll. 49-52)

⁵⁵ ‘Sleep and Poetry’, *The Complete Works of John Keats*, ed. by H. Buxton Forman (New York: Thomas Y. Crowell, 1895), p. 53 (ll. 47-49).

⁵⁶ Wordsworth, ‘Resolution and Independence’, *The Major Works*, p. 262 (ll. 48, 47, 43).

This is an echo here of Romantic anxieties, reminiscent of Keats's worry in 'Lamia' that 'the mere touch of cold philosophy' will 'Unweave a rainbow'.⁵⁷ Although the tone of Naden's poem is playful, its exaggerated lamentation indicating that it was not to be taken entirely seriously, its opposition of poetry and science nonetheless starkly contrasts with the perspective offered in her published works that speak directly to the reciprocal relationship between poetry and science.

Keats's medieval strain also influenced Naden, although it may initially seem that there are few direct parallels in form and style to be drawn upon. There are threads that can be followed, for example the appearance of a character called Bertha in 'After the Tournament' might be said to recall Bertha in 'The Eve of St Mark', since both are described as 'fair'. This is entirely conventional, however, and the pious character in Keats's unfinished narrative has little in common with the 'queenly figure' that takes pity on a gallant but lonely knight in Naden's poem (*P75* 160, l. 25; 161, l. 46). Looking to Keats's other chivalric poems, something like the reported speech of the enchanted knight in 'La Belle Dame Sans Merci' has no equivalent in Naden's efforts, as she adheres to a descriptive narrative form that retains an omnipotent perspective. Nor does Naden's youthful poetry work towards the later, more emancipated medieval tradition that Natalie Joy Woodall has observed in women poets of the 1880-90s, whereby 'the damsel has not only rejected her reliance on a protective knight, but has also adopted several of the knight's less discussed, unsavoury qualities'.⁵⁸ While Naden seeks to create an inner life for the women that wait for their knights' safe return, she does not ultimately overturn stereotypes of caring womanhood. In a way that is typical of Naden's

⁵⁷ 'Lamia', *Complete Works of Keats*, p. 240 (ll. 230, 237).

⁵⁸ Natalie Joy Woodall, "'Women are knights-errant to the last": Nineteenth-century Women Writers Reinvent the Medieval Literary Damsel', in *Reinventing the Middle Age and the Renaissance: Construction of the Medieval and Early Modern*, ed. by William F. Gentrup (Turnhout: Brepols, 1998), pp. 201-22 (p. 201).

many poems in this genre, despite Hilda's rejection of feminine wiles at the beginning of 'The Crimson Banner', by the end she has become helpmeet, described by knights as being 'deemed an angel came from heaven to soothe their pain' (*P75-7* 155, III, l. 6).

Dorothy Mermin has suggested that in poems such as these a secondary narrative of empowerment may be realised: Victorian women writers' revisions of medieval balladry 'skeptically examine [...] the virtues of self-repression and self-sacrifice they seem to affirm'.⁵⁹ Naden's juvenilia largely work within the conventions of chivalric narratives, however; it is in comic poems such as "'Love's Labour Lost." A Tale of the Year 1900', 'A Warning', and 'The Bribe' that she confronts social stereotypes surrounding gender (*P75* 44-46, 154-55; *P75-7* 41-47). It is here that Naden deals directly with the sociocultural restrictions that women faced, undermining them through assured character-based humour. While these poems are not dramatic monologues, the approach taken in the latter two can be aligned with what Isobel Armstrong has identified as the 'travesty of femininity, in order that it can be made an object of investigation'; Naden holds stereotypical feminine wiles up to account.⁶⁰ It is therefore notable that it was almost exclusively those comic notebook poems that were later published (including 'The Lady Doctor', 'The Two Artists', and 'Maiden Meditations'), and that the single medieval narrative to appear in print – 'Sir Lancelot's Bride' – was more heavily revised than other poems for which an unpublished version survives.

And yet, in the final entry in *Poems 1875-6-7*, we find a direct allusion to Keats's medievalism. The poem is written on the inside of the back cover, in seemingly different ink,

⁵⁹ Marjorie Stone, "'A Cinderella Among the Muses": Barrett Browning and the Ballad Tradition', *Victorian Literature and Culture*, 21 (1993), 233-68 (p. 257).

⁶⁰ Armstrong, *Victorian Poetry*, p. 325.

which suggests that Naden returned to this volume after a period of absence. The poem, reproduced here in full, indicates that having written and then re-read her many poems in the chivalric mode Naden turned on them, pronouncing:

Farewell to you, scarf-giving beauty,
Farewell to you, lance-bearing knight,
Well up in each chivalrous duty
With helmet all polished & bright.

I've done with your spick & span armour,
I've done with your ribbons of blue;
You graceful & golden haired charmer,
I've finished entirely with you.

I'm tired of the well-equipped dandy,
Whose charger must caper & prance,
Whose manner is sweeter than candy,
Though sharper than mustard his lance.

Another must sing of his splendour,
Another his troubles must tell;
Ye phantoms so true & so tender,
Ye knights & ye ladies, farewell! (*P75-6-7 187*)

The first line can be understood to be a reference to Keats's poem 'On receiving a curious Shell, and a copy of Verses, from the same Ladies', which asks 'What is it that hangs from thy shoulder, so brave, / [...] / Is it a scarf that thy fair lady gave?'.⁶¹ This indicates that even if Naden does not obviously work within the terms of chivalric poetry developed by Keats, she nonetheless acknowledges his influence upon her attachment to the genre. This poem is both an emotionally-charged moment of self-reflection and a comic riposte to a poetic tradition that does not serve women well. She thus signals how the passage of time could lead to a shift in perspective and motivations; the youthful obsession with medieval tales is

⁶¹ 'On receiving a curious Shell, and a copy of Verses, from the same Ladies', *Complete Works of Keats*, p. 20 (ll. 13-15).

usurped by the philosophical poetic persona that characterises *Notebook* and shines through her published works.

The points at which Naden's mature style come to the fore in her notebooks have a comic or ironic sensibility. There are clear parallels here with her later works. For example, the wryly observant tone of 'The Fair One with the Golden Locks. An Unsolved Problem' (P75-7 6-8) is shared by 'The Two Artists' in *Songs and Sonnets*. Furthermore, the knowing, teasing perspective on romance that became her calling-card as a result of the 'Evolutional Erotics' has clear precursors in "'Love's Labour Lost." A Tale of the Year 1900' (P75 44-46) and 'Angelina' (P75-7 88-9), as well as 'Love Versus Learning' that was first published in 1877. Naden's most sharply-observed early poetry directs humour at the expectations surrounding the act of 'versifying', however. Particularly notable in this regard are 'The Juvenile Rhymer', 'The Rhyming Dictionary', and 'The Poetaster', all of which appear in *Poems 1875-6-7*. Naden employs a removed perspective, choosing not to identify directly with the writers she describes, although combined with this sense of detachment and critique is a rueful commentary on her own early attempts at poetic composition. In particular, these three poems address the issues of inspiration and influence, both of which are central to developing a personal writing style.

The subject of Naden's forty-line poem 'The Rhyming Dictionary' is the use and abuse of John Walker's *Rhyming Dictionary of the English Language*, first published in 1775 and revised and reissued throughout the nineteenth-century.⁶² Beer observes that 'Nothing brings

⁶² Lawrence H. Dawson, 'Preface', in *Walker's Rhyming Dictionary of the English Language*, by John Walker, revised and enlarged by Lawrence H. Dawson, supplement compiled by Michael Freeman (Abingdon: Routledge, 2001), pp. v-vii (p. v). Dawson notes the dictionary's popularity with poets 'from Byron downwards',

out the phonic grotesque in rhymes more than rhyming dictionaries’, and as such Naden embraces an opportunity to experiment with the interplay between rhyme, humour, and expectations.⁶³ The first stanza of Naden’s poem clearly draws on Walker when choosing rhyme words:

Oh blame me not, because I look
In Walker for my rhymes,
I tell you it is just the book
For these enlightened times,
When all the philosophic brains
Have come to this decision,
That every part of labour gains
By orderly division.
So I & Walker both may claim
A share in every line;
The drudgery was his:– the fame
Of course is wholly mine. (P75-7 169, ll. 1-12)

This claim of co-authorship with the popular reference work, and suggestion that the true hard work of composition lies with Walker rather than the poet, undermines the Romantic ideal of an inspired, lyric voice. At the beginning of the poem it therefore seems that Naden is writing in a confessional mode, but it later becomes clear that this is not the case. While many of the rhyme words are to be found in Walker’s dictionary, Naden’s use of polysyllabic rhyme phrases – ‘need her’ / ‘cedar’, ‘denied him’ / ‘supplied him’ (P75-7 170, ll. 26, 28, 34, 36) – undermines this connection, pushing against the formal boundaries that such a work seems to impose.

and Valentine Cunningham discusses Tennyson’s use of Walker’s book in *Victorian Poetry Now: Poets, Poems, Poetics* (Hoboken NJ: Wiley-Blackwell, 2011), pp. 117-18.

⁶³ Beer, ‘Rhyming as Comedy’, p. 182. Beer goes on to suggest that such dictionaries expose ‘the ordinary caution of poets, their tendency to stay within tightly chosen parameters of rhyme [...] Rhyming rare words, as in Byron and Browning, is usually understood as the very type of comic rhyme’ (p. 183).

The speaker links the task of composition with developments in industry, suggesting that ‘in this great mechanic age / When saving labour’s all the rage’ (P75-7 169, ll. 13-14) dividing the task of writing poetry is an obvious decision. While most would consider poetry a solitary pursuit, and therefore assume that the subversion in this poem lies in the division of this labour, the speaker claims that this is not a new situation, for ‘’Twas easy in the ancient days, / When all Olympus aided’ (P75-7 170, ll. 21-22). The rhyming dictionary has thus become a necessity because the classical muses have left the poet to his own devices:

The Nymphs have left the river-bed,
Apollo’s lyre is stringless,
The Graces three have long been dead,
And Cupid’s old & wingless.
Then let the bard who bravely sings,
With heavenly help denied him
Rejoice that though he can’t have wings
A walking stick’s supplied him! (P75-7 170, ll. 29-36)

The idea of a creative crutch, one so closely linked to Walker that it engenders a pun, would not ordinarily be deemed positive, and certainly Naden’s refusal to use the rhyming dictionary to source her line endings indicates her desire to mock this approach to composition. And yet, invariably Naden employs a clear rhyme scheme, and the repetitiveness of some of the rhyme words in the notebooks especially – ‘mien’, ‘golden’, and ‘foeman’ being particular favourites – suggest that she did not always turn to Walker’s dictionary when she might. The question of inspiration is therefore a vexed one, and it is arguable that Naden’s reluctance to embrace the label ‘poet’ stems from her acceptance of a Romantic model of genius, and her awareness that she had not been visited by the muse. Poetry was a skill that was not absolutely indwelling, instead it needed to be learned: she was not artist but artisan.

The issue of an absent muse and the search for substitutes is expanded upon in ‘The Juvenile Rhymer’; over its eight quatrains the question of influence and imitation is pushed to the extreme. Having introduced ‘our ambitious young hero’ who has the determination to write poetry but not a talent for invention, Naden describes his unorthodox approach to writing through a litany of witticisms about the men of letters who were her contemporaries:

Then he read & he copied each poet,
But he copied much more than he read.
He was Tennyson once, & to know it,
You had only to glance at his head,

With the help of Rossetti’s emotions,
Many poems he managed to write,
And from Arnold he borrowed some notions
But he left out the “sweetness & light”.

Mr. Swinburne must look to his laurels
And our hero’s effusions regard,
For in all things, from metre to morals
He has followed that sceptical bard.

Now the Muse all his efforts is crowning,
And how *can* the dear charmer do less,
The obscurity common in Browning,
He has copied with perfect success. (*P75-7* 109, ll. 17-32)

Naden therefore acknowledges and accepts the often imitative qualities of juvenilia; her skewering rhetoric focusing on the reason for the youth’s approach – his unwarranted self-confidence in thinking ‘himself ten times sublimer / Than our two greatest poets combined’ (*P75-7* 108, ll. 7-8) – rather than the act of impersonation itself. The inversion in the final stanza, whereby ‘the Muse’ is described as crowning, rather than inspiring, the rhymer implies a sceptical view of divine inspiration. This poem also provides potential insights into Naden’s own views of her contemporaries, whom she rarely references elsewhere. I would argue, however, that one should proceed with caution in this regard, since the purpose served

by the brief sketches is closer to that of *Punch* cartoons than genuine criticism, inflating the most obvious trope to a level of reductive absurdity. It is also notable that in Naden's litany of poets the focus is on their works, something that is particularly evident when set against Elizabeth Barrett Browning's juvenile 'A Vision of Poets', for example. This poem also lists poets, assigning each a few lines in order to sum up their attributes, but Barrett Browning focuses on their physical selves and biographies: for example, 'Shelley, in his white ideal' and 'Keats the real / Adonis'.⁶⁴ While Barrett Browning has a different, less comic, purpose, a comparison of these two poems nevertheless indicates Naden's desire to emulate (or otherwise) poetry rather than focusing on literary celebrity.

The idea of poetic composition as a utilitarian process is expanded upon in 'The Poetaster', in which Naden describes a figure whose writing process is the opposite of that which

Wordsworth so famously describes in his preface to the *Lyrical Ballads*:

all good poetry is the spontaneous overflow of powerful feelings: but though this be true, Poems to which any value can be attached, were never produced on any variety of subjects but by a man who, being possessed of more than usual organic sensibility, had also thought long and deeply.⁶⁵

In contrast Naden's poetaster is described thus:

His rapid pen can lightly skim
O'er Life & Death, o'er Space & Time,
And Love & Hate are but to him
The pegs whereon to hang his rhyme.
[...]
His puny soul has never sought
Beyond its narrow bounds to reach,
He has no high & noble thought,
That will not bend to human speech. (*P75-7 173-74*, ll. 1-4, 17-20)

⁶⁴ Quoted in McDonald, p. 315.

⁶⁵ Wordsworth, 'Preface', *The Major Works*, p. 598.

In comparison with the two poems already discussed, in which humour clearly tempers the critique, Naden holds ‘The Poetaster’ – of whom it can be said ‘His mark was low, he reached it well’ (*P75-7* 174, l. 30) – in disdain. Thus the contours of Naden’s view of the writing process come into focus. When describing an unwillingness to wait for inspiration there is a note of recognition: in ‘The Juvenile Rhymer’ the adolescent Naden writes that ‘he sacrificed beauty & feeling / To the jingle of anapæst verse’ (*P75-7* 108, ll. 11-12) in jaunty anapæstic metre. In contrast, the poetaster’s disregard for seeking higher knowledge is scorned, the final two lines of the nine stanza poem – ‘He is that lowest thing on earth – / A man contented with himself’ (*P75-7* 175, ll. 27-28) – demonstrating Naden’s disgust at a professed poet who is not driven by an urge to strive upwards towards some form of enlightenment.

Songs and Sonnets of Springtime

Naden’s first volume opens with a dedicatory sonnet ‘To J. C. and Caroline Woodhill’, her grandparents. In this explicitly personal lyric she reflects upon her mother ‘whose fond embrace I never knew’ and subsequent upbringing by her grandparents ‘who have watched me from my infant days / With tenderest love and care’ (*CPW* xxiii, ll. 3, 9-10). Through this poem the double meaning of ‘springtime’ in the collection’s title is made apparent, for Naden’s mother is described as ‘dying in her spring’ as well as the volume itself being styled as ‘this wreath, entwined in April hours’ (*CPW* xxiii, ll. 6, 12). Naden thus signals her own youth (she was twenty-three years old upon publication, her mother died aged twenty-seven), as well as the recurring theme of seasonal change.

This is one of the most conventional poems that Naden published, adhering to the tropes of sentimentality, nature, and domesticity that were identified with women poets in the

nineteenth century. The closing lines are emblematic of this: ‘Yours was the garden where the seed was set, / To you I dedicate the opening flowers’ (*CPW* xxiii, ll. 13-14). To describe these poems as akin to flowers in the process of opening emphasises Naden’s self-awareness – while she may now be published, the poems do not represent a fully matured voice, but rather one that is in the process of becoming. The association of poetry by a woman with a poesy of flowers was a strong and enduring one. An illustrative example appears in May Probyn’s first collection of poetry, which was also published in 1881. Probyn’s dedicatory poem includes the strikingly similar lines ‘You gave me a space / In the flowering space’ and ‘Here are some posies [...] they are scentless and small – / But I have none else – they are my all’.⁶⁶ Naden was not, therefore, immune to working within the conventions expected of women writing poetry in the nineteenth century, and it is perhaps predictable that when writing directly to her family she chose to do so in a way that unambiguously associates the lyric ‘I’ with herself. In addition, while this poetic voice is quite difficult to reconcile with the rest of the collection’s questioning and sometimes radical sensibility, the autobiographical nature of ‘Dedication’ asserts a sense of ownership over the poems that follow, even those in which formal masking techniques establish a clear sense of distance between poet and speaker.

One explicit example of this propensity to mask is demonstrated by ‘A Letter’, which is split defiantly on the page with a bold line. It begins ‘Only a woman’s letter, brown with age / [...] / Only a letter, treasured by the dead’ (*CPW* 34, ll. 1, 5). The opening stanza thus establishes the context of being offered a glimpse into the passionate youth of someone departed. After the break the two remaining stanzas are purportedly the contents of this letter, a lover’s plea:

⁶⁶ May Probyn, ‘To T. Westwood’, quoted in Moine, p. 1.

‘Take my one treasure: take, and ever keep / My whole heart’s love’ (*CPW* 34, ll. 13-14). It concludes with an eroticised image: ‘gladly twine / Amid your mellow fruit my virgin flowers’ (*CPW* 35, ll. 27-28). The lyric ‘I’ is here tempered by the framing technique that enforces a sense of distance between the poet and the sentiments expressed. The power of this device is demonstrated when the poem is encountered in a different context, for drafts of the ‘letter’ portion of this poem appear as entries 118 and 120 in *Notebook*. Here, divorced from the narrative structure and instead interpolated between Naden’s statements about her developing philosophical stance, it is tempting to read these stanzas proclaiming ‘All have their time for love, & this is ours’ as a personal expression of feelings towards an absent lover (*N78-9* 49).⁶⁷ While a biographical narrative could certainly be moulded around these impassioned lines, it is impossible to know whether this poem relates to a specific incident in Naden’s personal life. What is relevant to my argument, however, is Naden’s explicit awareness of how such a poem may have been interpreted by the reading public were it to conform to a standard lyric structure without the narrative frame. As such, the lyric ‘I’ is submerged and effectively disassociated from an expectation of insight into the poet’s emotional life.

It is notable that within *Songs and Sonnets* poet characters within Naden’s narrative poems, as distinct from the poetic voice, continue to be gendered primarily as male (see for example ‘Moonlight and Gas’ and ‘The Old Love-Letters’). Nonetheless, Naden comes to disregard

⁶⁷ This reading is compounded by the first entry in *Notebook*. Entry 82 is a love poem that uses the Greek alphabet as a cipher, in which Naden writes, ‘For you in every changing mood / My spirit yearns’, and concludes ‘oft I seem to hear your voice / To feel your kiss’ (*N78-9* 1-2). The somewhat clumsy attempt to hide the meaning of this poem suggests a level of authenticity to the personal feelings expressed that is not attributable to other extant poems by Naden; it also primes the reader for encountering further personal lyrics.

the masculine features of the Romantic poet role (although she does not claim the title for herself), and thus follows the model that Homans has elaborated upon:

Romantic poetry generally minimizes its connection with practical experience [...] If the poetical character transcends time and place, according to the Romantic ideal, then it should transcend gender as well. We should not expect Romantic poetry by women to bear very heavily the traces of sexual identity, socially experienced; and yet something often impedes this poetry from achieving what appears to be a desired Romantic transcendence.⁶⁸

An ungendered, transcendent voice is exactly what Naden required in order to develop her ideas in the direction of what Nour Alarabi calls a ‘humanist’ philosophy that ‘target[ed] both men and women, trying to liberate them from all religious superstitions and scientific misconceptions that limit their abilities’.⁶⁹ Homans goes on to consider the impact poetry ‘ideally unconditioned by gender’, that nonetheless ‘has implicit male biases’, has upon women writers.⁷⁰ In the section that follows I argue, however, that by the second stage of Naden’s poetic career she had found ways of overturning these in order to focus on the ideal rather than the socially-constructed reality.

When the lyric ‘I’ does appear without the masking devices of ‘A Letter’ it primarily addresses and describes nature and the wider universe; it is the voice of a philosopher who is interested in asking ontological and epistemological questions. As Marion Thain observes, ‘Naden speaks of a desire to see the world not as a multitude of characters and circumstances, divided and packaged by man’s structures of meaning, but as a living unity’.⁷¹ Naden thus attempts to transcend the distinctions attributable to an authorial ‘I’, which is bound up with assumptions about the influence of gender, class, nationality, and other sociocultural markers.

⁶⁸ Homans, *Women Writers*, p. 8.

⁶⁹ Alarabi, ‘A God of their Own’, p. 244.

⁷⁰ Homans, *Women Writers*, p. 8.

⁷¹ Thain, ‘Scientific Wooing’, p. 155.

This is why Naden often slips from what might be an ‘I’ into ‘we’, enacting her desire to speak to the universal human condition. Reading Shelley’s ‘To Jane: The Invitation’ (first published posthumously in 1824) alongside Naden’s poems in *Songs and Sonnets* illustrates this, since they are lyrics that share much thematically. The final lines of ‘Undiscerned Perfection’ – ‘And see, wherever sun or spark is lit, / One Law, one Life, one Substance infinite’ (*CPW* 143, ll. 13-14) – draw on the same sense of expansive unity that underpins Shelley’s closing couplet ‘All things seem only one / In the universal Sun’.⁷² However this oneness which for Shelley is cast as negative by the modifier ‘only’ is for Naden the positive unifying force that she seeks throughout her works. Furthermore, while Shelley writes of the universal he pins it to the specific – this is a poem addressed to Jane Williams. Karen Wiseman has argued that ‘Shelley’s lyrics take hold of the actual precisely by widening the lyric’s grasp; that is, they open to include the dialectical negotiations by which poetry comprehends the world’.⁷³ The movement from the personal to the universal is one that Naden chooses not to negotiate, however, effacing her position as poet-speaker in the opening line ‘Man needs no dread unwonted Avatar’ and proceeding to use ‘we’ in the place of a lyric ‘I’. Naden thus allows the reader to step into role of subject and enact the moment of heightened understanding that Shelley relates.

Augusta Webster, a contemporary of Naden’s who was principally known for her poetry, observes in the essay ‘Poets and Personal Pronouns’ (1879) that very often ‘the poet is believed to be his own lay figure’, despite the fact that ‘as a rule, I does not mean I’.⁷⁴ She

⁷² *The Complete Poetical Works of Percy Bysshe Shelley* (Cambridge, MA: Riverside Press, 1901), p. 412.

⁷³ Karen Wiseman, ‘The Lyricist’, in *The Cambridge Companion to Shelley*, ed. by Timothy Morton (Cambridge: Cambridge University Press, 2006), pp. 45-64 (p. 63).

⁷⁴ Augusta Webster, ‘Poets and Personal Pronouns’, in *A Housewife’s Opinions* (London: Macmillan, 1879), pp. 150-56 (pp. 153, 154).

notes that ‘few poets are even ostensibly autobiographical; and it is hard on them to investigate them as if they were putting themselves through a process of vivisection for the public to see how they were getting on inside’, and concludes by proposing: ‘On the whole the editorial pronoun, the “We” and the “Our” and the “Us,” is what can most safely be recommended to poets for their future protection.’⁷⁵ While the tone of this suggestion is certainly tongue-in-cheek, it nonetheless speaks quite clearly to Naden’s desire to disassociate herself from a lyric ‘I’ that might imply autobiography, and her resultant adoption of ‘we’ in very many of her published poems. In addition to the everyman quality that this ‘editorial pronoun’ provides, this decision underscores a link to be made between Naden’s poetry and her philosophical prose writings.

While this divide between poet and speaker may suggest that Naden is wary of engaging with the confessional Romantic mode, it is nevertheless in *Songs and Sonnets* that her poetic voice can be most closely associated with Wordsworth’s, most specifically his focus on the natural world as stimulus for thought and simplicity of language. His insistence upon composing poetry in ‘the language really used by men’ is reflected in her own choices regarding poetic diction, which largely reject elevated or technical vocabulary.⁷⁶ The exception to this is Naden’s use of scientific terms – the ‘raceme’ of the hyacinth, the ‘æons’ travelled by starlight (*CPW* 110, l. 7; 142, l. 8) – but in *Songs and Sonnets* these are employed sparingly considering the wealth of specific scientific concepts that find their way into her later poems.

⁷⁵ Ibid., pp. 155, 156.

⁷⁶ Wordsworth, ‘Preface’, *The Major Words*, p. 608.

We know from *Notebook* that Naden was reading Wordsworth concurrently with the composition of *Songs and Sonnets* since entry 115, which can be dated to the spring of 1879, ends with a quotation from ‘I wandered lonely as a cloud’:

“And flash upon that inward eye
Which is the bliss of solitude.”

Wordsworth’s ~~inward~~ subjective vision of daffodils was born of the same **entity** essence that brought forth the preceding objective vision. All sensations are products of matter, whether acting upon itself, or working in conjunction with other material entities. (N78-9 45)

It is notable that in her commentary Naden substitutes for ‘inward’, Wordsworth’s term, her own word to describe this phenomenon, emphasising the subjectivity of visual perception and memory and thus that poetic inspiration has a physiological basis. Not only does this attest to Naden drawing upon poetry alongside philosophy and science in order to develop her ideas about cognition, but, upon turning to the sonnet ‘March, 1879’, which takes the vividness of memory as its theme, it becomes clear that Wordsworth’s poetry was also a stimulus for her own poetic writing:⁷⁷

Ye little birds, that chant your love so loud,
Your careless hearts are not so glad as mine,
For he who sings because the sun doth shine
Is robbed of joy by every murky cloud;
And ye, sweet heralds of the summer crowd
Of unremembered flowers, whose tints combine
To light the meadows – ye grow pale and pine,
When by cold winds your radiant heads are bowed.

From you, from all fair creatures of the earth,
I do but gain the beauty that I give;
Your form, your music, in my soul have birth,
And in my very life your colours live;
And when the sunlight fades, and ye depart,
I hold your joy within my secret heart. (CPW 113)

⁷⁷ Indeed, the format of the title recalls Wordsworth’s ‘November, 1806’ and ‘November, 1836’, *The Major Works*, pp. 331, 371 – in total Naden published ten sonnets titled in this manner.

There are direct verbal echoes here, most obviously in the cloud/crowd rhyme with which Wordsworth's poem opens, and the allusion to his penultimate line 'And then my heart with pleasure fills' in Naden's closing line.⁷⁸ Furthermore, Naden's confident (and therefore out-of-character) use of the lyric 'I' in the sestet perhaps draws upon Wordsworth's strident opening line, the 'I' being emphasised through its doubling on the page in the place of a title.⁷⁹ And while Naden's poem does not explicitly state that the flowers she describes are daffodils, the brightness of the spring flowers 'whose tints combine / To light the meadow' (l. 6-7) are certainly suggestive of the bright yellow trumpet flowers that Wordsworth describes 'dancing in the breeze'. In Naden's poem, however, such a breeze is transformed into 'cold winds' (l. 8) to which birds must bow their heads; this shift from something playful to something cruel is indicative of the sense of realism that she brings to the poem. Not for her is lying on a couch 'In vacant or in pensive mood' composing a poem from her visual memory, instead Naden projects forward, writing from the position of someone outside eyeing the 'murky cloud[s]' (l. 4) and bowing her own head to the wind while casting herself back to the previous summer and forwards to the inevitable coming again of winter.

In Wordsworth's celebration of his inward eye Naden recognises a deeper truth that underlies how, physiologically, we perceive the world. In the notebook entry Naden emphasises that vision and visual memory arise from the same material essence – the neural processes that facilitate cognition. It is on this basis that Naden addresses the bird and flowers in the octave: 'Your form, your music, in my soul have birth, / And in my very life your colours live'. These

⁷⁸ Wordsworth, 'I wandered lonely as a cloud...', *The Major Works*, pp. 303-04 (ll. 1, 3, 23).

⁷⁹ It should be noted, however, that we do not know where Naden would have read Wordsworth's poem, and in Palgrave's *Golden Treasury* (for example) it is instead titled 'The Daffodils'. *The Golden Treasury*, selected and arranged by Francis Turner Palgrave, ed. by Christopher Ricks (London: Penguin, 1991), p. 346.

lines echo her view, stated earlier in entry 115, that ‘The mind, therefore, can not simply feel, but can cause sensations of sight, hearing, touch, taste, smell, just as it causes those, of thought & emotion’ (*N78-9* 43-44), which is restated in the climactic passage of ‘The Brain Theory of Mind and Matter’ from 1883:

matter, untouched, unseen, unperceived by sensation or thought, must be a void and formless chaos, until the first living eye gives it shape and colour, the first living organ of touch endows it with tangible solidity, the first living ear wakes the dumb to speech and song. (*I&D* 166)

To find a sense of mutual understanding and continuity between Wordsworth’s most famous poem and this concept at the very heart of Hylo-Idealism demonstrates Naden’s desire, and ability, to draw upon and synthesise her multi-disciplinary knowledge. In doing so she developed a philosophy that was recognisably applicable across a wide expanse of human thought.

Nonetheless, Naden was concerned with the inability of poetry, or any text, to fully express experiential truth. In ‘Twilight’ there are mysteries, ‘Nameless alike in science and in story / In all that sage can tell or poet sing’, which are ‘Revealed alone in symbols and in dreams’ (*CPW* 65, ll. 39-40, 44). This sense that truth may be revealed to us, but cannot be accurately communicated, is hard to reconcile with Naden’s attempts in poetry and prose to convey the veracity of her unifying philosophy. The sonnet ‘Speech and Silence’ reasserts Naden’s anxiety that it is not possible to succeed in communicating effectively the higher knowledge that she sought:

In stillness we must win our deepest lore,
Or ’mid the speechless chant of earth and sea:
Truth is a spirit, bodiless and free;
Imaged in words, ’tis perfect truth no more,
For all our lofty visions fade and flee,
And song begins, when ecstasy is o’er. (*CPW* 131, ll. 9-14)

This final line recalls Wordsworth's description of poetry being 'recollected in tranquillity' and the image conjured by 'oft when on my couch I lie' in 'I wandered lonely as a cloud'; Naden dismisses his claim that this retrospective composition communicates any kind of 'perfect truth'.⁸⁰ The idea that words are secondary to silence, which the poem suggests does have the power to communicate truth, might seem to negate Naden's poetic, scientific, and philosophical projects, but poetry may transcend mere words, and the sonnet mode emphasises these extra-lingual features. The first three lines describe these attributes:

When some sweet voice flows forth in foreign speech,
The soul shines through the words, and makes them clear,
And all we see interprets all we hear. (*CPW* 131, ll. 1-3)

The sonnet as a truth-telling mode is referenced in the phrase 'The soul shines through' (l. 2); expectations of sincerely expressed emotion mean that the reader is encouraged to delve beneath the printed words. Marianne van Remoortel and Marysa Demoor have discussed the satisfaction of making 'sonnets give up their well-hidden secrets', asserting that 'All sonnets have hidden meanings'.⁸¹ Content is thus subordinated in this poem to spoken intonation (rhythm) and visual attributes. The significance of visual comprehension is most obvious in the sonnet's octave-sestet split, which is usually typographically marked and adds meaning by imbuing the poem with expectations that have developed over the form's history. The volta in 'Speech and Silence' is followed by the line 'In stillness we must win our deepest lore' (l. 9), the stanza break endowing the poem with a line of silence. The reader is thus invited to reflect upon the blank as a fifteenth line of poetry.

⁸⁰ Wordsworth, 'Preface' and 'I wandered lonely as a cloud...', *The Major Works*, pp. 598, 304 (l. 19).

⁸¹ Marianne van Remoortel and Marysa Demoor, 'Of Sonnets and Other Monuments: Picturing Sonnets of the Nineteenth-Century', *Victorian Poetry*, 48 (2010), 451-59 (p. 455).

Naden's 'Year in Sonnets' sequence maps annual natural cycles onto lifecycles and centres upon how emotions are intertwined with the atmospheric effects of transitioning from spring to summer to autumn to winter. Fabienne Moine has observed that, due to its conventionality, 'nature poetry represented for many aspiring [female Victorian] authors a valuable first experience of authorship', it being 'a poetic genre that felt particularly appropriate to those lacking in poetic skills'.⁸² But this is not the purpose that nature serves in Naden's poetry; indeed, this theme's relative absence in the notebooks emphasises that while these may not be Naden's most mature works, nor are they those of a juvenile apprenticeship. Rather than feeling constrained by the cultural expectations surrounding women's poetry, Naden's focus on a larger philosophical aim places these poems in a different category, one in which science is not just referenced or commented upon (as was common) but, as discussed in the preceding chapters, was viewed as an integral part of expressing her conception of truth. 'Starlight. I' and 'Starlight. II' are important markers of this approach, as they conclude the original content of *Songs and Sonnets* and signal a movement away from the earth-bound natural forces that define the majority of the sonnets that precede it. This pair of poems is particularly notable because in embracing the universe as a natural entity they depart from the traditional natural realms that Moine identifies, literally moving upwards and away from 'All hues of earth' towards 'The light of other worlds' (*CPW* 142, ll. 4, 7).⁸³ This, Naden seems to suggest, is the true, transcendent aim of the poet, looking outwards into the unknown. In doing so hers becomes an ungendered philosophical voice; the unifying action of 'Starlight. I' and 'Starlight. II' is such that the experience does not depend upon gender, nationality, or other divisive features. She looks to commonalities – we all look up and see the same night sky –

⁸² Moine, p. 272.

⁸³ Moine states that she does not cover certain themes due to the scarcity of poems tackling them, specifically 'oceans, marine landscapes, natural catastrophes, the universe, the four elements and mountains', p. 7.

underscoring the importance of experiencing nature at an elemental level that strips off the socialised expectations of male or female experience.

The 'reconciliation of poetry, philosophy, and science' (*FR* 126) is central to Naden's conception of different intellectual and creative disciplines, and it lies at the heart of her world-view. This is a hallmark of *Songs and Sonnets*, for in these poems Naden aspires to look beyond the world as it is – fragmented – and towards the world as it could be – unified. Jack Stillinger has identified this transformative urge as a starting point for understanding Keats's poetry, describing a basic structure whereby:

Characteristically the speaker in a Romantic lyric begins in the real world (A), takes off in mental flight to visit the ideal (B), and then – for a variety of reasons, but most often because he finds something wanting in the imagined ideal or because, being a native of the real world, he discovers that he does not or cannot belong permanently in the ideal – he returns home to the real (A'). But he has not simply arrived back to where he began [... he] has acquired something – a new understanding of a situation, a change in attitude toward it – from the experience of the flight, and for better or worse he is never the same afterward.⁸⁴

The importance of this movement is such that Naden could look to the structure of Romantic lyric and narrative poems as a model for her intellectual desires. If the protagonist in these poems achieves momentary enlightenment within an ideal realm before returning, changed, to the real world, it legitimises poetry as a valuable method of seeking to transcend the fragmentary world in which we live and finding a unifying perspective. This principle underlies 'Undiscerned Perfection', in which the narrative voice can only catch glimpses of the 'fair visions [... / ... that] shine, and change, pass with motion fleet' (*CPW* 129, ll. 5-6). These nonetheless give rise to the knowledge communicated in the final two lines: 'I know

⁸⁴ Jack Stillinger, *Romantic Complexity: Keats, Coleridge, and Wordsworth* (Champaign, IL: University of Illinois Press, 2004), pp. 6-7.

that each confused and tortuous line, / To fuller sight, in true perspective lies.’ (*CPW* 129, ll. 13-14). Thus it is lines of verse that facilitate the slow and unclear journey towards ideal, unified truth. Stillinger goes on to observe, with specific reference to *Endymion*, that ‘The conclusions of the poems are frequently ambiguous – they end in questions, doubtful circumstances, “wonderment” – but a new and more positive view of the pleasure-pain complexity is sometimes inferable [...] the complexity is better than no life at all.’⁸⁵ This ambiguity is certainly present in ‘Undiscerned Perfection’ in which the reader is left with a tantalising sense of what might be possible, rather than a resolution whereby poetry and science have been successfully synthesised. Poetry thus facilitates the act of asking questions for Naden; she does not claim to successfully resolve matters or achieve the unity for which she strives.⁸⁶

In ‘Hylo-Idealism: The Creed of the Coming Day’ Naden writes how ‘Two interlocutors are like opposite mirrors [...] in however distorted a form, each may be said to *contain* its opposite neighbour’ (*I&D* 174). In the several dramatic monologues in *Songs and Sonnets* (such as ‘The Carmelite Nun’ and ‘Semele’ discussed in the previous chapter) Naden can be said to be participating in such a dynamic, whereby the writer and the subject of the poem are the interlocutors. Naden primarily uses character monologues to demonstrate her understanding of the struggles individuals might have with building an identity alongside religious institutions, whether chosen or imposed. She reaches beyond personal experience and yet finds a similarity of cause, the search for truth; thus, poet and speaker are ‘like opposite mirrors’ that distort but nonetheless reflect and contain the other. Naden sees this

⁸⁵ *Ibid.*, p. 8.

⁸⁶ Naden also follows this narrative arc in ‘The Pilgrim’ and ‘Light at Eventide’, and makes similar claims for poetry as a questioning rather than knowledge-giving medium in ‘Books’ among other poems in *Songs and Sonnets*.

human urge towards higher knowledge as underpinning all human thought and endeavour, and she is only truly scornful in her writings when faced with the prospect of people turning away from the light of knowledge and intellectual progress. As such, in Flint's words, 'crossing the borders of the self becomes a way to explore the possibilities of identification with others, to establish selfhood not as a form of isolation, but as something grounded in a perpetual dialogue between similarity and difference'.⁸⁷

The dramatic monologues in *Songs and Sonnets* largely conform with what Glennis Byron deems the norm for female poets by 'using fictionalised speakers placed within contemporary society'; Byron conjectures that this approach was used because 'they wish to focus attention more directly on the problems and concerns of their own worlds'. Indeed she references Naden directly in her discussion of how dramatic monologues of this type 'frequently exploit the strategy of inhabiting the conventional in order to expose it'. Using 'The Carmelite Nun' as a case in point, Byron observes how there is a 'doubleness or discursive splitting' not simply between poet and speaker but, more significantly, 'through the speaker's internalisation of the ideology that defines her'.⁸⁸ As a result the subjective and objective become interdependent, and the poem becomes polemic, demonstrating and critiquing the social circumstances that have exerted pressure upon the speaker.

Flint observes how in many women's dramatic monologues 'men are undermined by unwittingly revealing the limits of their ideological strait-jackets', an assertion that can be

⁸⁷ Flint, p. 165.

⁸⁸ Glennis Byron, 'Rethinking the Dramatic Monologue: Victorian Women Poets and Social Critique', in *Victorian Women Poets*, ed. by Alison Chapman for the English Association (Cambridge: D. S. Brewer, 2003), pp. 79-98 (pp. 86, 88).

applied to many of Naden's poems that take up the voice of a contemporary man, for example 'The Old Love-Letters' and 'The Two Artists'.⁸⁹ Furthermore, this is an act of defiance that resists what Homans calls 'a familiar method for trivializing women poets, the collapsing of the poet with her speakers'.⁹⁰ Naden clearly desired to be associated with more than her own subjectivity, and in a poem such as 'The Roman Philosopher to Christian Priests' Naden pushes against this stricture, crossing the bounds of time, gender, and society to embody an individual's voice that is unlike her own. As she casts back to speak in the voice of someone dead for almost two millennia Naden nonetheless draws out commonalities, the philosopher's rejection of Christianity arising from the conviction that 'knowledge calms the heart, and clears the eye: / A thousand faiths there are, but none is true' (*CPW* 17, ll. 22-23). Thus, Naden seeks to embody more than just one self. She wishes to speak for humankind, finding in her dramatic monologues points of unity across sociocultural divides.

A Modern Apostle; The Elixir of Life; The Story of Clarice; and Other Poems

In an 1886 paper given at Mason College's Poesy Club and reported upon in *Mason College Magazine*, Naden focused on Keats's 'exquisite sensitiveness to all the elements of beauty' and its diverse forms relating to the senses. It is the sensual appreciation of nature – 'colours, tones, tastes, odours, textures' – in which she finds Keats's 'genius'.⁹¹ Naden thus emphasises his engagement with the material over and above the spiritual. She shares this appreciation with Matthew Arnold, who stated in his 1888 essay 'John Keats' that 'to see things in their

⁸⁹ Flint, p. 164.

⁹⁰ Margaret Homans 'Amy Lowell's Keats: Reading Straight, Writing Lesbian', *The Yale Journal of Criticism*, 14.2 (2001), 319-51 (p. 334). Homans supports her assertion with Robert Browning's complement to Elizabeth Barrett that nonetheless exposes underlying assumptions about the identification of women's personal and poetic voices: 'You speak out, *you*,—I only make men & women speak', *The Letters of Robert Browning and Elizabeth Barrett Browning 1845–1846*, ed. by Elvan Kintner, 2 vols (Cambridge: Harvard University Press, 1969), I, p. 7.

⁹¹ 'Poesy Club. October 12th', *MCM* 4, October 1886, p. 106.

beauty is to see things in their truth, and Keats knew it'.⁹² Indeed, what are perhaps Keats's most famous lines suggest exactly this: 'Beauty is truth, truth beauty, – that is all / Ye know on earth, and all ye need to know.'⁹³ However, Naden closes by remarking: 'He never fully learnt the beauty of ideas, the charm of divine Philosophy, but was on his way to this knowledge when he died.'⁹⁴ This sentence encapsulates Naden's view of the interplay between the poetic and philosophical, the sensual and the intellectual, for she is arguing that upon Keats's death at twenty-five he had only begun the process of truly understanding the world. There is a sense here that the twenty-nine-year-old Naden perceives a natural progression, from 'enthusiasm for Nature' and 'the combination of sensations, emotions, and images to immortalise some transient mood' (in which she suggests 'Within certain limits, [Keats] is unrivalled'), to a more mature sensitivity to the beauty and truth that can only be found in the realm of ideas.⁹⁵

Naden indicates that she perceived a value judgement to be made when comparing the subjects found in Keats's poems and those in a poem such as Shelley's 'Hymn to Intellectual Beauty'. While Naden does not reference Shelley's poem directly, it encapsulates the desire for expressing 'the beauty of ideas' that she champions here. One facet of this is the overtly secular nature of Shelley's 'unseen Power':

No voice from some sublimer world hath ever
To sage or poet these responses given;
Therefore the name of God and ghosts and Heaven,
Remain the records of their vain endeavour,
Frail spells whose utter'd charm might not avail to sever⁹⁶

⁹² Matthew Arnold, 'John Keats', in *Essays in Criticism. Second Series* (1888; London: Macmillan, 1913), pp. 100-21 (p. 116).

⁹³ 'Ode on a Grecian Urn', *Complete Works of Keats*, p. 297 (ll. 49-50).

⁹⁴ 'Poesy Club. October 12th', p. 106.

⁹⁵ *Ibid.*

⁹⁶ 'Hymn to Intellectual Beauty', *Shelley: Selected Poetry and Prose*, p. 28 (ll. 25-29).

This was a sentiment with which Naden agreed profoundly, and we find it echoed in her railing against religious assumptions in both *Notebook* and essays such as ‘What is Religion?’. Recognisable too is Shelley’s proclamation that ‘Thy light alone [...] / [...] / Gives grace and truth to life’s unquiet dream’, which, in being addressed to Intellectual Beauty, echoes Naden’s preoccupation with identifying and following the light of truth that is founded in reason (rather than blind faith).⁹⁷ Furthermore, the description of moments of intellectual transcendence with terms ‘derived from religion’ is particularly obvious here, as Shelley employs explicitly Christian vocabulary – ‘hymn’ ‘spirit’, ‘vow’ – for his unashamedly secular purposes.⁹⁸ Thus, I argue, it is this kind of poetry that Naden would have had in mind as she cast her critical gaze over Keats’s only partially-formed sense of ‘the beauty of ideas, the charm of divine Philosophy’. *Modern Apostle* was published less than a year after this debate, and most contemporary reviewers agreed that it was in this volume that Naden hit her poetic stride and found her fully-matured voice.⁹⁹ Reading these poems alongside the notebooks as well as *Songs and Sonnets*, it becomes clear that Naden’s poetry does not follow a simple pattern of linear development; in this second volume Naden returned to the variety of poetic modes she had utilised over the previous decade and renegotiated her engagement with these.

Hughes states that *Modern Apostle* ‘unmistakably shows an advance on her earlier publication, influenced, no doubt, by her studies in evolution, and especially in physiology and psychology’ (*Memoir* 34). An example of how Naden’s academic pursuits coincide with

⁹⁷ *Ibid.*, p. 29.

⁹⁸ Macrae, ‘Critical Commentary’, pp. 235-52 (p. 241).

⁹⁹ For example, the *Women Penny Paper*’s review of both Naden’s volumes of poetry states ‘*A Modern Apostle*, is, as it should be, since it was published six years after [*Songs and Sonnets*], in some respects superior to the first’, ‘Reviews’, p. 93.

her poetry appears in ‘The Evolution of the Sense of Beauty’, an essay that Naden read at Mason College in 1884 and published in *Knowledge* in 1885. Naden utilises evolutionary theories of aesthetics to consider how humans’ sense of beauty developed from the concept of attraction evident in insects and birds. She states that visual beauty involves the perception of ‘colour and form. [...] A combination of colours may charm by contrast or gradation. A line may please by straightness or curvature; a combination of lines by symmetry or variety, or by the two united’ (FR 78). Although Naden writes here of what is visually beautiful, the same conceptual process may be applied to poetry: a poem’s lines can have both symmetry and variety in their rhyme scheme and line arrangement. Naden’s descriptions of Keats’s sensitivity ‘to colours, tones, tastes, odours, textures’ aligns with this view that humans’ aesthetic and creative sensibilities can be traced back to animal behaviour. ‘Natural Selection’, first published in *Mason College Magazine* during the same year, further advances this idea in a seriocomic manner, the speaker acknowledging

And we know the more dandified males
By dance and by song win their wives--
'Tis a law that with *Aves* prevails,
And even in *Homo* survives. (CPW 315, ll. 25-28)

While it can be observed, therefore, that Naden used the specifics of her scientific education to satirical effect in her poems, I would argue that the very experience of studying at Mason College had as much an impact upon Naden’s second volume as the contents of the syllabi. This is because of a key shift in characterisation. While Naden published many good dramatic monologues in *Songs and Sonnets*, it is notable that these largely draw on archetypes upon whom she projects the arguments about faith and doubt with which she was concerned during the late 1870s and early 1880s. By the time Naden was writing the poems in *Modern Apostle* she had developed a far larger, and more diverse, social circle. The comedy of the

‘Evolutional Erotics’ has as much to do with skewering a certain kind of student of science as it does the playful stretching of scientific metaphors.

Naden’s approach here was influenced by the freethought movement’s attacks which often used humour to ridicule targets. Marsh has shown how freethinkers used cartoons to lampoon religious figures and ideas.¹⁰⁰ In a poem such as ‘The Priest’s Warning’ (1885) Naden follows their method of emphasising the absurdity of the positions being touted as right and good. While, as discussed in Chapter Three, this level of vitriol is unusual for Naden, it can be seen that she borrows from this approach to comic writing when composing ‘Scientific Wooing’, ‘The New Orthodoxy’, and ‘Natural Selection’. While the speakers’ positions are pushed towards absurdity in these three ‘Evolutional Erotics’, they are nonetheless grounded in the reality of contemporary scientific developments and social expectations surrounding human relationships. They thus ring true to the reader, garnering a level of recognition that stimulates reflection. The key difference to ‘The Priest’s Warning’ is that while the speakers, and the objects of their affection, are shown to be misguided, we are not encouraged to view them with scorn. These are individuals grappling with the social implications of scientific advances, stumbling upon relatively new ground; even those being educated at institutions such as Girton (established 1869) and Mason College cannot be expected to be surefooted in this endeavour. In contrast, the titular priest is spouting what Naden considers to be dangerously irrational and conservative views – his religious argument makes a case for ignoring new knowledge and cleaving unquestioningly to the teachings laid down in ancient texts. For Naden, then, contemptuous satire is the due of those that shun the new. Her more humane,

¹⁰⁰ Marsh, pp. 176-81.

good-humoured comic verse is a gentler nudge in what she believes to be the right direction for those individuals who are navigating the realms of contemporary advances in knowledge.

In the sonnets of *Modern Apostle* Naden is interested less in humour than in irony, and she uses this to undercut expectations. This is true both of her dramatic monologue renderings of the figures Heloise, Prometheus, and Hercules, and of her more traditional sonnets that address received opinions about society and morality. These poems offer an insight into Naden's wry perspective upon the world, something that is not overtly comic but instead reflective. The structure of the sonnet is particularly conducive to this, the formal break denoting a shift in perspective which Naden often uses to become more introspective in the sestet. They also demonstrate a pushing against and questioning of the poetic canon, most overtly regarding Marvell in 'Andrew Marvell's "Definition of Love"'. In 'Poet and Botanist', however, Naden reflects upon and reshapes Wordsworth's lines in 'Tables Turned':

Our meddling intellect
Mis-shapes the beauteous forms of things;
—We murder to dissect.¹⁰¹

Her answer to Wordsworth is that 'the mild Poet can be ruthless too', and she uses the poem to draw out parallels between the intentions and methods of art and science. Naden reveals that neither is blameless in the search for truth: the botanist 'with his cruel knife and microscope' dissects flowers before their seeds are dispersed, cutting off the natural cycle, while the poet is described as 'Crushing the tender leaves to work a spell / Of love or fame'. The poem concludes:

[...] the record of the bud
He will not seek, but only bids it tell
His thoughts, and render up its deepest hue

¹⁰¹ Wordsworth, 'Tables Turned', *The Major Works*, p. 131 (ll. 26-28).

To tinge his verse as with his own heart's blood. (*CPW* 332, ll. 10, 11-14)

The emphasised repetition of 'his' underscores the sense of masculine ownership over the flower. Thus, Naden claims, the 'I' of lyric poetry silences the truth in nature by forcing it to reflect only human concerns, mediated through the voices of men. This approach can be readily identified with Wordsworth, and other Romantic poets, and it is one with which Naden fundamentally disagreed. Indeed, Moine has argued that Romantic nature poetry 'essentially grounded in meditation in order to shape and illuminate the self' was typically rejected by Victorian women poets who took a 'much more concrete and empirical approach'.¹⁰² As such, Naden reflects upon nature in order to locate its deeper meaning; she does not expect it to reflect her own subjectivity.

There is a specific debt in this volume to Byron's use of the *ottava rima*, which Naden employs in both 'A Modern Apostle' and 'The Elixir of Life'. It is my contention that one of the reasons Naden turned to this form at this stage in her writing career was to make an explicit break from the Wordsworth-influenced poetry of her first collection. Byron was notorious for railing against the earlier generation of Romantic poets. He makes this abundantly clear in several poems, one illustrative example appearing in Canto I of *Don Juan*:

There poets find materials for their books,
And every now and then we read them through,
So that their plan and prosody are eligible,
Unless, like Wordsworth, they prove unintelligible.¹⁰³

¹⁰² Moine, p. 6.

¹⁰³ George Gordon Byron, 'Don Juan', in *Lord Byron: The Major Works*, ed. by Jerome J. McGann (Oxford: Oxford University Press, 2000), p. 400 (I, ll. 717-20). Wordsworth appears a handful of other times in 'Don Juan', his 'Excursion' coming in for particular disapproval; although, that it is critiqued as 'rather long' in Byron's poem of seventeen cantos indicates the humour and self-awareness underlying such insults (see 'Dedication', ll. 25-32, and Canto III, ll. 833-56).

As Peter McDonald observes, ‘The mismatch for Byron, as it was for so many readers of Wordsworth, is one between form and content’, and furthermore, ‘The unironic nature of Wordsworthian style, its level of sustained seriousness, offers easy material for Byron (and many others) to render ironic.’¹⁰⁴ Upon moving away from the verse that characterises *Songs and Sonnets*, it is therefore unsurprising that Naden would look to an ally such as Byron in order to subvert the foundations of her earlier writings.

In the three long narrative poems that open *Modern Apostle* Naden demonstrates her desire to explore characters and situations more fully. These are a marked departure from the songs and sonnets of her earlier collection, and Thain argues that in doing so ‘Naden flaunts convention by using the long, masculine, narrative poem form, emphasising her movement away from the stereotypically feminine lyric form’.¹⁰⁵ While this oversimplifies the contents of Naden’s earlier volume, as well as the gendering of verse forms, the shift towards sustained narrative does open up a different kind of poetic expression. For example, Dorothy Mermin has remarked that the ‘epic vein’ gave young female writers more room to manoeuvre in relation to gender roles, and Dino Felluga has observed how the rise of the verse-novel provided a way of pushing against generic expectations.¹⁰⁶ Naden cannot be said to have been writing verse-novels nor epics – despite containing multiple sections, her poems are too short to be categorised as such. Nonetheless, the form and scope of the narratives of ‘A Modern Apostle’ and ‘The Story of Clarice’ in particular draw on key aspects of contemporary three-decker

¹⁰⁴ McDonald, p. 10.

¹⁰⁵ Thain, ‘Naden and a Feminist Poetics’, p. 127.

¹⁰⁶ Dorothy Mermin, *Godiva’s Ride: Women of Letters in England, 1830-1880* (Bloomington and Indianapolis: Indiana University Press, 1993), p. 5; Dino Felluga, ‘Truth is Stranger than Fiction: *Don Juan* and the Truth Claims of Genre’, *Modern Language Quarterly*, 77.1 (2016), 105-20.

novels (specifically thwarted romantic attachments) as well as sharing characteristics of *Don Juan* and *Aurora Leigh*, indicating an engagement with this liminal genre.

As discussed in Chapter Three, Byron's use of *ottava rima* clearly influenced Naden's adoption of the form. A key difference exists, however, due to the way Byron places himself within the narrative by exploiting the comic parenthesis. Byron's characterisation of himself as narrator in *Don Juan* and 'Beppo' is indicative of his self-confidence in the role of poet, and awareness of his own fame. It is an exaggerated persona that is nonetheless attributable to his own voice through which, for example, he digresses at length to express views on the relative merits of England and Italy, repeating the variations of the phrase 'I like' *ad nauseum* for comic effect.¹⁰⁷ While Naden begins 'A Modern Apostle' by addressing the reader with the exclamation 'You cry, "A common picture!" Look again' and entreating 'Hear if you will, and know young Alan's tale' (*CPW* 175, I, ll. 9, 16), this Byronic narrative voice is not sustained. More importantly, Naden chooses not to engage with what Felluga terms Byron's 'hyper-self-reflexivity'.¹⁰⁸ Byron regularly draws attention to the specific nature of the poetic form, for example 'It was the Carnival, as I have said / Some six and thirty stanzas back' in 'Beppo'.¹⁰⁹ This can become an extended parenthetical aside, such as in Canto IX of *Don Juan*:

[...] (I needs must rhyme with dove,
That good old steam-boat which keeps verses moving
'Gainst Reason – Reason ne'er was hand-and-glove
With rhyme, but always leant less to improving
The sound than sense) [...] ¹¹⁰

¹⁰⁷ 'Beppo', *Lord Byron*, p. 326-28 (ll. 321-84).

¹⁰⁸ Felluga, 'Truth is Stranger than Fiction', p. 108.

¹⁰⁹ 'Beppo', *Lord Byron*, p. 330 (ll. 441-42). Naden draws upon Byron's turn of phrase in the prose version of 'A Modern Apostle', beginning a paragraph 'As I have said, he was an apostle of Pantheistic Socialism' (p. 48).

¹¹⁰ 'Don Juan', *Lord Byron*, p. 696 (ll. 586-91).

This acknowledgement of the artificiality of rhyme and the sheer momentum of metre is all the more interesting for the way it pits sound against sense, rhyme against reason. This narrative reflexivity is not employed by Naden, and it is only in a reported Mason College speech that she comments explicitly on the formal expectations inherent in writing verse: in an 1887 debate on the premise ‘That form in poetical composition is of equal importance with matter’, Naden argued that ‘sins against form were unpardonable in a poet, because he was first an artist, and secondarily, if at all, a teacher’.¹¹¹ That the overwhelming majority of Naden’s published and unpublished poems adhere to strict rules of rhyme and metre indicates her commitment to regularity of poetic form.¹¹² Naden would therefore have been aware of the latent power of such strongly-rhymed poetry, and this sensibility is carried over from her two poems in *ottava rima* to the other narrative poem ‘The Story of Clarice’ and the shorter ‘Evolutional Erotics’. Indeed, it has come to be seen as characteristic of Naden’s poetic voice.¹¹³ The comedy inherent in such rhymes undermines pretensions to truth and knowledge, and as a result the alleged objectivity of rhyme (a word either does or does not rhyme with another) is shown to be subjective – while the sound might be perfect, the sense may well be lacking, meaning that it fails in its poetic role, unless its purpose is humour. Naden indicates the utility of comic rhyme; however, the transition away from polysyllabic rhymes in the second half of ‘A Modern Apostle’ demonstrate her commitment to nonetheless seeking truth through reason.

¹¹¹ ‘Poesy Club. May 17th’, p. 83. The importance of this debate is emphasised in an article on Naden that calls it ‘One of the most remarkable debates’ in the history of the Poesy Club, of which Naden was one of the earliest members. ‘Edgbastonians, Past and Present: No. 104 – Miss Constance C. W. Naden’, *Edgbastonia* 10, February 1890, pp. 17-23 (pp. 19-20).

¹¹² Naden’s poetry did often fulfil a didactic role, however, which might suggest that Naden did not identify as a poet-artist, instead conforming to a versifier-teacher role.

¹¹³ See, for example, Beer’s discussion of Naden in ‘Rhyiming as Resurrection’, pp. 193, 200-02.

In 'The Elixir of Life', which Thain describes as 'a revisionary Romantic quest narrative', the poet's voice is interpolated into the beginning and end of the poem spanning twenty-eight pages.¹¹⁴ This unusual decision on the part of Naden places it within a tradition of poems that claim to have been dream visions, a notable precursor being Coleridge's 'Kubla Khan; Or, a vision in a dream'. Naden's opening stanza states that the story has arisen from 'some strange waking vision' that shall be related in 'plain ungilded rhyme' (*CPW* 239, I, ll. 1, 6). There are Coleridgean echoes in Naden's poem, for the elixir is described as honey-like – 'molten topaz', 'golden dew' (*CPW* I, 244, l. 114; 245, l. 139) – which recalls the 'honey-dew' in Coleridge's closing lines, and the quest in 'The Elixir of Life' shares the poisoned chalice trope with the effects of the 'milk of Paradise' in 'Kubla Khan'.¹¹⁵ Unlike in 'Kubla Khan', however, Naden's framing device returns at the end of the poem:

[...] my Vision, fraught
 With marvels, faded, and a chilly stream
 Of work-day light poured in and quenched the dream. (*CPW* 267, II, ll. 334-36)

By using this device Naden ensures that the reader is unable to forget the unreal nature of the fantastical tale. There is also a link here to Stillinger's 'basic Keatsian structure', predicated upon 'a mental flight to visit the ideal' from which the speaker returns at the poem's conclusion somehow changed.¹¹⁶ The final image itself is fascinating for the claim it makes about the nature of inspiration; it is akin to dreaming, although the vision, 'Vivid in colour and distinct in word' (*CPW* 239, I, l. 8), is 'quenched' by light – thus reality outshines fantasy.¹¹⁷ Naden's decision to emphasise the artifice of a supernatural narrative indicates her

¹¹⁴ Thain, 'Naden and a Feminist Poetics', p. 85.

¹¹⁵ Samuel Taylor Coleridge, 'Kubla Khan', in *The Norton Anthology of English Literature*, ed. Stephen Greenblatt and others, 8th edn, 2 vols (New York: W. W. Norton, 2006), II, pp. 446-48 (ll. 54, 53).

¹¹⁶ Stillinger, p. 6.

¹¹⁷ It also recalls imagery found in *Songs and Sonnets* such as in 'Moonlight and Gas' – 'And choosing instead a more practical light / Let down my venetians and shut out the moon.' (*CPW* 91, ll. 15-16) – and 'Undiscerned Perfection' – 'Fair visions glide before my dazzled sight, / And shine, and change, and pass with motion fleet' (*CPW* 129, ll. 5-6).

awareness of the impact 'The Elixir of Life' has upon the tone of the volume. It is as though the framing device assists the reader's movement from the social commentary of 'A Modern Apostle' into a fantastical quest narrative and then back into the realism of 'The Story of Clarice'.

This is the shortest of Naden's three long narrative poems (at seventeen pages) and it dispenses with *ottava rima*, although it maintains the couplet ending to each stanza, which facilitates the unexpected pairings in which much of Naden's humour lies. Thus, in the first of its three sections 'sunny mist' is rhymed with 'Pessimist', and the departure of Clarice's suitor Wilfred closes 'Part I' with the lines 'And switch with savage cane the wayside flower, / And curse himself, and Fate, and Schopenhauer' (*CPW* 274, I, ll. 71, 72; 275, I, ll. 101-02). The poem centres upon Clarice, who has a 'guileless heart and book-learn'd brain', and her father's secretary Wilfred, who 'spoke with something of a poet's fire' and goes on to write a novel about his unrequited love for Clarice (*CPW* 272, I, ll. 42, 40). It is notable that this follows a similar pattern to 'A Modern Apostle' whereby the woman possesses academic intelligence while the man is more attuned to emotion and sensation, reversing stereotypes. The conclusion of this story is, however, more formulaic: misunderstandings are resolved upon the pair's reunion, they kiss and immediately begin to plan 'The future's wedded joy' (*CPW* 288, III, ll. 116). It might be presumed that this is a concession to conventional happy endings, but I would argue that the couple are given optimistic prospects in 'The Story of Clarice' because they are explicitly set up to represent the two disciplines that Naden desired to synthesise. Clarice has mastered politics, science, and history and thus possesses wisdom and intellect while Wilfred has emotional intelligence that manifests itself in art. Neither set of traits is described as wholly positive: Wilfred's 'mind was all o'ergrown with metaphor, /

With tropes that stimulate and stifle thought’, while Clarice’s learning means that ‘her woman’s instincts had been crushed / [...] / They had not air and light enough to bloom’ (*CPW* 273, I, ll. 43-44; 272, I, ll. 28-30). Their stunted natures can only be propagated successfully through the union of these two kinds of knowledge (without intervention from religious concerns, which are notably absent in this poem); it is thus in these characters that Naden finds the embodiment of her synthetic philosophy.

This does not mean, however, that Naden had come to inhabit comfortably the role of poet, as one who stimulates recognition and reflection in their readership. In ‘Cosmic Identity’ Naden writes that:

The cosmos, as we know it in space and time, displays wealth of variety, yet is synthesised as the one in many are by the persistence of fundamental relations. This is the inner significance of the Platonic ideal of the neo-platonic striving to connect heaven and earth, of all forms of philosophic and poetic pantheism. For this conception is essentially poetical and is the meeting point of science and poetry. (*FR* 188)

The conclusion of ‘The Story of Clarice’ is not a moment of ‘inner significance’, precisely because in a narrative poem such as this we are distanced from characters rather than sharing in an embodied moment of unity. This goes some way to explaining the importance of Naden’s pantheistic poems in *Songs and Sonnets*, and the pull she felt towards the Romantic poetry that celebrated nature in exactly this manner. Naden goes on to observe that while ‘The scientific spirit diverges from the poetic spirit’, both ultimately aim to find universal synthesis of life and knowledge; as a result, ‘the consummation of rational endeavour is also the fulfilment of poetic aspiration’ (*FR* 188, 189). This is Naden’s mature view of the ideal of the poet, which was not evident in her poems precisely because it was a work-in-progress. The ‘ideal of science’ – unity in diversity – has not been (and arguably cannot be) attained, nor has

poetry reached a point at which it communicates ideas that are no longer embodied and thus are truly synthetic.

Conclusion

In 'The Evolution of the Sense of Beauty' Naden argues that a marker of 'civilised man' is that he 'begins to desire that his art shall be true, as well as attractive and symbolic' (FR 95). This translates, for Naden, into requiring that poetry provides much more than simply beauty of form (although, as she argued in the 1887 Mason College debate, this must remain its foundation). The sociological component of this idea has its roots partially in Herbert Spencer's conception of poetry outlined in *The Principles of Psychology*, which recognises 'the simple aesthetic pleasures derivable from rhythm and euphony' but suggests that 'the higher region of æsthetic feeling' is accessed through the feelings and ideas being 're-represent[ed]'.¹¹⁸ This level of higher expression is something that Naden pursued throughout her writing career (in poetry and prose); she drew upon and reshaped a variety of poetic forms and antecedents in the search for the most effective way to interrogate and communicate ideas about our place in the universe. Nevertheless, Naden does not ever seem to have been comfortable with being identified as a poet, despite the fact that modern scholars have been unwilling to classify her as anything else.

In 'Poet and Botanist' Naden writes of the unexpectedly ruthless poet who destroys the flower and 'bids it tell / *His* thoughts' (CPW 332, ll. 12-13). In 'A Modern Apostle' Ella states at a climactic moment 'I *will* speak [...] / [...] I try / To tell my thought' (CPW 211, IV, ll. 182-84). In 'Evolutionary Ethics' Naden writes how in the role of poet her object is 'the true

¹¹⁸ Herbert Spencer, *The Principles of Psychology*, 2 vols (New York: D. Appleton, 1873), II, p. 642.

expression of my thought' (*I&D* 105). Here we have three very similarly-phrased descriptions of expressive intention written during approximately the same period of Naden's life – yet they function differently and provide insights into the way genre and form dictated, or at least shaped, Naden's approach to articulating herself. Fundamental to Naden's idea of the poet is that their role is to communicate what they are thinking, and across the 1880s it is possible to trace a growing confidence in her writing to this end. And yet, although it is impossible to know exactly what Naden would deem her truest thoughts, she seems to be most successful in communicating her philosophical ideal through prose; it is telling that there is not a lyric poem in *Modern Apostle* that intimates full disclosure.

In the midst of this view of Naden's idea of the poet it is prudent to turn to the last poem published in her lifetime. 'Rest' appeared in *The Woman's World* in March 1888 (and was not collected in her *Complete Poetic Works*):

On the soft grass, among the daffodils,
I lay, and thought, up-gazing at the blue—
'Could I dream long, and bid the world dream too,
In changeless noonday, while the lark distils
From earth and heaven fresh music for his trills,
And feel the sunshine glowing through and through
My frame, until its glory should imbue
The soul, that anxiously her fate fulfils—

'Surely all yearnings which that bird above
Sings not; all sorrow and regret and pain;
The shadow of death that lies on Love's own hours
Nay, Love itself—sad, wistful, human Love—
Must rise like vapours, leaving heart and brain
Young, free, and radiant as the noon-lit flowers.'¹¹⁹

¹¹⁹ Naden, 'Rest'.

Kathryn Ledbetter characterises the purpose of *The Woman's World* under Wilde's editorship as being to 'demonstrate women's power through beauty in the present and in the past', and the aestheticism of the poetry published in its pages attests to this.¹²⁰ This alone could account for the tone of 'Rest', which differs significantly from poems in *Modern Apostle*, published less than a year earlier. Perhaps surprisingly, however, Wilde's review of this volume in an earlier issue commended Naden's 'culture and courage', and the poems singled out for specific praise – 'A Modern Apostle', 'Christ, the Nazarene', and 'Recompense', the latter two called 'pretty' and 'full of suggestion' respectively – are not obviously aligned with the aesthetic movement.¹²¹ The question therefore remains, what is the purpose of this unusual poem? Looking back across Naden's corpus, it is her links to Romanticism that yield the most obvious clue. For Naden to begin her poem lying among daffodils recalls Wordsworth's 'host of dancing Daffodils' and her analysis and response to 'I wandered lonely as a cloud' in *Notebook* and 'March, 1879'. In contrast to Wordsworth, who claims that he 'gazed – and gazed – but little thought', Naden is plunged into deep reflective thought by her natural surroundings. Significantly, she gazes not at the daffodils but lies with them 'up-gazing' (l. 2), this changed perspective connecting her with what Wordsworth describes as 'a laughing company'. 'Rest' is a response to his assertion that 'A poet could not but be gay' in such an environment.¹²² Naden is more ambivalent than this blunt statement would allow, for she conflates 'sorrow and regret and pain', 'The shadow of death', and 'sad, wistful, human Love', and desires that all these dissipate 'leaving heart and brain / Young, free, and radiant as the noon-lit flowers' (ll. 10, 11, 12, 13-14). The moment of release that Naden imagines would come were she to remain in this one spot 'in changeless noonday' (l. 4) speaks to the

¹²⁰ Kathryn Ledbetter, *British Victorian Women's Periodicals: Beauty, Civilization, and Poetry* (New York: Palgrave Macmillan, 2009), p. 139.

¹²¹ [Oscar Wilde], 'Literary and Other Notes', *The Woman's World* 1, December 1887, pp. 81-82.

¹²² Wordsworth, 'I wandered lonely as a cloud...', *The Major Works*, pp. 303-04.

reality of her inability to truly rest, her mind, heart, and body all carrying a weight. This kind of insight is one that readers are not permitted elsewhere in Naden's poems, with the exception of the coded love poem in *Notebook* (N78-9 1-2). For her to have decided to publish this at a time when her focus was shifting away from education and poetry towards philosophy and politics is indicative of Naden's changing views on the capabilities of poetry in the final years of her life.

By tracing Naden's poetic voice across her unpublished notebooks and two published volumes of poetry I have sought to identify how the idea of the poet sat within her unifying project. The masking and unifying techniques employed by Naden were all successful to a certain degree and, as I have shown in previous chapters to be the case regarding Naden's relationship with science and philosophy, poetry was itself a method which she used to work through certain concepts. It may be inferred, therefore, that Naden's inability to resolve the idea of a unified and universal voice in her poetry led to her stepping away from the form in 1887. Her death less than two years after the publication of *Modern Apostle* and the subsequent appearance of 'Rest' means that it is impossible to know whether she would have ceased producing poetry permanently. Nonetheless, it suggests that Naden had reached a point at which poetry was unable to assist further in the shaping of the book that was in process in the final years of her life.

The idea that poetry could be an effective means of change was a key aspect of Romantic ideology. As Felluga has argued in *The Perversity of Poetry*, the popularity and politics of poetry in the Romantic and early Victorian period 'complicate the attribution of high-cultural

inefficacy' that had, by the twentieth century, become an accepted truth.¹²³ Elsewhere he makes the claim that the marginalization of poetry arose because 'the Victorian critic and poet managed [...] to confer onto the irreducible fact of marginalization the ineluctable mark of necessity', and as a result 'we continue retroactively to re-enact poetry's imagined rarefication'.¹²⁴ As the culture around her had shifted towards a rhetoric that denied the efficacy of poetry to achieve social change, Naden railed against this, taking cues from Keats, Wordsworth, Byron, and Shelley alongside contemporary experimentation with the dramatic monologue form. She also looked to comic verse, participating in the periodical press at a time when the satirical mode flourished as an important way of critiquing contemporary culture. Here was an obvious example of poetry with impact, or at least poetry that landed a punch. But campaigns, whether political or philosophical, cannot be won with satire alone, and often the readership of periodicals meant that such skewering rhetoric could not achieve much more than preaching to the converted. Naden's sense that she had a voice and convictions that must be attended to by the widest possible audience thus, I argue, underlies her step away from poetry upon moving to London.

While Naden made great strides in reworking the Romantic ideal of unity so that it fitted with her secular, scientifically-informed philosophy, she was slower to confront the underlying gender politics of a period that upheld the inherent masculinity of the poet. Where she undoubtedly did succeed was in the comic mode, a view that is shared by Victorian and contemporary critics. Furthermore, it seems that Naden herself believed this to be the case, for

¹²³ Dino Felluga, *The Perversity of Poetry: Romantic Ideology and the Popular Male Poet of Genius* (Albany: State University of New York Press, 2005), p. 1. Felluga provides an overview of scholarship that has pointed to 1824-25 as being the years in which poetry's dominance in the popular imagination was first challenged, pp. 145-47.

¹²⁴ Dino Felluga, 'Tennyson's Idylls, Pure Poetry and the Market', *SEL*, 37 (1997), 783-803 (p. 797); Dino Felluga, 'Novel Poetry: Transgressing the Law of Genre', *Victorian Poetry* 41.4 (2003), 490-99 (p. 496).

Hughes recounts in the *Memoir* that Naden responded to his review of *Modern Apostle* that emphasised her ‘bright playful humour’ and scientific bent by commending how ‘it emphasises those aspects of my writing which I have more especially at heart’ (*Memoir* 38).¹²⁵

By comparing the poems in *Modern Apostle* to those in *Songs and Sonnets* it becomes apparent that Naden was also grappling with what Felluga identifies as ‘an apparently paradoxical injunction in the Victorian period: realize but idealize; be like the novel, although not too sensational or “low”; at the same time, be “poetic,” although not too Byronic or politically idealistic’.¹²⁶ In the earlier volume Naden adopts modes that tend towards the desire to idealise, taking cues from Wordsworth and lyric poetry; nevertheless, the underlying political idealism – registered by the influence of freethought – pushes against this classification. Her subsequent dissatisfaction with this is made clear by the narrative poems that take cues from verse-novels, and yet these also butt up against expectations by adopting elements of the sensational and fantastical. Naden wishes, as ever, to reconcile both sides of a binary opposition, drawing upon several strands and synthesising these into something conceived as achieving a higher truth.

Naden is never unquestioning. Even her earliest and most ‘naïve’ poetry shows evidence of her standing at one remove from uncritically inhabiting the role of poet. Her philosophical writings form a foundation for understanding this, as they show Naden to be thinking about the function of poetry alongside philosophy and science. She does, however, become less assured that poetry can communicate a Romantic ideal of truth. This plays out in the

¹²⁵ W. R. H[ughes], ‘Review. *A Modern Apostle, etc*’, *The Midlands Naturalist*, 10 (1887), 185-87.

¹²⁶ Felluga, *The Perversity of Poetry*, p. 144.

trajectory of Naden's writings, since in later poems and essays she becomes less idealistic and far more critical of what poetry might actually achieve through her embracing of the comic form. While Naden thus loses faith in the efficacy of poetry as a medium for affecting the world tangibly, it nonetheless plays a crucial role at the foundation of her world-scheme. Naden used poetry as a means to interrogate her own thinking, and her seeming decision to move away from this mode in 1887-89 underlies a shift towards focusing on a philosophy that synthesised elements of poetry and science in order to achieve her intellectual goals.

CONCLUSION

not a unity of substance or of being, which makes no provision for diversities, and indeed expressly excludes them, but a unity of relation, which at once implies diversities, and renders them intelligible
(Constance Naden, *FR* 188)

After leaving Mason College in 1887, Constance Naden maintained an active engagement with science. We know, for example, that soon after moving to London she was nominated as a member of the Royal Institution and ‘attended most of its Friday evening lectures’ (*Memoir* 44), indicating a desire to remain abreast of scientific developments.¹ Naden’s final public address was on ‘The Principles of Sociology’, given in Birmingham on 22 October 1889. In this talk, she sought to demonstrate the scope of sociology as a new discipline ‘which has yet to establish in the public mind its right to exist’ (*I&D* 177). Naden describes sociology as requiring a synthesis of existing scientific knowledge and methods, asserting that it

demands the concurrence of all the sciences to furnish its raw materials, and to work out the lines on which it must proceed. [...] No conception of the formation and growth of societies can ever spring up until we have learnt to view the physical universe as a network of cause and effect, of action and reaction. (*I&D* 178)

It is therefore clear that her unifying project was still in progress at the close of her short life. Indeed, despite Naden’s rapidly worsening condition during her final months, upon her death on 23 December 1889 she had already drafted the paper that she was to have read to the Aristotelian Society the following January.²

¹ Naden’s certificate of election to the Royal Institution records that she was nominated by J. J. Aubertin, Step. Busk, James Dewar, and John Colebrook on 5 November 1888. Royal Institution archives, RI MS AD/05/B.

² It is in this posthumously published paper that she expressed her desire ‘to exhibit human nature, not as a duality, but as an unity [sic] under different aspects’, ‘On Mental Physiology’, p. 82. The most revealing insight into her condition at this time is the letter to Robert Lewins dated 22 November 1889, printed in facsimile in the front of *Further Reliques*; in it she writes, ‘I was very much agitated when I spoke to you last night, but now I

Each of my chapters has traced the trajectory of Naden's thinking regarding the three principal interlinked disciplines in which she participated. In no case was this trajectory an entirely linear one, but within each it becomes clear that Naden resisted specialism and instead embraced the broadest possible span of knowledge. While there is very little documentary evidence relating to Naden's activities during her 1887-88 travels (*Memoir* 41-43), it is plausible that her journey through the Middle East and India was undertaken to expand her learning outside of the Western intellectual tradition in which she had thus far immersed herself.³ Unless further information comes to light regarding this period of Naden's life it will remain difficult to trace the impact this had upon her world-scheme, and as such I have not attempted to do so in this thesis. In addition, I have not sought to address Naden's political activities in London, the least well-documented aspect of her multifaceted career. William R. Hughes asserts that 'Progress, emancipation, and social reforms' became central to Naden's pursuits in 1888-89: she canvassed for the liberal 'Mr. G. Leveson-Gower [...] when he was an unsuccessful candidate for Marylebone', gave addresses supporting women's suffrage, and undertook many charitable endeavours that aimed to lessen inequality (*Memoir* 51). There are few details from which to reconstruct her beliefs, goals, and actions at this time, however, since Naden did not publish work on these topics. Nonetheless, this shift towards politics, foreshadowed in 'A Modern Apostle', was likely founded upon a synthetic urge, for she states in 'Hylo-Idealism: The Creed of the Coming Day' that 'fulness of life' may only be 'gained from conscious unity and solidarity with the lives of others' (*I&D* 174). Her desire to bring together seeming opposites extended to seeking 'consolation in the

feel that we ought both to be glad that there is a chance of my getting rid of this incubus, which has been weighing on my life so much lately.' (*FR* n.p.).

³ Hughes notes that 'Professor Max Müller had kindly given them introductions to several of the native pundits' (*Memoir* 42).

prospect of a final unification of egoism and altruism, under the control of reason and science' (*I&D* 142). This theory of morality founded in social evolution suggests that Naden's move towards political activism was stimulated by aspirations of social unity; she had begun agitating for change through deeds as well as words.

Naden's corpus provides new insight into the interdisciplinary work that was being undertaken during the late nineteenth century. She demonstrates the need for disciplines to be read alongside each other and have reciprocal relationships, committing herself to developing a unifying model and attempting to put this into practice. At the heart of Naden's writings is a resistance to the fragmentation of knowledge into discrete categories, and a commitment to the idea that history and the world around us can only be understood by considering multiple perspectives simultaneously. The light of reason is made even brighter by the spark of poetic creation, and the imagination is as much a tool of the scientist and philosopher as the artist. This is a claim that was made during the Romantic period, reinforced by John Tyndall, enacted by Naden, and continues to be argued by scholars today. Naden documented her synthetic process in her poetry and essays, through which she argues for a 'One Cosmos' model that seeks affinities rather than homogeneity. While Naden's philosophy was not fixed and did not reach its final incarnation before she died, it nonetheless suggests a world-scheme whereby the perspectives of poetry, philosophy, and science are shown to work together towards a single higher knowledge and purpose. It is therefore only by considering Naden as scientist, philosopher, and poet that her uniquely interdisciplinary position within Victorian studies truly comes into focus.

In a recent assessment of the literature and science field Martin Willis asserts that ‘the differences between literature and science must be recognised and respected and neither should be folded in to the other in ways that deny them their own agency and meaning’.⁴ Naden’s desire to uncover unity in diversity supports and extends this position out towards a broader understanding of interdisciplinarity. Her corpus provides a fresh vantage point from which to consider points of unity within the diversity of nineteenth-century culture and society, and encourages scholars to embrace a similarly synthetic urge within the academy today.

⁴ This observation is made in reference to Ruston’s publications within the field, specifically ‘Introduction’. Martin Willis, *Literature and Science: A Reader’s Guide to Essential Criticism* (London: Palgrave, 2015), pp. 9-10.

APPENDIX

Translation of 'Das Ideal', *Songs and Sonnets of Springtime* (1881)

THE IDEAL

“Behold, the Kingdom of God is within you.”

Luke xvii.21.

DEDICATED WITH GRATITUDE TO MY ESTEEMED FRIEND DR LEWINS

I am a child of the sun,
And strive ever upwards towards the everlasting light;
The earth day, the narrow lustre of the clouds,
Do not satisfy my craving.

Would it satisfy me to live among
The mountaintops, like the shy chamois?
No! I must enthrone myself somewhere that no eagle can glide,
As in the kingdom of the ancients.

I want to tear up the dreaming fog
Of matter, of space, of time,
And pour myself, free and ever more free
Into eternity.

I would never feel the absence of a soulmate
[As I do] here among the smoke of lies.
I want to revive this lifeless universe by myself,
With divine asthenic breath.

The wind picks itself up through its own energy,
The act induces the strength:
I no longer am. Man can only start to exist
When he starts creating as a God.

In vain! What can really help us give birth
To the truthful sparkle of the true day?
Even on the sunthrone,
A heart that always desires must darken.

How can I refresh my withering Self
On empty, hesitating light?
I can only recover at Earth's breast
From this sharp heavenly pain

Forgive me, oh nature, for this childish babble,
For this frenzied song.
After all, what are you
If not the echo of the chimes of ancient souls.

The poet's bold dream is not forsaken,
It was [simply] too narrow, too pale:
The kingdom of earth and heaven
Can only be born in the spirit of mankind.¹

¹ Translated from *CPW* 76-78. I am indebted to William Hooker and Lindis Kipp for their translations of 'Das Ideal' from the original German – something that has not previously appeared in print – and thus assisting my analysis of this poem.

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