

'Beyond, both the Old World, and the New': Authority and Knowledge in the works of Francis Bacon, with special reference to the New Atlantis

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‘Beyond, both the Old World, and the New’:
Authority and Knowledge in the works of Francis
Bacon, with special reference to the *New Atlantis*.

Andrew Peter Langman

Queen Mary, University of London

Thesis for the degree of Ph.D, 2007

I hereby declare that this thesis is my own work and effort, and that all sources of information have been properly acknowledged.

A handwritten signature in black ink, consisting of a stylized initial 'A' followed by a long horizontal stroke that ends in a small arrowhead.

A. P. Langman

Abstract

This study investigates the role of authority in the works of Francis Bacon, arguing that the issue of authority provides not only an interpretation of *New Atlantis*, but an important structural component of his body of works. From the first manifestation of his philosophical project to his last works of natural history, authority is an all-pervasive issue – the authority of nature, of scripture, of the named author, and how authority functions in the dissemination of natural knowledge. Chapter one argues that the publication of *New Atlantis* alongside *Sylva sylvarum* in 1626/7 was more the result of William Rawley's need to assert his own authority as the protector and disseminator of Bacon's textual legacy than an appreciation of the work's own qualities. Chapter two considers Bacon's views of history and time, suggesting that Bacon not only conceived of a new, progressive mode of historical time which would allow for the assertion of a textual authority based on the records of a civilisation unbroken by the vicissitudes of time, but that he figured these theories in *New Atlantis*. Chapter three argues that Bacon used theology both as defence and imperative to his intellectual programme, while his attempt to move beyond the deterministic, Calvinist world-view to allow for multiple possible futures, or 'chance': Bacon could then present experiment as the way of eliminating chance, in order to accelerate the rate of new discovery. Chapter four investigates Bacon's manipulations of textual authority, from the early rehearsals of the *Instauratio magna* to the performance of reliability in print in *Sylva sylvarum*. Finally, the afterword seeks to suggest that the *New Atlantis* hinges on the issues of authority with which Bacon engaged throughout his career and writings: in the issue of authority, Francis Bacon found the beginning and the end of his philosophy.

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The initial transcription of *New Atlantis* was provided, in electronic form, by Dr. Maria Wakely.

Abbreviations

<i>OFB</i>	<i>The Oxford Francis Bacon</i> , gen. eds. Graham Rees and Lisa Jardine, 15 vols., (Clarendon Press: Oxford, 1996-)
<i>SEH</i>	<i>The Works of Francis Bacon, Baron of Verulam, Viscount St. Alban and Lord Chancellor of England</i> , ed. by James Spedding, Robert Leslie Ellis, and Douglas Denon Heath, 7 vols, (London: Longmans, 1857-59)
<i>LL</i>	<i>The Letters and Life of Francis Bacon, Baron of Verulam, Viscount St. Alban and Lord Chancellor of England</i> , ed. by James Spedding, Robert Leslie Ellis, and Douglas Denon Heath, 7 vols, (London: Longmans, 1861-74)
<i>SS</i>	Francis Bacon, <i>Sylva sylvarum: or, A Naturall historie in ten Centuries</i> (London: J. H. for William Lee, 1626/7)
<i>NA</i>	<i>New Atlantis</i> as found in Francis Bacon, <i>Sylva sylvarum</i> (London: J. H. for William Lee, 1626/7)
<i>OMT</i>	Francis Bacon, <i>Operum Moraliū et Civilium Tomus</i> , ed. Guilielmi Rawley (London: Richardum Whitakerum, 1638)
<i>DAS</i>	<i>De augmentis scientiarum</i>
<i>AL</i>	<i>Advancement of Learning</i>
<i>IM</i>	<i>The Instauration magna</i> , as published in 1620
<i>NO</i>	<i>Novum organum</i>
<i>Resuscitatio</i>	<i>Resuscitatio, Or, Bringing Into Publick Light Severall Pieces, of the Works, Civil, Historical, Philosophical, & Theological, Hitherto Sleeping, of the Right Honourable Francis Bacon Baron of Verulam, Viscount St. Alban</i> , ed. by William Rawley (London: Sarah Griffin for William Lee, 1657)
<i>Baconiana</i>	Francis Bacon, Viscount of Verulam, <i>Two or More Works, Baconiana, or certaine genuine remains of Sr Francis Bacon</i> (London: J. D. For Richard Chiswell, 1679)
Farrington	Benjamin Farrington, <i>The Philosophy of Francis Bacon, an essay on its development from 1603 to 1609, with new translations of fundamental texts</i> (Liverpool: Liverpool University Press, 1964)
<i>Institutes</i>	Jean Calvin, <i>Institutes of the Christian Religion</i> , trans. by

	Henry Beveridge, 2 vols (London: James Clarke, 1953)
NLS MS Bacon to James, 1620	NLS Adv. MS 33.1.7 vol 22, item 11. Francis Bacon to James I, Oct. 20, 1620
<i>The Bible</i>	Biblical citations, unless indicated otherwise, are all from <i>The Bible: Authorized King James Version with Apocrypha</i> , ed. by Robert Carroll and Stephen Pickett, (Oxford, New York: Oxford University Press, 1997)
<i>OED</i>	<i>Oxford English Dictionary</i> , 20 vols, 2nd edn (Clarendon Press: Oxford, 1989)
<i>DNB</i>	<i>Dictionary of National Biography</i> , 63 vols, (London: Smith, Elder, 1885-1900)
EEBO	<i>Early English Books Online</i> at http://eebo.chadwyck.com/home
<i>JSTOR</i>	Journal Storage at http://www.jstor.org
BL	The British Library
LPL	Lambeth Palace Library
PRO	National Archives, Kew
NLS	National Library of Scotland

Instauration, *Instauratio* and *Instauratio magna*

Bacon utilized the term ‘Instauration’ to mean a number of different things, and in order to avoid confusion, I shall refer to these as follows:

Instauratio magna: this will refer solely to the volume published in 1620 which contains the *Distributio operis*, *Novum organum*, the *Parasceve ad historiam naturalem*, and the *Catalogus historiarum particularium* as found in *OFB*, XI. This is the volume which is routinely and incorrectly termed *Novum organum*.

Instauratio: this will refer to the print event itself – the intended publication of works which fall into the Six-part plan outlined in the *Distributio operis*, and of which *Novum organum* was a partial fulfilment of Part II, the *Historia experimentalis* was the beginning of the fulfilment of Part II, and so forth (see

OFB, XI, pp. xix-xxii).

Instauration: this shall be reserved for the undertaking itself, the grand project (of which the parts of the print event were merely blueprints) of restoring mankind to his natural authority over nature (see *OFB*, XI, p. 77; *OFB*, XIII, p. 173; *SEH*, V, pp. 133-34 (*SEH*, II, p. 16)).

Transcription policy

MS:

1. [...] indicates an editorial addition
2. — Indicates a word struck through in the original
3. ^ ^ show words above text as additions
4. > after a letter indicates a swash descender
5. Where contractions have been expanded, this is indicated by underlining, such as Lord.
6. Where guesses have been made as to the letters missing or, indeed, words, such will be square bracketed and ? – [over?] thus signifies that the ‘o’ is a guessed addition to account for a missing or obscured letter.
7. MS transcriptions have been rendered in such fashion as to reflect their spatial layout: line endings and indentations have been rendered faithfully.
8. Spelling, punctuation and capitalisation have been rendered faithfully, though the long ‘s’ has been normalised.
9. MS Letters have been indented and lineated to allow for ease of reference.

Printed texts:

Spelling, punctuation, capitalisation, and italics have been rendered faithfully. An attempt has been made to reproduce changes in the size of type utilised, though not the typeface itself. The capital VV for W has therefore been retained, though where a capital ‘I’ has been rendered as ‘J’, the capital ‘I’ has been substituted: the long ‘s’ has been normalised.

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Introduction

The philosophy of Francis Bacon has led a somewhat chequered critical afterlife since his demise three hundred and eighty years ago. His works met with a mixed critical response even in his own lifetime, with his *Essays*, *Advancement of Learning*, *De sapientia veterum* and *Historie of the Reign of Henry the Seventh*, for example, enjoying great popularity and not only almost continual reprinting but several printers' disputes over rights.¹ His magnum opus, however, the *Novum organum* of 1620, was described by Henry Cuffe as a work which 'a fool could not have written [...] and a wise man wold not',² and by James I as 'like the peace of God, that passeth all understanding',³ while Edward Coke merely inscribed these words on the engraved title of his presentation copy: 'It deserveth not to be read in schooles, but to be fraughted in the ship of fooles'.⁴ Another perennially popular Baconian work was *Sylva sylvarum* (1626/7), not to mention the latter's 'companion' text, the much used and abused *New Atlantis*. Graham Rees explains the disparate variety of Bacon's champions in these terms:

In seventeenth-century England Bacon's writings were invoked by virtuosi on the make, provincial projectors, improving colonialists, millenarian visionaries, royalists and radicals, Anglicans and Puritans, Calvinists and Latitudinarians, educational and social reformers, promoters of the New Science and defenders of the Old Erudition.⁵

¹ See R. W. Gibson, *Francis Bacon, A Bibliography of his Works and of Baconiana to the year 1750* (Oxford: Scrivener Press, 1950), pp. xiii-xvii, and R. W. Gibson, *Francis Bacon, A Bibliography of his Works and of Baconiana to the year 1750: Supplement* (Oxford: Privately Issued, 1959); *OFB*, XV, pp. lxxv-lxxviii, cixcxii; *Records of the Court of the Stationers' Company 1602 to 1640*, ed. by William A. Jackson (London: The Bibliographical Society, 1957), pp. 149, 178, 204, 326-28; see below, p. 71, fn 128.

² PRO SP14.117.37, John Chamberlain to Dudley Carleton, London, October 28, 1620.

³ PRO SP14.119.64, J. C. to D. C., London, February 3, 1620 (old style). The fact that both of these comments were reported by John Chamberlain, who was less than fond of Bacon, and that Cuffe, for one, had been dead for seventeen years when he was thus quoted, has failed to prevent many critics from taking these comments as gospel.

⁴ Jason Scott-Warren, *Early Modern English Literature* (Cambridge: Polity Press, 2005), p. 133.

In the latter half of the seventeenth-century, Bacon's influence manifested itself concretely in the formation of the Royal Society, some founder members of which included John Evelyn and Robert Hooke, who wore their Baconian influences on their sleeves.⁶ Bacon's name was appropriated to confer authority and prestige upon the project, as can be clearly seen in Abraham Cowley's ode which prefaced Sprat's *History of the Royal Society* of 1667:

Bacon at last, a mighty Man, arose,
 Whom a wise King and Nature chose
 Lord Chancellour of both their Laws,
 And boldly undertook the injur'd Pupils caus. [...]

From these and all long Errors of the way,
 In which our wandring Prædecessors went,
 And like th'old Hebrews many years did stray
 In Desarts but of small extent,
 Bacon, like Moses led us forth at last,
 The barren Wilderness he past,
 Did on the very Border stand
 Of the blest promis'd Land,
 And from the Mountains Top of his Exalted Wit,
 Saw it himself, and shew'd us it.⁷

It was, perhaps, a rather partial view of Bacon's philosophy which was appropriated as the semi-official credo of the Royal Society, as it exaggerated the accumulation of natural-historical data while playing down the role of hypothesis.⁸ Bacon's name was often used as an authority to bolster the prestige of new works. Robert Boyle, for example, was occasionally explicit in describing himself as following in the Baconian tradition,⁹ while Henry

⁵ *OFB*, XI, pp. xxii-xxiii.

⁶ For the genesis of the Royal Society, and its relationship to the 'Invisible College' of the Hartlib circle, which included other Baconians such as Comenius and Drury, see Charles Webster, *The Great Instauration: Science, Medicine and Reform 1626-1660* (London: Duckworth, 1975), pp. 58-67, 88-99.

⁷ Thomas Sprat, *The History of the Royal Society of London* (London: T. R. for J. Martyn and J. Allestry, 1667), B1^v-B2^v. See also Achsah Guibbory, 'Imitation and Originality: Cowley and Bacon's Vision of Progress', *Studies in English Literature, 1500-1900*, 29 (1989), 99-120. For the reliability of Sprat's work, see Michael Hunter, *Science and Society in Restoration England* (Cambridge: Cambridge University Press, 1981), pp. 29-31.

⁸ *OFB*, XI, pp. xxiv-xxv.

⁹ Not least in his apparent intention to write a 'sequel' to *SS*; See Rose-Mary Sargent,

Pemberton and Colin Maclaurin wrote at length on how Newton's philosophy was a continuation of the path marked out by Bacon. Pemberton suggested that Newton followed Bacon's method in several senses, in his avoidance of conjecture, and slow proceeding, rather than rushing to attempt to comprehend 'entire systems, and fathoming at once the greatest depths of nature'¹⁰ he suggested also that Newton worked from simple precepts, one of which was 'the method of arguing by induction, without which no progress could be made in natural philosophy'.¹¹ Maclaurin not only wrote that Bacon was 'justly [along with Kepler and Galileo] held amongst the restorers of true learning, but more especially the founder of *experimental philosophy*',¹² but also suggested that initial resistance to Newton's ideas could be laid firmly at the door of a lack of appreciation of Bacon's ideas:

Had the philosophers, since Lord *Verulam*'s time, adhered more closely to his plan, their success had been greater; and Sir *Isaac Newton*'s philosophy had not found the learned so full of prejudices against it, in favour of some systems lately invented and mightily extolled by speculative men; that while all admired the sublime geometry which shone throughout his work, few for some time appeared to be disposed to hearken to his philosophy, or in a condition to judge of it impartially.¹³

Bacon was also to become well known in the Low Countries and France, thanks to the efforts of the brothers Dupuy, the brothers Gruter, and individuals such as Pierre Gassendi and Marin Mersenne. In Europe, Bacon's position became all the more exalted due to his adoption as a virtual founding father of the French Enlightenment, his admirers including Diderot and D'Alembert as well as Voltaire, who, like Maclaurin, considered Bacon to be the 'Father of experimental philosophy.'¹⁴

'Baconian Experimentalism: Comments on McMullin's History of the Philosophy of Science', *Philosophy of Science*, 68 (2001), 311-18 (p. 315).

¹⁰ Henry Pemberton, *A View of Sir Isaac Newton's Philosophy* (Dublin: John Hyde, 1728), B2^r.

¹¹ *Ibid.*, C3^r.

¹² Colin Maclaurin, *An Account of Sir Isaac Newton's Philosophical Discoveries, in Four Books* (London: A. Millar et al, 1748), H4^v.

¹³ *Ibid.*, I2^{r-v}.

¹⁴ See *OFB*, XI, p. xxvii, fn. 19, citing Voltaire, *Letters Concerning the English Nation*, ed. by

The nineteenth century saw perhaps a more critical evaluation of Bacon,¹⁵ evident in John Herschel's Baconian work, the *Preliminary discourse on the study of natural philosophy* (1830), which itself spawned William Whewell's *History of the inductive sciences from the earliest to the present time* (1837). Other considered critics of Bacon in this period include John Stuart Mill and the somewhat less conciliatory Sir David Brewster.¹⁶ The nineteenth century produced six editions of *Novum organum*, as well as three editions of his works. Rees considers that *The Principles of Science* (1874) by William Stanley Jevons 'marked the point at which the reaction against Bacon and the inductive view of natural science really began', while Sargent uses Jevons as an example of criticism of the 'pseudo-Bacon' established by the earlier misapprehension of his work.¹⁷

In the twentieth-century, the new vision of the enlightenment as destructive rather than productive, as posited by Adorno and Horkheimer, and a new vision of the state of revolutionary sciences put forward by Thomas Kuhn, led to Bacon standing accused of 'the disenchantment of the world'.¹⁸ A chasm was opened up between the Baconian sciences, in which vast storehouses of data were to be acquired for the progressive and continuous construction of scientific knowledge, and the 'classical' sciences of Copernicus and Einstein, which, in effect, overthrew their immediate successors by positing a new world view. Karl Popper, with his idea that

Nicholas Cronk (Oxford: Oxford University Press, 1994), pp. 50-52. As Rees notes, their esteem for Bacon outlived even the Encyclopaedists, citing the case of the marquis de Condorcet, who, writing before his death in prison, 'did not hesitate to rank Bacon with Galileo and Descartes' (*OFB*, XI, p. xxvii).

¹⁵ See Richard Yeo, 'An idol of the market-place: Baconianism in nineteenth-century Britain', *History of Science*, 23 (1985), 251-98.

¹⁶ Sargent considers that Mill's interpretation of Baconian induction suggested that 'knowledge was limited to discovering law-like regularities', and that it was his version of the methods and goals of induction which were to become known as 'Baconian Induction' (Sargent, p. 312).

¹⁷ *OFB*, XI, p. xxx; Sargent, p. 312.

¹⁸ Max Horkheimer and Theodore W. Adorno, *Dialectic of Enlightenment*, ed. by Gunzelin Schmid Noerr, trans. by Edmund Jephcott (Stanford: Stanford University Press, 2002), p. 2.

knowledge is to be increased through the modification of existing knowledge through falsifiable conjecture, hammered the final nail in the coffin of the Baconian inductive sciences. It is perhaps for this reason that Graham Rees has been led to bemoan the fact that ‘Bacon’s fall from *philosophical* grace seems to be associated, nonsensically, with his relative decline into *historical* marginality’, further suggesting that ‘any critic may say that Bacon got it all wrong, and I am sure that many will continue ingenuously to argue that. But even they cannot deny that he got it wrong rather gloriously and fruitfully’.¹⁹

In the twentieth-century, critiques of Bacon’s philosophy moved away from the demonstration or refutation of its utility, truth or applicability, and began to concentrate more on the implications of his plans for the restoration of human knowledge, and his wider influence on society: there are those who consider Bacon to have heralded the modern age, while others point to his reliance on conceptual systems outmoded even in Bacon’s time.²⁰ Whatever the particular scholarly bent, it is undeniable that Bacon’s works are peculiarly fruitful, allowing the scholar to investigate rhetoric, education, philosophy, science, politics, the law, utopianism, medicine, natural history and much more. Much of Bacon criticism is reliant on the great Victorian edition of his works edited by Ellis, Heath, and Spedding, which explicitly separated the several Bacons; philosopher, politician, lawyer, statesman and man. This somewhat artificial separation is now beginning to be addressed, by the new Oxford edition of his works and letters, edited by Graham Rees and others, by new critical biographies such as Lisa Jardine and Alan Stewart’s *Hostage to Fortune*, which concentrates on Bacon’s life at the expense of his works, and

¹⁹ *OFB*, XI, pp. xxxviii, xlv. This section is a condensation of Graham Rees’ eloquent overview of the ‘fluctuating fortunes’ of Bacon’s philosophy as suffered by his magnum opus, *NO* (See *OFB*, XI, pp. xxii-xlvi). For more on the reading and mis-reading of Bacon’s philosophy, see Sargent, pp. 312-4, and Brian Vickers, ‘Francis Bacon and the Progress of Knowledge’, *Journal of the History of Ideas*, 53 (1992), 495-518, in *JSTOR*.

²⁰ See Charles Whitney, *Francis Bacon and Modernity* (New Haven and London: Yale University Press, 1986); Benjamin Farrington, *Francis Bacon: Philosopher of Industrial Science* (New York: Henry Schuman, 1949); Paulo Rossi, *Francis Bacon: From Magic to Science*, trans. by Sacha Rabinovitch (Chicago: University of Chicago Press, 1968); John Henry, *Knowledge is Power* (London: Icon, 2002).

Perez Zagorin's *Francis Bacon*, which attempts to balance the works against the life. Individual studies by the likes of Julian Martin, Henry Wormald, Jerry Weinberger and John C. Briggs aim to answer questions which the Victorian editors would probably not have suspected could exist.²¹ Like Shakespeare, Bacon serves more and more as a carrier for the interests of modern scholars, who have found cogent readings of Bacon in realms as diverse as feminist theory and linguistics, and, like Shakespeare, the man at the heart of these often frighteningly complex and difficult works becomes more and more remote from them.²²

This is not to say that this study is designed to be an all-encompassing work which will, once and for all, bring Bacon himself back to the centre of Bacon studies. What it does highlight is the difficulties encountered by the student wishing to make his or her mark on the subject. The first, and perhaps most daunting, is the sheer volume and quality of scholarship available on Bacon, which may well lead to the fear that, without an unpublished lost manuscript, new archive or undiscovered letter, all is lost. But, as Bacon himself said, 'they are ill discoverers, that thinke there is no land when they can see nothing but Sea'.²³ This leads the student onto the second difficulty, the quantity and

²¹ Lisa Jardine and Alan Stewart, *Hostage to Fortune: The Troubled Life of Sir Francis Bacon, 1561-1626* (London: Victor Gollancz, 1998); Perez Zagorin, *Francis Bacon* (Princeton: Princeton University Press, 1998); Julian Martin, *Francis Bacon, the State, and the Reform of Natural Philosophy*, (Cambridge: Cambridge University Press, 1992); B. H. G. Wormald, *Francis Bacon: History, politics and science, 1561-1626* (Cambridge: Cambridge University Press, 1993); Jerry Weinberger, *Science, Faith and Politics: Francis Bacon and the Utopian Roots of the Modern Age* (Ithaca and London: Cornell University Press, 1985); John C. Briggs, *Francis Bacon and the Rhetoric of Nature*, (Cambridge, Massachusetts: Harvard University Press, 1989).

²² See Catherine Gimelli Martin, 'The Feminine Birth of the Mind: Regendering the Empirical Subject in Bacon and his Followers', in *Francis Bacon and the Refiguring of Early Modern Thought*, ed. by Julie Robin Solomon and Catherine Gimelli Martin (Aldershot: Ashgate, 2005), pp. 69-88 (p. 69, fn 2), who attempts to reclaim Bacon from over-critical feminist readings; Kate Aughterson, "'Strange things so probably told': gender, sexual difference and knowledge in Bacon's *New Atlantis*", in *Francis Bacon's New Atlantis: New Interdisciplinary Essays*, ed. by Bronwen Price (Manchester and New York: Manchester University Press, 2002), pp. 156-79; Susan Bruce, 'Virgins of the world and feasts of the family: sex and the social order in two Renaissance utopias', in *English Renaissance Prose: History, Language and Politics*, ed. by Neil Rhodes (Tempe, Arizona: Medieval & Renaissance Texts and Studies, 1997), pp. 125-46 (pp. 139-46).

²³ *OFB*, IV, p. 83.

complexity of Bacon's own writings. The student is thus plunged into a sea of philosophy, and must amass experience in Bacon's works in the hope that some new, previously undiscovered island of interpretation might come into view. There is, however, little new under the sun, as the sailors in *New Atlantis* discovered when they were placed in hope of making land by observing a dark mass of cloud:

And it came to passe, that the next Day about Euening, we saw within a Kenning before vs, towards the North, as it were thick Cloudes, which did put vs in some hope of Land; Knowing how that part of the South Sea was vtterly vnknowne; And might haue Islands, or Continents, that hithertoo were not come to light.²⁴

Many Bacon studies begin with the identification of a fissure, a contradiction. This may be between Bacon's apparent separation of science and religion, between his apparent disdain for rhetoric and his relentless application of it, between his apparently unquenchable thirst for political power and his protestations of humility. This study is perhaps no different, as its genesis was in a question of genre: was *New Atlantis* an attempt at a fictional representation of the philosophy explained in the *Instauratio magna*? This question, in turn, led to the observation that one does not become identified as the authoritative voice of early-modern science by thinkers of the stature of Diderot and Keynes by accident. Whether Bacon's 'science' itself was successful is perhaps not as interesting as the manner in which it seems to have dominated Western scientific thought for at least two hundred years before falling spectacularly from grace. It seemed to me that there was mileage in considering the manner in which authority is figured in Bacon's works, whether the authority his name carried with it was simply that of his thought, or a conscious production of his presentation. It became then 'simply' a question of unravelling the way authority figures in Bacon's works, to show how Bacon appeals to levels and types of authority within his works, and especially to show the struggle he had with authority: not least how he

²⁴ NA, a3^r (SEH, III, p. 129).

sought to convince his audience that his way, which involved at its heart a rejection of received authority and a re-building of philosophy from the ground up, is the right way without resorting to the very authority which he disdains. This is the task I have set myself in this thesis.

Critics such as David Colclough, Julie Robin Solomon and Alvin Snider have noted that Bacon is perhaps unusually preoccupied with authority, and have made valuable contributions to the issue: Colclough with his investigation of the discourse of authority Bacon enters into early in his career in the *Advancement of Learning*, *Temporis partus masculus*, *Cogitata et visa* and *Redargutio philosophiarum*; Solomon and Snider more preoccupied with the appeal to the authority of nature Bacon makes in his *Novum organum*.²⁵ It seems, however, that authority is not simply an issue with which Bacon is deeply concerned, but that it is an issue which informs his works and his corpus at a structural level, as well as an issue which lies at the heart of the dissemination of Bacon's works ever since his death.

Both Colclough and Solomon acknowledge the necessity of taking a dialogical approach to Bacon, one which views his writings not in isolation, but with the understanding that Bacon himself envisaged responses to his works. This perception reminds us that authority, not least in Jacobean England, was an exercise in persuasion, not the simple imposition of power, but that 'government was from the top to the bottom a process shared between 'rulers' and 'ruled''.²⁶ Professionally, Bacon was involved at the very heart of

²⁵ David Colclough, "Non canimus surdis, respondent omnia sylvae": Francis Bacon and the transmission of knowledge', in *Textures of Renaissance Knowledge*, ed. by Philippa Berry and Margaret Tudeau-Clayton (Manchester and New York: Manchester University Press, 2003), pp. 81-97 (p. 83); David Colclough, "Of the alleading of authors": the construction and reception of textual authority in English prose, c. 1600-1630; with special reference to the writings of Francis Bacon, John Hoskyns and John Donne' (unpublished doctoral thesis, University of Oxford, 1996), pp. 10-78; Julie Robin Solomon, *Objectivity in the Making: Francis Bacon and the Politics of Inquiry* (Baltimore and London: The John Hopkins University Press, 1998); Alvin Snider, *Origin and Authority in Seventeenth-Century England: Bacon, Milton, Butler* (Toronto: University of Toronto Press, 1994).

²⁶ Kevin Sharpe, 'Representations and Negotiations: Texts, Images, and Authority in Early Modern England', *The Historical Journal*, 42 (1999), 853-81 (p. 854).

this process, not least as his duties regularly involved negotiating truces between the two conflicting authorities in England, the monarch and parliament, as well as the delicate negotiation between the monarch's right to make law and the common law of the country.²⁷

It was not only in terms of sovereign power that authority was a contentious issue, as ever since the reformation, the Lutheran and Calvinist doctrine held that spiritual authority was not imposed from above (that is, by a temporal organisation such as the Catholic Church), but was a matter for the individual: spiritual authority inhered in faith, not doctrine. Robert Weimann, for one, suggests that authority in the early-modern period was no longer something predetermined, but something which had to be negotiated, positing the Martin Marprelate controversy (with which Bacon was involved, writing *An Advertisement Touching the Controversies of the Church of England* as a response²⁸) as an example of this negotiation, presenting the author as 'someone in hiding, fashioning the legitimation of his own unsanctioned writing in print—a defiant author-function, in the very teeth of censorship and threatening violence, quite prepared in playful provocation to discuss its own contingent conditions of authorization'.²⁹

In a wider sense, however, Bacon identified the problem of 'sheep-like consent' to the authority of the ancient authors as one of the primary malaises holding back the progress of philosophy (a philosophy with the avowed purpose of ameliorating man's condition on earth). At every stage in his writings, Bacon is concerned with the effect of his writings, and with the best way in which to persuade his various audiences. That the issue is of deep concern is apparent from what may well be considered his very first

²⁷ Bacon's speech on the subject of the triple subsidy in 1593 is one famous example, which many consider to have led directly to his subsequent lack of advancement (see *LL*, I, pp. 209-32; Jardine and Stewart, pp. 141-45), while Solomon notes the almost perpetual tussles with Coke (Solomon, pp. 174-84).

²⁸ *LL*, I, pp. 70-96; See below, p. 134, fn 15.

²⁹ Robert Weimann, *Authority and Representation in early Modern Discourse* (Baltimore and

expression of philosophy, the piece known as *The Praise of Knowledge*,³⁰ which considered the manner in which respect for ancient philosophy held back further advances in knowledge:

And let me not seem arrogant, or without respect to this great reputed author [Aristotle]. Let me so give every man his due, as I give Time his due, which is to discover truth. Many of these men had great wits, far above mine own, and so are many in the universities of Europe at this day. But alas, they learn nothing there but to believe: first to believe that others know that which they know not; and after, that themselves know that which they know not. But indeed facility to believe, impatience to doubt, temerity to assever, glory to know, doubt to contradict, end to gain, sloth to search, seeking things in words, resting in a part of nature — these and the like have been the things which have forbidden the happy match between the mind of man and the nature of things, and in place thereof have married it to vain notions and blind experiments.³¹

Bacon here marries together his concerns regarding authority – both the specious authority lazily garnered from ancient names, and the difficulties involved in persuading people that there is a better way when one does not yet command the authority to do so – as well as the dangers inherent in simply becoming yet another who commands obedience rather than directs mankind on the ‘right path.’ In an early conflation of authority with sovereignty, suggesting a right rather than an acquisition, Bacon states that ‘no doubt the sovereignty of man lieth hid in knowledge’.³² It is from this standpoint that this thesis seeks to investigate and analyse Bacon’s engagement with the problems of authority and knowledge within his works.

London: Johns Hopkins University Press, 1996), p. 91.

³⁰ *Francis Bacon: The Major Works*, ed. by Brian Vickers (Oxford: Oxford University Press, 1996), pp. 22-51. This piece was delivered as part of a device Bacon wrote, titled *Of Tribute; or, giving that which is due*. The version presented by Spedding (*LL*, I, pp. 123-43) is out of date.

³¹ *Francis Bacon: The Major Works*, p. 36.

³² *Loc. cit.*

a. An overview of the argument by chapter

Each chapter of this study will confront an area in which authority is of great importance to either Bacon's works or their dissemination. By the final chapter, I will have built up a picture which demonstrates the importance of authority both as an integral part and a structural component of Bacon's philosophical project, identifying how Bacon adjusts both his thought and presentation to take into account his understanding of authority, and how its manipulation, manifestation and expression lay behind any hopes for success he harboured.

In chapter one, I shall consider the manner in which the manipulation of Bacon's texts after his death has perhaps led to their misapprehension. Taking the case of the first text published after his death, the *Sylva sylvarum*, and its companion texts *New Atlantis* and the *Magnalia naturæ*, I shall show how their subsequent understanding and interpretation was directed not by the author, Bacon, but by his secretary and amanuensis, William Rawley. While it is no breakthrough to note that Rawley wrote the dedicatory letter and letter 'To The Reader' which accompanied this text, close analysis both of the accretive weight of *Sylva sylvarum*'s paratextual material and of the letter in question suggest that the authority with which Rawley was most concerned was not the authority of nature, nor the natural-philosophical authority the accrual of which these texts may have been designed to assist, but the authority of the editor himself, William Rawley. Every decision made by Rawley seems designed to allow Rawley himself to fix his own position by utilising the authority of the texts' now dead author. So effective were Rawley's editorial and paratextual interventions that *Sylva sylvarum* and, more notably, *New Atlantis*, have singularly failed to escape from what appear to be somewhat prescriptive and limiting explanations of their relevance and position within Bacon's works. This is especially relevant with the *New Atlantis*, where the removal of Rawley's explanation of Bacon's intentions

regarding this enigmatic work may perhaps aid a new reading of it.

In chapter two, I shall take a more historiographical approach, demonstrating that Bacon's views on history and the nature of time were not merely based around an attempt to break free from traditional and limiting models of time, but around an understanding of the necessity for historical information to be reliable. Concentrating on the relationships between Bacon's conceptions of history and time and those of his contemporaries or near-contemporaries such as Bodin, Le Roy, Hakewill and Goodman, I shall show that it is in *New Atlantis* that Bacon demonstrates his historiographical theories in 'action,' illustrating the authority, both over man and nature, which results in the accumulation of centuries of accurate records, unsullied by wars and the dangers to learning of the apparently inevitable collapse of mighty empires, such as the Roman. Bacon presents, in the *New Atlantis*, a view of a new kind of history: a progressive, linear history of an arguably modern nature, and one which provides historical authority for the utility of Bacon's proposed instauration of the sciences based on natural-historical data accumulation.

Chapter three considers Bacon's treatment and manipulation of religion, suggesting that Bacon used religion primarily as an authority to support his own proposals (though I am not suggesting that the proposals necessarily came first, and the religious support and argument later). Bacon considered religion and natural philosophy as parallel tools with which we could understand both the will and power of God, if not his nature. Bacon adjusts his theological statements to allow for the agency of man, gently distancing himself from Calvinist determinism, and investigating the nature of free will in order to allow for the somewhat contentious issue of chance in human affairs. It was the existence of chance which allowed Bacon to demonstrate the superior authority over nature which could be acquired through the application of experiment, effectively the acceleration of the natural actions of time and chance. It is in *New Atlantis*, and particularly in the manner in which

the Bensalemites receive their revelation, that Bacon demonstrates his reading of the utility of his natural philosophy, the suggestion that religion and natural philosophy not only went hand-in-hand, but also served as mutually authorising forces. Finally, Bacon demonstrates, in *New Atlantis*, the manner in which mankind can use this knowledge for his own good, if the existence of chance is accepted, and slowly effect its own recovery from the physical effects of the Fall.

Not content with considering authority in terms of history and religion, Bacon was intimately concerned with the authority of the written word. In chapter four, I will investigate Bacon's thoughts on the problems of received authority, and the manner in which these thoughts affected the presentation of his ideas to the outside world. Considering several of his originally unpublished manuscripts as well as the *Instauratio magna* itself, and its accompanying letters, I will show how Bacon's knowledge of the problem of the reception of authority was worked through so that he might provide a text shorn of nominal authority while replete with as much other authority, such as monarchical and bibliographical, as possible: and this in a text which concerns the removal of authority from the author of philosophical tracts and its re-positioning in nature as judged by experimental practice. The final cog in the wheel of the authority of textual presentation is to be found in the *Parasceve*, a work which considers the importance of presenting the reliability of information in a textual format, the enactment of which is to be found in the notes and published text of the *Sylva sylvarum*.

The Afterword serves as a summing-up of the Baconian concern with authority in every shape and form, whether textual, religious, historical, temporal or monarchical. It is his 'final' work, the *New Atlantis*, in which Bacon most completely, if obliquely, considers the nature of authority, perhaps more than any other issue. From its beginning, where the sailors are de-authorised, having every piece of their cultural authoritative baggage

removed, to the end, where the narrator has his book which explains the Bensalemite 'way to knowledge' pre-authorised for publication by the father of Salomon's House, almost every action is figured in a presentation, or representation, of authority – and authority figured in terms of a discourse, rather than an imposition.

b. The aim of this study

Studies of Bacon's works tend, with a few notable exceptions, to fall into one of two categories; those which seek to 'unify' Bacon's works under a single banner, and those which investigate one aspect of them. In the first category falls Julian Martin's work which suggests that the greatest influence on Bacon's philosophy was that of his belief that he was first and foremost a statesman, and that his philosophy was one way in which the nascent 'British' empire might be advanced, while the overriding organisational principle of his philosophy was that of the law.³³ The second camp is represented by studies such as Brian Vickers' magisterial analysis of Bacon's prose style, Lisa Jardine's consideration of his use of rhetoric and Stanley Fish's analysis of the effect of reading on the meaning of his *Essays*.³⁴ This study hopes to forge a link between the two polar opposites, using methods borrowed from history of the book studies as well as analysis of the philosophical implications of the works, consideration of their placement within contemporary debates such as theology as well as analysis of literary style in order to reach its conclusions.

Its conclusions may not perhaps be far-reaching, and do not seek to turn Bacon studies on its head, but they do, I believe, open up a new strand of

³³ See also Wormald, and Weinberger.

³⁴ Brian Vickers, *Francis Bacon and Renaissance Prose* (Cambridge: Cambridge University Press, 1968); Lisa Jardine, *Francis Bacon: Discovery and the Art of Discourse* (Cambridge: Cambridge University Press, 1974); Stanley Fish, *Self-consuming Artefacts: The Experience of Seventeenth-Century Literature* (Berkeley, Los Angeles, London: University of California Press, 1972), pp. 78-155; other works which consider Bacon's position within contemporary conceptual movements include Snider; Marina Leslie, *Renaissance Utopias and the Problem of History* (Ithaca and London: Cornell University Press, 1998); Denise Albanese, *New*

discourse within his works, as well as hopefully encouraging scholars to re-consider their appraisals of *Sylva sylvarum* and *New Atlantis*, at the very least. It is important also, perhaps, to re-consider the effect that Rawley had on the dissemination and reception of Bacon's works after his death, and to note that in this respect, the problems with authority Bacon had identified survived him.

Science, New World (Durham and London: Duke University Press, 1996).

Chapter One: Dedicatory letters and re-contextualisation

The reputation and interpretation of a text is greatly influenced by the circumstances of its first public appearance, and by the intentions and requirements of its first publisher. Francis Bacon's *New Atlantis* is a work which was first published within months of the author's death, and one which inhabits a strange, interstitial world in which it is neither fully the responsibility of its author, nor of its editor and publisher. Its somewhat slippery nature as a work contributed to its subsequent appropriation by a number of individuals and movements in the years following publication, and also of its various interpretations. This chapter will investigate the publishing history of *New Atlantis* before suggesting that perhaps the greatest influence on its subsequent reception has been William Rawley, its editor. Through an analysis of the paratextual devices which accompanied both *New Atlantis* and the volume with which it was first published, *Sylva sylvarum*, and also with those accompanying it in its first Latin translation, in the *Operum moralium ... tomus*, this chapter will show that Rawley's original contextualisation of this work is less than reliable.

a. *New Atlantis*: publication, dissemination and appropriation

Francis Bacon's *New Atlantis* is a fundamentally mysterious text, inhabiting a unique place within his works as, amongst other things, the only overtly fictional product of his almost thirty-year long publishing career.¹ The manner of its publication is, if not shrouded in mystery, at the very least somewhat opaque. It appeared, unheralded, at the back of a larger and more traditional, if itself somewhat difficult work, the *Sylva sylvarum*, which was published by

¹ Other works, such as *Redargutio philosophiarum*, are based around a fictional discourse, not dissimilar to Socratic dialogue, which is introduced in a fictional setting, but *NA* does seem to be the only text of Bacon's which wears comfortably the definition 'fiction.' For discussions based around the fictional nature of *NA*, see Albanese, pp. 94-99.

William Rawley, Bacon's secretary, chaplain and amanuensis, soon after Bacon's death.² The relationship between *New Atlantis* and *Sylva sylvarum* is equally opaque, with some critics seeing the two texts as closely interrelated, while others are somewhat less convinced of their need to be read together.³ What is certain, however, is that when the larger work was entered into the Stationers' Register on July 4th, 1626, there was no mention whatsoever of *New Atlantis*:

William Lee, *junior*

Entred for his Copie vnder the handes of [George Montaigne] the Lord. Bishop. of London and master **Islip** late warden, a booke Called *Sylua Syluarum or A Natural History in Ten Centuryes* written by the right honorable FRANCES lord VERULAM, viscount SAINT ALBONES.⁴

Other evidence which suggests that, at the very least, the relationship between *Sylva sylvarum* and *New Atlantis* is not to be taken at face value, is inferable from the publication history of the latter work. *Sylva sylvarum* itself was a very popular work, going through five editions in the first twelve years after

² While most extant copies of *SS* show the date of publication as 1627 on both engraved and letterpress titles, Dr. Maria Wakely informs me that, while collating copies for the forthcoming *OFB* edition of *SS*, she noted 2 copies with 1626 on the letterpress title (of the five copies held at the Huntington Library, two have letterpress titles dated 1626, the control copy for Dr. Wakely's collation, shelfmark RB 43511, and shelfmark RB 601353), while the version held on microfilm at Senate House Library, University of London (Goldsmith's Kress no. 00576.0-1 – from Yale's Beinecke Library) is also dated 1626/7. Gibson, too, notes variants of letterpress title (Gibson, nos. 170, 171).

³ See Sarah Hutton, 'Persuasions to science: Baconian rhetoric and the *New Atlantis*', in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 48-59. Jerry Weinberger, in contrast, does not so much as mention *SS* in his edition of *NA*, which places the text alongside the introduction to the *Instauratio magna* (*New Atlantis and the Great Instauration*, ed. by Jerry Weinberger, rev. edn (Wheeling, Illinois: Harlan Davidson, 1989)).

⁴ *A Transcript of the Registers of the Company of Stationers of London 1554-1640 A.D.*, ed. by Edward Arber, 5 vols (London: Privately Printed, 1877), IV, p. 124. While this entry shows that the book was approved both by the ecclesiastical authorities and the Stationers' Company, it is, perhaps, important to note that entry into the Stationers' Register was an expression and claiming of the right to print, as well as an indication of an intention to print, though not all books so entered were either printed or, indeed, ready for printing when so entered. Further to this, not all printed books were registered, and there have been cases where entry was forged for nefarious purposes. See Maureen Bell, 'Entrance in the Stationers' Register', *The Library*, 6th Series, 16 (1994): 50-54; Cyndia Susan Clegg, *Press Censorship in Jacobean England* (Cambridge: Cambridge University Press, 2001), p. 60; Franklin Dickey, 'The Old Man at Work: Forgeries in the Stationers' Registers', *Shakespeare Quarterly*, 11 (1960), 39-47; Cyprian Blagden, *The Stationers' Company: A History, 1403-1959* (London:

initial publication.⁵ It was not, however, until 1670 that *New Atlantis* was included on the title-page of *Sylva sylvarum*: the 1651 edition, in contrast, included the addition of a translation of *Historia vitae et mortis* on the letterpress title.⁶ *New Atlantis* was not merely obscured by its lack of advance publicity, however. While a reader of *Sylva sylvarum* might be forgiven for feeling no little surprise when, having laboriously worked through Bacon's *Natural History in Ten Centuries*, he or she stumbled upon the relatively slight *New Atlantis* tucked into the final few pages, the more astute reader might have noticed the non-continuous signatures, a feature of the work which remained unaltered until an edition of 1676.⁷

Using different printers to produce different parts of a work, or to print different works which were then bound together, or even binding extant works in with new works was not uncommon, however. Bacon seems to have used different printers himself for the *Advancement of Learning*, while in 1638, some copies of Rawley's collection of several of Bacon's works translated into Latin, *Operum moralium et civilium tomus*, included reissued sheets of the 1620 *Instauratio magna* left over from its publication eighteen years previously.⁸ The engraved title for *Sylva sylvarum* states that it was 'Printed

George Allen and Unwin, 1960).

⁵ For more on the genre of natural history, and the relationship of *SS* to this and other genres of history, see Ian Maclean, 'White Crows, Graying Hair, and Eyelashes: Problems for Natural Historians in the Reception of Aristotelian Logic and Biology from Pomponazzi to Bacon', in *Historia: Empiricism and Erudition in Early Modern Europe*, ed. by Gianna Pomata and Nancy G. Siraisi (Cambridge, Massachusetts: The MIT Press, 2005), pp. 147-79; Ann Blair, 'Historia in Zwinger's *Theatrum humanae vitae*', in *Historia* (see Maclean, above), pp. 269-96.

⁶ Gibson, pp. 147-57; see nos. 179a, 176. While this may not, at first, seem important, it must be noted that *SS* itself was accompanied by an impressive engraved title which attempts, at the very least, to connect it to Bacon's *Instauratio magna*; for a detailed description and analysis of the engraved title see Margery Corbett and Ronald Lightbown, *The Comely Frontispiece: The Emblematic Title-Page in England 1550-1660* (London: Routledge and Kegan Paul, 1979), pp. 184-89.

⁷ Gibson, no. 180. Thomas Newcomb did, however, publish *NA* as an individual text in 1659.

⁸ See Henri Durel-Leon, 'Francis Bacon & l'Emergence d'une Nouvelle Philosophie de la Nature Autour de *The Advancement of Learning* (1605)' (unpublished doctoral dissertation, Université de Paris, 2001), pp. 103-114; Maria Wakely and Graham Rees, 'Folios Fit for a King: James I, John Bill, and the King's Printers, 1616-1620', *Huntington Library Quarterly*, 68, (2005), 467-95; *OFB*, XI, p. xcix, and pp. xcvi-ciii for more on the publication and printing of *IM* itself.

for *W. Lee*, while the letterpress title is more informative: ‘Printed by *J. H. for William Lee*’.⁹ *New Atlantis* has no such imprint included on its somewhat cursory letterpress title, though it does include a printer’s device, one whose motto *Tempore patet occulta veritas* (time reveals hidden truths) could have been written specifically for this work.¹⁰ These devices, however, were effectively trademarks, and regularly handed down or sold to other printers. The device accompanying *New Atlantis* is described by McKerrow as ‘framed device of Time bringing Truth to light, with the motto, *Tempore patet occulta Veritas*, and the initials R. S.’, and he notes that not only was it closely copied from a 1554 device of the Genevan printer Badius, but it was eventually acquired by Augustine Mathewes, who first used it in 1624, along with J. Norton. Neither Haviland nor Lee, the printers named in the work, used this device (the former using a flaming heart which can be seen in the 1638 Latin edition of *New Atlantis* found within *Operum moralium ... tomus*). McKerrow thus concludes that *New Atlantis* was ‘perhaps printed by Mathewes’.¹¹

While Rawley went to considerable pains to convince his readers that *New Atlantis* did, indeed, belong with *Sylva sylvarum*, other editors seem not to have been quite so convinced. Isaac and Jacob Gruter, for example, were assiduous scholars and continental publishers of Bacon’s works, the latter being responsible for translating *Sylva sylvarum* into Latin.¹² In a letter dated May 29th, 1652, however, a matter of months after his brother Jacob’s death,

⁹ *SS*, engraved title and letterpress title. For transcriptions, see below, pp. 39-41.

¹⁰ Bacon regularly referred to time’s relation to both the obscuring and uncovering of truth: ‘time seemeth to be of the nature of a Riuer, or streame, which carryeth downe to vs that which is light and blowne vp; and sinketh and drowneth that which is weightie and solide’ (*OFB*, IV, p. 29; c.f. Farrington, p. 80; *SEH*, III, p. 599): ‘so let great Authors haue their due, as time which is the Author of Authors be not deprived of his due, which is funder and funder to discouer truth’ (*OFB*, IV, p. 28).

¹¹ Ronald B. McKerrow, *Printers & publishers’ devices in England & Scotland 1485-1640* (London: The Bibliographical Society, 1949), pp. 122-23 (no. 312). The use, however, of similar paper (as judged by almost identical watermarks) and identical ornamental straps used for the letter To The Reader for *SS*, the letter To The Reader for *NA* and the *Magnalia naturæ*, however, suggest at the very least some communication between printers, if they were created by different printers before binding.

¹² A particularly onerous task, it seems; for more on the Gruters and their publication of Bacon’s works, see *OFB*, VI, pp. lxxv-lxxxv; *OFB*, XIII, pp. lxxxi-lxxxiii.

Isaac Gruter wrote to William Rawley regarding his proposed publication of an improved version of the Latin *Sylva sylvarum*, as well as a Latin translation of his brother's original French edition:

That *Edition* of my Brother's, of which you write, that you read it with a great deal of Pleasure, shall shortly be set forth with his Amendments, together with some *Additions* of the like Argument to be substituted in the place of the *New Atlantis*, which shall be there omitted.¹³

The point here, of course, is that *New Atlantis* was left out of the edition – Gruter evidently did not consider it to be a vital companion piece to the natural history.

Meanwhile, in England, *New Atlantis* was being appropriated by all and sundry, from Bacon's former secretary Thomas Bushell, who used it to support his own mineralogical designs, to the continuation of *New Atlantis* by the anonymous R. H., to its adoption as a pattern by the Hartlib circle and, latterly, the Royal Society.

Thomas Bushell had been a servant of Bacon's, and proceeded to use his old master's name as a recommendation, beginning the dedicatory letter for his work *M^r Bushell's Abridgement of the Lord Chancellor Bacon's Philosophical Theory in Mineral Prosecutions* (London: 1659) with the line 'my old Master the Lord Chancellor *Bacon* would often say'.¹⁴ In one section of this work, 'M^r Bushell's Mineral Overtures', Bushell discusses Bacon's ambition to found an actual Salomon's House, as 'described in his new Atlantis, annexed to his Natural Historie', while noting apparent royal promises made to Bacon regarding mines,¹⁵ stating that after Bacon had 'vouchsafed to acquaint me concerning his proceedings with his Majesty in this Affair, he bad me call to mind the many fatherly favors which he had

¹³ *Baconiana*, Q1^v.

¹⁴ Thomas Bushell, *M^r Bushell's Abridgement of the Lord Chancellor Bacon's Philosophical Theory in Mineral Prosecutions* (London, 1659), A1^r.

conferred upon me, as pious motives to retard my unripe years from hazardous travels'. After this statement, Bushell spends several lines explaining how Bacon had employed him as a servant at the age of fifteen, and since then had cleared his debts several times, arranged his marriage to a wealthy heiress, not only providing him with an income of £400 per annum to smooth the way with her father, but also promising that he would 'make me the Heir to his knowledge, in Mineral Philosophy'.¹⁶ Further to this, Bushell details how Bacon relied upon him to carry out his designs, not least regarding Salomon's House, finishing his overtures with a flourish, suggesting that he would leave 'after my debts paid a magnificent Monument in memory of my most deserving Master, by finishing his *SOLOMONS* House in all its dimensions, and with all the accommodations and endowments thereof, according to his Lordships own Heroick *Idea*'.¹⁷

R.H., who some believe to be Robert Hooke, published his 'continuation' of *New Atlantis* in 1660, subtitled 'wherein is set forth a platform of monarchical government', which modified Bacon's work in such a way as to render it, amongst other things, more explicitly religious in tone: 'In this Ocean of plenty thus did we sail on firme Land, as if all the gold of *Peru* (whence we so lately sailed) had been transplanted into this *Palestine*'.¹⁸

¹⁵ *Ibid.*, A1^r [second set of sigs].

¹⁶ *Ibid.*, A1^v [second set of sigs].

¹⁷ *Ibid.*, A3^r [second set of sigs]. Tenison, in his *Baconiana* (1679), writes 'this Invention I describe in the words of him, from whom I had the notice of it, Mr. *Thomas Bushel (k)* one of his Lordships Menial Servants; a Man skilful in discovering and opening of *Mines*, and famous for his curious *Water-Works*, in *Oxfordshire*, by which he imitated *Rain, Hail, the Rain-bow, Thunder and Lightning*' (*Baconiana*, c1^v), which compares to *NA*: 'We haue also Great and Spacious Houses, wher we imitate and demonstrate Meteors; As Snow, Haile, Raine, some Artificiall Raines of Bodies, and not of Water, Thunders, Lightnings' (*NA*, e3^v (*SEH*, III, p. 158). See also e3^r, f2^v (*SEH*, III, pp. 157, 162)).

¹⁸ Francis Bacon, *New Atlantis, begun by the Lord Verulam, Viscount st. Albans: and Continued by R.. H. Esquire* (London: John Crooke, 1660), B5^r. Geoffrey Keynes writes 'I am inclined to believe that Hooke was the author, though he never acknowledged it himself, nor is it mentioned as his by any contemporary. No satisfying alternative attribution has, so far as I know, ever been suggested' (Geoffrey Keynes, *A Bibliography of Robert Hooke* (New York: Oxford University Press, 1960), pp. xi, 2-4). Keynes dismisses an earlier argument by Edmund Freeman in favour of Hooke as author as weak (see Edmund Freeman, 'A Proposal for an English Academy In 1660', *Modern Language Review*, 19 (1924), 291-300), proposing new evidence in favour of Hooke, namely an apparent reference to Hooke's 1665

Shortly before R.H.'s work, another re-writing of *New Atlantis* had appeared, in the form of a preface to John Heydon's *Holy Guide* (1662), which is notable for the manner in which it re-presents Bacon's text as an explicitly Rosicrucian text, inserting references to the Rosicrucians at several points, as well as re-positioning the work as explicitly English:

WE travell'd from Sydmouth (where we had continued by the space of one whole year) for London and Spain by the South Sea.

I am by Office Governour of this House of Strangers, and by Vocation I am a Christian Priests, and of the order of the Rosie Crosse

*These are (my son) the Riches of the Rosie Crucians; read our Temple of Wisdome.*¹⁹

During this time the concept and title of *New Atlantis* was being appropriated as a rallying call and inspiration, not least by the Hartlib circle who were not only responsible for the inviting of Comenius to England in 1641 to begin the construction of the 'invisible college', an institution based upon Salomon's House, but also for the beginnings of the Royal Society.²⁰

Hartlib himself was interested in Bushell's project to realise *New Atlantis* on

Micrographia, the investigation of a cheesemite and a louse by a 'rare Microscope'. Hooke also had a copy of this continuation in his library as well as a later edition of *SS*. There is no mention of the work in Lisa Jardine's recent biography of Hooke (*The Curious Life of Robert Hooke: The Man Who Measured London* (London: HarperCollins, 2003)). Gibson notes that 'Hazlitt states that the book was written "perhaps by Richard Haines"' (Gibson, p. 263). Haines (1633-85) was a 'farmer, patentee and pamphleteer, who corresponded with several members of the Royal Society' (s.v. DNB).

¹⁹ John Heydon, *The Holy Guide: Leading the Way to the Wonder of the World* (London: T. M. 1662), b1^r, b6^r, e6^v; cf. *NA*, a3^r, b2^v, f4^r (*SEH*, III, pp. 129, 135, 164). For a later, critical reading of *NA* as an implicitly Rosicrucian text, see Frances A. Yates, *The Rosicrucian Enlightenment* (London: Ark, 1986), pp. 125-29.

²⁰ See Rose-Mary Sargent, 'Bacon as an advocate for cooperative scientific research', in *The Cambridge Companion to Francis Bacon*, ed. by Markku Peltonen (Cambridge: Cambridge University Press, 1996), pp. 164-67. See Zagorin, p. 127. For Bacon's influence on Hartlib and Comenius, see G. H. Turnbull, *Hartlib, Dury and Comenius: Gleanings From Hartlib's Papers* (London: University of Liverpool Press, Hodder and Stoughton, 1947), pp. 36-37, 203-04, 344. For more on the route from Bacon's *NA* to the Royal Society through Hartlib, see Webster, pp. 58, 260, 362-69, 381-84, 499-502; Hunter, *Science and Society*, pp. 21-39.

Lambeth Marsh, and also composed his own utopian work, the *Description of the famous Kingdom of Macaria* (1641).²¹ Joseph Glanvill, for his part, saw a direct connection between the Royal Society and *New Atlantis*'s Salomon's House, calling Bacon's fictional institution a 'Prophetick Schem of the ROYAL SOCIETY'.²²

b. William Rawley, the paratexts to *Sylva sylvarum* and its place within the *Instauratio*

It is not, however, merely the publishing, dissemination and appropriation of *New Atlantis* which makes it a mysterious text, as there is no conclusive textual evidence regarding when, or why, it was written.

William Rawley wrote at length on Bacon's life in his *Resuscitatio*, first published in 1657, and usefully included a list of the works he produced during his 'quinquennium', the five years between his disgrace and his death:

²¹ In a letter to Robert Boyle dated 8 May, 1654, Hartlib wrote: 'Yesterday I was invited by the famous *Thomas Bushel* (for I suppose you have seen his *Mineral Overtures* in print) to *Lambeth-Marsh*, to see part of that foundation or building, which is designed for the execution of my lord *Verulam*'s *New Atlantis*' (Robert Boyle, *Works*, ed. by Thomas Birch, 3rd edn (Hildesheim: Georg Olms Verlagsbuchhandlung, 1965), VI, p. 88). In his *Memorial for the Advancement of Universal Learning*, he planned a college named 'Atlantis' (Dorothy Stimson, 'Comenius and the Invisible College', *Isis*, 23 (1935), 373-88 (p. 386)). Hartlib also wrote a prophetic tract, the *Clavis apocalyptica* (London: William Du-Gard for Thomas Matthewes, 1651), and a practical work of husbandry, *The compleat husband-man* (London: Edward Brewster, 1659), as well as *A description of the famous kingdome of Macaria* (London: for Francis Constable, 1641).

²² Joseph Glanvill, *Scepsis scientifica* (London: E. Cotes for Henry Eversden, 1665), c1^v. Other works which cite, manipulate, continue, discuss or simply refer to *NA*, include the following: Thomas Bancroft, *The heroical lover* (London: William Godbid, 1658); John Bramhall, *A replication to the Bishop of Chalcedon his Survey of the Vindication of the Church of England* (London: by R. H. for John Crook, 1656); Gilbert Burnett, *A vindication of the authority, constitution, and laws of the church and state of Scotland* (Glasgow: Robert Sanders, 1673); Walter Charleton, *The Ephesian and Cimmerian matrons* (London: for Henry Herringman, 1668); John Dunton, *A voyage round the world* (London: for Richard Newcome, 1691); Thomas Glanvill, *Essays on several important subjects* (London: J. D. for John Baker and Henry Mortlock, 1676); Samuel Gott, *The divine history of the world explicated and illustrated* (London: E.C. and A.C. for Henry Eversden, 1670); Thomas Heyrick, *The New Atlantis. A poem* (London: 1687); Peter Heylyn, *Theologia veterum* (London: E. Cotes for Henry Seile, 1654); J.B., *Chirologia, or, the naturall language of the hand composed of the speaking motions* (London: Thomas Harper, 1644); Richard Leigh, *The transproser rehears'd* (Oxford: for Hugo Grotius and Jacob Van Harmine, 1673); Seth Ward, *Vindiciae*

In which time he composed the greatest part of his books and writings, both in English and in Latin, which I will enumerate (as near as I can) in the just order wherein they were written: - *The History of the Reign of King Henry the Seventh*; *Abcedarium Naturæ*, or a Metaphysical piece which is lost; *Historia Ventorum*; *Historia Vitæ et Mortis*; *Historia Densi et Rari*, not yet printed; *Historia Gravis et Levis*, which is also lost; *a Discourse of a War with Spain*; *a Dialogue touching an Holy War*; *the Fable of the New Atlantis*; *a Preface to a Digest of the Lawes of England*; *the beginning of the History of the Reign of King Henry the Eighth*; *De Augmentis Scientiarum*, or the Advancement of Learning, put into Latin, with several enrichments and enlargements; *Counsels Civil and Moral*, or his book of *Essays*, likewise enriched and enlarged; *the Conversion of certain Psalms into English Verse*; *the Translation into Latin of The History of the Reign of King Henry the Seventh, of the Counsels Civil and Moral, of the Dialogue of the Holy War, of the fable of the New Atlantis*, for the benefit of other nations; his revising of his book *de Sapientiâ Veterum*; *Inquisitio de Magnete*; *Topica Inquisitionis de Luce et Lumine*; both these not yet printed; lastly, *Sylva Sylvarum*, or *the Natural History*. These were the fruits and productions of his last five years.²³

From this evidence, in many ways the best available, we can deduce that *New Atlantis* was written sometime in 1623, the publication dates of *Historia vitæ et mortis* and *De augmentis* respectively, the only two works in this list that were at that time published – though only if we assume that these works were published soon after completion.²⁴ The work whose writing immediately precedes *New Atlantis*, the *Advertisement Touching an Holy Warre*, was not published until 1629, though the title-page states that it was written in 1622.²⁵ This is of some help, but there is no evidence beyond that, which has led some commentators to suggest alternative dates for *New Atlantis*'s composition.²⁶

academiarum (Oxford; Leonard Lichfield for Thomas Robinson, 1654).

²³ *SEH*, I, pp. 9-10. I assume that Rawley gives a list of terminal dates here – when each work was finished – rather than suggesting that Bacon wrote each work as a discrete unit.

²⁴ Spedding notes a six-month gap between completion and publication for *Henry VII*, published in 1622, and suggests at least a six-month gap for *DAS*, published in 1623 (*LL*, VII, pp. 352-53). One of the next pieces written, the beginning of the *History of the Reign of Henry VIII*, seems also to have been abandoned in 1623 (*SEH*, VI, p. 267).

²⁵ *SEH*, VII, p. 9.

²⁶ Spedding mentions 1624 (*SEH*, III, p. 121), David Renaker suggests that it was planned in 1616, see 'A miracle of engineering: the conversion of Bensalem in Francis Bacon's *New Atlantis*', *Studies in Philology*, 87 (1990), 181-93 (p. 188), while N. I. Matar puts its creation as between 1613 and spring 1621, see 'The sources of Joabin's speech in Francis Bacon's *New Atlantis*', *Notes and Queries*, n.s. 41 (1994), 75-78 (p. 78). Judah Bierman suggests *NA*

Irritatingly, there are no mentions of the work in any letter or work of Bacon's, not even, as Spedding points out, the letter perhaps most likely to have included such information, were Rawley's list accurate.²⁷

New Atlantis, it seems, arrived not so much with a fanfare but tucked behind another text, unheralded and unexplained. This is un-typical of Bacon, as practically every other piece of work he produced was accompanied by an explanation of its purpose, and, where appropriate, an expression of its place within the textual expression of his grand project for the reconstruction of natural philosophy, the *Instauratio*. While works such as the *Instauratio magna* of 1620 arrived into the world positively dripping with authority and explanation, *New Atlantis* is a text the purpose of which must be reconstructed.²⁸

There was also one other piece included in the volume in which *Sylva sylvarum* and *New Atlantis* were published: the two-page list of the *Magnalia naturæ* which immediately follows *New Atlantis*. The reason for the *Magnalia naturæ*'s accompanying *Sylva sylvarum* and *New Atlantis* is something of a mystery. Most likely printed by the same printer as *New Atlantis*, there is, however, nothing which explicitly connects it to *New Atlantis* – *New Atlantis* finishes on page 47, while there is no pagination for the *Magnalia naturæ* – other than the errata which appear on its second page: 'In the *New Atlantis* Pag. 28.lin.27. for *both* read *bath*. Pag.36.lin.6. for *procuced* read *produced*.'²⁹

was most likely written between 1605 and 1623, see 'New Atlantis revisited', *Studies in Literary Imagination*, 4 (1971), 121-42 (p. 127), Sharon Achinstein is happy with 1624, see 'How to be a progressive without looking like one: history and knowledge in Bacon's *New Atlantis*', *CLIO*, 17 (1988), 249-64 (p. 250), while Jardine and Stewart suggest that it was written in the last few months of 1625 (Jardine and Stewart, pp. 499-500).

²⁷ *LL*, VII, p. 537. Spedding refers to the letter Bacon writes to Fulgentio on the subject of the *Instauratio* (*LL*, VII, pp. 532-33).

²⁸ For the authoritative contexts of *IM*, see below, pp. 207-17.

²⁹ *NA*, g3^v. The 1676 edition of *SS* (Gibson, no. 180), includes the *Magnalia naturæ* under the running titles for *New Atlantis*, which itself is paginated contiguously from *Sylva sylvarum* (Francis Bacon, *Sylva Sylvarum: or A natural history, in ten centuries* (London: S. G. and B. Griffin for Thomas Lee, 1676)). There is an odd feature of this edition, however, as while the final page of *NA* and the first of the *Magnalia naturæ* (2A2r, 2A2v) have the running

In terms of its textual content, however, it is generally considered to be a list of works which Bacon felt that it would be desirable to achieve which is largely mirrored in the list of achievements of Salomon's House, the 'research institution' described in *New Atlantis*. While plausible, a comparison of the 130 topics of the *Catalogue of Particular Histories* appended to the *Parasceve*, the ten centuries of *Sylva sylvarum*, the experiments or achievements discussed in *New Atlantis*, and the list of the *Magnalia naturæ*, does not suggest that any individual list has a more close correspondence with any other, though what each list shares is, perhaps, a sense of the ambition of Bacon's natural historical plans.³⁰ What is certain is that there is no editorial context provided for it other than the fact that Rawley saw fit to include it in this volume, and place it after *New Atlantis*. There is no indication whether it was originally designed to accompany *Sylva sylvarum* or *New Atlantis*, or perhaps to serve as some method of connecting the two texts together.

What is missing in the case of the *Magnalia naturæ* is explicit contextualisation, whereas for its accompanying texts, *Sylva sylvarum* and *New Atlantis*, some context, justification for their publication, and clues as to their intended purpose, are given in the letters published with the volume: the dedicatory letter and letter 'To The Reader' for *Sylva sylvarum*, and the letter 'To The Reader' for *New Atlantis*. Practically every critic takes these letters, written not by Bacon himself but by Rawley, as representing Bacon's wishes exactly. Ellis, for example, in his preface to *New Atlantis* in the Victorian edition of Bacon's works, practically paraphrases Rawley's letter 'To The

headline as 'New Atlantis', on the second page of the *Magnalia naturæ* (2A3r), the running headline reads 'New Atlantis'.

³⁰ See *OFB*, XI, pp. 475-85; *NA*, g3^{r-v} (*SEH*, III, p. 167-68), see Appendix 12; *SEH*, II, pp. 673-80; *NA*, e2^r-g2^r (*SEH*, III, pp. 156-66). The title *Magnalia naturæ præcipue quoad usus humanos*, translates as 'Great works of nature, especially with respect to human utility.' Generally, critics have little to say about this piece. Sarah Hutton, for example, mis-reads its title as she suggests that the account of the workings of Salomon's House 'could be excerpted and appended to the list entitled *Magnalia naturalia* printed in the same volume' (Sarah Hutton, 'Persuasions to science', in *Francis Bacon's New Atlantis* (see Aughterson, above), p. 52. Bronwen Price, in the same volume, writes that 'appended to the end of *New Atlantis* is a '*Magnalia Naturæ*', a list of Salomon's House's discoveries' (Bronwen Price, 'Introduction', in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 1-26 (p. 5)).

Reader’.³¹ Lacking any other conclusive evidence, it is natural that these letters of Rawley’s should provide the most direct and authoritative context for *New Atlantis*. It may be, however, that these letters, rather than illuminating the appearance of *New Atlantis*, may in fact be obscuring its real nature: perhaps the editor protests too much.

Before addressing the arguments contained within the letters which accompanied both *Sylva sylvarum* and *New Atlantis* some account must be given of their physical place within the text. It is not only the letters which provide the context of a work, as other, indirect clues to a work’s meaning and position can be found within an author’s canon, contemporary society and debates. The contextualising and explanatory elements which surround, protect and help to explain a text’s functions are termed paratexts, and it is to an investigation of the paratexts of *Sylva sylvarum* that I shall now turn.

Gerard Genette, in his seminal work *Paratexts, thresholds of interpretation* describes the paratext in the following manner:

The paratext is what enables a text to become a book and be offered as such to its readers and, more generally, to the public. More than a boundary or a sealed border, the paratext is, rather, a *threshold*, or – a word Borges used apropos of a preface, a “vestibule” that offers the world at large the possibility of either stepping inside or turning back.³²

For Genette, paratexts are everything which accompanies the text, excepting the text itself, for which ‘the author or one of his associates accepts responsibility’.³³ While everything around and about the text – the name of

³¹ *SEH*, III, pp. 121-23.

³² Gerard Genette, *Paratexts, thresholds of interpretation*, trans. by Jane E. Lewin (Cambridge: Cambridge University Press, 1997), pp. 1-2. Randall Anderson has noted how Bacon made a similar connection, though with reference to parts of speech, in *DAS* (*SEH*, IV, p. 492; *SEH*, I, p. 707), see Randall Anderson, ‘The Rhetoric of Paratext in Early Printed Books’, in *The Cambridge History of the Book in Britain, IV, 1557-1695*, ed. by John Barnard and D. F. McKenzie (Cambridge: Cambridge University Press, 2002), pp. 636-44 (pp. 636-37).

³³ Genette, p. 9.

the author, the title, subtitle, chapter headings, name of publisher, quotations, citations, illustrations, prefaces, dedicatory letters – serves as evidence of some sort or another, not all of these may be considered paratexts in Genette’s schemata. For example, Francis Bacon’s *Instauratio magna* was published by the King’s Printers, forming part of a small group of works published in folio between 1616 and 1620. This fact may, therefore, be used to make deductions about both Bacon and text.³⁴ The publication of the translation of *De augmentis* into English by Gilbert Watts in 1640, however, cannot be expected to yield evidence as to Bacon’s intentions, though it can certainly shed light on Bacon’s reception after his death.³⁵

Sylva sylvarum arrived in the marketplace accompanied by the following pieces of paratextual baggage:

- A portrait of Bacon, bearing the following legend: ‘*The Right Hon.^{ble} Francis Lo: Veru- | lam, Viscount S^{ct} Alban: Mortuus 9 Aprilis | Anno Domini. 1626. Annoque Aetat 66.*’³⁶
- An engraved title (by Thomas Cecill), showing a tetragrammaton encased within the Shechinah, or shining cloud.³⁷ Below this, the

³⁴ See Wakely and Rees, pp. 487-91.

³⁵ See Francis Bacon, *Of the advancement and proficience of learning*, trans. by Gilbert Watts (Oxford: Leon Lichfield for Robert Young and Edward Forrest, 1640), engraved title, and below, pp. 44-45, for its relevance when compared to the engraved titles which accompanied *IM* and *SS*.

³⁶ There is some confusion regarding the legend on this portrait, however. Gibson suggests that in the 1626/7 edition, the portrait legend is in Latin, reading thus: ‘*Hon^{mus}, Francisc^{us} Bacon^{is}, Baro de Veru- | lam: Vice-Comes S^{cti} Albani mortuus 9 Aprilis, | Anno Domini. 1626. Annoque, Aetat 66.*’ (Gibson, no. 170). This may well be incorrect, as at least one of these editions, on microfilm in Senate House Library, University of London Library (Goldsmith’s Kress no. 00576.0-1), has the portrait legend in English. A quick survey of six copies in the BL (editions from 1627, 1628, 1631, 1635 and 1639, BL shelfmarks 982.f.14., g.2449.(1)., 728.I.29., 728.1.31., 442.g.5., 535.k11) found five portraits with the legends in English, with one portrait, from 1635, missing (the 1639 edition may, however, be corrupt, as the engraved title is obscure, and could easily read 1631), while copies held on EEBO suggest that the ‘Latin’ portrait became common after the fifth edition of 1639.

³⁷ This was a common method of representing God without compromising Protestant ideology, with old woodblocks from Catholic Bibles often being re-carved in this fashion. See Jim Bennet and Scott Mandelbrote, *The Garden, the Ark, the Tower, the Temple: Biblical metaphors of knowledge in early modern Europe* (Museum of the History of Science: Oxford,

words *Et vidit Deus lucem quod esset bona*.³⁸ Beneath this, and between Corinthian pillars presumably representing the Pillars of Hercules, is a globe bearing the legend '*Mundus Intellectualis*'. The World sits upon a plinth, on which is to be found the title of the work, which reads as follows: 'SYLVA SYLVARVM | or | A *NATURALL HISTORY* | In ten Centuries. | *Written by the right Hon^{ble} Francis | Lo: Verulam Viscount S^{ct} Alban.* | Published after the Autho^{rs} Death | by W: RAWLEY D^r of Diui | nity. &c.' Underneath this is the imprint, which reads thus: LONDON | *Printed for W. Lee and are to be sould at | the Great Turks head next to the Mytre | Tau^erne³⁹ in Fleetstreet*'. To the left of the imprint is 'Anno', and to the right '1627'.⁴⁰

- A letterpress title: [within double rules] SYLVA | SYLVARVM: | OR | A Naturall Historie. | [rule] | IN TEN CENTURIES. | [rule] | WRITTEN BY THE RIGHT | Honourable FRANCIS Lo. Verulam. | Viscount S^t. ALBAN. | [rule] | Published after the Authors death, | By WILLIAM RAWLEY Doctor of Diuinitie, | late his Lordships Chaplaine. | [rule | orn. | rule] LONDON, | ¶ Printed by J. H. for William Lee at the Turks | Head in Fleet-street, next to the Miter. 1626.
- A letter dedicatory to King Charles, written by William Rawley.⁴¹
- A letter 'To The Reader', written by William Rawley.⁴²
- The text – including marginal notes and numbers as, effectively, a navigational aid: these are what Genette terms intertitles. Box-rules encase each element of the text – the text itself, the running titles, the page numbers and the experiment marginalia (to the right of the text on recto, left on verso) – such that there are three boxes formed within

1998), p. 31.

³⁸ 'And God saw the light, that *it was good*', Genesis 1. 4.

³⁹ The 'e' has perhaps been inserted after printing, and has a '˘' underneath indicating its insertion.

⁴⁰ For a facsimile of this engraved title, see Corbett and Lightbown, p. 184.

⁴¹ See Appendix 1 for a transcription. There is a copy of *SS* in the British Library which reverses this order, placing the letter dedicatory before the letterpress title, but this is presumably an accident of binding (*SS* (London, 1627), BL shelfmark g.2449. (1.)).

⁴² See Appendix 2 for a transcription.

one primary box.

- Titles to each Century, and running headlines reading ‘Century. [No. in Roman numerals] on recto and ‘*Naturall History:*’ on verso.
- A Table of the Experiments, splitting the experiments loosely into genre within the centuries, and enumerating the number of experiments in each genre, and on which page each genre of experiments begins.

At the back of the volume we find, with a fresh run of signatures, *New Atlantis*, accompanied by the following paratextual baggage:

- A letterpress title reading as follows: NEW ATLANTIS | A VVorke vnfinished. | VVritten by the Right Honourable, FRANCIS | *Lord Verulam, Viscount S^t. Alban.* [orn].
- A letter ‘To The Reader’ written by William Rawley.⁴³
- As with *Sylva sylvarum*, box-rules encase the text, the running headlines (‘*New Atlantis.*’, on both recto and verso) and the page numbers, while the margin remains blank, though takes the same position of that of *Sylva sylvarum*.

And, finally, we have the two pages of the piece *Magnalia naturæ* included at the end of the work, its signatures continuing from *New Atlantis*, together with two errata for *New Atlantis* itself on the second page.⁴⁴

Ultimately, the paratext is meant to guide the reader’s interpretation of the text in question, even if they choose not actually to read it.⁴⁵ Genette suggests that

⁴³ See Appendix 3 for a transcription.

⁴⁴ See Appendix 12 for a transcription.

⁴⁵ Indeed, several of Bacon’s works survive only in paratextual form, simply because their actual texts were never written, such as the *Historia gravis et levis*, the *Historia sympathiæ et antipathiæ rerum*, and the *Historia sulphuris, mercurii, et salis*, which survive in promissory form as titles and prefaces in the *Historia naturalis et experimentalis* of 1622 (*SEH*, V, pp. 129, 202-06 (*SEH*, II, pp. 11, 80-83)).

the paratexts ‘constitute a zone between text and off-text’ which is one both of transition and transaction.⁴⁶ The paratextual zone is designed, whether well or poorly, to direct the attention of the reader, and thus to create a better reception and more pertinent reading of the text. As paratexts influence the reader’s reception of the text, it is important to establish under whose authority such devices are presented: author, editor or publisher? It is also important to note the differing levels of textual engagement presented by a work’s paratexts, as well as noting the audience to whom they direct themselves. A patron, for example, might not be expected to read beyond the dedicatory letter, while the ‘lay’ reader would doubtless be expected to read this ‘personalised’ epistle as well as the more general letter ‘To The Reader’.⁴⁷ Paratexts are, to a great degree, the most performative aspect of a text, pre-figuring, as it were, the discourse between text and reader.

Sylva sylvarum occupies a strange position in Bacon’s canon, not least because it was only just published posthumously. Its appearance so soon after Bacon’s death means that it occupies a unique, ‘transitional’ publication space. It is a text neither published during Bacon’s lifetime because he, Bacon, wished for it to be published, such as the *Instauratio magna*, nor is it a work published after his death because his editor wished it to be published, like *De bello sacro*.⁴⁸ The text occupies a space in-between, its motive for

⁴⁶ Genette, p. 2.

⁴⁷ Anderson, p. 640.

⁴⁸ Bacon’s *Advertisement Touching An Holy Warre* was first published in 1629, By Rawley, in his *Certaine Miscellany Works*, a collection designed to ‘vindicate the VVrong, his Lordship suffered, by a corrupt, and surreptitious Edition, of that *Discourse* of his, *Touching a Warre with Spaine*’, to prevent ‘the like Iniury, & Defacements’, of the other works published, and to ‘satisfie the Desires of some, who hold it vnreasonable, that any the Delineations of that Pen, though in neuer so small a Modell, should not be shewen in the World’ (Francis Bacon, *Certaine Miscellany Works of the Right Honourable, Francis Lord Verulam*, ed. by William Rawley (London: I. Hauiland for Humphrey Robinson, 1629), A3^{r-v}). Cf. the letter To The Reader of Rawley’s 1657 *Resuscitatio*: ‘It is true, that for some of the *Pieces*, herein contained, his *Lordship* did not aim, at the *Publication* of them, but at the *Preservation* onely; And *Prohibiting* them from *Perishing*; So as, to have been reposed, in some *Private shrine*, or *Library*: But now, for that, through the loose keeping, of his *Lordships Papers*, whilst he lived, divers *Surreptitious Copies* have been taken; [...] I thought my self, in a sort, tied, to vindicate these *Injuries*, and wrongs, done to the *Monuments*, of his *Lordships Penne*: And at once, by setting forth, the true, and Genuine,

publication consisting of a combination of both motives. As has already been noted, there is no surviving MS material or references in letters to *New Atlantis*, though there is some material relevant to *Sylva sylvarum*.⁴⁹ As a result of this, and the general lack of MS material for other works, evidence regarding Bacon's intentions tends to be gleaned from comments in earlier works regarding future intentions, earlier versions found in earlier works, references to previous works in later ones, and, most importantly, the paratextual baggage delivered with the work – especially prefaces, dedicatory letters and letters 'To The Reader'. As Genette suggests: 'The most important function of the original preface, perhaps, is to provide the author's interpretation of the text or, if you prefer, his statement of intent.'⁵⁰

In this sense, it is relatively easy to suggest that there is a significant difference between Bacon's statement in his letter 'To The Reader' accompanying the *Instauratio magna* that 'he [Bacon] thought that every effort should be directed to seeing how the commerce between the Mind and Things (to which hardly anything on Earth or, at any rate, earthly things can compare) could be entirely restored, or at least put on a better footing',⁵¹ and Rawley's later statement in the letter 'To The Reader' in *Sylva sylvarum* that 'hee knew well, that ther was no other way open, to unloose Mens mindes, being bound'.⁵² We can be reasonably sure that the first statement is what Bacon meant: the second, we can be equally reasonably sure, is Rawley's estimation of what Bacon meant, however accurate it may actually be.

Graham Rees has suggested that with regard to the *Instauratio magna*, Bacon probably oversaw every stage of the process which transformed his drafts into

writings themselves, to prevent the like Invasions, for the time to come' (*Resuscitatio*, a4^r-a4^v). This expression of an unwillingness to publish thwarted by un-authorized publication was something of an editorial commonplace. Sometimes, however, as in the case of Bacon's *Essays*, it was true (see *OFB*, XV, pp. lxxv-lxxviii, cix).

⁴⁹ See below, pp. 248-51.

⁵⁰ Genette, p. 221.

⁵¹ *OFB*, XI, p. 3.

⁵² *SS*, A1^r (*SEH*, II, p. 335).

a printed text, this care extending to the preface, the dedicatory letter, and even the famous engraved title.⁵³ With *Sylva sylvarum*, however, we know that it must have been Rawley who ultimately supplied most, if not all, of this information, not least because the letter ‘To The Reader’ and the Letter Dedicatory are written, and signed, by him. It is possible that *Sylva*’s engraved title was either designed or its features specified by Bacon before his death, that Rawley himself designed it, or that it was designed by both of them together. There is, however, no decisive evidence available.⁵⁴ Similarly, the only evidence we have that Bacon’s wishes were minutely observed by Rawley in the dedicatory letters and the letters ‘To The Reader’ is Rawley’s own insistence which, I will argue, is more likely to be for another reason entirely.

There are several paratextual features of *Sylva sylvarum* which seem to suggest that rather too much effort is being expended to accord the text the authority of association with Bacon and, most importantly, his great intellectual project, the *Instauratio*. The engraved title, for example, bears striking similarities to that of the *Instauratio magna*, while Gilbert Watts’ 1640 translation of *De augmentis* accentuates this feeling in its appropriation of the imagery of both the *Instauratio magna* and *Sylva sylvarum*.⁵⁵ The three engraved titles, taken in the order they ‘should’ be, according to the plan of the *Instauratio* Bacon published in 1620, do indeed seem to form a series, from the manipulation of classical column types according to the architectural schema as proposed by Vitruvius, to the biblical quotations accompanying

⁵³ *OFB*, XI, p. cxvii.

⁵⁴ It seems unlikely that this engraved title was designed by a third party, however. It is interesting that *SS* is the first Baconian work since the *Instauratio magna* to have an engraved title. As these titles were very expensive to produce, it was perhaps a commercial decision on the part of the bookseller for whom *SS* was probably published (no records remain of who financed the work). If Rawley alone was responsible for the design, then it must be admitted that he was attempting to reflect the engraved title of the *Instauratio magna*.

⁵⁵ See Corbett and Lightbown, p. 189. For a work which comprehensively over-states the significance of these title-pages, see Peter Dawkins, *Building Paradise: The Freemasonic and Rosicrucian Six Days’ Work* (Warwickshire: Francis Bacon Research Trust, 2001), pp. 159-165.

each one.⁵⁶ That *De augmentis* was designed, at the very least in retrospect, to be a part of the *Instauratio*, is plain from the dedicatory letter Bacon wrote to Lancelot Andrewes to accompany the *Advertisement touching an Holy Warre* in 1622:

And again, for that my book of Advancement of Learning may be some preparative, or key, for the better opening of the Instauration; because it exhibits a mixture of new conceits and old; whereas the Instauration gives the new unmixed, otherwise than with some little aspersion of the old for taste's sake; I have thought good to procure a translation of that book into the general language, not without great and ample additions and enrichment thereof, especially in the second book, which handleth the Partition of Sciences; in such sort, as I hold it may serve in lieu of the first part of the Instauration, and acquit my promise in that part.⁵⁷

That *Sylva sylvarum* should be accorded a place within the *Instauratio* is a matter of some debate. The work is not in Latin, the language in which Bacon wrote all his works designed for the *Instauratio*, and which he cherished as 'the general language'. Bacon himself does not include *Sylva sylvarum*, or any work which resembles it, in his own list of natural histories which he presents with the publication of *Historia ventorum* in 1622. Here he provides a list of five other natural histories he intended to publish – on a monthly basis – and which were all single-subject histories: *Historia densi et rari*, *Historia gravis et levis*, *Historia sympathiæ et antipathiæ rerum*, *Historia sulphuris, mercurii, et salis*, and *Historia vitæ et mortis*. These titles were published along with the work *Historia ventorum* under the meta-title of *Historia naturali et experimentalis ad concendam philosophiam: sive Phænomena Universi: quæ est Instaurationis Magnæ Pars Tertia*.⁵⁸

Where Bacon states explicitly that these natural histories belong to Part III of the *Instauratio*, he makes no such claim for *Sylva sylvarum*, though Rawley

⁵⁶ This plan was published by Bacon with the *Distributio operis*, see OFB, XI, p. 27.

⁵⁷ *SEH*, VII, pp. 13-14. *AL* is referenced, in the preliminaries to the *IM*, as a work from which the first part of the *Instauratio magna*, the partitions of the sciences, can 'to some extent be retrieved' (OFB, XI, p. 49).

suggests that it was ‘Designed and set downe for a third part of the *Instauration*’.⁵⁹ Later editors of Bacon’s works also treat *Sylva sylvarum* differently. Spedding, for example, includes it in Part I of the *Works*, being those works forming the *Instauration*, while Rees does not include it in the table of the *Instauration* presented in *The Oxford Francis Bacon*.⁶⁰

Evidence supporting the inclusion of *Sylva sylvarum* within the *Instauration* can, however, be drawn from the *Distributio operis* published with the *Instauration magna* in 1620. Here Bacon states the following:

But as for its mass, I do not just put together a history of nature free and unconstrained (when, that is, it goes its own way and does its own work—as in the history of the heavenly bodies, meteors, the Earth and sea, minerals, plants and animals) but much more of nature restrained and vexed, namely when it is forced from its own condition by human agency, and squeezed and moulded.⁶¹

As many of the experiments included within *Sylva sylvarum* concern the vexing of nature, and suggest ways in which nature might be further vexed in order to further illuminate matter, it may appear that *Sylva sylvarum* does adequately fulfil some of the requirements for a natural history.⁶² The Latin histories, of course, not only fulfil these requirements but were also expressly framed as belonging to Part III of the *Instauration* in the *Historia experimentalis* of 1622.⁶³

What seems to be most true of *Sylva sylvarum* is that in some ways it fits neatly into Bacon’s canon, and in other ways it is problematic. Even the

⁵⁸ *SEH*, II, pp. 7, 11 (*SEH*, V, pp. 125, 129).

⁵⁹ *SS*, A1v (*SEH*, II, p. 335). Bacon does, however, write the following in *SS*: ‘For this Writing of our *Sylua Syluarum*, is (to speake properly) not *Naturall History*, but a high kinde of *Naturall Magicke*. For it is not a Description only of Nature, but a Breaking of Nature, into great and strange Workes’ (*SS*, E2^r (*SEH*, II, p. 378)). Cf. Giovanni Baptista della Porta, *Natural Magick* (London: for Thomas Young and Samuel Speed, 1658), 2D2^r.

⁶⁰ *OFB*, XI, pp. xx-xxi.

⁶¹ *Ibid.*, p. 39.

⁶² See, for example, Expts. 28, 131, 510 (*SS*, B3^v-B4^r, G1^v, S2^{r-v} (*SEH*, II, pp. 349, 396-97, 504)).

⁶³ The *Historia experimentalis* contained the first of the Latin histories, and bore on its title

engraved title is of interest. It reads ‘SYLVA SYLVARVM | or | A NATURALL HISTORY | In ten Centuries.’, and as such is the only Baconian work other than *Valerius terminus* to have a Latin *and* an English title. Bacon often gave his works multiple titles, such as the ‘Essays, or Counsels, Civil and Morall’, allowing his titles to fulfil two useful purposes. Firstly they serve as an identificatory device, in the case of *Sylva sylvarum* provoking, perhaps, recognition by the reader of two other works with similar names, Statius’ miscellany *Silvæ* and Ben Jonson’s commonplace book, *Timber, or Discoveries*.⁶⁴ The second part of the title describes the nature of the work, while simultaneously informing the reader of its thematic nature – it is a natural history – and its method of organisation – it is in ten centuries. Genette has suggested that ‘the titular situation of communication, like any other, comprises at least a message (the title itself), a sender, and an addressee’,⁶⁵ and the full title of *Sylva sylvarum* communicates a wealth of information to its reader.⁶⁶ The two-part nature of the title, with the first part allowing for easy identification and for the possible invoking of education, while the second part allows for a description of the work, also resembles the format chosen by Bacon for the title of the *Novum organum: Novum organum, sive indicia vera de interpretatione naturæ*.⁶⁷

The centuriate organisation utilised in *Sylva sylvarum* was an increasingly common feature of early-modern works, with the ‘century’ designation serving to alert the reader to the work’s finite parameters as well as implying a certain amount of editorial judgement on the part of the compilers: these works were not merely collections, they were specially selected and carefully compiled collections.

page the words ‘*Quæ est Instaurationis Magnæ Pars Tertia*’ (SEH, II, p. 13).

⁶⁴ *Sylva sylvarum* can be translated as a ‘forest of forests’, amongst other things. The word *Silva* was also used to signify an *ex tempore* occasional poem in Roman times.

⁶⁵ Genette, p. 73.

⁶⁶ Much of this information is dependent on the reader’s familiarity with Bacon’s works and the reader’s own education. See David Colclough, ‘Of the alleading of authors’, p. 69.

⁶⁷ Translating as *New Organon, or True Directions for the Interpretation of Nature*. The *Organon* was the name given to the collection of Aristotle’s works on logic, though it was

A search carried out of the *EEBO* database, designed to highlight works between 1500 and 1700 whose title contained the designation century or centuries, returned a number of results. Twenty-five authors, primarily from the latter half of the seventeenth century, used explicit centuriate organisation in their works, including Ralph Austen, Philipp Ayres, John Chetwynd, Patrick Simson, and Johann Comenius.⁶⁸ Of these, eight are concerned with religion (including one on Church history, and one of hymns and psalms), while the rest are generally collections of epigrams, aphorisms, maxims and histories, with only three (including *Sylva sylvarum* and one work, by Ralph Austen, which was based on *Sylva sylvarum*) dealing with natural history. Most of the works have only two centuries, and a few four – Simson’s work on Church history contains a chapter divided into sixteen centuries, while Chetwynd’s history is organised into fourteen centuries, followed closely by Bacon’s *Sylva sylvarum*, in ten, while Comenius is alone in utilising a full century of centuries. Almost as many authors however, stuck to one century, perhaps using the term to accentuate the finite nature of their collections as well as their exclusive nature, and they include Joseph Hall, Nicholas Culpeper, and Anthony Stafford.⁶⁹

It is possible that the habit of centuriate organisation might also have been used as a marketing device, accentuating the connection between two volumes

never a title given by Aristotle himself.

⁶⁸ See Ralph Austen, *Observations upon some part of Sr Francis Bacon's Naturall history* (Oxford: Hen. Hall, for Thomas Robinson, 1658), Philip Ayres, *Mythologia ethica, or, Three centuries of AEsopian fables in English prose* (London: Printed for Thomas Hawkins, 1689), John Chetwynd, *Anthologia historica containing fourteen centuries of memorable passages and remarkable occurrents* (London: J.R. for P.C., 1674), Patrick Simson, *The historie of the Church since the dayes of our Saviour Iesus Christ, untill this present age [...] Divided into 16. centuries.* (London: Iohn Dawson for Iohn Bellamie, 1634), Johann Amos Comenius, *Janua linguarum reserata: or a seed-plot of all languages and sciences [...] comprehended in an hundred titles, and a thousand periods* (London: Robert Young, 1636). All works in *EEBO*.

⁶⁹ Joseph Hall, *Select thoughts, one century* (London: Printed by J.L. for N.B., 1648), Nicholas Culpeper, *Opus astrologicum, [...] Briefly containing, 1. A century of aphorisms* (London: J. Cottrel, 1654), Anthony Stafford, *Meditations, and resolutions, moral, divine, politicall century I* (London: H.L., 1612). All works in *EEBO*.

of the same collection, while allowing each volume to be commensurately smaller, as seems to have occurred with the second part of Matthew Barker's *Flores intellectuales*, published in 1692, the year after its companion volume. The letter 'To The Reader' makes this connection plain, as does the text, as volume two begins at century nine:

Reader,

*I Here present thee with the remainder of what I could not well insert in my former Book, that it might not swell to a greater bulk and price than I intended. To put too many flowers in a Nosegay makes it less handsom and handy.*⁷⁰

What is plain, however, is that Rawley saw fit to accentuate the organisational structure of *Sylva sylvarum*, attempting, presumably, to draw attention away from what Bacon may have foreseen as a problem, that the work might be perceived as merely 'an Indigested Heap of Particulars'.⁷¹ That Rawley perceived this as a potential problem is further evidenced in his letter 'To The Reader', where he writes that 'As for his Lordships loue of Order, I can referr any Man to his Lordships Latine Booke, *De Augmentis Scientiarum*'.⁷²

c. William Rawley, authority, and dedicatory letters

If the form of the engraved title seems to be attempting to place *Sylva sylvarum* within Bacon's *Instauratio*, then there is other evidence to suggest that the process embarked upon by Rawley in the paratextual material is one

⁷⁰ Matthew Barker, *Flores intellectuales. containing three centuries* [...] (London: Tho. Snowden for John Dunton, 1692), A2r, in *EEBO*.

⁷¹ *SS*, A1^r (*SEH*, II, p. 335). That Bacon himself saw this as an potential issue is confirmed by his comments between Expts. 525 and 526 of *SS* (*SS*, S3^v-S4^r (*SEH*, II, pp. 507-08)). For the place of artificial organisation in Bacon's works, see Jardine, pp. 174-77.

⁷² *SS*, A2^v (*SEH*, II, p. 337). There are several instances in *SS* where the experiments do not neatly fit into the centuriate organisational schema, such as Expts. 759 and 760 (*SS*, 2C1^v (*SEH*, II, pp. 584-85)) and the entire section on music, Expts. 101-290 (*SS*, F1^r-K4^v (*SEH*, II, pp. 385-436)). The centuriate structure of *SS* certainly allows for a more straightforward reading experience, as well as allowing easy referencing. It is not, however, clear that this organisation has any greater significance, unlike that of *DAS*, which, as Rawley correctly identifies, was carefully ordered, as Sachiko Kusakawa has explained, see 'Bacon's classification of knowledge', in *The Cambridge Companion to Francis Bacon* (see Rose-Mary Sargent, above), pp. 47-74.

by which he wishes to accrete as much authority as possible: the authority to publish the text, as well as Bacon's accumulated authority as a writer and former Lord Chancellor.⁷³ The title *Sylva sylvarum* works hard to place itself as part of Bacon's *Instauratio*, though Bacon's references to *Sylva sylvarum* within its own text suggests that it was Bacon's own.⁷⁴

There are other assertions of authority in the opening paratexts as well, such as Rawley's description of himself as '*late his Lordships Chaplaine*', alerting the reader both to his closeness to Bacon as well as his credentials as a divine. The fact that Rawley also uses John Haviland, the printer responsible for *Historia ventorum* and *Historia vitæ et mortis*, as well as many other of Bacon's works published after his disgrace, bears witness to Rawley's continued position as Bacon's right-hand man, even after his death.

The initial entrance into the work provided, the reader is now ready to enter into its more textual halls, the dedicatory letters and letters 'To The Reader', all written by William Rawley. It is these letters, and especially the letter 'To The Reader' supplied for *New Atlantis*, that have at the very least obscured the context of *New Atlantis* since the day of its publication. One of the reasons for its apparent power over subsequent readings of *New Atlantis* can be traced directly to Rawley. As Rees has pointed out, 'Bacon scholars still seldom appreciate how much they rely on information and texts derived from Rawley',⁷⁵ and the importance of Rawley as editor, disseminator and champion of Bacon's works in the mid-seventeenth century does tend to prevent any serious challenge to his claim to be the man most qualified to speak on behalf of his deceased patron: 'no Man, could pretend a better Interest, or Claim, to the ordering of them [Bacon's works], after his Death,

⁷³ The engraved title was by Thomas Cecill, but there is no record of whether its design was Bacon's, Rawley's or his.

⁷⁴ Bacon mentions *SS* in Expts. 93, 525 and 839; *De sapientia veterum* in Expt. 98; *Abeceдарium novum naturæ* in Expt. 839; and *Historia ventorum* (though he calls it *De ventis*) in Expt. 818.

⁷⁵ *OFB*, XIII, p. lxxviii.

than my self.’⁷⁶ *New Atlantis* was first presented to the public without fanfare and ‘protected’ by the work which it accompanied, the *Sylva sylvarum*. As a text it defies easy comprehension, and the result of this is simply to lend weight to the authority, self-professed as it may be, wielded by Rawley’s letter ‘To The Reader’ which preceded it: where contextual evidence regarding a text’s purpose is either lacking or hard to extract from the text itself, any other evidence available will be immediately seized upon, and will prove hard to contradict.

Sylva sylvarum, as with most books of this time, was accompanied by a dedicatory letter and a letter ‘To The Reader’: the first designed to confer the protective authority of a patron upon the work, in this case the new King, Charles; the second to serve as a explanation of the work’s purpose and reason for publication to the general reader. The two letters, to a degree, tell the readers how and why to read a text, as well as invoking or appropriating, fairly or unfairly, the protection and recommendation of the work’s patron – the individual, institution or concept to which the work was dedicated. These letters did not always occupy entirely discrete textual spaces, as is apparent when we consider works of Bacon’s such as *Historia vitae et mortis*, where there is no dedication, simply a letter ‘To The Reader’ which fulfils both purposes while appearing to be dedicated directly to a time rather than any individual patron.⁷⁷ In effect, the letter ‘To The Reader’ serves as a concrete manifestation of a public discourse with the reader, while the letter dedicatory affects a private discourse with the patron. Before considering these two

⁷⁶ *Resuscitatio*, a4^r. See also *OFB*, XIII, pp. lxiii-lxxxiii.

⁷⁷ *Historia vitae et mortis* was published in 1623, and concerned, primarily, with long life and how to achieve it. The sole accompanying ‘epistle’ reads thus: ‘To the present and future ages, greeting’ and includes what seems to be a plea to the future age:

For it is my hope and desire that it will contribute to the common good; that through it the higher physicians will somewhat raise their thoughts, and not devote all their time to common cures, nor to be honoured for necessity only; but that they will become the instruments and dispensers of God’s power and mercy in prolonging and renewing the life of man, the rather because it is effected by safe, convenient, and civil, though hitherto unattempted methods (*SEH*, V, p. 215 (*SEH*, II, p. 103)).

letters in detail, it is necessary to explore the nature of early-modern patronage, how writers might seek to attain it, what benefits a patron might expect to accrue from it, Bacon and Rawley's experience of the process, and the place that letters played within it.

The dedicatory letter was a vital part of the early-modern game of patronage, an important tool by which an individual could hope to achieve both political office and the accumulation of livings and preferments which could fund both political and, in Bacon's case, philosophical activity.⁷⁸ The early death of Sir Nicholas Bacon had deprived both Francis and Anthony of the settlement of lands which would provide for them financially, the result of which was that Bacon was forced not only to work for a living, but also to expend vast quantities of energy attempting to gain new patrons, convince existing ones to assist with his political advancement, and extricate himself from relationships with increasingly ineffective or actively damaging patrons.⁷⁹

⁷⁸ For the importance of patronage to politics and personal advancement in the early-modern period, see Kevin Pask, *The Emergence of the English Author* (Cambridge: Cambridge University Press, 1996); Linda Levy Peck, *Court Patronage and Corruption in Early Stuart England* (London: Routledge, 1993), pp. 47-74; Linda Levy Peck, 'Court Patronage and Government Policy: The Jacobean Dilemma', in *Patronage in the Renaissance*, ed. by Guy Fitch Lytle and Stephen Orgel (Princeton University Press; Princeton, New Jersey, 1981), pp. 27-46; Eleanor Rosenberg, *Leicester, Patron of Letters* (New York: Columbia University Press, 1955). Bacon showed a professional interest in the mechanics of patronage, as can be seen in the 'Reading on Advowsons', thought to derive from Lent 1587 or 1588, and to be the lecture Bacon delivered on becoming a Reader of Gray's Inn. It concerns Westminster 2nd, Chapter 5, concerning Church Advowsons, being 'the Right that a Man hath to presen[t] his ffreind or some fitt Person Presentative or Donative [...] He that hath Right to present is called a Patron' (BL Stowe MS 424, fol. 145^v). Spedding notes his own desire to read and publish this MS, but was barred from viewing it by Lord Ashburnham's 'rule requiring an introduction by a personal acquaintance of his own and of the applicant' (*SEH*, VII, p. 305).

⁷⁹ On the failure of Sir Nicholas Bacon to provide for his youngest sons, see Jardine and Stewart, pp. 29-31. Both Francis and Anthony Bacon might have expected great assistance from various powerful relations and friends due to the position of their late father, Sir Nicholas Bacon, Lord Keeper, and the family of their mother, Lady Anne Bacon, who was one of the five daughters born to Sir Anthony Cooke. For Francis, however, the patronage of such individuals as his uncle William Cecil, later Lord Burghley, Sir Christopher Hatton, Walsingham and the Earl of Leicester was never more than half-hearted (see Jardine and Stewart, pp. 72, 80, 99, 121-26, 133-34). A more successful relationship was forged with Robert Devereux, Earl of Essex, but this relationship was perhaps as much of a hindrance as a help to Bacon's prospects (Jardine and Stewart, p. 240). Bacon developed his next major patron, George Villiers, later Duke of Buckingham, through his own initiative, taking the new royal favourite under his wing and advising him closely. Buckingham's later corruption and abuse of power was a contributory factor to Bacon's own impeachment and fall from grace

The relationship between patron and client was, officially at least, one of mutual support. The client would use their skills, most often literary, to reflect favourably on the taste, discernment or education of the patron, or to provide more practical services. In return, the patron would, hopefully, provide their faithful client with preferment, livings, patents or simply money.⁸⁰ It is for this reason that, in the words of Gibson:

texts produced within the patronage tie – the most important of which were letters – emphasise above all the voluntary nature of the relationship. Clients explain their offers of service by referring to their love and respect for their patrons' nobility, glory and accomplishments.⁸¹

As well as producing texts whose learning, taste and erudition would forevermore be associated with the patron named in the dedicatory letter, writers such as Bacon also provided more tangible services through their scholarly skill, such as the active, productive reading described by Jardine and Grafton.⁸² It was, for example, in the capacity of scholar that Bacon first gained employment and patronage from the Earl of Essex, as a letter from Essex to Bacon bears witness:

The Queen did require of me a draft of an Instruction for matter of intelligence, seeming willing now she hath sworn me one of her Council to use my service that way. I persuade myself she doth it rather to try my judgement in it than for any present necessity for direction of any man that is to go. The places are Rheims and Rome. Mr. Phillips hath known Mr. Secretary's courses in such

(see Roger Lockyer, *Buckingham: The Life and Political Career of George Villiers, First Duke of Buckingham 1592-1528* (London and New York: Longman, 1981), pp. 44-46, 71, 97-100). Bacon also acted as a patron himself, assisting Henry Wotton, Thomas Meautys, and Tobie Matthew, amongst others, as well as acquiring the lucrative living of Landbeach for William Rawley in 1618 (*OFB*, XIII, p. lxxiv).

⁸⁰ For the more prosaic side of literary dedications and its financial implications, see Phoebe Sheavyn, *The Literary Profession in the Elizabethan Age*, 2nd edn (Manchester: Manchester University Press, 1967), pp. 8-38.

⁸¹ Jonathan Gibson, 'King Lear and the Patronage System', *The Seventeenth Century*, 14 (1997), 95-114 (pp. 95-6). Rosenberg notes that clients were important to patrons, suggesting that 'Leicester rewarded his servants because he needed them. His position was never secure, hanging from year to year on the Queen's whim' (Rosenberg, p. 19).

⁸² See Lisa Jardine and Anthony Grafton, 'Studied For Action: How Gabriel Harvey Read His

matters; so as I may have counsel from you and precedents from him. I pray you, as your leisure will serve, send me your concept as soon as you can; for I know not how soon I shall be called on. I will draw some notes of mine own which I will inform and enlarge by yours.⁸³

It was not merely for financial gain or preferment that an author might seek patronage for his work. The patron's name might be expected to lend some of its own authority and gravitas to the work itself, leading, in effect, to public 'authorisation' of the work. Certainly, the dedication of a work to the King served, in part, to show that the King himself approved of the work, thus lending the work greater authority. The patron assumed a relationship to the text not dissimilar in effect to that of the medieval 'auctor' to earlier texts, claiming credibility for a text through appeal to an ancient author.⁸⁴ While the humanist ethic practically insisted on a similar use of classical precedent and authority in the early-modern period, the wider social authority of a work was something which was increasingly conferred by the patron.⁸⁵

The dedicatory letter, while allowing for the continued expression (and, in effect, continued negotiation of) a client-patron relationship, was also used for

Livy', *Past and Present*, 129 (1990), 30-78.

⁸³ *LL*, I, p. 251. Spedding describes the services Francis and his brother Anthony provide for the Earl of Essex before acting this letter as an example of this employment (*LL*, I, p. 250-51). While this letter is evidence of an already functioning relationship, scholars would also offer their 'scholarly services' (largely interpretation and analysis of ancient works to provide 'knowledge profitable to the enterprise of government') to potential patrons through private letters. Similar services were offered, for example, by Henry Wotton to Lord Zouche in the 1590s (see Lisa Jardine and William Sherman, 'Pragmatic readers: knowledge transactions and scholarly services in late Elizabethan England', in *Religion, Culture and Society in Early Modern Britain*, ed. by Anthony Fletcher and Peter Roberts (Cambridge: Cambridge University Press, 1994), pp. 102-24 (p. 105)). Wotton further demonstrates the reciprocal nature of these relationships in a letter to Bacon (December 1620) concerning *IM* (BL Add. MS 39254, fols. 60-63) in which he not only provides the flattery one might expect from a publicly visible dedicatory letter, but also reminds Bacon that he had agreed to provide him with intelligence regarding things scientific, as well as reminding him of his cousin, Thomas Meautys, then one of Bacon's secretaries.

⁸⁴ Pask, p. 9. Chaucer, for example, invented an 'auctor,' Lollius, for his work *Troilus and Criseyde*, while he, in turn, was invoked as an English auctor: 'Chaucer's authority was apparently available to shield the publication of some mild erotica as well as anti-clerical texts.' (Pask, p. 27).

⁸⁵ Gabriel Harvey's brother, the Rev. Richard Harvey, certainly believed that the patron of a work conferred upon a discourse the proper authority to go to press (Lorna Hutson, *Thomas*

the public negotiation, and often un-authorised appropriation, of a new client-patron relationship. Just as private scholarly readings could lead a patron down a dangerous path, and Henry Cuffe's influence on Essex is an example of this, an untimely or ill-chosen dedication could also harm a client's prospects.⁸⁶

Dedicatory letters were tools used not only to seek the productive patronage which could result in immediate advantage for the author, but also as tools through which a work might take advantage of a patron's reputation, power and authority in asserting its right to be heard and taken seriously. A text published without a dedicatory letter, and thus without a patron, would have appeared unofficial, invalid, and unauthoritative. The dedicatory letter functions, therefore, as an expression of this textual protection and authority, allowing the author to demonstrate under whose 'authority' he publishes, and this expression takes the form of a private letter published for all to see: it is a performance.⁸⁷ The dedicatory letter was vital both in fulfilling the obligations

Nashe in Context (Oxford: Clarendon Press, 1989), pp. 198-99).

⁸⁶ See Paul E. J. Hammer, 'The Use of Scholarship: The Secretariat of Robert Devereux, Second Earl of Essex, c. 1585-1601', *English Historical Review*, 109 (1994), 26-51 (pp. 49-50). Gabriel Harvey for example, dedicated a work to Elizabeth and Leicester in 1578, including 'some untimely references to Leicester's possible union with Elizabeth' (Rosenberg, pp. 327-28). By the time it was published, Leicester had married the Countess of Essex. Henry Cuffe suffered as his 'scholarly readings' were held up as an incitement to the Earl of Essex's abortive rebellion in 1601 (Jardine and Grafton, pp. 33-34). A further example of the trouble a dedication could cause is provided by Thomas Nashe's *Have with you to Saffron Waldon*, the dedication of which inspired a reply: Lichfield's *The Trimming of Thomas Nashe* (Though this has been attributed to Gabriel Harvey: see *The Trimming of Thomas Nashe Gentleman, by the high-titled patron Don Richardo de Medico Campo, barber chirurgion to Trinitie Colledge in Cambridge* (London: for Philip Scarlet, 1597), in *EEBO*. See Cliff Forshaw, "'Cease Cease to bawl, thou wasp-stung Satyrst.'" Writers, Printers and the Bishops' Ban of 1599', *Entertext*, 3. 1 'Renaissance Renegotiations' (2003), <<http://www.brunel.ac.uk/4042/entertext3.2/forshaw.pdf>> [accessed 24 January 2006], 101-131. Dedications had unforeseen effects on Bacon's works, too: *NO* was considered alongside *DAS* as a heretical work (despite Bacon's attempts to render it immune to such assaults, see *LL*, VII, p. 436), as the latter was put on the *Index Liborum Prohibitorum* on 3rd April 1669. Tommaso Noce, one of the censors, noted that 'apart from this title, [giving James the title *defensor Fidei*] I have not found in this book anything else worthy of censure, also because the author adopts a philosophical stance and does not enter into the merit of questions concerning dogmas and the customs of Religion'. He finds more matter for censure in the dedication of *DAS* to James, however. See Marta Fattori, 'Sir Francis Bacon and the Holy Office', *British Journal for the History of Philosophy*, 13 (2005), 21-49 (p. 39).

⁸⁷ This is not the literal authority as wielded by Archbishop of Canterbury and the Bishop of

of a client-patron relationship, but also in providing the text with the best chance of being read favourably.⁸⁸ As tools for the manipulation of the authority of the patron and the author, the dedicatory letter and the letter ‘To The Reader’ worked in tandem. In attempting to direct and enhance the reader’s experience, and to trumpet the qualities of the patron, both letters affected the form of the personal letter in what was a very public performance.

d. The letters accompanying *Sylva sylvarum*

Sylva sylvarum inhabited a strange, transitional space of publication, being neither published during the author’s life because he wished it to be published, such as the *Instauratio magna*, nor was it published after the author’s death simply because an editor felt it ought to be published, as was the case with *Certaine Miscellany Workes* of 1629, the publication of which Rawley explained in the following manner:

I Haue thought good, as a Seruant, to the Labours, and Memory, of that Noble Lord, the Lo. *Viscount S. Alban*, to collect into one, these few, rather Parcells, than Iust Works, of his excellent Pen. Which I haue done for these Causes. First, to vindicate the Wrong, his Lordship suffered, by a corrupt, and surreptitious Edition, of that *Discourse* of his, *Touching a Warre with Spaine*, lately set forth. Secondly, by way of Preuention, to exempt, from the like Iniury, & Defacements, those other *Discourses* of his, herein contained.⁸⁹

In a similar fashion, the letters which accompanied it also inhabit a strange, transitional space, as they are not simply direct pleas for patronage on behalf of the author, fulfilment of an existing patronage tie, or straightforward

London, who were responsible for the ecclesiastical authorisation of works before publication, as prescribed by the Star Chamber decree of 1586, nor was it the authority wielded by the Stationers’ Company, which was more concerned with protecting the copyright of its members (see Clegg, pp. 20-67). The authority considered here is, arguably, more important: the text’s intellectual right to exist.

⁸⁸ Kevin Sharpe notes that the ideology of reciprocity embodied in the client-patron relationship had been exposed as a fiction (Bacon’s experiences here must prove a case in point) not least in Machiavelli’s writings (Sharpe, p. 854). This, however, merely accentuates the feeling that the dedicatory letter is a tool by which the author, editor or publisher sought to accrue authority to or on behalf of the text.

explanations of the text's place in the world. Both letters were written by William Rawley, who was not only involved in the compiling of the work itself, but had also provided a letter 'To The Reader' on Bacon's behalf three years previously, for *De augmentis*.⁹⁰ Just as the letters which accompanied Bacon's magnum opus, the *Instauratio magna*, were in effect negotiations on behalf of the author, the work and the work's purpose, so we find similar concerns in the *Sylva sylvarum* letters. Just as the work itself exists in a transitional, or interstitial, space, so do the letters themselves, as the negotiations they perform are complicated by the author's death, the work's difficulties and the editor's own, somewhat unstable position.

Both the dedicatory letter and the letter 'To The Reader' utilise familiar rhetorical devices and tropes standard for such letters, but their ultimate effect is somewhat different from the usual: rather than presenting an argument in support of the work or its author, they present one in favour of its editor. The dedicatory letter begins with almost exactly the same words as Bacon's own virtuoso display of public letter-writing, the dedication to King James from the *Instauratio magna*:

TO THE MOST HIGH
AND MIGHTY PRINCE
CHARLES,
BY THE GRACE OF GOD,
King of *Great Britaine, France, and*
Ireland, Defender of the Faith, &c.

*May it please your most Excellent Maiestie;*⁹¹

⁸⁹ Francis Bacon, *Certaine Miscellany Works*, A3^{r-v}.

⁹⁰ BL Add. MS 38693 contains manuscript notes of *SS*, largely in Rawley's hand. Rawley's letter To The Reader for *DAS* is often ignored, possibly because it appears untranslated in Spedding (*SEH*, I, pp. 421-2), while Gilbert Watts' 1640 translation contains an unsigned letter to the 'Favovrable Reader' apparently written by Watts himself (Francis Bacon, *Of the advancement and proficience of learning*, trans. by Gilbert Watts, ¶ 4^{r-v}).

⁹¹ *SS*, ¶¶ (see Appendix 2) (*SEH*, II, p. 333). Cf. *OFB*, XI, p. 7. For the form and effect of Bacon's own manipulation of these types of letters, see below, pp. 212-29.

This is Rawley playing the formal rhetorical game expected in such a dedicatory letter, as he performs what might usefully be termed an epistolary bow.⁹² The rest of this letter, however, highlights the difference between the Francis Bacon who published the *Instauratio magna* and the William Rawley now presenting *Sylva sylvarum*, and it is a difference of which Rawley is only too acutely aware. Bacon was, at the time of publishing the *Instauratio magna*, a powerful and important man, holding the office of Lord Chancellor, and had his work published by the King's Printers, the most prestigious printing house of all. Any work published by him arrived in the marketplace, so to speak, already flush with authority, a luxury denied Rawley. While in possession of the rich living of Landbeach, by 1626 William Rawley was the former amanuensis and chaplain of a deceased, disgraced, former Lord Chancellor. It is this imbalance between the publication of a work by Bacon at his peak of power and reputation, and one by Rawley the editor several years after his former master's fall from grace, which informs this first letter.⁹³

The letter shows Rawley as he wished to be seen, as the presenter and protector of Bacon's intellectual and literary legacy. Rawley is concerned less with presenting the work in question, though this is plainly important for him, but in asserting his right to present it. The first line, therefore, is a short argument to demonstrate that the work itself *already* enjoys the patronage of Charles:

The whole Body of the Naturall Historie, either designed, or written, by the late
Lo. Viscount S. Alban, was dedicated to your *Maiestie*, in his Booke *De Ventis*,

⁹² Such addresses were, to a large degree, formalised both by convention and in handbooks such as Angel Day's *The English Secretary, or Methode of Writing of Epistles and Letters* (P. S. for C. Burbie: London, 1599).

⁹³ It is also the most likely reason for Rawley's description of himself on the engraved title of *SS* as 'D^r of Diuinitie &c', while the letterpress title further alerts the reader to Rawley's position in the proceedings, as now he has the title of '*late his Lordships Chaplaine*': Rawley seems to be attempting to accrete authority in order that the dedicatory letter and letter 'To

about foure yeeres past, when your *Maiestie* was *Prince*: So as there needed no new Dedication of this *Worke*, but only, in all humblenesse, to let your *Maiestie* know, it is yours.⁹⁴

Rawley is here demonstrating his justification, or authority, in approaching Charles, and for invoking his patronage and protection for the work itself. By including *Sylva sylvarum* under the umbrella of Bacon's proposed natural history, already dedicated to Charles, Rawley states quite plainly that no new dedication is needed, at least for the work: Rawley thus goes some way to fulfilling the aims of a letter 'To The Reader', further reinforcing the sense that such letters are not discrete units of meaning or persuasion. It might be that Rawley includes *Sylva sylvarum* under the umbrella of the Natural History as defined, or at least produced, with *Historia naturalis et experimentalis*, in order simply to appropriate the authority of this work: the argument regarding whether *Sylva sylvarum* deserves to be a part of this Natural History is a complex one.⁹⁵ By validating *Sylva sylvarum* in this way, Rawley simultaneously validates his claim that it already enjoys the King's patronage, while granting himself the right to put forward his own claims, whatever they may be. While it may seem as if Rawley's efforts are expended to prove that the work already enjoys Charles' protection, and thus concern the work's reception alone, it is actually for Rawley himself that this letter argues. Rawley claims the patronage of both Bacon and the work itself, describing himself, not unreasonably, as 'one that was trusted with his *Lordships Writings*, euen to the last'.⁹⁶ Rawley invokes the reputation and intrinsic authority still wielded by the name of Bacon to justify his own approach to the King.⁹⁷ In order to reinforce his claim, and also possibly the

The Reader' might be more favourably received.

⁹⁴ SS, ¶ (SEH, II, p. 333).

⁹⁵ Bacon rarely found himself able to stick to a pre-arranged plan of publication, however, and Rawley conveniently assumes that the previous dedication, in which Bacon expressly vows to 'complete and set forth one or more parts of it, according as they be more or less difficult or extensive' every month, includes SS, against some of the prevailing evidence (SEH, V, p. 127 (SEH, II, p. 9)).

⁹⁶ SS, ¶ (SEH, II, p. 334).

⁹⁷ Bacon's reputation was certainly high on the continent (see OFB, XIII, pp. xlix-lxx; OFB, VI, pp. lxxv-lxxxv), and by 1640 Gilbert Watts was able to describe Bacon, in the dedication

feeling that Bacon is inextricably bound up even in this letter, he affects a typically Baconian rhetorical device:

It is true, if that *Lo.* had liued, your *Maiestie*, ere long, had beene inuoked, to the Protection of another *Historie*; VWhereof, not *Natures Kingdome*, as in this, but these of your *Maiesties*, (during the Time and *Raigne* of King Henry the Eighth) had beene the Subiect: VWhich since it died vnder the Designation meereley, there is nothing left, but your *Maiesties* Princely Goodnesse, graciously to accept of the Vndertakers Heart, and Intentions; who was willing to haue parted, for a while, with his Darling *Philosophie*, that hee might haue attended your Royall Commandement, in that other *Worke*.⁹⁸

Rawley here presents Bacon's intentions as evidence to support his case, intentions to which Rawley could refer with authority, and which Charles would have been aware, namely the writing of the *History of the Reign of Henry VIII*. This work had been requested by Charles in 1623, after the publication of Bacon's *History of the Reign of Henry VII*. Bacon, however never quite managed to find the time to write this second work.⁹⁹ Indeed, Rawley's assertion that Bacon was willing to 'haue parted, for a while, with his Darling *Philosophie*' in order to write this work seems, in the light of the works produced over the final three years of his life seems disingenuous. Bacon's continual protestations of ill health in his final few years might occasionally have been mere excuses, though his health generally was poor, and as a man in his sixties he could not have expected many more productive

to his translation into English of the *DAS*, in the following terms: 'the Author is Sir *Francis Bacon*, a name well known in the European world; a learned man, happily the learned'st, that ever lived, since the decay of the Grecian and Romane Empires; when learning was at a high pitch; and Which rise and fell with those Monarchies; for Scepters and Sciences have the same revolutions, the same periods' (Francis Bacon, *Of the advancement and proficiencie of learning*, trans. by Gilbert Watts, ¶ 2^{r-v}). Watts also included a series of recommendations of Bacon in his work, by individuals such as 'Le Sieur Maugars, Councilor and secretary to the K. of France, Mr Peirre D'Ambois, S^r De La Magdelaine' (A1v), Toby Adams and S^r Tobie Mathews (A2v), Mr George Sandys, and finally Marin Mersenne, who Watts described as 'an able man, but a declar'd adversary to our Authors designe [...] acknowledges this much, which comming from an Adversary is therefore more valid' (B1').

⁹⁸ *SS*, ¶^{r-v} (*SEH*, II, p. 333).

⁹⁹ Only the introduction was ever written (*SEH*, VI, pp. 269-70), while Bacon mentions Charles' commandment to write this work in a letter to Tobie Matthew, in June 1623 (*LL*, VII, pp. 428-29), noting that he had not forgotten it, while suggesting that Sir Robert Cotton was proving less than accommodating with his provision of material.

years.¹⁰⁰ It does, however, appear that he was unwilling even to interrupt the translation of *De augmentis* on account of *Henry VIII*, though in his letter to Charles which accompanied the latter work, he excuses himself:

For Henry the Eighth, to deal truly with your Highness, I did so despair of my health this summer as I was glad to choose some such work as I might compass within days; so far was I from entering into a work of length. Your Highness's return hath been my chief restorative. When I shall wait upon your Highness I shall give you a further account.¹⁰¹

This letter not only demonstrates Bacon's habitual usage of phrases such as 'to deal truly', a habit apparently picked up by Rawley, but also shows Bacon promising more information on receipt of further favour, here in the form of a personal meeting. Rawley performs the same negotiation, only with a book that was never written, and at a meeting which is only performed on paper. Rawley is appealing to the authority of Baconian works past, present, and unrealised to give himself the authority to present, or re-present, *Sylva sylvarum* to Charles.

At the end of the letter we find Rawley's most tortuous and convoluted appeal

¹⁰⁰ Bacon's health was rarely good and, like his brother Anthony (who had died in 1601), he had been sickly as a child and suffered from both gout and fits of the stone later in life, self-medicating from a relatively early age (see Jardine and Stewart, pp. 150, 172, 300-01, 489, 506-8). While members of the better-nourished classes could reach their eighties, mortality from acute conditions was always a danger, with the two plague years of 1603 and 1625, for example, each claiming around 20% of the population of London alone (see A. W. Sloan, *English Medicine in the Seventeenth Century* (Durham, Bishop Auckland: Durham Academic Press, 1996), p. 154; see also Paul Slack, 'Mortality crises and epidemics', in *Health, medicine and mortality in the sixteenth century*, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979), pp. 9-59).

¹⁰¹ *LL*, VII, pp. 436-37. He included a similar excuse for the imperfect nature of *IM* in the private letter he sent to James with the work itself: 'And the reason why I haue published it now, (specially being unparfite) is (to speak plainely) bycause I number my daies, and would haue it saued' (NLS MS Bacon to James, 1620. See Appendix 7). Bacon had always been more than usually concerned with his health, and had self-medicated from a relatively early age (see Jardine and Stewart, pp. 150, 172, 300-01, 489, 506-8). While members of the better-nourished classes could reach their eighties, mortality from acute conditions was always a danger, with the plague years of 1603 and 1625, for example, each claiming around 20% of the population of London alone (see A. W. Sloan, *English Medicine in the Seventeenth Century* (Durham, Bishop Auckland: Durham Academic Press, 1996), p. 154; see also Paul Slack, 'Mortality crises and epidemics', in *Health, medicine and mortality in the sixteenth century*, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979), pp. 9-59).

for the continuation of a previously negotiated patronage relationship – that of Charles and the Baconian Natural Histories – and also the point where it begins to become plain that it is now for Rawley, not the work, that this appeal is ultimately made:

Thus much I haue beene bold, in all lowlinesse, to represent vnto your *Maiestie*, as one that was trusted with his *Lordships Writings*, euen to the last. And as this *Worke* affecteth the *Stampe* of your *Maiesties Royall Protection*, to make it more currant to the *World*; So vnder the *Protection* of this *Worke*, I presume in all humblenesse to approach your *Maiesties* presence; And to offer it vp into your *Sacred Hands*.¹⁰²

Rawley here utilises a strategy similar to that in Bacon's private letter with the *Instauratio magna* when he suggests that Charles's protection will make *Sylva sylvarum* 'more current to the world'.¹⁰³ Immediately afterwards, however, he demonstrates that it is himself, Rawley, who truly needs this protection. While Rawley explicitly states that he uses the work as a shield under which he presumes to approach Charles, he also states that he does so for the sake of the work itself. The work 'affecteth the stamp' of royal protection because it is part of the *Natural History*, the parts of which were effectively dedicated *en masse* to the Prince some years before, and thus becomes justification for Rawley to 'presume in all humbleness to approach Your Majesty's presence'.¹⁰⁴ Rawley is here transforming the dedicatory letter not into a private or even public conversation, but into a physical approach to Charles.

¹⁰² SS, ¶^v (*SEH*, II, p. 334).

¹⁰³ Bacon's *IM* was delivered to James with a private letter as well as the public dedicatory letter published with the text. In the former letter, Bacon argues a similar line, suggesting that 'your gracing it [his work] may make it take hold more swiftly' (NLS MS Bacon to James, 1620).

¹⁰⁴ Rawley continually reminds himself and his reader to whom he speaks. Rawley uses the address 'Your Majesty' three times in the first sentence of his dedicatory letter, nine times in all. This compares with Bacon's use of the address a mere four times in his dedicatory letter to James accompanying *IM*: a letter fully twice as long. Rawley also signs his name as simply 'W. Rawley' at the letter's end, while referring to Bacon as 'Viscount St. Alban', 'that Lord' and 'his Lordship'. The overall effect is to obscure Rawley's place in these proceedings, while accentuating the assertion of posthumous patronage for Rawley, as well as simultaneously attempting to allow the work its own authority: having asserted authority of work and author, Rawley may then attempt to appropriate them. It is as well to point out that the prime motivation for this attempted appropriation is to allow Rawley to better preserve his

In this way, we can see Rawley attempting to make the absent – his physical proximity to Charles – present, a characteristic use of a letter within contemporary drama as well as a manipulation of the Erasmian concept of the letter, and a particularly powerful one when presented in published form.¹⁰⁵ For the lay reader, Rawley now appears on his knees before the King himself, offering up his dead patron's work directly into Charles's 'sacred hands', an interesting reversal of the usual representation of the transaction of divine knowledge, in which the King hands down the scriptures to his bishops, and from them to the people.¹⁰⁶

Rawley, in his public application for royal protection for *Sylva sylvarum*, has invoked authority from his deceased patron, Bacon, as well as protection from the work itself. Like his assertions regarding the unwritten *Henry VIII* (which Bacon had indeed intended to write, assuming he ever had the time), and his claims to know Bacon's intentions regarding works, this application, although retrospective, seems reasonable. Rawley's intention seems, however, not simply to claim a place for the work in question, but to fix, in the eyes of the public and of Charles, his place as guardian and editor of Bacon's works. Rawley manipulates Bacon's works, name and rhetorical style in an attempt to rebuild, re-form and re-draw the patronage he once enjoyed from Bacon so that it would continue long after his master's death. The dedicatory letter he wrote for *Sylva sylvarum* is his first attempt, uncertain and faltering though it may be, to do so.

dead master's works and reputation.

¹⁰⁵ See Lisa Jardine, *Erasmus, Man of Letters: The Construction of Charisma in Print*, (Princeton, New Jersey: Princeton University Press, 1993), p. 153.

¹⁰⁶ This is an interesting manipulation of the traditional manner in which the Bible is delivered to the people, as shown in the engraved title of the Coverdale Bible of 1539, which depicts Henry VIII giving books titled 'verbum Dei' to his bishops, who then deliver them to the priests who speak them to the people: the people are thus led to declare 'vivat Rex' (Myles Coverdale, ed. *The Byble in Englyshe* (London: Richard Grafton and Edward Whitchurch, 1539), engraved title). James I effectively repeated this process with the AV Bible of 1611. For another interesting interesting manipulation of this process, see the Bensalemite revelation, below, pp. 150-53.

Rawley continues his attempts to gain authority for the work and for its editor in the letter ‘To The Reader’, a more complicated piece of work, not least in the manner in which it artfully incorporates elements of *Novum organum*, adding to the impression he is trying to give of Bacon’s works as a coherent vision carefully executed, rather than a disparate collection of fragments united under the banner of the meta-work which was his *Instauratio*.¹⁰⁷ The first part of Rawley’s ‘To The Reader’ follows on from the dedicatory letter, being devoted to persuading the Reader that he, Rawley, is a fit and authoritative source of Bacon’s intentions and wishes. It begins thus:

HAuing had the Honour to be continually with my *Lord*, in compiling of this *Worke*; And to be employed therein; I haue thought it not amisse, (with his Lordships good leaue and liking,) for the better satisfaction of those that shall read it, to make knowne somewhat of his Lordships Intentions, touching the Ordering, and Publishing of the same.¹⁰⁸

Rawley is here asserting his relationship to Bacon, thereby establishing his right to speak, while simultaneously affecting a plea for approval, ‘with his Lordships good leave and liking’. In asserting his close physical proximity to Bacon, Rawley seeks to reassure the reader that he is the officially sanctioned mouthpiece for the work. He further reinforces this feeling by mentioning not Bacon’s writings but his actual words, using such phrases as ‘I haue heard his Lordship often say’, ‘but he resolued’, ‘I haue also heard his Lordship discourse’, and ‘his Lordship hath often in his mouth’. Just as Rawley invites the reader to picture him in physical proximity to Charles, these phrases draw

¹⁰⁷ For example, when Rawley writes that ‘he knew well that there was no other way to unloose men’s minds, being bound and, as it were, maleficiate by the charms of deceiving notions and theories, and thereby made impotent for generation of works’ (SS, A1^r (SEH, II, p. 335)), he is effectively précising Bacon’s Idols of the theatre as found in *NO* (OFB, XI, pp. 95-107). The suggestion in the preface to the *Instauratio magna* that ‘the journey has always to be made through the woods of experience and of things particular [per experientiae & rerum particularium syluas]’ (OFB, XI, p. 19) is not only echoed in the work’s title, but also within the letter To The Reader: ‘would not think themselues vtterly lost in a Vast Wood of *Experience*’ (SS, A3^r (SEH, II, p. 337)). Other echoes of Bacon’s words in this letter, include ‘*Experimenta Fructifera*, and *Experimenta Lucifera*’ (SS, A2^r (SEH, II, p. 336). Cf. OFB, XI, p. 17), and Rawley’s own indications of where he is borrowing, ‘Not for any Excellency of his owne Witt, (as his Lordship is wont to say)’ (SS, A2^v (SEH, II, p. 336)).

¹⁰⁸ SS, A1^v (SEH, II, p. 335). Cf. *Resuscitatio*, a4^r.

him as Bacon's constant and trusted companion, which, in fairness to Rawley, he was.

In making plain the relationship between Rawley and Bacon, Rawley not only supports his own claims to the right to speak on behalf of Bacon and publish his works, but also gently resuscitates the dead author. He also presents the idea that Bacon's will, at least, is alive and well, and finding its expression through Rawley: Rawley talks of *Novum organum* as a work 'of which his Lordship is yet to publish a Second part', 'this *Naturall History* was a Debt of his', and 'he hopeth, by this means, to acquit Himselfe of that, for which hee taketh *Himselfe* in a sort bound'.¹⁰⁹

Rawley reinforces his claim to authorial approval he began with the very first line of the letter,¹¹⁰ and with the letter's final words, 'this Epistle is the same, that should haue been prefixed to this Booke, if his Lordship had lived'.¹¹¹ This sentence, however, is included not within the text itself, but as if it were a manuscript marginalium.¹¹² This marginal gloss stands in the outer margin of A3^r of *Sylva sylvarum*, even though there is plenty of room beneath the text to include it as a post-script, much as it appears at the end of the text of *New Atlantis*. It would, of course, have been impossible for Rawley to include this line in the body-text without contradicting the letter itself, but Rawley seems keen to alert the reader to this statement, not least through his unnecessary use of marginalia. The point Rawley is making, just in case the reader either didn't understand the letter itself, or perhaps simply hasn't bothered to read it, is that this letter was firstly written before Bacon's death,

¹⁰⁹ Rawley once more appropriates Bacon's own words, as Bacon considered *DAS*, for example, a 'debt': 'I hold it may serve in lieu of the first part of the Instauration, and acquit my promise in that part' (*SEH*, VII, p. 14).

¹¹⁰ *SS*, A1^r (*SEH*, II, p. 337). This is a claim which, having supplied the letter To The Reader for *DAS* (*SEH*, I, pp. 421-22), Rawley is fully entitled to make.

¹¹¹ *SS*, A3^r (*SEH* II, p. 337).

¹¹² It appears in *SEH* as a line following the letter, however, gently erasing any appreciation of a possible significance of its placement on the part of the reader (*SEH*, II, p. 337).

and secondly was written under his directions and approved by him.¹¹³ Whether or not the letter was written before Bacon's death is debatable, but actually of less importance than the pains Rawley takes in order to establish this fact.¹¹⁴

Rawley is wrestling with the problem that the kind of preface he is writing, one of recommendation and direction, depends in large part for its authority on the status of the writer.¹¹⁵ In this, Rawley fails, as he has no claim to an authority or reputation to match that of Bacon. In attempting to fulfil the function of an 'intellectual patron' to *Sylva sylvarum*, he must first establish his credentials for so doing: he must establish his own authority. The only claim he has is his closeness to Bacon during the writing of this and many other works. His only option, therefore, is to rely on the authority of the author, and appropriate as much of it as he can, not least by accentuating his personal knowledge of both Bacon and his philosophy. Whether or not Rawley was the intended writer of this preface or letter 'To The Reader', by fulfilling this function he lays claim to the authority of Bacon himself for continuing to publish Bacon's works, and to act as the guardian of his textual legacy, claiming the role as Bacon's spokesman, a role he felt particularly suited to, as he made clear in the *Resuscitatio* of 1657:

HAVING been employed, as an *Amanuensis*, or dayly instrument, to this *Honourable Authour*, And acquainted with his *Lordships* Conceits, in the composing, of his *Works*, for many years together; Especially, in his writing Time; I conceived, that no Man, could pretend a better Interest, or Claim, to the ordering of them, after his Death, then my self.¹¹⁶

¹¹³ Once more, Ellis reads this as simple fact in his preface, writing 'the preface is Rawley's own, and was written in Bacon's lifetime' (*SEH*, II, p. 325).

¹¹⁴ It seems to me more likely that this letter was written by Rawley after Bacon's death, if only because Rawley does appear to protest too much in his continually reminding the reader that these words are Bacon's, not his.

¹¹⁵ Genette, pp. 267-68.

¹¹⁶ *Resuscitatio*, A4^r. It is also interesting to observe that on the letterpress title to the 1657 *Resuscitatio* Rawley is titled thus: 'Doctor in Divinity, his Lordships First, and Last, CHAPLEINE. Afterwards CHAPLEINE, to his late Maiesty'. By 1661, Rawley had changed this title: 'Doctor in Divinity, his Lordships First, and Last, CHAPLEIN. And now His Majesties CHAPLEIN, in Ordinary'. If nothing else, this at least shows that title-pages such

Rawley's apparent use of the text of *Sylva sylvarum* as a tool with which to establish his own reputation and authority as publisher, editor and disseminator of Bacon's works relies in part on the text's own coherence. Rawley alludes to its status as a natural history 'designed and set down for a third part of the Instauration', while accentuating its superiority to other natural histories as a mode of defence against criticism that 'Men (no doubt) will thinke many of the *Experiments* contened in this Collection, to bee Vulgar and Triuiall; Meane and Sordid; Curious and Fruitlesse'.¹¹⁷ For Rawley, *Sylva sylvarum* seems a relatively easy text to manipulate in this manner. The same, however, cannot be said for *New Atlantis*.

e. The letter 'To The Reader' for *New Atlantis*

New Atlantis does not have the luxury of its own dedication, though this is not particularly surprising, as for Rawley it apparently belongs with *Sylva sylvarum* and the natural histories in general: it is this opinion which he struggles to justify in the letter 'To The Reader'. Whereas the letter 'To The Reader' standing before *Sylva sylvarum* is largely designed to support Rawley's claims to authority with regards to Bacon's thoughts and works in general, the letter attached to *New Atlantis* is more of an attempt to justify the text's appearance in the volume. It is important to remember at this stage that the first thing any contemporary reader would know about this text was when they had finished reading the final experiment of *Sylva sylvarum*: there is no mention of it in the dedicatory letter, the letter 'To The Reader' or any 'contents page.' *New Atlantis* arrives, appropriately enough, in as unexpected a fashion as the island of Bensalem does for the sailors within the text itself.

The first thing the reader learns about *New Atlantis* (and, interestingly

as this were used to place more than simply the work: they provided important authoritative context for the author or, in this case, editor, too.

¹¹⁷ SS, A1^v (SEH, II, p. 335).

enough, the last) is its unfinished nature, as the title-page introduces it as ‘New Atlantis | A VVorke vnfinished’.¹¹⁸ In the letter ‘To The Reader’ itself, Rawley explains its existence thus:

THis *Fable* my *Lord* deuised, to the end that He might exhibite therein, a *Modell* or *Description* of a *Colledge*, instituted for the *Interpreting* of *Nature*, and the *Producing* of *Great* and *Marueilous Works* for the *Benefit* of *Men*; Vnder the Name of *Salomons House*, or the *Colledge of the Sixe Dayes Works*.¹¹⁹

Rawley immediately qualifies his statement, adding the line ‘and even so farre his *Lordship* hath proceeded, as to finish that Part’. Rawley seems to consider the rest of *New Atlantis* as a ‘fable’ which contains this ‘modell’ which was designed, apparently, to be imitated (though he admits that ‘the *Modell* is more Vast, and High, then can possibly be imitated in all things; Notwithstanding most Things therin are within Mens Power to effect’). Having glossed the passage of *New Atlantis* most easily connected to *Sylva sylvarum*, Rawley then explains what exactly it was that Bacon intended to add to it, and why he didn’t:

His *Lordship* thought also in this present *Fable*, to haue composed a *Frame* of *Lawes*, or of the *best State* or *Mould* of a *Common-wealth*; But foreseeing it would be a long *Worke*, his Desire of Collecting the *Naturall History* diuerted him, which He preferred many degrees before it.¹²⁰

New Atlantis thus remained unfinished for the same reason that (despite Rawley’s protestations to the contrary) the *History of the Reign of Henry VIII* had failed to advance beyond its introduction – it was sidelined by Bacon’s natural histories, presumably the *Sylva sylvarum* itself or *Historia naturalis et experimentalis* which he began to publish in 1622. Rawley is informing the reader more of what is missing than what is present in the work, as if, once more, he is attempting to use what is absent to validate his claims regarding

¹¹⁸ See above, p. 41.

¹¹⁹ *NA*, a2^r (*SEH*, III, p. 127). It is this section of *NA*, the passage on Salomon’s House, which has attracted most critical attention.

¹²⁰ *NA*, a2^r (*SEH*, III, p. 127).

what is present: the textual forebears of *New Atlantis*, such as Plato's *Republic*, More's *Utopia*, and so forth were traditionally associated with such systems of laws. Presumably Rawley is suggesting that, for Bacon, natural history was more important than a 'frame of lawes' or constitution for a fictional commonwealth.

Rawley's final paragraph is also of great interest, however, as his inability to explain the text adequately is highlighted by more equivocation:

This Worke of the *New Atlantis* (as much as concerneth the *English Edition*) his *Lordship* designed for this Place; In regard it hath so neare Affinity (in one Part of it) with the Preceding *Naturall History*.¹²¹

The reason *New Atlantis* is bundled alongside *Sylva sylvarum* is, apparently, simply because of the description of Salomon's House. The matter of the text's 'near affinity' is simply Rawley's opinion, though how much weight one can place on this opinion is unclear. It is true that the section on Salomon's House does bear close comparison with the *Sylva sylvarum*, but it also bears comparison with, for example, the *Parasceve* published alongside the *Novum organum* in the *Instauratio magna* of 1620. Not only does the section on Salomon's House perhaps have a relationship to texts other than *Sylva sylvarum*, such as the *Parasceve* and, of course, the natural histories which comprised *Historia naturalis* of 1623, but it also takes up only 23% of the text of *New Atlantis*, meaning that, with regard to its place of publication, Rawley, or Bacon, has apparently ignored 77% of it.¹²² It is, as has been noted, difficult to dispute Rawley's authority in the absence of anything more substantial, such as a holograph manuscript conveniently explaining Bacon's own wishes, but the tone of this letter 'To The Reader', vague and apologetic

¹²¹ *NA*, a2^{r-v} (*SEH*, III, p. 127). The equivocal nature of this sentence becomes apparent if Rawley's apologetic use of parenthesis is compared to the use of parentheses made by Bacon and by Rawley himself in the *OMT*.

¹²² Of the forty-seven pages of *NA*, which comprises of 15,385 words, the 3,572 words of the section on Salomon's House (e2r-g2r) takes up seventeen pages. It is perhaps of interest to note that the increased font size of this sections increases the apparent proportion of this

as it is, seems to indicate that Rawley himself is unsure of how to read the text himself (a problem, it must be said, which he has shared with practically every reader since). The letter seems to be attempting to justify, rather than explain, the presence of *New Atlantis*, and there is simply no mention of the *Magnalia naturæ*.

The final question mark over *New Atlantis* comes in Rawley's parenthetical remark, 'as much as concerneth the *English Edition*'. Rawley has not only used the work's 'title' for the first time, but has hinted at the existence of another version, presumably the Latin version of which he writes in his account of the products of Bacon's last years, and furthermore, suggests that it is, in effect, a different work, as its place is also different.¹²³ While one can only assume that a Latin edition of *New Atlantis* would keep its 'neere affinity' with *Sylva sylvarum*, assuming that this refers to the description of Salomon's House, Rawley here seems to be suggesting that this will not be the case.

As was observed in the case of *New Atlantis*, the only direct evidence regarding when the final few works of Bacon's were written is to be found in Rawley's *Resuscitatio* of 1657, which included a list of the works Bacon produced in the five years between his disgrace and his death, his 'quinquennium.' Last on this list, after the enlargement of the *Essays* and 'the *Conversion of certain Psalms into English Verse*', came the following:

the Translation into Latin of The History of the Reign of King Henry the Seventh, of the Counsels Civil and Moral, of the Dialogue of the Holy War, of the fable of the New Atlantis, for the benefit of other nations; his revising of his book de Sapientiâ Veterum; Inquisitio de Magnete; Topica Inquisitionis de Luce et Lumine; both these not yet printed; lastly, Sylva Sylvarum, or the Natural

section to 36% of the total pages, compared to 23% of the total word count.

¹²³ It is useful to remember that the title *NA* is not mentioned anywhere in the text, and may well be a response either to the governor of the House of Strangers' reference to America as being the 'great Atlantis' (*NA*, c2^v (*SEH*, III, p. 141)), or Bacon's own question regarding whether it matters if America is the Old Atlantis, or was discovered for the first time (*OFB*, XI, pp. 183-85).

History. These were the fruits and productions of his last five years.¹²⁴

Bacon's Psalmic work was published in December 1624,¹²⁵ which suggests that *New Atlantis* was being translated into Latin as *Sylva sylvarum* was being compiled, during the last two years of Bacon's life. The same list suggests that the English *New Atlantis* was written at some point around 1622 and 1623, the publication dates of *Historia ventorum* and *De augmentis* respectively.¹²⁶ It was then, presumably, left lying around until some suitable place could be found for it – perhaps its length and 'unfinished' nature made it unsuitable for publication alone.¹²⁷ It is, however, the translation of works into Latin which is of importance here, as none of these translations appeared in print until 1638, when Rawley published *Operum moralium ... tomus*.¹²⁸ It is intriguing that these translations into the 'universal language' were to be carried out 'for the benefit of other nations', a phrase which is paralleled in the text of *New Atlantis* itself, as the father of Salomon's House remarks of his relation of the institution's working that '*I giue thee leave to Publish it;*

¹²⁴ *SEH*, I, p. 10.

¹²⁵ *SEH*, VII, p. 265.

¹²⁶ Spedding notes that *DAS* was 'prepared and arranged, and in that sense composed, before [*Historia ventorum*]' (*SEH*, I, p. 10, fn 1).

¹²⁷ Here we ought to recall that, according to Rawley, *NA* was 'designed' to accompany *SS* (though this can either mean 'created expressly for that purpose' or 'decided that this is where it ought to go'). The centuriate organisation allowed for the relatively arbitrary termination of one portion of Bacon's planned natural history. The completion of all of Bacon's natural history was an impossible task for one man (see Bacon's letter to Baranzano (*LL*, VII, p. 377), where Bacon writes 'what matter, I ask, if the description of the Instances should fill six times as many volumes as Pliny's history?'). Rawley notes another manner in which it may have been considered unfinished when he expressed his fear that it may have been seen as 'an Indigested Heap of Particulars' (*SS*, A1^r (*SEH*, II, p. 335)), while he is equally keen to show that it also 'hath nothing of Imagination' (*SS*, A3^r (*SEH*, II, p. 337)): that is, it was designed to appear in this manner, and simply reflects the world as it is.

¹²⁸ In a similar manner to the entry into the Stationers' Register for *SS* in 1626, the entry for *OMT*, on the 4th September, 1638, does not include *NA*, though the entry does include *DAS*. While this in itself is of merely passing interest, on the same day it is noted that the printers John Haviland and John Wright also had transferred to themselves Parker's rights to the publication of '*HENRY the SEAVENTH* by the Lord Verulam', '*Historia ventorum vitæ et Mortis* by the Lord Verulam', 'His Part of the Lord Verulams *Apothegmes*', 'his interest in the *Essaies and Councells* by the Lord Verulam', and '*Certaine Psalmes in verse* by the Lord Verulam' (Arber, IV, pp. 405-7). Earlier that same year, Lee Junior and Mozeley had registered the '*History natural and experimentall oof life and Death*. written in Latyn by the right honourable FFRANCIS Lord Verulam translated into English' (Arber, IV, p. 377).

for the Good of other Nations'.¹²⁹

In June 1623, Bacon wrote to Tobie Matthew:

It is true my labours are now most set to have those works which I had formerly published, as that of Advancement of Learning, that of Henry 7th, that of the Essays being retractate and made more perfect, well translated into Latin by the help of some good pens which forsake me not. For these modern languages will at one time or other play the bank-rowtes with books: and since I have lost much time with this age, I would be glad as God shall give me leave to recover it with posterity.¹³⁰

Bacon remarked on several occasions that he intended to have some of his works translated into Latin, though on no occasion does he mention the *New Atlantis*: its translation is implied in the letter 'To The Reader' from 1626/7, and mentioned in Rawley's Life of Bacon from the *Resuscitatio* of 1657. It is not until the 1638 collection *Operum moralium ... tomus*, edited and published by Rawley, that a Latin translation of *New Atlantis* was actually published, and its publication perhaps asks more questions than it answers.¹³¹

f. *Operum moralium ... tomus*, fragments, and Rawley's re-contextualisation of *New Atlantis*

The letterpress title of *Operum moralium ... tomus* informs the reader not only what texts are included within the volume, but also a small amount of information regarding the texts themselves. It divides the works within into

¹²⁹ *NA*, g2^r (*SEH*, III, p. 166).

¹³⁰ *LL*, VII, p. 429.

¹³¹ For more on Bacon's desire for Latin translations, see *SEH*, VII, pp. 13-14; *LL*, III, pp. 300-02; *LL*, IV, p. 64; *LL*, VII, pp. 436, 532-33. That Bacon intended the publication of such a work of translations is accepted by Spedding at face value, as he writes of *De sapientia* that 'a year or two before his death he designed to include the whole volume among the *Opera Moralia et Civilia*, of which he was then preparing a collection, and in which it was afterwards published by Dr. Rawley' (*SEH*, VI, p. 607). It is not, however, to be implied that Rawley did not actively edit works published in *OMT*, however, as between 1622 and 1638 there was authoritative editorial intervention in the *Historia naturalis*, as the printer's original copy in 1622 contained errors, especially the preface to *Historia Sulphuris*, but we don't know whose intervention it was – for that at least, Rawley had a corrected text to give to the

two distinct sections, the first section consisting of five translations which (apart from *De sapientia*) had never appeared in Latin translation before, while the second section includes three works which belong to the *Instauratio*: it is in this second section that, in some copies of *Operum moralium ... tomus*, reissued sheets of *Novum organum* can be found. Along with the list of included works, the letterpress title also states that Rawley edited the works in the first half of the volume, but is silent regarding his connection with the second half.¹³²

The work's dedicatory letter, addressed to King Charles and written by Rawley, bears little resemblance to the letter which accompanied *Sylva sylvarum* and its complex negotiation of authority, as it is little more than a relatively standard list of Charles' virtues and a reminder of his illustrious parentage. Gone is the apologetic Rawley of 1626/7, although for the first paragraph, Rawley relies on re-iterating the virtues, not of the dedicatee, but of the author, Bacon himself.¹³³

Rawley opens the *Lectori S.* of *Operum moralium ... tomus* in a fashion far removed from the faltering, uncertain introduction he gave to the *Sylva sylvarum* of 1626/7,¹³⁴ before elaborating on the distinction between the halves of the work made on the letterpress title. Having noted that the audience is already aware of *De augmentis* and *Novum organum* as philosophical works, Rawley tells them that Bacon desired that his moral and political works should not perish, and thus the process of translation was begun. While explaining why the moral and political works ought to be

printers (personal communication with Prof. Graham Rees, 16 March, 2006).

¹³² 'Cura & Fide Guiliemi Rawley, Sacræ Theologiæ Doctoris': see letterpress title to *OMT*, Appendix 4. There are some corrections in the later printing of *Historia vitæ et mortis* which suggest that Rawley probably had a hand in the editing of this work, too.

¹³³ *OMT*, A1^r-A2^r.

¹³⁴ *Ibid.*, A3^r-A3^v. See Appendix 5 for the Latin and a facing page translation. In 1638, Rawley seems keen to establish his credentials for presenting these works: 'These are the things which the most honourable Master gave to me once in his orders, and in what manner I was to set them before the reader' (*Ibid.*, A3^r). Compare this to the beginning of the letter To The Reader Rawley wrote for *SS* (*SS*, A1^v (*SEH*, II, p. 335). Cf. *Resuscitatio*, a4^r.)

published in Latin within this collection, Rawley further differentiates them from one another, placing them into two groups, the first containing *Historiam regni Henrici septimi, Sermones fideles, siue interiora rerum* (i.e. the *Essays*) and *De sapientia*, and the second containing *Dialogum de bello sacro* and *Nova Atlantis*. Rawley goes on to make an explicit connection between *Nova Atlantis* and *De bello sacro*, much as he had done twelve years previously, between *Sylva sylvarum* and *New Atlantis*.¹³⁵

Rawley includes these final two works, *De bello sacro* and *Nova Atlantis*, in a new category of text, the ‘fragmentary’ text: the letterpress title of 1626/7 saw the publication of *New Atlantis – A Worke Unfinished*, though by 1638 it has changed into *Nova Atlantis Fragmentorum Alterum* or *New Atlantis – The Second of the Fragments*. *New Atlantis* seems to have changed from an ‘unfinished’ text into a ‘fragmentary’ one, and apparently at Bacon’s request:

And finally he ordered that two fragments be added, the Dialogue of the Holy War, and the New Atlantis: but he said that these were the three kinds of fragments.¹³⁶

Rawley further explains Bacon’s tripartite distinction between the types of fragments, presenting it as an authentically Baconian category:

The first of them, which were preserved in whole books, which have been lost; as the *Somnium Scipionis*. The second of them which the author himself could not complete either because he was taken by death or he was distracted by other affairs; as the *Atlantis* of Plato. The third of them, which the author likewise abandoned voluntarily. And of this type are those two which we mentioned earlier, but he didn’t abandon those by weariness or aversion to his subject, but that he had many other things that he had to put first.¹³⁷

¹³⁵ *SS* is neither included nor mentioned in the work, however. In the letter To The Reader accompanying *NA* in 1626/7, we recall, Rawley explicitly connected the work to *SS*: ‘This Worke of the *New Atlantis* (at least so much as concerneth the *English Edition*) his Lordship designed for this place; in regard it hath so neare Affinity (in one part of it) with the Preceeding *Naturall History*’ (*NA*, a2^v-a2^r (*SEH*, III, p. 127)). The *Magnalia naturæ* is also omitted from this volume.

¹³⁶ *OMT*, A3^v.

¹³⁷ *Ibid.*, A3^v.

Rawley distinguishes *De bello sacro* and *Nova Atlantis* from *Somnium scipionis* and Plato's *Atlantis* in order to show what Bacon's works were not. *Somnium scipionis* was the surviving portion of Cicero's lost *De republica*, preserved mainly in the fifth century commentary by Macrobius, and was a popular summary of neoplatonic cosmology.¹³⁸ This work thus fits neatly into the first category of fragments, as originally forming part of a larger work which is now lost. 'Plato's *Atlantis*' was a common way of referring to his *Critias*, a work which was a continuation of the *Timaeus*, but which finished abruptly, in mid-sentence.¹³⁹ Bacon's two works are thus distinguished from their illustrious company because they neither formed part of a greater work now lost, nor were they abandoned due to pressure of circumstances or death. Bacon's two works here belong to the third type of fragment, texts which the author wouldn't, rather than couldn't, carry on with: 'he didn't abandon those by weariness or aversion to his subject, but that he had many other things that he had to put first.'¹⁴⁰ Rawley doesn't mention these other things until the letter with which he introduces *Nova Atlantis*.

The 'theory' of fragments does have the appearance of a Baconian theory, not least due to its tripartite nature,¹⁴¹ but it is not supported in any other Baconian work. Bacon used the term fragments 'en passant' in other works, though was generally somewhat equivocal regarding the actual value of such

¹³⁸ See *The Cambridge History of Renaissance Philosophy*, ed. by Charles B. Schmitt, and Quentin Skinner (Cambridge: Cambridge University Press, 2000), pp. 780, 785; *The Oxford Companion to Classical Literature*, ed. by Sir Paul Harvey (Oxford: The Clarendon Press, 1940), p. 401. According to Kiernan, Bacon alludes to the *Somnium scipionis* twice in *AL* (*OFB*, IV, pp. 233n, 278n).

¹³⁹ George Hakewill refers to it in this manner, see *An apologie of the povver and prouidence of God in the gouernment of the world* (Oxford: John Lichfield and William Turner, 1627), 2G1^r. It is generally considered that Plato then went on to compose his *Laws*, which remained unfinished at his death in 348 BC (Plato, *Timaeus and Critias*, trans. by Desmond Lee (Harmondsworth: Penguin, 1977), pp. 22-23).

¹⁴⁰ *OMT*, A3^v.

¹⁴¹ Bacon was particularly fond of tripartite distinctions, such as those of 'humane learning', natural history, civil history, poesy, and philosophy in *AL* (*OFB*, IV, pp. 62, 63, 65, 74, 76).

fragments.¹⁴² In the *Advancement of Learning*, for example, he suggests that they can, at the very least, give an idea of the thoughts of those who have gone before:

And therefore the Natural Philosophie of *Democritus*, [...] seemeth to mee (as farre as I can iudge by the recitall and fragments which remaine vnto vs) in particularities of Phisicall causes more reall and better enquired than that of *Aristotle* and *Plato*.¹⁴³

This passage, simply expanded in *De augmentis*,¹⁴⁴ might be taken as an example of the positive, if hardly unimpeachable, evidence regarding the thoughts of past philosophers which fragments may be able to provide. But in *De augmentis* Bacon also speaks of the manner in which they may be taken as historical documents, suggesting that fragments of works can actually be useful, if considered alongside other types of historical evidence, though their utility seems to rely on the skill and diligence of the historian.¹⁴⁵

Having categorised *Nova Atlantis* as a fragmentary text, one which fits a previously unknown Baconian textual theory, let's consider whether a comparison between the *Lectori S* of the *Nova Atlantis* of 1638 and the letter 'To The Reader' of *New Atlantis* of 1626/7 casts any more light on the position of text or editor.¹⁴⁶

Rawley makes four significant changes to the text of 1626/7, each one representing a movement away from the letter of 1626/7, making the 1638

¹⁴² Bacon does use the word *fragment* in highlighting the unfinished nature of chapters in *Valerius terminus*, though without, it seems, the interpretive baggage the word is asked to carry by Rawley: *SEH*, III, pp. 215-16, 227, fn. 1, 234, fn. 2.

¹⁴³ *OFB*, IV, p. 86.

¹⁴⁴ *SEH*, IV, p. 363-64 (*SEH*, I, pp. 569-70).

¹⁴⁵ *SEH*, IV, p. 303 (*SEH*, I, pp. 505-06). Cf. *AL* (*OFB*, IV, p. 66). Bacon criticises fragments in *DAS* (*SEH*, V, p. 93; *SEH*, I, p. 809). In his comparison of *Nova Atlantis* and *De bello sacro* with the *Somnium scipionis* and *Critias*, Rawley also asserts their membership of the canon of Western philosophical texts, to which his ancient examples certainly belong, as well as ascribing Bacon's works a certain superiority.

¹⁴⁶ The *S*. in *Lectori S*. stands for *Salutem*, and is a fairly standard epistolary greeting, appearing, for example in Gruter's 1653 *Works* (*SEH*, I, p. 421; *SEH*, III, p. 6), meaning

letter read less as a straight translation than a subtle re-positioning of both work and editor.¹⁴⁷

In 1626/7, Rawley wrote in his letter ‘To The Reader’ of the ‘*Modell or Description of a Colledge, instituted for the Interpreting of Nature*’, namely Salomon’s House, that ‘Certainly, the *Modell* is more Vast, and High, then can possibly be imitated in all things’,¹⁴⁸ while in 1638, he added the phrase ‘pro more poetices’, which is an awkward one, meaning something like ‘in the manner of the poets’ or ‘according to the custom of poetical proceedings’. It seems, therefore, that by 1638 he has changed his mind slightly:

The model (I confess) is, in the manner of the poets, grander and more lofty, than that which lies open for imitation in all things.¹⁴⁹

The implication is that this model is now something beyond literal interpretation, something which has been, or must be, exaggerated, just as poets tend to exaggerate. In 1626/7 Salomon’s House was simply a ‘*Modell*’, impossible as it may have been to imitate in all things, whereas, in 1638, the words ‘pro more Poetices’ seems to have changed *New Atlantis* into a more literary text than it had been in 1626/7: where it simply contained a ‘*Modell or Description*’ in 1626/7, this has, by 1638, become effectively a work of poesy.¹⁵⁰

‘greetings to the reader.’

¹⁴⁷ The general tone of the *Lectori S.* of 1638 has also changed, however. Rawley’s use of parenthesis, for example, displays a confidence in 1638 absent in 1626/7. The 1626/7 parentheses are almost apologetic in tone, and concern the text itself – ‘as much as concerneth the *English Edition*’, ‘in one Part of it’ (*NA*, a2^{r-v} (*SEH*, III, p. 127)) – while the single set of parentheses found in 1638 concerns the author’s relationship with the reader, as Rawley affects private conversation with the words ‘I confess’ (*OMT*, 2H2^r. See Appendix 6).

¹⁴⁸ *NA*, a2^r (*SEH*, III, p. 127).

¹⁴⁹ *OMT*, 2H2^r.

¹⁵⁰ While Bacon discusses the uses of fable throughout his works, not least in *De sapientia*, he does differentiate between fable and poesy, calling the latter ‘FAINED HISTORIE [...] wherein the Nature of things doth denie it’ (*OFB*, IV, p. 73). Bacon further differentiates between this poesy and ‘POESY PARABOLICAL’, in which ‘the Secrets and Misteries of Religion, Pollicy, or Philosophy, are inuolued in Fables or Parables’ (*OFB*, IV, p. 74): it is this type of poesy Bacon describes as fables in the preface to *De sapientia*, as inviting interpretation (*SEH*, VI, pp. 695, 625). It seems, perhaps, that Rawley is less confident than

Two of the other changes Rawley makes add to the feeling of a subtle re-positioning of *New Atlantis* by Rawley. The suggestion that ‘His Lordship thought also in this present *Fable*, to haue composed a *Frame of Lawes*,’ is replaced with ‘In animo etiam habuit, hac ipsâ in *Fabulâ, Librum de legibus*,’ so the ‘*Frame of Lawes*’ has changed into a ‘book concerning the laws’. Where, in 1626/7, Rawley simply stated that Bacon abandoned *New Atlantis* because ‘his Desire of Collecting the *Naturall History* diuerted him’, he adds, in 1638, ‘and for the putting together of other parts of the *Instauration*’.¹⁵¹

Finally, Rawley adds these words to the end of the letter: ‘here he fixed his foot. I had these things on his authority’.¹⁵² While in 1626/7 Bacon had abandoned *New Atlantis* because ‘his Desire of Collecting the *Naturall History* diuerted him’, in 1638, Rawley is attributing to Bacon a somewhat firmer resolution.¹⁵³ It also seems significant that it is with this expression of Bacon’s resolution that Rawley marks the end of the 1638 letter: he entirely omits the final paragraph printed in 1626/7. This paragraph had served both to alert the reader to the possibility of a Latin translation of the text, while also explaining the appearance of *New Atlantis* at the back of *Sylva sylvarum*: it was ‘designed for this Place’. In 1626/7, therefore, the English *New Atlantis* was ‘designed’ to accompany *Sylva sylvarum*: in 1638, the Latin *Nova Atlantis* is included in a collection of Latin works because, as Bacon said, according to Rawley, it is, like *De bello sacro*, a work which is ‘fragmentary.’

Bacon had been about the possibility of achieving some of those things demonstrated within Salomon’s House.

¹⁵¹ *NA*, a2^r (*SEH*, III, p. 127); *OMT*, 2H2^r. This is the only difference between the two texts noted by Ellis: ‘in the Latin translation Rawley adds, *aliumque instaurationis partium contexendarum*; alluding probably to *DAS*, the only portion of the *Instauration*, not belonging to the *Natural History*, which he seems to have been employed upon afterwards’ (*SEH*, III, p. 127). *NA* bears the marks of not having been consistently edited, as Ellis became ill in 1849, and Spedding was forced to take over the work. His comments in *SEH*, I, (p. vi) make it reasonable to assume that full diligence was not accorded some of Bacon’s philosophical works, and the footnotes accompanying *NA* suggest further that this text was one of the texts which suffered most.

¹⁵² *OMT*, 2H2^r. This apparent preoccupation with authorial intention is also to be found in the *Lectori S.* of *OMT* itself.

While it is possible that Rawley's statements and motives are entirely genuine, he seems to be presenting the same work in two different ways, and in doing so re-presenting himself. Gone is the man who felt 'bold, in all lowliness' ¹⁵⁴ in presenting *Sylva sylvarum* to Prince Charles, to be replaced by one who is simply, and dutifully, following Bacon's orders.¹⁵⁵ Rawley is no longer presenting himself as a mere amanuensis, but as the editor and guardian of Bacon's literary legacy, and asserting that it was Bacon himself who wished it to be this way.¹⁵⁶ Rawley, in the letters included in *Operum moralium ... tomus*, has begun to appropriate Bacon's name as his authority for publication.

Just as Rawley is re-presenting himself as the authorised editor and publisher of Bacon's works, he is simultaneously compromising the intrinsic relationship between *Sylva sylvarum* and *New Atlantis* he had put forward in 1626/7, and one which has been accepted almost without question ever since: the only real reason for the two works to be published together seems to have been their use of the vernacular. Just as Rawley presents himself more boldly in making out a case for his authority to publish, he also makes a much bolder case for the inclusion of *Nova Atlantis* within the collection *Operum moralium ... tomus*, including the work in the general preface, even though he made no mention of the work in the letter 'To The Reader' which accompanied *Sylva sylvarum*. He ascribes to Bacon far more intent in 1638 than he did in 1626/7. The overall affect of these changed positions is to place *New Atlantis* more centrally within Bacon's works than it had been up until that point, to recuperate it, perhaps.¹⁵⁷

¹⁵³ *NA*, a2^r (*SEH*, III, p. 127).

¹⁵⁴ *SS*, ¶^v (*SEH*, II, p. 333).

¹⁵⁵ Compare 'I had these things on his authority' with the beginning of the letter To The Reader accompanying *SS* (*SS*, A1^v (*SEH*, II, p. 335)).

¹⁵⁶ It is as well to remember Rees' words on Rawley's position here: 'A witness to though not a literary executor of Bacon's will, it is not known how Rawley came into possession of so much of his master's literary estate' (*OFB*, XIII, pp. lxxiv-lxxv; see also *LL*, VII, pp. 539-51, 545).

¹⁵⁷ While Rawley goes to some lengths in the *Lectori S.* which accompanied *OMT* to assert his authority for setting forth these texts in this manner, beginning it with the words 'these are the

In 1638, Rawley presents a version of *New Atlantis* different from the one he had presented in 1626/7. It is now, apparently, a somewhat more poetic text, not so much unfinished as a fragment, and designed not to accompany *Sylva sylvarum*, but to take its own place within a collection of works translated into Latin, presumably ‘for the Good of other Nations’. Simultaneously, Rawley also manages to present himself as a more active participant in the publication of this work than he had done previously. He claims the right to be the guardian of the Baconian legacy based on Bacon’s own orders, orders which exist nowhere other than in the writings of Rawley himself. It is no surprise that the final line of the general preface to *Operum moralium ... tomus* seeks to explain why it has taken him twelve years to carry out Bacon’s orders and produce this work, echoing Bacon’s own words regarding *De augmentis*: ‘I am finally producing this work which had been long sought after by people abroad. By my prayers it could not have been properly finished before this time.’¹⁵⁸

g. Conclusion

In *De augmentis*, Bacon called the ornaments of speeches, such as prefaces, conclusions, digressions and so forth, ‘accessory and interstitial passages’ noting further that ‘if they be handsomely and skilfully fashioned and placed’, they may ‘add a great deal of ornament and effect to the entire structure’.¹⁵⁹

things which the most honourable Master gave to me once in his orders, and in what manner I was to set them before the reader’ (*OMT*, A3^r), he also adjusted his presentation of one of the other works, *DAS*, changing his own place in the proceedings, as well as that of *DAS* itself. The letter which Rawley includes with this work is almost identical to the original, except for two, apparently minor, changes. In the letter To The Reader accompanying the work in 1623, Rawley is described as ‘Sacrae Theologiae Professor’, while in 1638, Rawley bears the title ‘Sacrae Theologiae Doctor’ (*SEH*, I, p. 421; *OMT*, 3A2^r). The two works are also contextualised, as in 1623 *DAS* is described as ‘primum tomum’, or the first volume of the *instauratio*, while in 1638 this has been changed to ‘Præsentum Tomum’, or the present volume (*SEH*, I, p. 421; *OMT*, 3A2^r). Other than these two changes, the letters are identical.

¹⁵⁸ *OMT*, A3^v. See *SEH*, VII, pp. 13-14.

¹⁵⁹ *SEH*, IV, p. 492 (*SEH*, I, pp. 707).

He also wrote that '*Books will speake plaine, when Counsellors Blanch*'.¹⁶⁰ It seems, however, that while books may 'speake plaine', their 'accessory and interstitial passages' may not speak as plainly as Bacon suggests. Since its publication, the interpretation of *New Atlantis* has been dominated by the paratextual devices of William Rawley, its inclusion alongside *Sylva sylvarum* and the *Magnalia naturæ*, and especially Rawley's explanation of its purpose in the letter 'To The Reader'.

A close investigation of the paratextual devices with which Rawley published these works, both in 1626/7 and accompanying the 1638 Latin edition of *New Atlantis*, suggests that his intentions were perhaps less to advance the understanding of the texts than to serve his own needs: the assertion of his own position and authority in relation to Bacon's works. This is not to say that Rawley was simply manipulating Bacon's works for his own ends, as it is plain from his efforts on behalf of his dead master that he held him in the highest esteem, and wished to serve his memory as best he could. What it does suggest, however, is that with these three texts in particular, Rawley's statements ought perhaps to be read carefully rather than simply accepted uncritically. What seems plain from these readings, however, is that *New Atlantis* was not published entirely free of any editorial bias: it began its public life as part of a discourse of authority designed to enhance and cement Rawley's right to disseminate Bacon's intellectual and textual legacy.

¹⁶⁰ *OFB*, XV, p. 67.

Chapter Two: Renaissance historiography and Baconian time

The text of *New Atlantis* is saturated with images and references to time and history, and this temporal preoccupation is connected to the manner in which the concept of authority is manipulated within this work. Before investigating the place of history and its relationship to authority in *New Atlantis*, however, some account of the temporal and historical concepts of the day, as well as the place of Bacon's thought within them, is necessary. Accordingly, this chapter will first summarise important historiographical trends of the moment, before investigating Bacon's own theories and how these are made extant within his partially 'ahistorical' *New Atlantis*. This chapter shall then demonstrate how history is used within the text to assert authority of several types, and end with a consideration of the importance of time to Bacon's Instauration.

a. The changing nature of historiography in the Renaissance

The historiography of any age is not only indicative of the relationship of that age with the past, but also with itself, in its present, while simultaneously providing often unwitting testimony regarding its view of the future. Perhaps the single dominant feature of the Renaissance was its attempt to revive antiquity, a revival which necessitated a movement away from traditional conceptions of the past, and towards a rebirth of 'true' classical civilisation.¹

The Renaissance witnessed an upsurge in interest in history, with numerous editions and translations of ancient works accompanied by the proliferation of new works based on, carefully referencing, or consciously imitating, works by

¹ Jacob Burckhardt, *The Civilization of the Renaissance*, trans. by S. G. C. Middlemore (London: Allen and Unwin, 1944), pp. 104-07; Robert Nisbet, *History of the Idea of Progress* (London: Heinemann, 1980), p. 103. This revival of antiquity, the aim of the Renaissance humanist movement, also affected the Reformation, which was largely predicated on a return of the church to its pure, biblical state.

classical figures such as Polybius, Plutarch and Tacitus.² While some of this proliferation can be traced to the simple utility of the printing press,³ it is plain that the humanist concern with accuracy and philology, as well as a new awareness and appreciation of the works of antiquity, were also important factors. It was not only works of history which proliferated, however, but also works considering the nature of history, the *ars historica*, which became an increasingly popular genre in the sixteenth century.⁴ That the Renaissance was becoming differently conscious of a relationship with antiquity is plain not only from the works read and published, but also from the changing nature of the visual representation of ancient figures. In medieval art, it was usual to represent historical figures – mostly biblical or mythical – as if they inhabited the same world as the artist. Clothes, animals, buildings and habits portrayed were all generally recognisable to the contemporary audience. A medieval book of hours, for example, might contain images of the evangelists writing their gospels as if they were medieval scribes, sitting at lecterns or desks with tilted surfaces, utilising recognisably medieval technologies.⁵ Similarly, biblical, mythological and historical scenes invariably contained individuals dressed in contemporary clothing: in medieval Europe, the past seems to have been conceived of as being a present which had already occurred, it was not, therefore, greatly different from the present.

From this tradition, representations of Virgil, for example, shifted from his being a medieval scholar to his wearing a toga. For Schiffman, this suggests that in the Renaissance, the past was seen as discrete, detached from the

² For example, Camden's *Britannia* was published 'as another Polybius', while his *Annales* consciously imitated Tacitus. See Achsah Guibbory, *The Map of Time: Seventeenth-century Literature and Ideas of pattern in History* (Urbana: University of Illinois Press, 1986), pp. 13-15.

³ See Elizabeth Eisenstein, *The Printing Press as an Agent of Change*, 2 vols (Cambridge: Cambridge University Press, 1979), I, p. 225.

⁴ Leonard F. Dean, 'Sir Francis Bacon's Theory of Civil History Writing', in *Essential Articles for the Study of Francis Bacon*, ed. by Brian Vickers, (Hamden, Connecticut: Archon, 1968), pp. 211-35 (p. 211); Zagorin, pp. 206-09.

⁵ Roger S. Wieck, *Time Sanctified: The Book of Hours in Medieval Art and Life* (New York: George Braziller, 1988), p. 55.

present, where the ruins of Rome were the presence of a lost world rather than the historical reality of an earlier civilisation.⁶ The past was not linked to the present on a 'temporal continuum,' but was distant from it: this distance was, as Petrarch suggested, to be bridged by emulation.⁷

Drawn largely from classical sources, Renaissance concepts of history were overwhelmingly cyclical: 'The Greek and Roman intellects saw little reason to expect anything very new to happen in the human future, and doctrines of cyclical recurrence or the supremacy of chance (*tyche* or *fortuna*) arose and interpenetrated.'⁸ If history repeats itself, moral and political lessons could be drawn from history, just as lessons were drawn from scripture. The result of this realisation was a drive towards a more accurate representation of history, so that sufficient detail would be available from which valid comparisons could be drawn.⁹

While Tacitus had specifically mentioned that one of history's functions was to commemorate acts of virtue and evil to posterity,¹⁰ and Cicero's conception of history was as a source of moral instruction, the Renaissance movement towards utilising histories as a source of political instruction centred around

⁶ Zachary Schiffman, 'Jean Bodin, Roman law, and the Renaissance Concept of the Past', in *Cultural Visions, Essays in the History of Culture*, ed. by Penny Schine Gold and Benjamin C. Sax (Amsterdam: Rodopi, 2000), pp. 271-87 (pp. 273-74). Schiffman cites Erwin Panofsky, *Renaissance and Renascences in Western Art* (New York: 1969), and Leonard Barkan, *Transuming Passion*, (Stanford: Stanford University Press, 1991), pp. 10-19, describing *School of Athens*, in which Raphael represents philosophers from many ages in an Athenian school modelled on modern architecture.

⁷ This movement was also connected to one of the other great shifts in the Renaissance, the idea of the individual becoming a being defined by self-consciousness rather than membership of a group or social class, while similar change occurred in religious thought, whereby the individual conscience, rather than the Roman Church, was seen to be the measure of religion. See Burckhardt, pp. 81-85; Stephen Greenblatt, *Renaissance Self-Fashioning* (Chicago and London: University of Chicago Press, 1980).

⁸ J.G.A. Pocock, *The Machiavellian Moment* (Princeton, New York: Princeton University Press, 2003), p. 31. Nisbet argues, however, that the Greeks, especially Hesiod, were aware not only of the future, but of a future where civilisation may well be more advanced (Nisbet, pp. 10-17).

⁹ Dean, p. 225.

¹⁰ Zagorin, p. 207.

the Florentine school of historians such as Macchiavelli and Guicciardini.¹¹ Yet Patrizzi and Guicciardini questioned the possibility of drawing lessons from history directly applicable to present problems, as analogies between past and present could only ever be partially accurate, and as Dean explains, ‘the theory of *Historia, magistra vitae* rested on the assumption that human nature remains essentially constant and that situations repeat themselves. This assumption was finally being examined’.¹² The result of this was a greater concentration on the state of mind, conditions and character of individuals at the centre of great events, and historians who concentrated on causes, such as Polybius, became increasingly popular.¹³

The cyclical mode of history, however, was not only supported by classical precedent, but also in the minds of people whose lives were dominated by the cyclical nature of their lives. In a world ruled by the seasons, the repetitive rhythms of farming and the cyclical liturgical calendar, the cyclical mode of history was not only a natural expression of the world as experienced by the individual, but necessarily seem to rule out any great advance or change. Implicit in the cyclical mode of history is its fundamentally unchanging nature. This mode was also asserted as a counter argument to the decay theories of nature which were increasingly popular in the sixteenth and

¹¹ Barbara Shapiro, *Probability and Certainty in Seventeenth Century England* (Princeton, New York: Princeton University Press, 1983), p. 120. See also Edwin B. Benjamin, ‘Bacon and Tacitus’, *Classical Philology*, 60 (1965), 102-10 (p. 102), and Zagorin, p. 207, for the popularity of Tacitus and his status as an ‘archpolitique’ in Renaissance circles. There was much interest in the works of Tacitus in Essex’s circle – which included both Francis and his brother Anthony – around the 1590s for example, and both were probably involved in the scholarly extraction of political lessons from various classical works. See Essex to Francis Bacon, 1593 (*LL*, I, p. 251); Jardine and Sherman, pp. 107-11. Tacitus was also used as a basis for overtly political plays such as Jonson’s *Sejanus, His Fall*.

¹² Dean, p. 223.

¹³ Dean quotes Camden as following Polybius when he writes ‘circumstances I have not in the least omitted, that not only the Events of Affairs, but also the Reasons and Causes thereof, might be understood. That of Polybius pleases me mightily’. Preface to the *Annales of the Reign of Elizabeth* (1613) cited in Dean, p. 225. For how cyclical theory of history influenced the use of history as exemplar, especially in Polybius, see George H. Nadel, ‘Philosophy of History before Historicism’, *History and Theory*, 3 (1964), 291-315 (p. 295). See also Chester G. Starr, ‘Historical and Philosophical Time’, in *History and Theory, Beiheft 6, History and the Concept of Time* (Middletown, Connecticut: Wesleyan University Press, 1966), pp. 24-35 (p. 29).

seventeenth centuries.

The decay theory finds its first expression with Hesiod's concept of the metallic ages, and later with Protagoras.¹⁴ Adopted by Christian historians, however, it was specifically related to the Fall: since the Fall, nature has been gradually decaying from that first expression of perfection. This theory was entwined with concepts of a 'Golden Age' as expressed not only by those philosophers who aimed for its restoration,¹⁵ but also in works of literature such as Shakespeare's *As You Like It* and Spenser's *Arcadia*. Increasingly popular in the beginning of the seventeenth century, with Fulke Greville and John Donne as notable adherents, the decay theory stated that not only nature but the state of knowledge and civilisation has degenerated since the Fall. Adherents to decay theories tended to champion the superiority of the ancients, and especially the Greeks, in learning, civilisation, and manners.

The peak of these theories was perhaps reached with the publication of Godfrey Goodman's *The Fall of Man, or the Corruption of Nature Proved by the Light of our naturall Reason* (1616), a work defending the cosmic fall doctrine with extensive and detailed examples of decay.¹⁶ This work occasioned a reply, in 1627, in one of the most influential expressions of the cyclical theory of history, Hakewill's *An apologie of the povver and prouidence of God in the gouernment of the world*.¹⁷ Hakewill, in his turn,

¹⁴ Nisbet argues that Hesiod's ideas, especially the myth of Prometheus, shows a concern for progress, even if his theory of the metallic ages seems to suggest a gradual decline, from gold to iron (Nisbet, pp. 13-18). Hakewill notes that Seneca assumes a level of technological progress, very much in Baconian terms: 'And if we descend to a particular examination of the severall professions, *Arts, Sciences, and Manufactures*, we shall surely finde that prædiction of the *Divine Seneca* accomplished, *Multa venientis ævi populus ignota nobis sciet*, the people of future ages shall come to the knowledge of many things vnknowne to vs' (Hakewill, 2E1^v).

¹⁵ A desire held by Renaissance magi such as John Dee, Hermetic magicians and Paracelsians, see John S. Mebane, *Renaissance Magic and the Return of the Golden Age* (Lincoln and London: University of Nebraska Press, 1989), pp. 3, 91-2, 95. For more on literary representations of the Golden Age in Renaissance literature, see Harry Levin, *The Myth of the Golden Age in the Renaissance* (New York: Oxford University Press, 1969).

¹⁶ Ronald W. Hepburn, 'George Hakewill: The Virility of Nature', *Journal of the History of Ideas*, 16 (1955), 135-50 (p. 136).

¹⁷ Hakewill cites Cicero (*De inventione rhetor*, I.i) as containing a description of the Golden

drew heavily from the sixteenth-century works Jean Bodin and Louis Le Roy, *Methodus ad facilem historiarum cognitionem* (1566) and *De la vicissitude ou variété des choses en l'univers* (1576).¹⁸

Both Bodin and Le Roy were dismissive of the decay theories, advocating instead cyclical theories of history, as evidenced by the continual rise and fall of empires. For Le Roy, each empire came to dominate its time through strength of arms, and this domination leads to ease and wealth which begets learning, and that the stage of learning is followed by lasciviousness and corruption, at which point the empire is vulnerable to being overwhelmed by the next puissance: 'BVT as the Romans were climed to the top of humane power and wisdom, by labour & industrie: so were they straightwaies corrupted by riches, and ouermuch libertie; degenerating from the former integritie, prowess, learning, and eloquence.'¹⁹ Le Roy does believe in a cyclical degeneration, as each cycle rises and falls, but he is adamant that there is no overall degeneration in nature:

She [nature] is the same that she was in the former famous ages: The world is such as it was before: The heauen and the time keepe the same order which they did; [...] And were not the maner of luying corrupted, which we vse, preferring idlenesse before diligence, pleasure before profit, and riches before vertue; nothing would let, but this age might bring foorth as eminent personages in

Age: 'Time was when men like beasts wandered in the fields, and maintained their life by the food of beasts. neither did they administer their affaires by justice, but by bodily strength: There was no need given either to Religion or *Reason*, no man enjoyed lawfull marriage, nor with assurance beheld his owne issue, neither were they acquainted with the commodity which vpright Lawes bring with them. During this golden age flourished [...]' (Hakewill, 2P1^v-2P2^r).

¹⁸ Hakewill cites Bodin's *Methodus*, Chapter VII, in his marginalia when discussing the error of the Golden Age (Hakewill, 2P1^v). He also propounds a cyclical theory of the arts very similar to that of Le Roy (Hakewill, 2D4^v). These French works were available and known in England: a translation of Le Roy's work was published in England in 1594, and Bodin's *Methodus* became popular after his visit to London in 1579, being cited by Holinshed in his *Chronicles*, and used by Sidney, Harvey, Spenser and Hobbes, amongst others, see Leonard F. Dean, 'Bodin's *Methodus* in England before 1625', *Studies in Philology*, 39 (1942), 160-66 (pp. 160-62); Hans Baron, 'The Querelle of the Ancients and the Moderns as a Problem for Renaissance Scholarship', *Journal of the History of Ideas*, 20 (1959), 3-22 (p. 8).

¹⁹ Louis Le Roy, *Of the Interchangeable course, or variety of things in the whole world*, trans. by Robert Ashley (London: Charles Yetsweirt, 1594), O5^v. This is the contemporary translation of *De la vicissitude*.

Philosophie as were Plato, and Aristotle.²⁰

Le Roy denies that the knowledge of the ancients is the pinnacle of human knowledge: indeed, he seems to suggest that in modern times there are some areas which have reached perfection.²¹ Bodin followed a similar line of thought, though his *Methodus* was designed in part as a systematic study of history for his project for designing a universal law to supplant the *Corpus* of Roman law codified by Tribonianus under the Emperor Justinian, which was increasingly viewed as being impossible to apply usefully to contemporary French society.²² Bodin, while dismissing the four monarchies and decay theories of history, and despite his burgeoning comprehension of history as a series of unique actions placed within time, was searching for 'a scientific method which would enable the historian to conquer the mysterious unpredictability of man and make it possible to understand the present and even the future.'²³ Bodin felt that the function of histories was to enable us to acquire prudence by establishing universal precepts of action, not only suggesting how we might judge the reliability of different historical accounts, but also goes some way towards establishing a 'universal time,' by which he means a reliable and definable chronology, the better to judge reliability, relevance, and relationships between events.²⁴

Le Roy and Bodin have been identified with the beginnings of a philosophy of

²⁰ Le Roy, Z1^v.

²¹ He considers the law to be practically perfect (LeRoy, T5^v), for example, Book XI bears the following title: 'A COMPARISON OF THIS AGE, with the most famous former Ages; to know wherein it is superior, inferiour, or equall vnto them: and first touching the warfare of these dayes, with the auncient Greek, and Romain' (Le Roy, V5r).

²² Schiffman, 'Jean Bodin', p. 279. See also p. 276, where Schiffman discusses Hotman's *Antitribonian* (1603), in which he 'declares that the public law of each state is relative to its historical circumstances and, thus, that the public law of Rome cannot be applied to France'. Schiffman finds in Hotman a combination of historicization *and* universalism, as his main complaint is not concerning the Roman Law itself, but its codification by Tribonianus. Like Bodin, Hotman desired to create a new set of laws, distilled from the *Corpus* but discarding those parts which are unique to the time of its codification, leaving just universal precepts.

²³ Jean Bodin, *Method for the Easy Comprehension of History*, trans. by Beatrice Reynolds, (Columbia University Press: New York, 1945), pp. 17, 28; George Huppert, 'The Renaissance Background of Historicism', *History and Theory*, 5 (1966), 48-60 (p. 57).

²⁴ See Bodin, chapters IV, V and VIII.

progress as well as a historical relativism reminiscent to that of modern-day historians.²⁵ This historical relativism can be drawn from Bodin's understanding that the *Corpus* was not directly applicable to France's situation, and Le Roy's suggestion that 'bookes are different also according to the disposition of the times, and inclination of countries wherein they are made: [...] Euery age hath his peculiar kind of speech; Euery nation and age his phrase'.²⁶

Their philosophy of progress is inferred from their insistence that the achievements of the ancients are not beyond modern man, and that modern man may already have surpassed these achievements. Yet while Schiffman casts doubt upon their relativistic credentials, their progressive credentials are mixed at best.²⁷ Their historiography borders on the progressive, as the peak of each cycle surpasses the peak of the previous cycle, but in this sense any progressive tendencies are non-linear – they do not advance steadily and surely.²⁸

In contrast to the cyclical conception of history and its relationship, however negative, to the Golden Age and decay theories of history, stood the

²⁵ La Popelinière also noted that history was invariably written according to the age in which the writer lives, rather than the age in which it occurred. See Huppert, pp. 49-50.

²⁶ Le Roy, Z3^r.

²⁷ Schiffman takes issue with the ideas of both Julian Franklin in his *Jean Bodin and the Sixteenth-Century Revolution on the Methodology of Law and History* (New York, 1963), and Pocock, the former suggesting of Bodin that 'this idea of continuity and the divorce of history and nature, is often uncannily suggestive of the historicism of the nineteenth century', (Franklin, pp. 118-19) the latter wondering whether the activities of Bodin and other French jurists indicated a movement away from the simple collection of facts towards a more modern, narrative approach to history (see 'Renaissance Historicism Reconsidered', *History and Theory*, 24 (1985), 170-82).

²⁸ Achsah Guibbory also notes this tendency in Speed's *Historie of Great Brittain* (1611), (Guibbory, p. 22). Le Roy's work considers the natural world as a great influence, suggesting that the seasons and climates of different nations lead them to excel in different things. For more on Le Roy, and the assertion of the superiority of the moderns over the ancients as a criticism of the decay theories of nature, see Bodo L. O. Richter 'The Thought of Louis Le Roy According to His Early Pamphlets', *Studies in the Renaissance*, 8 (1961), 173-96; Baron, pp. 8-10. Perez Zagorin notes that 'only in the case of a few thinkers like the philosopher-jurist Jean Bodin were these notions of time [the cyclical and the decay theories] slightly modified by an embryonic recognition of the possibility of change as progress' (Zagorin, p. 203).

essentially linear Christian conception of history.²⁹ For Schiffman, the primary difference between Bodin's articulation of history and the Christian conception of a universal history is that the former is analytical while the latter is invariably chronological.³⁰ Bodin was striving for a concept of history itself, to uncover a 'universal law' in human affairs, rather than a notion of history as a body of literature, and Schiffman suggests that it is this which leads his work to be primarily secular in nature.³¹

Christian notions of history tended, after Augustine, to accentuate its eschatological and teleological nature: man was put on earth for a purpose, and this purpose has a clearly defined end-point, which could, with some hard work and maybe a little divine inspiration, be calculated.³² Le Roy's articulation of history does allow for the perfection of things, such as law, but his cyclical view suggests that once a knowledge has reached perfection it will inevitably decay, as its expression is swallowed by barbarianism, necessitating its eventual re-discovery.³³ Bodin, for his part, seems to conceive of an end-point to history in a Christian sense, but that until then the cyclical nature of history will simply continue. Both Le Roy and Bodin have been accused of conceiving of history as progressive, but there is no explicit goal in their theories, other than the religious end of salvation.³⁴ This religious goal does not, however, interact greatly with their conception of time, though Bodin

²⁹ Christianity itself did not in any way preclude adherence to the decay theory, as many Christian thinkers, such as Melanchthon and Donne, were happy for the two to coexist.

³⁰ Schiffman, 'Jean Bodin', p. 284. Leonard Dean, however, suggests that Bodin was attempting to 'find some uniformity in the welter of events by examining the inter-relations of the human will with divine and natural forces' (Dean, p. 225).

³¹ Bodin, p. xi. Bodin does, however, consider the divine relationship to time in Chapter VIII.

³² Such differentiations are not, however, entirely clear-cut. Hakewill, for one, not only adhered to the cyclical view of history, but also believed strongly not only that man was put on earth for a purpose, but that there would be an end to the world in biblical terms. Bodin, LeRoy and Hakewill were all concerned with establishing a beginning and end to both time and the world itself, with Bodin dedicating pages of his *Methodus* to demonstrating the problems of the Greek conception of the world as eternal, and time as having no beginning (Bodin, pp. 304-05, 317, 319-33).

³³ Le Roy notes that 'euerything that can not go forward, or vpwward, doth naturally descend' (Le Roy, G2^v).

³⁴ While Bodin wished to discover the universal law he felt was implicit in human history, this goal was an accomplishment rather than an end-point, serving for the utility of man rather

does at least suggest that even with a more accurate chronology and history, man cannot hope to know when the world is to end, as not even the angels have this knowledge.³⁵ The world, therefore, has two distinct levels of movement, the journey towards the earth's end as directed by God, and the cyclical progression of secular history. Neither Bodin nor Le Roy actively attempted to combine the two histories.

Pocock suggests that the cyclical view of history as inherited from the ancients was changed primarily by the 'saviour monotheisms' which suggested the eventual fulfilment of the covenant between God and man. This covenant, and especially the final act of salvation, 'denoted a change in the relations between men and that which was outside time altogether', which made the act of salvation 'extra-historical'.³⁶ This certainly goes some way to explaining how Bodin and Le Roy could effectively divorce their secular histories from any sort of soteriological history. Saint Augustine clearly expressed the nature of history in relation to the divine in *De civitate dei*, as the salvation of man was not to be seen as an historical event, but one which occurred outside of history. While Pocock asserts that Augustine divorced eschatology and history, stating that historical events could not be related directly to an unrepeatable salvation event, and that salvation was not an outcome of any historical process, this divorce was not total, as Kristo suggests:³⁷

According to Augustine, history is ambiguous, but one can still perceive a purpose in it. It is God's purpose, and the role of Jesus Christ occupies focal position. In fact, Augustine was able to incorporate the most distinctive themes of Christian theology -- creation, sin, predestination, grace, the church, and eternal life -- into this global scheme of purposeful history [...] History -- with Christianity at central stage -- has a definite goal determined by God. God revealed his historical designs in the past, and it is the task of theology to reflect

than his ultimate aim (Bodin, p. 25).

³⁵ Bodin, p. 333.

³⁶ Pocock, p. 31.

³⁷ *Ibid.*, p. 34.

on the meaning of God's revelation for each historical epoch.³⁸

Augustine certainly denies that salvation can be a result of any historical process, but he also suggests that God's purpose can be discerned in history, though only after the fact:

And this Iudgement shall consist on these circumstances, partly precedent, and partly adiacent: *Helixæa shall come*, the Iewes shall beleue, Antichrist shall persecute, Christ shall iudge, the dead shall arise, the good and bad shall seuer, the world shall burne, and be renewed. All this wee must beleue shall be, but in what order, our full experience then shall exceed our imperfect intelligence as yet. Yet verily I doe thinke they shall fall out in order as I haue rehearsed them.³⁹

Augustine argues against the retrospective reading of these events into purely secular history, as seems to be justified by the prophecies of Daniel and the revelation of St. John the Divine. While he suggests that these events will be plainly comprehensible in themselves, an increasingly popular school of thought was attempting to read God's providential design into secular history.

Pocock posits a complex relationship between the fortune of the individual and the fortune of society, suggesting that the faithful convert the Boethian *fortuna* into providence, linking their strokes of fortune, good and bad, to God's eternal plan:

Prophecy was the public action of providence; it united the fortune which was converted into providence by faith with the fortune that was the historical dimension of secular societies. In prophetic time one did not merely affirm the timelessness of the *nunc-stans*; one affirmed the immanence of the eschaton.⁴⁰

³⁸ J. G. Kristo, *Looking for God in Time and Memory: Psychology, Theology and Spirituality in Augustine's Confessions* (Lanham, New York, London: University Press of America, 1991), p. 134.

³⁹ Saint Augustine, *Of the citie of God* (London: G. Eld and M. Flesher, 1620), XX.xxx, p. 780, in *EEBO*.

⁴⁰ Pocock, p. 44. The *nunc-stans* is the Boethian concept whereby God exists in a permanent 'now', rather than having any past, present or future (Boethius, *The Consolation of Philosophy*, trans. by Victor Watts (Harmondsworth: Penguin, 1999), pp. 132-37). This concept allows Boethius, and others, to accept that God effects events which present themselves to man in terms of fortune, but that these apparently fortuitous events are not pre-determined.

While fortune is effectively man's 'imperfect experience of the perfection of history',⁴¹ a providential history was, by its very nature, a fixed temporal experience, as it encountered no cycles or revolutions, and could thus, theoretically, at least, be charted. Raleigh's *History of the World* (1614) is possibly the most well-known example, which 'represented history, from the creation to the last judgement, as a progressive manifestation of divine purpose'.⁴² As with other providential or prophetic histories, Raleigh's work was an expression of millenarianism, in which writers sought to investigate, and occasionally predict, the coming apocalypse.⁴³ This apocalypse was seen as a release from the cyclical revolutions of history, and though Raleigh did not specifically relate past events to contemporary ones, 'his readers were given ample scope for drawing parallels, with respect to sequences of events and personalities, between the ancient and the modern world'.⁴⁴

The two main prophetic books of the Bible from which millenarian predictions were drawn were the books of Daniel and of Revelation. One of the common readings of Daniel related the four kingdoms of Daniel 7 and 8 to the four great empires on earth, the Babylonian, Persian, Greek and Roman – a distinction related to the four metallic ages as expressed by Hesiod – which meant, naturally, that the fifth monarchy, the reign of the saints, was imminent. Others interpreted history in terms of the six days of creation, postulating six monarchies before the day of judgement, while Katharine Firth notes that the usual Christian delineation of ages were seven, based on the seven seals of the apocalypse from the book of Revelation, 'from Adam to Christ in six ages, and the final age from Christ to the end'.⁴⁵ The millennialist

⁴¹ Pocock, p. 39.

⁴² Webster, pp. 2-3.

⁴³ Actual date-specific predictions were uncommon until the 1640s, however, with the onset of the Fifth Monarchists and other radical millenarians, see Melvin J. Lasky, *Utopia and Revolution* (London: Macmillan, 1977), and Webster, pp. 1-15.

⁴⁴ Webster, p. 3.

⁴⁵ Katharine R. Firth, *The Apocalyptic Tradition in Reformation Britain, 1530-1645* (Oxford: Oxford University Press, 1979), p. 38; cf. Augustine, XXII.xxx, p. 859.

believed that the prophecies, as contained within the books of Daniel and Revelation, could be related to specific events within history, and especially recent history, which allowed them to suggest that the end of prophetic history was now: 'If the life of civil society, lived forward in time as a succession of unrepeatable experiences, was to find its meaning in the context of sacred history, it would have to be suggested that in the tract of civil history to be explained, prophecy itself was approaching its unique and unrepeatable end.'⁴⁶ Prophetic history thus sought to relate secular history to divine prophecy, the end result of which was the inevitable discovery that the final days of earth were at hand, not least because each and every prophecy in the Bible was bound to be related to secular events.

While it may seem as if providential histories would be temporally incompatible with cyclical conceptions of history, they were conflated, most notably in Hakewill's *An apologie of the povver and prouidence of God in the gouernment of the world* (1627) which utilised both evidence of the cyclical nature of history and an expression of God's providence as arguments against the decay theory of history, as already noted. It can be hard, however, to draw clear distinctions between differing expressions of historical opinion. Hakewill, for example, adheres to the cyclical theory of history, disagrees with the decay theory, and asserts the importance of God's providence within history. Bodin explicitly divorces his cyclical, semi-progressive history from spiritual histories, and yet attempts to read a future defined in eschatological terms through application of prophecy to known history. The tendency to apply prophecy to secular history generally served one of two purposes. The first was the manner in which many commentators would see certain events in recent history as pointing to the fact that not only were we living in a providential age, that is, one specifically appointed by God, but also that God is blessing one country while punishing another. Thus the destruction of the Spanish Armada in 1588 could be read as proof of God's divine favour resting

⁴⁶ Pocock, p. 44.

on England, while more unfortunate events, both national and personal, were increasingly read as demonstrating God's disfavour with individuals, villages, towns, countries or indeed the entire world. As Walsham has remarked on the power of providential belief:

When hostile Catholic powers were poised to invade her shores and the papist fifth column at home threatened to subvert her from within, belief in providence fused with anti-popery and xenophobia to create a potent brand of patriotism and to forge a powerful sense of confessional identity. When foreign navies failed and assassination plots were sabotaged, it fostered an inspiring myth of elect English nationhood.⁴⁷

The belief that God's actions could be directly read into historical events directly challenged the Augustinian line that secular and spiritual histories were separate, and, perhaps more pertinently, the Calvinist notion of an inscrutable, unknowable God.

b. Bacon's place within Renaissance historiography

The intellectual world in which Bacon found himself thus had three primary conceptions of time, with each relating to historiographical practice. The first, what might well be termed the cyclical static conception, was a combination of Greek cyclical modes and medieval seasonal time, in which the revolutions of time effectively repeat themselves. This conception manifests itself in the inability to conceive of the past and future as being substantially different from the present, and allows history to be utilised as a pedagogical aid, with events from the past taken as close analogies to events in the present. This concept was still extant in the thought of Jean Bodin, especially when considering the possibility of learning from history:

⁴⁷ Alexandra Walsham, *Providence in Early Modern England* (Oxford: Oxford University Press, 1999), p. 333. For how pamphlets containing providential readings of events were used to remind the reader of their fate should they fail to amend their ways, see Walsham, pp. 69-70.

Since for acquiring prudence nothing is more important or essential than history, because episodes in human life sometime recur as in a circle, repeating themselves, we judge that attention must be given to this subject, especially by those who do not lead a secluded life, but are in touch with assemblies and societies of human beings.⁴⁸

The second temporal conception was the cyclical progressive mode, as championed by Bodin, Le Roy and Hakewill, in which the revolutions of time did not merely repeat, but materially adjusted the conditions of learning in each revolution. Each period of progression was followed by a period of barbarism, it is true, but each revolution, due mainly to its occurrence in different parts of the globe and through different peoples, advanced learning in different areas. The net result was a continual, if gradual, increase in learning. Le Roy's *De la vicissitude* suggests on its title-page exactly how this progression is likely to be achieved, questioning the idea 'that there can be nothing sayd, which hath not bin said heretofore: And that we ought by our owne Inuentions to augment the doctrine of the Auncients; not contenting our selues with Translations, Expositions, Corrections, and Abridgements of their writings'.⁴⁹

The third temporal conception is somewhat more confusing. The linear stasis mode of history is best represented by Christian conceptions of time and providence, in which time is advancing to a pre-arranged rendezvous with the apocalypse. This conception of time is linear because it unfolds in one direction, having a set beginning and a set end. It is a stasis simply because, while it may appear to be progressive, it is simply an unfolding of time, the only manner in which it seems to be progressive is its appearance to the human beings which conceive of it – their experience of time is, effectively an imperfect comprehension of the perfection of divine history.⁵⁰ It is within this temporal conception that we find the decay theory of history, as expounded in Goodman's *The Fall of Man*, the letter 'To The Reader' of which allies the

⁴⁸ Bodin, p. 17.

⁴⁹ Le Roy, engraved title (A1^r).

decay theory with God's fore-ordination of the world's history – as did its rebuttal, Hakewill's *An apologie*.⁵¹

The fourth temporal conception, that of linear progressive time, is one which seems most conspicuous in its absence in Renaissance historical thought. This mode of thought posits time as a continuous, uninterrupted flow for which there is no pre-determined time of ending, nor any pre-determined and scheduled sequence of events. This fourth mode is, effectively, the modern conception of history as a continuous flow of events, and necessitates some measure of historicization as well as a comprehension of how past, present and future interact.

Bacon's position within these four conceptions of time is difficult to fix with any certainty, as there are, as with all other Renaissance historiographers, elements of each conception active within his thought at any one time. It is in his *New Atlantis*, however, that he comes closest to a truly modern conception of history, as this work evidences a relationship with past, present and future, posits a fully progressive attitude towards time, while attempting to accommodate the Christian conception of time, though without the overtly millenarian focus so prevalent amongst Bacon's contemporaries. Throughout his works, however, there is a movement towards this fourth mode of history, as evidenced in his use of language, his comprehension that the Instauration is, effectively, a quest which will be continually rewarded,⁵² his apparently burgeoning understanding of the relative nature of time and the importance of

⁵⁰ See Pocock, pp. 31-48.

⁵¹ Goodman considered that the world was tending towards decay, writing that 'if the whole kinde and species of man seemes daily to decline and decay, which shall appeare by the comparison of times past with time present; of our selues, with our ancestors; then assuredly the whole world cannot be excused from corruption; but as it dies daily in the singulars, so at length it shall faile in the vniuersals, and in the kindes of the creatures' (Godfrey Goodman, *The Fall of Man, or the Corruption of Nature* (London: Felix Kyngston, 1616), Z7^r).

⁵² He does, however, conceive of the journey in finite terms: 'The *first* is to get rid of that idea which, though it be utterly false and harmful, easily invades and takes hold of men's minds, namely that the inquiry into particulars is something infinite and without end, when it would be truer to say that the way of opinions and disputations is the trifling one' (*OFB*, VI, p. 7).

the position of the observer. Bacon is moving towards temporal historicization, an understanding that what is now present will become past, what is past was once present, and what is future will soon be present. In this sense, *New Atlantis* is simply the, or *a*, future: now, but over there. A future, more to the point, shorn of the temporal anxieties of the Old World.

c. *New Atlantis* and Bacon's movement towards a progressive historiography

The textual richness of *New Atlantis* has attracted much critical comment over the years, especially regarding its ambivalent relationship with both contemporary works and Bacon's other, more straightforwardly 'philosophical' works. The text is especially rewarding when read in the light of Renaissance and especially Baconian historical concerns, though this aspect remains under-explored.⁵³ Critics have remarked on its genre, not least in terms of narrative, with Paul Salzman, for example, outlining a case for its inclusion within what he terms the 'hybrid' genre created when scientific treatise intersects with utopia.⁵⁴ While he is right to draw attention to the narrative context of *New Atlantis*, noting the similarity between its opening with those 'actual' travel narratives such as Raleigh's *Discoverie* and those included within collections such as Hakluyt's *principal nauigations*, he fails to note that *New Atlantis* seems not only to resemble the genre of the travel narrative which was both popular and established by this point in the seventeenth century, but that it also includes features of some of Bacon's own historiological categories. This textual adherence to genres which existed primarily in theoretical terms within Bacon's *De augmentis* is but one of a number of ways in which *New Atlantis* accords with, or at the very least begins an internal textual dialogue with, Bacon's own theories, concerns and preoccupations.

⁵³ A notable exception can be found in Leslie, pp. 81-118, while Charles Whitney touches on the subject, Whitney, *Francis Bacon and Modernity*, pp. 196-204.

⁵⁴ Paul Salzman, 'Narrative contexts for Bacon's *New Atlantis*', in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 28-47.

The inhabitants of Bensalem are granted a rich and extensive history which exists, and is expressed, in parallel to that of Western Europe, and is notably one which allows the Bensalemites to escape from the historical errors and apparent inevitabilities to which the sailors' Western cultures have fallen prey.⁵⁵ The length of Bensalemite history allows for a direct timeline to be drawn from the deep past into the present, collapsing the Renaissance synchronous time and past-become-history as identified by Schiffman.⁵⁶

Alongside the parallel historical space occupied by the Bensalemites is a second historical space, namely a Christian synchronous space, which allows Bacon to imply that, like the pagans before them, the Bensalemites have not had their right to salvation removed by the merely chronological accident of Christ's birth.⁵⁷ Indeed, the inhabitants of Bensalem are represented as being more Christian than the Christians of Western Europe, having attained what appears to be the perfect church, one according with the reformation concept of *sola scriptura*, a church based not on the writings of the Church Fathers and the precepts and traditions of the Catholic Church, but one based upon the scriptures alone. The very manner in which the sailors discover the richness and depth of Bensalemite history is itself a commentary on the power of memory and the need for accurate and non-partisan record-keeping, while simultaneously confirming and denying European concerns with the mythical Golden Age. The context of Bensalemite history is explained to the sailors by the governor of Salomon's House, and in such a manner as to demonstrate the manner in which Bensalem, as a nation, has seemingly exempted itself from the vicissitudes of time identified by Bodin, Le Roy, and Bacon himself.

⁵⁵ See below, pp. 107-19.

⁵⁶ See Schiffman, 'Jean Bodin', pp. 271-87, and 'Renaissance Historicism Reconsidered', pp. 170-82. Schiffman's thesis considers the Renaissance as conceiving of time in terms of a 'past-become-history' in which the past lives 'in a kind of synchronous present.'

⁵⁷ In *Confession of Faith*, Bacon expresses the relatively standard formulation regarding pre-Christian salvation: 'That there is an universal or catholic Church of God, dispersed over the face of the earth; [...] being gathered of the fathers of the old world, [...] and of the names yet to be born, which are already written in the book of life' (*SEH*, VII, p. 225).

In the primary historical discourse of *New Atlantis*, beginning at c1^v and ending at c4^v, the governor of Salomon's House provides the sailors with a historical narrative of the island itself, one which highlights its relationship with the rest of the world, namely, the Old and New Worlds. When the narrator writes that the sailors have found themselves '*beyond, both the Old World, and the New*',⁵⁸ he accurately identifies Bensalem as existing outside the histories of Old and New Worlds: Bensalem is a place simultaneously older than the Old World yet, in terms of knowledge of it in the West, newer than the New. The discourse begins with an expression of Bensalemite longevity which allows the governor to express Bensalem's power in terms which the sailors understand, as well as describing its escape from the course of European history which so stifled its intellectual growth. The governor is not only expressing the power of Bensalem, but simultaneously explaining to the sailors that any Le Roy-esque beliefs they might have held regarding the current intellectual achievements of the Old World are sorely misplaced. He also demonstrates to the sailors that Bensalem's power and learning is rooted in its longevity as a stable society, a longevity which is at the very least an expression of its escape from vicissitudes of time as presented by the cyclical mode of history which had so hindered Europe's attempts to advance.⁵⁹

Bacon's interest in the cyclical mode of history is, as ever, the cause of no little disagreement among scholars. Perez Zagorin, for one, identifies Bacon as developing a notion of progressive time, suggesting that his conceptions of time and progress are generally ignored by scholars when discussing his historical theories.⁶⁰ Gaukroger suggests his characterisation of Democritus in *Temporis partus masculus* as evidence that Bacon was moving, like Bodin and

⁵⁸ NA, b2^r (SEH, III, p. 134).

⁵⁹ For Bacon's beliefs that the current intellectual achievements of the Old World are misplaced, see OFB, XI, pp. 113-19, and for the Governor's expression both of the longevity of Bensalem and their knowledge of the course of the rest of the world, see NA, c1^v (SEH, III, pp. 140-41).

⁶⁰ Zagorin, p. 203.

Le Roy, towards a more modern conception of history.⁶¹ Achsah Guibbory sees Bacon's vision as both cyclical and progressive, and his works as an attempt to break the cyclical nature of history,⁶² as does Charles Whitney and contemporaries such as Abraham Cowley, whose *Ode to the Royal Society* considers Bacon in this progressive light.⁶³ Tuveson, on the other hand, suggests that Bacon's call for a new science was underlaid by 'the idea of cyclical development,' while Nisbet is more damning of the idea that Bacon considered history as a progressive entity.⁶⁴

Much of this disagreement stems from the difference between what Bacon identified within history and what he approved of or wished for in terms of his *Instauratio*. At times he indulges in thought remarkably similar to that of Le Roy, such as in his essay 'Of Vicissitude of Things', which re-iterates ideas to be found in *De la vicissitude*, commenting as it does on the differing revolutions of time while noting how the constant changes of religious sects are damaging to knowledge, as they 'extinguish the Memory of Things'.⁶⁵ Similarly, Bacon here presents the rise and fall of empires as inevitable: 'When a *Warre-like State* grows *Soft and Effeminate*, they may be sure of a

⁶¹ Stephen Gaukroger, *Francis Bacon and the Transformation of Early-Modern Philosophy* (Cambridge, New York: Cambridge University Press, 2001), p. 110. Leonard Dean also sees a movement towards historicization in Bacon's works, noting that 'Bacon seems also to have been distrustful of histories which cover a vast sweep of time because he saw with unusual clearness for his day the difficulty and necessity of attaining perspective in the writing of history' (Dean, p. 215).

⁶² Achsah Guibbory, 'Francis Bacon's View of History: The Cycles of Error and the Progress of Truth', *Journal of English and Germanic Philology*, 74 (1975), 336-50. See also Guibbory, p. 44. Guibbory posits the conception that Bacon's belief in a restoration of pre-lapsarian power indicates a Christian cyclical conception of history in that man is to be returned to the state of Eden, but she ignores some of Bacon's comments which show that while the sovereignty regained might be taken as a return to the beginning, there is no sense of the cycle ever repeating, nor is the end point Bacon proposes a 'Golden Age' so much as an improvement on that time (*SEH*, III, p. 222). She also incorrectly suggests that Harry Levin sees Bacon as progressive, when he calls *AL* 'Bacon's monument to the idea of scientific progress' ignoring his suggestion that 'in briefly surveying the background of the advance, [he] again recognizes three ages' (Levin, p. 154).

⁶³ See Whitney, *Francis Bacon and Modernity*, pp. 46-47, 177; Achsah Guibbory, 'Imitation and Originality'.

⁶⁴ Earnest Lee Tuveson, *Millennium and Utopia* (Berkeley: University of California Press, 1949), p. 66; Nisbet, pp. 112-14.

⁶⁵ *OFB*, XV, p. 173.

Warre. For commonly such States are growne rich, in the time of their Degenerating; And so the Prey inviteth, and their Decay in Valour encourageth a Warre.’⁶⁶ Bacon finishes his essay with a simple and commonplace expression of the apparently cyclical nature of man’s history, relating them to the ages of man:

In the *Youth* of a *State*, *Armes* doe flourish: In the *Middle Age* of a *State*, *Learning*; And then both of them together for a time: In the *Declining Age* of a *State*, *Mechanicall Arts* and *Merchandize*. *Learning* hath his *Infancy*, when it is but beginning, and almost *Childish*: Then his *Youth*, when it is *Luxuriant* and *Juvenile*: Then his *Strength* of yeares, when it is *Solide* and *Reduced*: And lastly, his *old Age*, when it waxeth *Dry* and *Exhaust*. But it is not good, to looke too long, upon these turning *Wheeles* of *Vicissitude*, lest we become *Giddy*. As for the *Philology* of them, that is but a *Circle of Tales*, and therefore not fit for this *Writing*.⁶⁷

Once more, this could have come directly from the pages of Le Roy, but for the final exhortation, which accords with Bacon’s earlier suggestion that in order to prevent the continuous revolutions of religious sects, we must ‘reforme Abuses’.⁶⁸ Bacon’s essay, however, while identifying the vicissitudes of things with what is effectively a cyclical progressive theory of time and history, suggests that this series of revolutions is ultimately harmful to the state of learning, unlike Le Roy, who feels that the revolutions gradually advance the state of learning.

There seems little doubt that Bacon, while accepting that mankind’s history did seem to assert itself in a cyclical series of advances and retreats, in learning as well as other areas, was critical of the acceptance that such cycles

⁶⁶ *Ibid.*, p. 175. Cf. Le Roy, O5^v for this exact sequence of events occurring in the Roman Empire, though he doesn’t state that it led directly to war, and Y6^v for his fears that Europe, like Rome, will be overcome in turn by the barbarian flood, something which Bacon sees as a danger for Spain (*OFB*, XV, p. 175), and in *Of the True Greatness of the Kingdom of Britain*, where he suggests that the same fate will doubtless befall the Turk: ‘as great stature in a natural body is some advantage in youth, but is but burden in age; so it is with great territory, which when a state beginneth to decline, doth make it stoop and buckle so much the faster’ (*SEH*, VII, p. 53).

⁶⁷ *OFB*, XV, p. 176.

⁶⁸ *Ibid.*, p. 174.

were inevitable. Considering that his main concern was the field of learning, it is unsurprising that he concentrated his efforts on what he identified as the three ages of learning which had graced mankind's history thus far:

For the HISTORY of TIMES, (I mean of ciuil History,) the prouidence of God hath made the distribution: for it hath pleased God to ordaine and illustrate two exemplar States of the worlde, for Armes, learning, Morall Vertue, Policie, and Lawes. The STATE of GRECIA, and the STATE of *ROME*: The Histories whereof occupying the MIDDLE PART of time, haue more auncient to them, Histories which may by one common name, be tearmed the ANTIQVITIES of the WORLD; and after them, Histories which may bee likewise called by the name of MODERNE HISTORIE.⁶⁹

For so the Prophet *Daniel* speaking of the latter times foretelleth: *Plurimi pertransibunt, & Multiplex erit Scientia*, as if the opennesse and through-passage of the world, and the encrease of knowledge were appointed to be in the same ages, as we see it is already performed in great part, the learning of these later times not much giuing place to the former two Periods or Returnes of learning, the one of the Græcians, the other of the Romanes.⁷⁰

These two passages from the *Advancement of Learning* demonstrate Bacon's acceptance of the utility of the classical age in terms of learning, not least in terms of use as exemplar, and also the possibility of the modern age exceeding them. Bacon is somewhat more sceptical regarding the possible advances in learning when he points out that these three ages of learning have actually been relatively short:

For of the twenty-five centuries that men's memory and learning run to, scarcely six which were productive of sciences and helpful to their advancement can be set aside and picked out. Now times no less than places have their desert wastes. For we can properly count only three revolutions or periods of learning: the first with the Greeks; the second with the Romans; and the third with us.⁷¹

While these two passages contain another facet of Bacon's thought, the idea that providence had settled on a third age of learning, the present argument is

⁶⁹ *OFB*, IV, pp. 66-67.

⁷⁰ *Ibid.*, p. 71.

⁷¹ *OFB*, XI, p. 123.

more concerned with his fixing of man's learning and memories to the previous two thousand five hundred years, of which barely a quarter have been productive. Certainly, contemporary texts such as Broughton's *A Concoct of Scripture* place Bacon's opinion of the beginning of man's learning and memory, at 900 BC, at around the beginning of the reign of Solomon.⁷² While the beginning of man's learning is of significance, not least in terms of *New Atlantis*, it is important to note that Bacon's negative assessment of the possibility of the modern age surpassing the previous ages has softened somewhat by the publication of *De augmentis*:

The learning of these our times, not much giving place to the two former periods or returns of learning (the one of the Grecians, the other of the Romans), but in some respects far exceeding them.⁷³

He does go somewhat further in his suggestion that this third age may surpass the previous ages later in *De augmentis*, however, attaching a codicil regarding how this may be achieved:

I cannot, I say, when I reflect on these things but be raised to this hope, that this third period will far surpass the Greek and Roman in learning; if only men will wisely and honestly know their own strength and their own weakness; and take from one another the light of invention and not the fire of contradiction; and esteem the inquisition of truth as a noble enterprise, and not a pleasure or an ornament.⁷⁴

Bacon now seems to be moving towards the idea that each cycle can improve upon the last, rather than that either evidences a decay of learning or mere

⁷² Hugh Broughton, *A Concoct of Scripture* (London: Richard Watkins, 1590), D2^r. This work was still being reprinted in 1623. See also Howard B. White, *Peace Amongst the Willows, The Political Philosophy of Francis Bacon* (The Hague: Martinus Nijhoff, 1968), p. 121.

⁷³ *SEH*, IV, p. 312 (*SEH*, I, p. 514). Bacon's use of the word *revolutionibus* here suggests, along with its translation 'returne', that each period of learning has, thus far at least, been to some extent a re-visiting of the ideas of the previous period, rather than a moving forward of learning in a constructive and progressive manner. Bacon illustrates this superiority by noting 'those three things which were unknown to the ancients [...] the *Art of Printing*, *Gunpowder*, and the *Mariner's Compass*' (*OFB*, XI, p. 195. Cf. Farrington, pp. 95, 97; *SEH*, III, pp. 614, 615).

⁷⁴ *SEH*, V, p. 110 (*SEH*, I, p. 828).

stasis.⁷⁵ While *De augmentis*, as a revision and translation of the *Advancement of Learning*, might be seen to be a confirmation of an earlier, more tentative work in these terms, it might also serve to illustrate Bacon's belief in the advancement of his *Instauratio*. Most importantly, however, while it clearly demonstrates Bacon's identification of the cyclical mode as a fact in history, as it does not suggest that he believes, as do Bodin and Le Roy, in its inevitability in the future.⁷⁶ Indeed, it would rather seem to suggest that Bacon feels that the cyclical mode of history impedes learning rather than impels it, as Le Roy would have us believe.⁷⁷ If we consider that both Le Roy and Bacon accept that history tends to move in cycles (whether Bacon likes it or not) their differing opinions are best summed up by their attitude to time in general. Le Roy is adamant that 'for as time abolisheth the opinions that are not wel grounded; so it also confirmeth the infallible iudgements of a wise & vnderstanding nature',⁷⁸ whereas Bacon apparently thinks the very opposite, stating that 'time seemeth to be of the nature of a Riuer, or streame, which carryeth downe to vs that which is light and blowne vp; and sinketh and drowneth that which is weightie and solide'.⁷⁹

For Bacon, acceptance of the cyclical mode of time impedes learning through a combination of the fact that the river of time sinks weighty precepts while lighter concepts are borne upon the waves like flotsam. This fact, combined with the propensity of people to believe in things which are old simply because they are old, means that those lessons taken from the past are inevitably those lessons which are least worth learning: 'Again, men have been held back from further progress in the sciences by the siren song of

⁷⁵ Guibbory, pp. 49-51. On the present age, Le Roy writes the following: 'at this day our age may compare with the most learned that euer were. For now we see the tongues restored; and not onely the deeds, and writings of the auncient brought to light; but also many other goodly things newly inuented' (Le Roy, T5^v).

⁷⁶ Guibbory, p. 49.

⁷⁷ For Le Roy, the destruction of books a good thing, as it necessitated the writing of new books (Baron, p. 9).

⁷⁸ Le Roy, Z3^v.

⁷⁹ *OFB*, IV, p. 29. Cf. *SEH*, III, p. 227; Farrington, p. 80; *SEH*, III, p. 599.

reverence for antiquity'.⁸⁰ Time's natural position, as the 'author of authors', is usurped by tradition and received authority, and the state of human knowledge therefore becomes stuck in a particular place in the past. While Bacon is not suggesting that all knowledge handed down is useless, he does expect credit to be given where it is due: 'so let great Authors haue their due, as time which is the Author of Authors be not deprived of his due, which is funder and funder to discover truth.'⁸¹ Time, for Bacon, must be allowed linear expression if it is to further 'discover truth'. Reliance on received authority simply obscures truth, as 'the existing logic serves to entrench and firm up errors (themselves founded on common notions) rather than to investigate the truth, so that it does more harm than good'.⁸²

Bacon's unfavourable reaction to cyclical theories is not only brought out in his comments on Greece, Rome and the modern age, however, as he is unfavourable to circular motion in general, contrasting it with progressive motion in many contexts other than merely the advancement of learning. Achsah Guibbory has noted that Bacon's image for the mind's errors is the circle, suggesting not only that the circle is the image of the vain intellectual pursuits of past philosophers (and especially Aristotle and his followers), but that 'ever since the Fall, intellectual history has followed a degenerative, cyclical course'.⁸³ It is certainly true that Bacon was concerned with the repetitious nature of knowledge brought about not only by the cyclical manner in which works were endlessly disputed over, but the manner of this disputation itself, an observation which led to one of his favourite maxims, namely that imagined plenty is one of the real causes of poverty.⁸⁴ On the subject of books, for example, he noted that rather than be amazed at the variety of books available, we ought rather to note 'that there is no end to their repetitions, and that men are forever working over and talking about the

⁸⁰ *OFB*, XI, p. 133.

⁸¹ *OFB*, IV, p. 28

⁸² *OFB*, XI, p. 69. Bacon here speaks of Aristotelian logic.

⁸³ Guibbory, p. 48.

same things'.⁸⁵ Indeed, it was the manner in which men re-worked old knowledge or opinion rather than moving onto new knowledge which he identified as a major failing, and one identified with circular motion:

It is useless to expect great growth in the sciences from the superinduction and grafting of new things on old; instead the instauration must be built up from the deepest foundations, unless we want to go round in circles forever, with progress little or pitiable.⁸⁶

The governor's expression and explanation of Bensalem's history demonstrates that it has escaped from the apparent inevitability of the vicissitudes of things, and that ultimately, this escape was the catalyst behind its continual progression in the fields of learning of which the sailors will learn later in the text. Bensalem moved outside of the temporal constrictions of cyclical history into a continuous, progressive temporal field which exists in parallel to, or aside from, the Old World.

d. Bensalem's escape from the vicissitudes of time

The governor accentuates the continuous nature of Bensalemite history in simple terms, explaining to the sailors how the state of navigation has decayed in the past three thousand years, and, more importantly, that Bensalem did not only play a large part in this early and superior stage of navigation, but that Bensalem *'(as appeareth by faithfull Registers of those times) had then fifteene hundred strong Ships, of great content. Of all this, there is with you sparing Memory, or none; But we haue large Knowledge thereof.'*⁸⁷

The fact that the governor can speak, and speak authoritatively, on the world as it appeared three thousand years previously, and that he accentuates the fact that the Western world has little memory of this, while the Bensalemites have

⁸⁴ Farrington, pp. 75, 110 (*SEH*, III, pp. 593, 565); *OFB*, XI, pp. 11, 135; cf. *OFB*, VI, p. 105.

⁸⁵ *OFB*, XI, p. 137.

⁸⁶ *OFB*, XI, p. 77.

'large Knowledge thereof', is indicative of the expression of a power relationship based on accurate knowledge. The governor's assertion that his explanation is based on *'faithfull Registers'* merely accentuates the manner in which the Old World has relied on memory, which is liable to error, while the *'other'* world relies on accurate record-keeping and preservation. The fact that he explains the state of navigation *'about three thousand Yeares agoe'*, without suggesting that Bensalemite records end there, also expresses Bensalem's existence on a temporal scale radically different to that of the Old World – he is explaining the state of the world and navigation some five hundred years before Solomon, Bacon's own estimation of the beginning of man's learning and memory.⁸⁸ The governor, therefore, has managed in one short sentence to extend Bensalemite textual memory back into a time to which man's learning or memory is not supposed to stretch. Bensalem existed in an age *before* the flowering of philosophy which took place with the Greeks, and the Bensalem which existed then is the same Bensalem as exists now. It is not simply a past civilisation which has perished: it endures. Bacon once wrote that the Greeks *'had not a thousand years of history worth the name, but tales and rumours of antiquity'*,⁸⁹ and here the governor is asserting that on Bensalem there is not only history worth the name, but at least three thousand years' worth of it. In this sense, Bensalem, at the point in which the sailors land, appears to be a manifestation of what Bacon would describe as moving towards true antiquity: *'The opinion men cherish about Antiquity is ill-considered and ill-suited to the word. The term should mean the ripe age, the fullness of years, of the whole world.'*⁹⁰ The true ancients are not the

⁸⁷ NA, c1^v (SEH, III, p. 141).

⁸⁸ See OFB, XI, p. 123.

⁸⁹ *Ibid.*, p. 115.

⁹⁰ Farrington, p. 94 (SEH, III, p. 613). Cf. OFB, XI, p. 133; see also Farrington, p. 109; SEH, III, p. 563: *'We must not shut our ears to the words of the Egyptian priest, spoken to a distinguished Greek statesman and recorded by a famous Greek author. For he spoke like a true oracle when he said: "You Greeks are always children."'* The quote derives from Plato's *Timaeus*. See *Timaeus*, p. 35 (cf. OFB, XI, p. 115). Bacon extended this metaphor to include Greek science, writing that *'I must openly declare that this wisdom, derived mainly from the Greeks, is what might be called the boyhood of science and, as with boys, it is all prattle and no procreation'* (OFB, XI, p. 11). Bacon's suggestion that the ancients were the youth of the world, and the moderns the ancients (OFB, IV, p. 29) was not only present in the thought of

Greeks, but the Bensalemites, as they are the only expression of a continuous society, and a continuously progressive society, it appears, which can lay claim to the antiquity in which Bacon believes.

It is also not merely enough for the governor to state that Bensalem has been around for a long time and written down lots of facts, but it is important that he demonstrates the reason for their success in choosing the temporal field in which they live. His description of how they escaped from the vicissitudes of time is intimately tied in with the dissolution of the great sea-faring age with which he first impresses the sailors. The governor explains the fate of two great sea-faring nations, the Coyans and the Tyrambelese, whose empires he situates in modern terms as being Peru and Mexico, respectively:⁹¹

Yet so much is true, that the said Country of Atlantis; As well that of Peru then called Coya, as that of Mexico then named Tyrambel, were mighty & proud Kingdomes, in Armes, Shipping, and Riches: So Mighty, as at one time, (or at least within the space of 10.Yeaeres,) they both made two great Expeditions; They of Tirambel through the Atlantique to the Mediterrane Sea; and they of Coya through the South Sea vpon this our Island.⁹²

The governor then notes that *'the Diuine Reuenge ouertooke not long after those proud Enterprises. For within lesse then the space of one Hundred Yeaeres, the Great Atlantis was vtterly lost and destroyed.'*⁹³ The governor also intersperses his account with references to 'a great man amongst you', one of several references to Plato, whose discussion of the state of Atlantis and its

Giordano Bruno, (see Baron, p. 11, citing G. Gentile, *Studi sul Rinascimento*, Florence 1923, 123ff.) but also in the Bible, where Kiernan suggests 2 Esdras 14. 10 (*OFB*, IV, p. 230n), while Whitney suggests Bacon is wilfully misreading Jeremiah 6. 16 (Whitney, *Francis Bacon and Modernity*, pp. 93-94).

⁹¹ It is no accident that the sailors themselves have recently sailed from Peru, just to accentuate further the change between three thousand years previously and now. It also accords with Bacon's suggestion in *NO* that 'after coasting past the old arts, I will next make the human intellect ready to take to the high seas' (*OFB*, XI, p. 29). It is exactly this which the sailors have done, though, of course, they were blown off course into unknown seas, arriving by 'chance' at Bensalem.

⁹² *NA*, c2^r (*SEH*, III, p. 142).

⁹³ *NA*, c2^{r-v} (*SEH*, III, p. 142).

eventual fate are to be found in his *Timæus* and *Critias*.⁹⁴ The expeditions of the proud and mighty empires not only fail in their initial objectives, as the Coyans are repulsed by the superior (and remarkably charitable) intelligence of the Bensalemite King Altabin, while the fate of the Tyrambelese, other than the fact that they never returned, is simply not known. These examples serve to show not only the superior knowledge of Bensalem, for their victory over the Coyans was plainly one of intelligence, but also that where the Bensalemites do not know the outcome of any action, they simply do not report it other than to mark it down as unknown.⁹⁵ The governor's mention of Plato's works are implicit criticisms, as when Plato doesn't know, suggests the governor, he simply makes it up: '*For though the Narration and Description, which is made by a great Man with you [...] be all Poetical & Fabulous: Yet so much is true*'.⁹⁶ Plato's works do contain some fact intermixed with his fiction, yet it seems that only the records of Bensalem are capable of separating the fact from the fiction.⁹⁷

The governor explains that these nations were struck down within one hundred years, by the 'Diuine Reuenge', once more disagreeing with Plato specifically, as he suggests that they were destroyed '*Not by a great Earthquake, as your Man saith; (For that whole Tract is little subiect to Earthquakes;) But by a particular Deluge or Inundation*'.⁹⁸ It is notable that the governor's explanation of how the great Atlantis was destroyed, and how only those on high hillsides survived, and without the learning which their civilisation had presumably amassed up until that point, bears a strong

⁹⁴ *Timæus*, pp. 37-38.

⁹⁵ This conjunction of knowing thyself and knowing thine enemy is a perfect example of the utility of Bacon's theory of the architecture of fortune on a national scale. See *SEH*, V, p. 59 (*SEH*, I, p. 772).

⁹⁶ *NA*, c2^r (*SEH*, III, pp. 141-42).

⁹⁷ Bacon considers conjecture in *DAS*, in less than glowing terms: 'some indulge their imaginations in bold inventions; while others impress on their works the image not so much of their minds as of their passions' (*SEH*, IV, p. 302 (*SEH*, I, pp. 505-06)); 'whereas the story of a time (especially if it be of a period much before the age of the writer) is sure to meet with many gaps in the records, and to contain empty spaces which must be filled up and supplied at pleasure by wit and conjecture' (*SEH*, IV, p. 305 (*SEH*, I, p. 507)).

⁹⁸ *NA*, c2^v (*SEH*, III, p. 142).

resemblance not only to Bacon's essay 'Of Vicissitude of Things', but also to Le Roy's *De la vicissitude*, both works concluding America's population is effectively younger than the rest of the world's because of this flood. Bacon states the following:

But in the other two Destructions, by *Deluge*, and *Earth-quake*, it is further to be noted, that the Remnant of People, which hap to be reserved, are commonly Ignorant and Mountainous People, that can give no Account, of the Time past: So that the Oblivion is all one, as if none had beene left.⁹⁹

While Le Roy suggests this:

But contrarywise when it pleaseth God to cleanse the earth by inundations, then the dwellers on plaines, and valleys, to be forceably caried into the sea by the impetuositie of riuers, while the inhabitauntes of the hils remaine in safety. That those which remaine after such tempests are ignorant of that which is past, and vnfurnished of learning, which by little and little they recouer afterward.¹⁰⁰

The governor's explanation is not designed simply to demonstrate the wisdom of Bensalemite policy and the accuracy and temporal depth of their history, but to show a specific moment when their history diverges from that of the rest of the world. Having already suggested that Atlantis was a victim of the 'divine revenge', suggesting that its proud and warlike attitude played some part in its downfall, the governor continues his explanation of the separation of Bensalem from the rest of the world:

So you see, by this maine Accident of Time, wee lost our Traffique with the Americans, with whom, of all others, in regard they lay nearest to vs, wee had most Commerce. As for the other Parts of the World, it is most manifest, that in the Ages following, (whether it were in respect of Warres, or by a naturall Reuolution of Time,) Nauigation did euery wher greatly decay; And specially, farre Voyages, (the rather by the vse of Gallies, and such Vessells as could

⁹⁹ OFB, XV, p. 172. Kiernan connects this passage to Joseph Acosta's *The Natural and Morall Historie of the East and West Indies* (trans. 1604) in OFB, XV, p. 312n, but it seems as if there may be a closer connection to Le Roy's work here, not least in the manner in which both in his essay and in NA, such a deluge is directly connected with the ignorance of the people who remain.

¹⁰⁰ Le Roy, B2^v.

hardly brooke the Ocean,) were altogether left and omitted.¹⁰¹

The cause of their isolation was the ‘*maine Accident of Time*’, wars and ‘*a naturall reuolution of time*’. It is significant that the governor has used the example of navigation to demonstrate the gradual retreat of civilisation and learning into barbarity, not least because it is one of Bacon’s favourite images regarding the advancement of learning,¹⁰² but it also allows the governor to assert the continuing power and learning of Bensalem in a similar manner:

*So then, that part of Entercourse, which could bee from other Nations, to Sayle to vs, you see how it hath long since ceased; Except it were by some rare Accident, as this of yours. But now of the Cessation of that other Part of Entercourse, which mought be by our Sayling to other Nations, I must yeeld you some other Cause. For I cannot say, (if I shall say truely,) but our Shipping, for Number, Strength, Marriners, Pylots, and all things that appertaine to Nauigation, is as great as euer.*¹⁰³

Thus, the governor asserts that Bensalem preserved its learning through its avoidance of the ‘*maine Accident*’ or even the ‘*natural revolution*’ of time, as well as in its avoidance of war. It is at this point that the governor goes on to explain where the impetus and ability to remove itself from what seems to be the otherwise inevitable cycles of learning, war, and lapse back into youth and barbarity: how Bensalem has managed to consolidate its position outside such apparently inevitable temporal fluctuations. He begins this discourse thus:

There rained in this Island, about 1900. yeares agoe, a King, whose memory of all others we most adore; Not Superstitiously, but as a Diuine Instrument, though a Mortall Man: His Name was Solamona: And we esteeme him as the Law-giuer of our Nation. This King had a large heart, inscrutable for good; And

¹⁰¹ NA, c2^v-c3^r (SEH, III, p. 143).

¹⁰² See Vickers, *Renaissance Prose*, pp. 183-6; Timothy J. Reiss, “‘Seated Between the Old World and the New’: Geopolitics, Natural Philosophy, and Proficient Method’, in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 223-46.

¹⁰³ NA, c3^r (SEH, III, pp. 143-44). The governor’s assertion that navigation has not decayed with them but has been circumscribed shows that Bensalem has not suffered from this decay, and had escaped from these seeming inevitabilities. The element of choice is always present in Bensalem history, it seems.

was wholly bent to make his Kingdome and People Happy.¹⁰⁴

Once more, the governor mentions the length of time elapsed since this King's reign (though there is no mention of his death), accentuating the depth of memory and cultural longevity of Bensalem. What seems to have occurred is that Solamona instituted laws at this time which are still active and useful on the Bensalem of today. In this way, Solamona seems to have achieved a set of laws which also escaped the vicissitudes of time, which is what the distillation and codification of the Roman law under Justinian, the *Corpus Juris*, had failed to achieve. Solamona thus achieved a set of laws which transcend time, resembling the universal Law sought by Bodin.¹⁰⁵ The manner in which, after Solamona, the monarchy on Bensalem seems to become somewhat invisible has been remarked upon by Marina Leslie, who nevertheless suggests merely that 'on Bensalem it is the Fathers of the House of Salomon, and not an enlightened monarch, who will constitute the new and divinely sanctioned ruling order in which human knowledge and human power are united'.¹⁰⁶ It seems, however, that while Leslie is fundamentally correct in identifying a movement of government from an enlightened monarch to an enlightening institution, she ignores the fact that in the manner in which the governor describes Solamona, he is effectively still governing and directing the country through the laws which he so efficiently framed almost two millennia previously.¹⁰⁷ The nature of Solamona's laws are discussed briefly, primarily concerning his law regarding the admission of strangers and travel from Bensalem. While these features of Bensalem's society are important, it is, as the governor himself admits, the framing of the institution of Salomon's

¹⁰⁴ NA, c3^r (SEH, III, p. 144).

¹⁰⁵ For more on Bodin's desire for a body of Universal Law, see Schiffman, 'Jean Bodin', p. 279. On Bacon's similar quest, see Daniel R. Coquillette, "'The Purer Foundations': Bacon and Legal Education', in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 145-72.

¹⁰⁶ Leslie, p. 99. The nature of the monarchy would, of course, be invisible if NA was indeed unfinished, and lacked, as Rawley suggested, the 'Frame of Lawes, or of the best State or Mould of a Common-wealth' (NA, a2^f (SEH, III, p. 127)).

¹⁰⁷ This is a feature that would surely not have gone unnoticed in an age whose monarch was believed himself to be the country's lawmaker (Alan Stewart, *The Cradle King, A Life of*

House by which Solamona bequeathed his most important legacy. Both institutions, the institution of secrecy and the institution of revelation, as they might be termed, allow for one thing, the escape from the cyclical rise and fall of empires so as to allow for the succession of ages necessary, as Bacon often stated, for the advancement of learning.¹⁰⁸

That Bacon recognised the need for a succession of individuals to work on the advancement of knowledge, and that this necessitated a change in outlook from the short-term desires for ‘fruit’ towards a long-term desire for ‘light’, is quite plain.¹⁰⁹ Bacon’s works resound with negative imagery regarding circular patterns and reasoning as well as images of paths, roads, directions and successions, as he carefully accentuates the manner in which he is not simply following old paths, but mapping out a new path for learning:

For if I were to declare that I did better than the ancients while pursuing the same path that they did, no crafty words of mine could prevent people from comparing or arguing over our respective intellectual merits, talent, or ability.¹¹⁰

People will perhaps think too that I am only reinventing the wheel, and that the ancients themselves followed the same route as I do.¹¹¹

Now I, in thrall to an undying love of truth, have committed myself to the hazards, hardships and loneliness of the open road and, trusting for support to the Lord’s help, I have kept my mind proof against the shock and marshalled ranks of opinion.¹¹²

James VI and I (London: Chatto and Windus, 2003), p. 233).

¹⁰⁸ The connection here between a continuous temporal law and the laws of nature, which are also constant and have only been changed at the Fall and will only change again once the next age has begun, seems important here. In the *Confession of Faith*, Bacon wrote: ‘He created heaven and earth, and all their armies and generations, and gave unto them constant and everlasting laws, which we call *Nature*, which is nothing but the laws of creation; which laws nevertheless have had three changes or times, and are to have a fourth and last. The first, when the matter of heaven and earth was created without forms: the second, the *interim* of every day’s work: the third, by the curse, which notwithstanding was no new creation, but a privation of part of the virtue of the first creation: and the last, at the end of the world, the manner whereof is not yet revealed’ (*SEH*, VII, pp. 220-21).

¹⁰⁹ See *OFB*, XI, p. 17; *SS*, A2^r (*SEH*, II, p. 336).

¹¹⁰ *OFB*, XI, p. 57.

¹¹¹ *Ibid.*, p. 187.

That Bacon wished for a direct progression of knowledge is similarly signposted in both the titles Bacon chooses, such as the *Advancement of Learning* or *Novum organum*, as well as within the texts themselves, whether in the negative sense of the inability of the works of ancient authors to advance the sciences, or in terms of his own desire for their advancement:

I do obserue neuertheless, that their [the received authors'] workes and Acts are rather matters of Magnificence and Memorie, then of progression and proficiencie, and tende rather to augment the masse of Learning in the multitude of learned men, then to rectifie or raise the Sciences themselues.¹¹³

Now a straight history of the phenomena will open the road to the truth, but one infected by dogma will obstruct it.¹¹⁴

But my way is to educe axioms successively and step by step.¹¹⁵

As well as referencing the importance of a directed approach to learning, Bacon also regularly introduces classically inspired mythical analogy into his work, most commonly, in this case, the myth of Atalanta and her distraction from the direct line of the race by Hippomene's golden apples: 'I absolutely renounce and reject that unseasonable and childish craving for some guarantee of new works which is clutched at hastily and, like *Atalanta's* apple, slows down the race.'¹¹⁶ Another example of Bacon's desire for succession can be found in his exposition of the myth of Prometheus, specifically regarding the torch-race instituted in his honour, which 'carries in it a very wise admonition, to this effect,—that the perfection of the sciences is to be looked for not from the swiftness or ability of any one inquirer, but from a succession'.¹¹⁷

¹¹² *Ibid.*, p. 21.

¹¹³ *OFB*, IV, p. 56.

¹¹⁴ *OFB*, VI, p. 113.

¹¹⁵ *OFB*, XI, p. 31. Guibbory identifies the inductive process as itself progressive: 'Bacon's definition of induction actually incorporates the historical ideal of linear progress. Induction begins with the particulars and experience of nature and then moves up "a just scale of ascent ..."' (Guibbory, 'Francis Bacon's View of History', p. 345).

¹¹⁶ *OFB*, XI, p. 39. See also *OFB*, IV, p. 32; *SEH*, III, p. 222; *SEH*, III, p. 498; *SEH*, VI, pp. 743-44, 667-68.

¹¹⁷ *SEH*, VI, pp. 753, 675. For more on the place of Prometheus and Democritus in Bacon's thought, see Reid Barbour, 'Remarkable Ingratitude: Bacon, Prometheus, Democritus',

The laws instituted by Solamona not only provided for the isolation of Bensalem from the rest of the world's gaze, but also for its inoculation against the vicissitudes of empires and fortunes, and it is this second aspect which allowed the greatest work of Solamona, Salomon's House, the time in which to achieve learning through a continuous succession of investigations.

The governor explains the existence of Salomon's House in glowing terms:

*The Noblest Foundation, (as wee thinke,) that euer was vpon the Earth; And the Lanthorne of this Kingdome. It is dedicated to the Study of the Works, and Creatures of GOD. Some thinke it beareth the Founders Name a little corrupted, as if it should be Solamona's House. But the Records write it, as it is spoken.*¹¹⁸

The governor's description of Salomon's House does not give much evidence for its dedication to the progressive accumulation of knowledge, but merely demonstrates its extreme longevity, while connecting it with Solamona's reverence for King Solomon, simultaneously suggesting that belief in the Judeo-Christian God dates back at the very least to this time, even if there was no particular denominational allegiance. It is in the later exposition of the working of Salomon's House by one of the fathers of the institution, with its repeated references to the long-term nature of the experiments and the obsession with manipulating time which clearly show the devotion of Salomon's House not to the short-term acquisition of effects, but the long-term acquisition of the knowledge of causes. Indeed, this is something the governor himself touches upon:

I am the rather induced to be of this Opinion, for that I finde in ancient Records, this Order or Societie is sometimes called Salomons House; And sometimes the Colledge of the sixe Daies Workes: wherby I am satisfied, That our Excellent King had learned from the Hebrewes; That GOD had created the World, and all that therein is, within sixe Dayes; And therefore hee instituting that House, for the finding out of the true Nature of all Things, (wherby GOD mought haue the more

Studies in English Literature, 1500-1900, 32, (1992), 79-90.

Glory in the Workemanship of them, and Men the more fruit in the vse of them,)
*did giue it also that second Name.*¹¹⁹

While Bensalem has exiled itself from the vicissitudes of time via the laws of Solamona, this exile is embodied in both its longevity and the aims of its primary institution, Salomon's House. The governor asserts this longevity partly through assertion of written records and partly through demonstration that what the sailors think is new is, in fact, something which has happened before, and the sailors are merely repeating old patterns of behaviour in their discovery of Bensalem.

The explanation of the great age of navigation of previous millennia serves also to simultaneously support and deny the existence of the 'Golden Age'. While advocates of a decay theory might latch onto this prior flowering of knowledge, especially as expressed through the ubiquitous Baconian formula of navigation and the governor's assertion that '*Nauigation did euery wher greatly decay*',¹²⁰ the Golden Age seems to have continued, albeit in truncated geographical form, within the 5600 mile circuit of the island of Bensalem. The loss of navigation, however, seems to be gradually being replaced by the current Western expeditions, as the governor says, '*Doe not thinke with your selues, that I know not how much it is encreased with you, within these sixescore Yeares: I know it well; And yet I say, greater then, than now*',¹²¹ further reinforcing Bacon's reading of the prophecy of Daniel. It is, however, in terms of knowledge that the governor also frames his history, stating that '*At that time, this Land was knowne and frequented by the Shipps and Vessells of all the Nations before named*',¹²² before noting that after the decay of navigation, visitors to Bensalem arrived only through luck, while Bensalem's knowledge of the rest of the world continued, albeit veiled in secrecy:

¹¹⁸ NA, c4^f (SEH, III, p. 145).

¹¹⁹ NA, c4^f (SEH, III, pp. 145-46).

¹²⁰ NA, c3^f (SEH, III, p. 143).

¹²¹ NA, c1^v (SEH, III, p. 140).

¹²² NA, c1^v (SEH, III, p. 141).

*When the King had forbidden, to all his People, Nauigation into any Part, that was not vnder his Crowne, he made neuerthelesse this Ordinance; That euery twelue yeares ther should be set forth, out of this Kingdome, two Shippes, appointed to seuerall Voyages; That in either of these Shippes, ther should be a Mission of three of the Fellowes, or Brethren of Salomons House; whose Errand was onely to giue vs Knowledge of the Affaires and State of those Countries, to which they were designed.*¹²³

It is this gathering of knowledge which has led Leslie to suggest that *New Atlantis* needs to be viewed as ‘the *locus* where he most explicitly works out a synthesis of genres to negotiate a new narrative for the *production* of history’.¹²⁴ Leslie suggests that *New Atlantis* serves as a fictional history of learning, demonstrating the utility and method of Bacon’s History of Learning, as delineated in *De augmentis*, within a fictional framework. For Bacon, ‘a complete and universal History of Learning is yet wanting’,¹²⁵ and he sets out its aims in this manner:

The *argument* is no other than to inquire and collect out of the records of all time what particular kinds of learning and arts have flourished in what ages and regions of the world; their antiquities, their progresses, their migrations (for sciences migrate like nations) over the different parts of the globe; and again their decays, disappearances, and revivals.¹²⁶

What Bacon describes here is exactly what the ships sent forth by Solamonic decree have been carrying out for Bensalem for the past 1900 years. While Bacon is concerned in *De augmentis* with how to extract such a history from such evidence as remains, the Bensalemite method has been simply to catalogue it as it occurs. The oft-held view that the Merchants of Light seek raw materials in the form of Western inventions and scientific advances to fuel the factory for producing works that is Salomon’s House is an imposed view of their function. The name ‘*Merchants of Light*’ does imply that they

¹²³ *NA*, c4^{r-v} (*SEH*, III, p. 146).

¹²⁴ Leslie, p. 83.

¹²⁵ *SEH*, IV, p. 300 (*SEH*, I, p. 503).

¹²⁶ *SEH*, IV, p. 300 (*SEH*, I, p. 503). Le Roy and Hakewill also form similar notions of the

are collecting raw material to be transformed into knowledge, but this information is of more historical use than natural philosophical, as becomes apparent when the text itself is considered:

*But thus you see, wee maintaine a Trade, not for Gold, Siluer, or Iewels; Nor for Silkes; Nor for Spices; Nor any other Commodity of Matter, But onely for GODS first Creature, which was Light: To haue Light (I say) of the Growth of all Parts of the World.*¹²⁷

The light the merchants seek from their voyages is not knowledge itself, but knowledge of the *state of growth* of the rest of the world. The naming of these men also has echoes in Bacon's *Parasceve*, which suggests that the Merchants of Bensalem are more analogical than literal:

For I shall perhaps conquer by my own efforts the part dealing with the actual work of the intellect. But the materials for the intellect are so widely spread out that they ought to be sought out and gathered in (as if by agents and merchants) from all sides.¹²⁸

Once more, the idea that materials are widely spread highlights the position of the island, lost to the world's gaze, yet diligently seeking out all types of knowledge.

e. *New Atlantis* and the Baconian historical genres

While Bensalem seems to have accrued what Bacon would describe as a Perfect History of Learning, drawn as it has been from contemporary observation and diligent gathering of all available evidence, this is not the only genre of history available in *New Atlantis*:

The confusion about the "method" of the *New Atlantis* is perhaps most clearly

motion of learning.

¹²⁷ NA, c4^v (SEH, III, pp. 146-47). For an opposing view to this, see Charles C. Whitney, 'Merchants of Light: Science as Colonization in the *New Atlantis*', in *Francis Bacon's Legacy of Texts*, ed. by William A. Sessions (New York: AMS Press, 1990), pp. 255-68.

revealed by the myriad of generic categories used—often interchangeably, or in hybrid form—to describe it: prophecy, allegory, myth, technological utopia, allegory of science, “utopia of science,” “mythic parable,” “philosophical fable,” “speculative myth,” or even a “theatre for the presentation of an allegory of science.”¹²⁹

The reason that *New Atlantis* is so difficult to fit into a single category, even as a simple utopia, is because of the number of genres it affects, and because of the number of sub-genres it includes; notably the manner in which several of Bacon’s own historical genres and sub-genres seem to be neatly accommodated within the text.

Specific parts of *New Atlantis* might be considered to correspond with specific parts of Bacon’s historical theories. Firstly, the meta-genre under which *New Atlantis* might be taken is, in Baconian terms, Poesy, that is, ‘a part of learning in measure of words for the most part restrained, but in all other points extremely free and licensed’.¹³⁰ Secondly, the information-gathering habits of the Merchants of Light demonstrate how Bacon’s History of Learning is to be compiled. Thirdly, the governor’s history of navigation is an example of both Universal and Particular histories, while the account of the Coyan expedition to Bensalem fits neatly into the sub-genre of History of Times. Further to these genres, the governor also explains the history of the revelation of Bartholomew, which is a perfectly acceptable sacred history,¹³¹ while the discussion with and about Joabin may serve as a discussion of salvation and apocalyptic history, and Joabin’s explanations of the customs of the islanders echo the advice given in Bacon’s letter to the Earl of Rutland regarding his travels.¹³² Last, and certainly not least, comes the discourse on Salomon’s

¹²⁸ *OFB*, XI, p. 451. These ‘merchants of light’ appear, therefore, to be natural historians.

¹²⁹ Leslie, p. 86.

¹³⁰ *SEH*, IV, pp. 314-15 (*SEH*, I, p. 517).

¹³¹ Bacon mentions that ‘divine things undoubtedly manifest themselves in both [natural and civil histories], but more in human affairs, so that they even constitute a distinct species in history, which I am accustomed to call Sacred or Ecclesiastical’ (*OFB*, VI, pp. 99-101).

¹³² Leslie, pp. 91-92; *LL*, II, pp. 16-17. On this letter’s ascription to Bacon rather than the Earl of Essex, see Brian Vickers, ‘The Authenticity of Bacon’s Earliest Writings’, *Studies in Philology*, 94 (1997), 248-96 (p. 274), though Hammer suggests it was a formula letter

House which serves as an exemplar of Baconian Natural History in action. Indeed, in terms of Bacon's own pronouncements regarding God's provision of Greece and Rome as two exemplar states for learning, arts and warfare, we might be lead to consider that Bensalem is a third – and far superior – exemplar state, and one which happens to contain all of the virtues of the traditional exemplar states, with none of their disadvantages, and also several new virtues.

New Atlantis is a text which emulates in no small way those 'real' travel narratives as found in such works as Hakluyt's *principal nauigations*, and it must be remembered that its status as a fable is not made explicit within the text itself, but included purely in the letter 'To The Reader' as written by William Rawley. Leslie, along with practically every other critic, accepts Rawley's version of the purpose of *New Atlantis*, accepting its status as a 'fable', and suggesting that this status shows that Rawley, for one, accepted that the work 'requires deciphering, unfolding, interpretation—if only to discover what kind of fable it is'.¹³³ I have already discussed the manner in which Rawley's description of *New Atlantis* changes over the twelve years it takes for him to publish the work in Latin, but what is important to remember is that without the foregrounding of its 'utopian' status, *New Atlantis* could very easily be mistaken for a serious travel narrative, in which the narrative itself explains the reasons for no information regarding this island ever having come to light before now.

New Atlantis is a fictional history presented as if it were fact, and Bacon talks of fictional histories in *De augmentis*, noting that 'Narrative Poesy is a mere imitation of History, such as might pass for real, only that it commonly exaggerates things beyond probability. [...] Parabolical Poesy is typical History, by which ideas that are objects of the intellect are represented in

'almost certainly composed by one of his secretaries', before noting that it wasn't written by Bacon (Hammer, pp. 46-47).

¹³³ Leslie, p. 87.

forms that are objects of the sense'.¹³⁴ While Leslie considers that *New Atlantis* fits most closely into the genre of parabolical poesy because only this, 'the highest of the three forms, offers sufficient escape from the material circumstances of history to provide a reforming lesson in the history it would describe',¹³⁵ one of the reforming lessons *New Atlantis* provides is actually the *need* to escape from these apparently inevitable material circumstances of history: the cyclical rise and fall of nations and empire which prevents learning from progressing over a long enough period to actually produce lasting improvements to man's physical well-being.

Bacon certainly believed that parabolical poesy was a worthwhile field of endeavour, as is evidenced by *De sapientia veterum*, and especially its preface:

beneath no small number of fables of the ancient poets there lay from the very beginning a mystery and an allegory. It may be that my reverence for the primitive time carries me too far, but the truth is that in some of these fables, as well in the very frame and texture of the story as in the propriety of the names by which the persons that figure in it are distinguished, I find a conformity and connexion with the thing signified, so close and so evident, that one cannot help believing such a signification to have been designed and meditated from the first, and purposely shadowed out.¹³⁶

Parabolical poesy, and the use of myths such as that of Pan in *De augmentis*, as well as those of Prometheus, Democritus, and Atalanta, form a minor, if not insignificant, part of Bacon's works. In *De augmentis*, however, Bacon himself notes the uses of parabolical poesy, explaining that one use is for instruction, while a second is for 'infolment'. This second use Bacon finds for such things 'the dignity whereof requires that they should be seen as it were through a veil; that is when the secrets and mysteries of religion, policy, and philosophy are involved in fables or parables'.¹³⁷ Bacon considers that

¹³⁴ *SEH*, IV, p. 315 (*SEH*, I, p. 518).

¹³⁵ Leslie, p. 89. See also Weinberger, pp. 239-43.

¹³⁶ *SEH*, VI, pp. 696, 626.

¹³⁷ *SEH*, IV, p. 317 (*SEH*, I, p. 520). For secrecy in *NA*, see Simon Wortham, 'Censorship and the institution of knowledge in Francis Bacon's *New Atlantis*', in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 180-98; John M. Archer, *Sovereignty and Intelligence:*

‘For my own part I must confess that I am inclined to think that a mystery is involved in no small number of them,’ concluding:

since it is evident that the writings in which these fables are related are, next to sacred story, the most ancient of human writings, and the fables themselves still more ancient (for they are related not as being invented by the writers, but as things believed and received from of old), I take them to be a kind of breath from the traditions of more ancient nations, which fell into the pipes of the Greeks.¹³⁸

There is certainly a degree of ‘infolment’ within the narrative of *New Atlantis*, and while the idea of secrecy permeates the narrative, it is primarily indulged in by the characters and the society of Bensalem, rather than by the author. In *New Atlantis*, Bacon has written a work which carefully avoids the mythological, just as the governor goes to extreme pains to note that everything that he relates is true and, more importantly, written down. It is to narrative poesy, the imitative history, to which *New Atlantis* belongs as an entire work. Indeed, Leslie highlights this fact when she notes of *New Atlantis*:

Bacon casts himself not as prophet—particularly unnecessary, as everything in the *New Atlantis* is depicted as historically accomplished fact—but as the rival historiographer and cosmologist to Plato. The story does not require a charismatic prophet-narrator, only a rather featureless and nondescript narrator-discoverer who will record how a tiny island-nation, unknown and unseen, could accomplish what all of Europe could not.¹³⁹

The second clue to the lack of parabolical poesy within *New Atlantis* is that the governor himself suggests that the naming of Salomon’s House is in part

Spying and Court Culture in the English Renaissance (Stanford, California: Stanford University Press, 1993), pp. 120-51; see John Michael Archer, ‘Surveillance and Enlightenment in Bacon’s *New Atlantis*’, in *Assays*, 6, ed. by Peggy A. Knapp (Pittsburgh: Carnegie Mellon University Press, 1991), pp. 111-27; see also Bacon’s essay ‘Of Simulation and Dissimulation’ (*OFB*, XV, pp. 20-22).

¹³⁸ *SEH*, IV, p. 317 (*SEH*, I, p. 521).

¹³⁹ Leslie, p. 118. An island with a circuit of 5600 miles is not exactly tiny, however. Cf. White: ‘the *New Atlantis* is a rewriting of a Platonic myth, and a rewriting clearly intended as a refutation’ (White, p. 112).

due to Solamona's knowledge of the Hebrews.¹⁴⁰ In *De augmentis*, Bacon noted the following:

From the third story of Pan's origin, it would seem as if the Greeks, either by intercourse with the Egyptians or otherwise, had heard something of the Hebrew mysteries. For it relates to the state of the world, not at its very birth, but after the fall of Adam; exposed and made subject to death and corruption.¹⁴¹

Solamona's knowledge of the Hebrews and their beliefs is not learnt through a third party, nor is it expressed through myth – it is learnt directly and expressed through the institution of Salomon's House.¹⁴²

It is also through the explication of the secrets of Salomon's House that the reader begins to comprehend the nature of Bensalemite time: they occupy a linear progressive timeframe of the sort absent in usual Renaissance conceptions of history and time. While the governor's contextualisation of Bensalem places it firmly outside the cyclical and decay modes of history, and firmly within the linear mode of history, it is the father of Salomon's House who allows both narrator and reader to comprehend just how fully progressive this linear mode of time is on the island of Bensalem.

f. *New Atlantis*, Salomon's House, and temporal manipulation

The first indication that Salomon's House is an institution for which time is of the utmost importance is its second name, the '*Colledge of the six Daies Workes*'.¹⁴³ Named after the six days of creation, the father of Salomon's

¹⁴⁰ NA, c4^f (SEH, III, p. 146).

¹⁴¹ SEH, IV, p. 320 (SEH, I, p. 523).

¹⁴² Bacon also writes that '*true Historie* propoundeth the successes and issues of actions, not so agreeable to the merits of Vertue and Vice, therefore *Poesie* faines them more iust in Retribution, and more according to Reuealed Providence, because *true Historie* representeth Actions and Euent, more ordinarie and lesse interchanged, therefore *Poesie* endueth them with more Rareness, and more vnexpected, and alternatiue Variations' (OFB, IV, p. 73), suggesting a connection between poesy and providence.

¹⁴³ NA, c4^f (SEH, III, p. 146). See NO: 'But in the proper course of experience, and of carrying it over to new works, we should in general model ourselves on the Divine Wisdom and Order. Now on the first day of creation God made light alone and gave over a whole day to it, and

House tells the narrator that '*The End of our Foundation is the Knowledge of Causes, and Secrett Motions of Things; And the Enlarging of the bounds of Humane Empire, to the Effecting of all Things possible*'.¹⁴⁴ Salomon's House is, of course, devoted to the discovery of the laws of nature, and it has, presumably, been slowly unlocking them for the past nineteen hundred years.¹⁴⁵ The father of Salomon's House explains the foundation very much in terms of its accomplishments, rather in any theoretical sense, in accord with Bacon's own precept:

There is no 'sign' more certain and more noble than that from fruits. In religion we are warned that faith be shown by works. It is altogether right to apply the same test to philosophy. If it be barren let it be set at naught.¹⁴⁶

Many of the works that the father explains to the narrator are concerned with time, such as experiments which take a substantial period of time to come to fruition:

*We vse them likewise for the Imitation of Naturall Mines; And the Producing also of New Artificiall Mettalls, by Compositions and Materialls which we vse, and lay ther for many yeares. Wee vse them also sometimes, (which may seeme strange,) for Curing of some Diseases, and for Prolongation of Life, in some Hermits that choose to liue ther, well accommodated of all things necessarie, and indeed liue very long.*¹⁴⁷

*And these Drinkes are of seuerall Ages, some to the Age or Last of fourtie yeares.*¹⁴⁸

made no materiate work that day' (*OFB*, XI, p. 113).

¹⁴⁴ *NA*, e2^r (*SEH*, III, p. 156).

¹⁴⁵ This is why the list of accomplishments of Salomon's House is so much greater than that of current Western technologies, though critics such as Richard Serjeantson have suggested that the technologies in this passage are such that they would be instantly recognisable to contemporary audiences. See Richard Serjeantson, 'Natural Knowledge in the *New Atlantis*', in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 82-105.

¹⁴⁶ Farrington, pp. 123-4 (*SEH*, III, pp. 576-77).

¹⁴⁷ *NA*, e2^v (*SEH*, III, pp. 156-57).

¹⁴⁸ *NA*, f1^r (*SEH*, III, p. 160). Bacon's own interest in the prolongation of life is well known, and documented perhaps most vividly in *De vijs mortis* (*OFB*, VI, pp. 270-359) and *Historia vitae et mortis* (*SEH*, II, pp. 91-229 (*SEH*, V, pp. 213-335)). See also Guido Giglioni, 'The Hidden Life of Matter: Techniques for Prolonging of Life in the Writings of Francis Bacon', in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 129-44.

Or whether they concern the speeding up of natural processes:

Wells for Infusions of many Things, wher the Waters take the Vertue quicker and better, then in Vessells, or Basins.¹⁴⁹

And we make (by Art) in the same Orchards, and Gardens, Trees and Flowers, to come earlier, or later, than their Seasons; And to come vp and beare more speedily then by their Naturall Course they doe.¹⁵⁰

This acceleration of time also features in the ‘appendix’ to *New Atlantis* and *Sylva sylvarum*, the *Magnalia naturæ*, where eight magnalia concern the manipulation of time, including the first three listed: ‘*The Prolongation of Life*’, ‘*The Restitution of Youth in some Degree*’, and ‘*The Retardation of Age*’.¹⁵¹

Bacon is inconsistent in considering whether ‘*Magnalia Naturæ*’ are beyond the bounds of human manipulation or not. When discussing artillery in *Novum organum*, for example, Bacon wonders whether it would have seemed possible to conceive of it before having viewed it:

But the idea of a fiery wind so suddenly and violently expanding and blasting forth would hardly have struck a man’s imagination or fancy—which is to be expected when he had seen nothing resembling it, except perhaps in earthquakes, or lightning which, as *magnalia naturæ* and beyond imitation, would have been dismissed out of hand.¹⁵²

He then suggests, however, that such attitudes are indicative of a lack of imagination: ‘nowadays men’s views run no further than to set such things down as the secrets and *magnalia* of nature as if they were without cause and exceptions to general rules’.¹⁵³ Yet in *Sylva sylvarum*, he writes ‘to restore

¹⁴⁹ NA, e3^v (SEH, III, p. 158).

¹⁵⁰ NA, e4^r (SEH, III, p. 158).

¹⁵¹ NA, g3^r-g3^v (SEH, III, pp. 167-68).

¹⁵² OFB, XI, p. 167. Cf. OFB, IV, p. 108.

¹⁵³ OFB, XI, p. 297.

Teeth in Age, were Magnale Naturæ. It may be thought of',¹⁵⁴ as well as considering the manipulation of time specifically in terms of Magnalia Naturæ: 'Acceleration of Time, in Works of Nature may well be esteemed Inter Magnalia Naturæ. And even in Diuine Miracles, Accelerating of the Time, is next to the Creating of the Matter. We will now therefore proceed to the Enquiry of it.'¹⁵⁵

That Bacon considers the acceleration of time as, effectively, a miracle, is of great interest when it comes to the Bensalemite notions of divination. The brothers of Salomon's House use divination not merely to predict the future, but as a method of altering it, something which, it seems, runs contrary towards most contemporary religious conceptions of time. On Bensalem, time is considered, treated, and tackled, from a position of power, while the Western world is still held in its thrall. The Bensalemites seek to control time, while the sailors' Western culture is controlled by it.¹⁵⁶

The treatment of history and time in *New Atlantis* not only accords with Bacon's oft-repeated dictum that time is the 'author of authors', but also demonstrates that Bacon is struggling with the standard conceptions of time as accepted within the Renaissance. Ultimately, the mutability of time is linked to the mutability of fortune, both in his conceptions of personal fortune, as

¹⁵⁴ SS, 2B4^f (SEH, II, p. 580).

¹⁵⁵ SS, L4^f (SEH, II, p. 442).

¹⁵⁶ That Bacon is preoccupied with time is apparent throughout his works, and his thought considers the importance of viewpoint for the perception of time (see SEH, IV, p. 471 (SEH, I, p. 687)), as well as showing an awareness of what we might consider to be differing timezones for natural phenomena (see OFB, VI, p. 91). One of his more radical conceptions, however, considered the connection between light and time: 'And this, with things like it, has sometimes teased me with an obviously outlandish doubt, namely whether we see the face of a clear and starry sky at the same time as it actually exists, or rather some time after; and whether there is not (when we look at the heavens) a real and an apparent time, just as there is a real and an apparent place which astronomers take account of in parallactic computations' (OFB, XI, p. 377). He did, however, 'banish the doubt' that the 'species or rays of the heavenly bodies could be carried to our sight instantly across an immensity of miles' (OFB, XI, p. 377). That the Bensalemites are obsessed with time and that Bacon wishes to demonstrate their mastery of it is plain in the father's assertion that 'Wee haue diuers curious Clocks; And other like Motions of Returne: And some Perpetuall Motions' (NA, f3^v (SEH, III, p. 164)).

discussed in *De augmentis*, and also the concept of chance, something which the institution of Salomon's House seems to be devoted to conquering, leading to an effective compression of time:

Another favourable omen is found in an understanding of the power and true nature of Chance. Chance, operating in suitable circumstances, has prompted many discoveries [...] Bacon accordingly opined that, since discoveries occur even when men are not looking for them and are thinking of something else, it is reasonable to expect that when men *are* looking for them, and that not in fits and starts but systematically and methodically, many more discoveries will be made. Of course it happens now and again that a man stumbles by accident on what has eluded the earnest search of another; but the opposite is the normal thing. The action of chance is intermittent, undesigned, random; art acts steadily, purposively, co-operatively.¹⁵⁷

It seems that Salomon's House is an institution dedicated to the defeat of chance, and that an important thread of the narrative of *New Atlantis* forms a discourse on the nature of chance, and the manner in which it can be defeated. Chance, like fortune, is a function of time, and it is through the understanding of and victory over time that the vicissitudes of chance can be replaced with the sure route to discovery that is experiment.

g. Conclusion

In one of his many expositions of the myth of Prometheus, Bacon wrote that 'the perfection of the sciences is to be looked for not from the swiftness or ability of any one inquirer, but from a succession',¹⁵⁸ and it was the escape from the cyclical mode of history identified as inevitable by most contemporary historiographers which Bacon fictionalised in *New Atlantis*. This escape from the vicissitudes of time allowed the Bensalemites the centuries of accumulated experimentation and the unbroken lines of institutional records necessary for the gradual discovery of the laws of nature. *New Atlantis* is simultaneously a demonstration of the legacy of Bacon's

¹⁵⁷ Farrington, pp. 95-96 (*SEH*, III, p. 614).

philosophical reforms, a demonstration of the authority inhering in both accurate record-keeping and cultural longevity, and an representation of the future to which Bacon appeals in his *Abecedarium novum naturæ*, when he states that ‘because I have little faith in the genius of our times, [...] I deal out work for ages to come’.¹⁵⁹ While the states of Greece and Rome were generally held up as exemplar states, ‘for Armes, learning, Morall Vertue, Policie, and Lawes’,¹⁶⁰ the island of Bensalem serves not only as a fictional exemplar of a potential perfection of science, society and politics, but also serves as a personification of the various different genres of Baconian history.

Bensalemite society has escaped from the vicissitudes of time through the wisdom and charity of the Kings Altabin and Salomona, the continuous and humble investigation of the secrets of nature, accurate and diligent record-keeping and an unbroken succession of ages, and as such demonstrates both the authority inherent in longevity, but also the importance of the nature of time itself to both Bacon and his philosophical project. The importance of time is not merely manifest in an historical sense, however, but in terms of a projection into the future, something which has great relevance both to Bacon’s Instauration and to his treatment of theological matters, as we shall now see.

¹⁵⁸ *SEH*, VI, pp. 753, 675.

¹⁵⁹ *OFB*, XIII, p. 173.

¹⁶⁰ *OFB*, IV, p. 67.

Chapter Three: Bacon, religion, and the triumph over chance

It is impossible to consider the nature of any early-modern philosophy without considering the influence of contemporary religious preoccupations, whether positive and negative. This chapter begins by considering the problems of ascertaining Bacon's own confessional stance before relating the evidence for this to the gradual progression of his philosophical programme, and finally considering the different ways in which religion works as authority within this programme. Religion manifests itself in *New Atlantis* primarily in terms of the 'special revelation' received on the island of Bensalem, a revelation which is figured in terms of authority, as well as suggesting an explanation of the role of providence in Bacon's philosophical programme. Finally, this chapter will consider the implications of Bacon's philosophy on the nature of free will and chance, before considering the manner in which these concepts are handled within *New Atlantis*.

a. Bacon's confessional stance

While there is little direct evidence regarding Bacon's early religious affiliations, his upbringing and early influences at university make it hard to believe that, for a time, at least, he was anything other than a committed Calvinist. Born to a father who contributed to the Elizabethan Act of Settlement of 1559, and a mother noted not only for her religious fervour but for her translations of radical Calvinist Bernard Ochino's sermons and of Bishop John Jewel's *Apology in Defence of the Church of England* in 1564,¹ Bacon was known to have written, via his brother, to Theodore Beza and to have probably attended sermons by radical non-conformist Walter Travers at

¹ See Jardine and Stewart pp. 23-66; Diarmaid MacCulloch, *Reformation: Europe's House Divided 1490-1700* (London: Allen Lane, 2003), p. 289; Anne Cooke Bacon, ed. by Valerie Wayne, *The Early Modern Englishwoman: A Facsimile Library of Essential Works* (Aldershot: Ashgate, 2000), Part II, vol. I.

the Temple in the early 1580s.² At university he, along with his brother Antony, was entrusted to the care of John Whitgift, master of Trinity College and later to become Archbishop of Canterbury.³ During James's reign, however, religion became as much an issue of the assertion and preservation of royal power and authority as it was a matter of doctrine.⁴ Bacon, as a career politician, might therefore be forgiven for being somewhat backward about coming forward regarding his own confessional stance.

Critics are divided regarding Bacon's confessional stance, and even the sincerity of his belief. Markku Peltonen suggests that 'one of the central tenets of Bacon's defense of learning was his strict separation of science and religion', a view criticised in an essay in the very same volume by J. C. Briggs.⁵ Jerry Weinberger suggests both that Bacon's project is largely a criticism of contemporary Christianity, concentrating on the negative aspects of Christian charity, and that 'Bacon was a non-believer, even if he pretended to be otherwise',⁶ while Perez Zagorin sees Bacon as a 'genuine Christian' who, nevertheless, was more interested in the advancement of science than the

² In Jardine and Stewart, p. 538, fn. 54. The letter to Beza does not survive. For Faunt noting a meeting with Bacon at the Temple, see LPL MS 647 fol. 162, art 76, Nicholas Faunt to Anthony Bacon, November 20th, 1583.

³ Whitgift was a Calvinist in matters of theology, not least his views regarding predestination, though not in matters of church government, as he held a distaste for puritanism. See David Steinmetz, *Calvin in Context* (New York and Oxford: Oxford University Press, 1995), p. 4.

⁴ Religious orthodoxy during James's reign was a particularly fluid affair, and what was orthodox one day might be considered non-conformist the next. This was, as much as anything else, due to James's politically motivated use of religious doctrine, not least where James sought to navigate a path between what he saw as the two extremist threats to his authority, papists and Puritans: the latter not least because of their presbyterian leanings, and as he said twice in one day at Hampton Court, 'No bishop, no king.' See Kenneth Fincham and Peter Lake, 'The Ecclesiastical Policy of King James I', *The Journal of British Studies*, 24, Politics and Religion in the Early Seventeenth Century: New Voices (1985), 169-207 (p. 174), in *JSTOR*.

⁵ Markku Peltonen, 'Introduction', in *The Cambridge Companion to Francis Bacon* (see Rose-Mary Sargent, above), pp. 1-24 (p. 19); also John Channing Briggs, 'Bacon's science and religion', in *The Cambridge Companion to Francis Bacon* (see Rose-Mary Sargent, above), pp. 172-99. See also Briggs on Bacon, Solomon and St. Paul (Briggs, pp. 16-25).

⁶ Jerry Weinberger, 'Francis Bacon and the Unity of Knowledge: Reason and Revelation', in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 109-27 (p. 111). See also Weinberger, pp. 50-70.

salvation of the mortal soul.⁷ Howard White puts forward the argument that Bacon's religious interest was in a civil religion, and that his choice of Anglicanism as a system was merely one of political expediency, while Julian Martin follows a similar path in suggesting that Bacon's view of church affairs was more pragmatically than theologically motivated.⁸ After his death, Bacon's philosophy was adopted by all parts of the religious spectrum, leading Matthews to issue the caveat that Bacon's theological ideas must be contextualised: 'the fact that Bacon was read and adopted by both Puritans and atheists should not be allowed to imply that he was either one.'⁹

These differing approaches to the question of Bacon's religious motivations clearly demonstrate the difficulties encountered when tackling this particular subject. It is for this reason that critics such as Zagorin and Gaukroger are happy to state that religion was a motivating factor without embarking on an investigation of its influence: it is enough merely to note that it is there.¹⁰ Matthews has, in his recent dissertation, gone some way to redressing this imbalance, however, providing an analysis of Bacon's works which concludes that in his theology can be traced a movement away from the Calvinism of his youth, and that this movement, including the adoption of theological standpoints which hark back to the Church Fathers, at the very least accompanies the development of his natural philosophy.¹¹

It may be that the importance of religion to Bacon's works is not to be found in expressions of his confessional stance, however. If he was, as Weinberger has suggested, a non-believer, or even an atheist, it would be unsurprising that he chose not to express this point of view in public. Accusations of atheism

⁷ Zagorin, p. 51; pp. 45-51.

⁸ White, pp. 67-75 & passim; Martin, pp. 38-42, 148, 172.

⁹ Steven P. Matthews, 'Apocalypse and Experiment: The Theological Assumptions and Religious Motivations of Francis Bacon's Instauration' (unpublished doctoral dissertation, University of Florida, 2004), p. 7.

¹⁰ Gaukroger, pp. 74-83.

¹¹ See Matthews for Bacon's logos theory (pp. 137-42), and for Bacon's apparent move towards the doctrine of Theosis as found in the thought of figures as diverse as Irenaeus and

were particularly damaging to one's personal reputation and, as Sir Walter Raleigh, Thomas Harriot, and Christopher Marlowe discovered, it was also technically an act of treason.¹² It seems that it is more important to assess Bacon's expressions of religious faith, as whether they are deeply held or cynically displayed as a defence against charges of atheism, the manner of their expression cannot but bear some relevance to the general plan of Bacon's works: if he were an atheist cynically manipulating the Bible for his own, 'scientific' ends, then the manner of his manipulation will shed light on these ends; if he held a deep-seated belief, the manner of his expression of this belief cannot but inform his philosophical writings. Indeed, Bacon went to some lengths to avoid being considered an atheist, discussing the matter in his *Meditationes sacræ*, as well as devoting an essay to the subject in the 1611 edition of the *Essays*.¹³

It is hard to reconstruct Bacon's theology with any absolute assurance – especially towards the latter, and more successful, phase of his political life during James's reign – but there are a number of important points which can be deduced from, and followed through in, his writings. There are two works which apparently deal directly and clearly with Bacon's own, personal beliefs, the *Meditationes sacræ* (1597) and *Confession of Faith* (c1603) – the first published alongside the 1597 edition of the *Essays*, the second remaining unpublished until after this death. Outside of these two pieces there are a few spurious works such as the *Prayers* printed by Tenison in his *Baconiana* (1679), his *Translation of Certain Psalms* (1624), and *Christian Paradoxes* (publ. 1643, of dubious ascription).¹⁴ In his professional life, Bacon produced three works of interest, though all of distinctly political hues: *An*

Osiander (pp. 155-57).

¹² See Stephen Greenblatt, *Shakespearean Negotiations: The Circulation of Social Energy in Renaissance England* (Oxford: Clarendon Press, 1988), pp. 21-26.

¹³ 'Of Atheisme' first appeared in H51, an MS version of the *Essays*, and was first published in 1612 (*OFB*, XV, pp. 51-54, cxvi-cxviii). It is also of interest that Bacon specifically states that his writings ought not to be considered tacit support for either the Manichæan or the Cathar heresies in *Historia vitæ et mortis* (*SEH*, V, pp. 292, 310 (*SEH*, II, pp. 185, 202)).

¹⁴ Cf. *SEH*, VII, pp. 259-62, 275-86, 292-97.

Advertisement Touching the Controversies of the Church of England (1589, publ. 1657); *Certain Considerations Touching the Better Pacification and Edification of the Church of England* (1603, partially publ. 1604); and *Advertisement Touching an Holy War* (1622, publ. 1629). The first piece was written for private circulation in response to the Martin Marprelate affair, the second presented to James on his accession as a guide to policy regarding the Church, while the third is but a fragment of a work Bacon undertook in order to give James the benefit of his experience regarding the re-kindling of the possible match between Prince Charles and the Spanish Infanta.¹⁵

It is, ultimately, the manifestation of theological matters within Bacon's philosophical works which is of most interest, however, and the manner in which the manifestation of theology within these works changes over time. After the unpublished *Valerius terminus*, in which Bacon outlines the theological foundations of the Instauration, it may seem that theological matters become less and less important, their direct discussion in *Novum organum*, for example, being limited to four aphorisms in Book I.¹⁶

¹⁵ Cf. *LL*, I, pp. 72-3; *LL*, III, pp. 103-27; *SEH*, VII, pp. 3-7. For Brian Vickers, *An Advertisement* was not written on behalf of the government, citing its suppression by Bancroft when Bacon prepared it for publication in 1603 as evidence (see 'The Authenticity of Bacon's Earliest Writings', p. 250). Jardine and Stewart, in contrast, consider this work as one written, effectively, to order and, as such, providing little information regarding Bacon's thought on the subject (Jardine and Stewart, pp. 123-5). Interestingly, they also note that Bancroft himself quoted from this work (Jardine and Stewart, p. 124). For more on the Marprelate controversy and the resumption of the Spanish Match in the early 1620s, see MacCulloch, pp. 387-89; Stewart, pp. 310-329; Clegg, pp. 161-96.

¹⁶ Book I of *NO* is concerned with a clearing of the ground for the inductive process, and thus necessarily encounters the relationship between divine and human knowledge, though without engaging with them at the depth of *DAS*, for example. Aph. 49 considers the relationship between superstition and knowledge, while 89 and 93 deal with the mixture of divine and human knowledge and the nature of providence – considering Matthew 22. 29 in Aph. 89, and Luke 17. 20 and Daniel 12. 4 in Aph. 93 (*OFB*, XI, pp. 87, 143-47, 151) – while Aph. 129 reinforces Bacon's justification of the seeking of new knowledge: 'Discoveries are also like new Creations repeated, and imitations of God's handiwork' (*OFB*, XI, pp. 193-97). Book II concerns the features of induction itself, and is accordingly shorn of any such discussions, its only contribution to the subject being limited to the final page: 'However, both of these losses can to some extent be made good even in this life, the former [the loss of the state of innocence] by religion and faith, the latter [the loss of man's command over the state of things] by the arts and sciences' (*OFB*, XI, p. 447).

De augmentis (1623) contains two primary sections concerning religion. Both of these sections are to a large degree repetitions of the arguments to be found in the *Advancement of Learning*, beginning with the argument regarding defence against clerical attacks on the program of learning, and ending, in Book IX of *De augmentis*, with what Bacon terms ‘the legitimate use of human reason in divine subjects; the doctrine concerning the Degrees of unity in the Kingdom of God; and the Emanations of the scriptures’.¹⁷ Bacon omits from the later work passages which might be held to relate to confessional controversy, such as ‘the Divisions of Inspired Divinity’, seemingly from a sense of political expediency, as he wrote to James in his letter of presentation:

It is a translation, but enlarged almost to a new work. I had good helps for the language. I have also been mine own *Index Expurgatorius*, that it may be read in all places. For since my end of putting it into Latin was to have it read everywhere, it had been an absurd contradiction to free it in the language and to pen it up in the matter.¹⁸

Weinberger suggests that, since the passages omitted were primarily those offensive to Rome, and that the problems of Christianity are central to Bacon’s thought, *De augmentis* is an incomplete work.¹⁹ This reading presupposes that Bacon’s omissions were indeed designed simply to avoid offending the Church of Rome, and therefore allowing his book to be read in Italy and other Catholic countries. If this is the case, then his efforts were, at the last, somewhat unsuccessful, as Marta Fattori has shown.²⁰ At the time of publication, however, England’s religious unity was becoming strained.

¹⁷ *SEH*, V, p. 111-19 (*SEH*, I, pp. 829-37). Cf. *OFB*, IV, pp. 3-9, 182-93; *SEH*, I, pp. 431-37.

¹⁸ *LL*, VII, p. 436. The omission of the ‘Divisions of Inspired Divinity’ is highlighted in the subtitle of Book IX of *DAS* (*SEH*, V, p. 111 (*SEH*, I, p. 829)), while the actual passages omitted are two from *AL*: *OFB*, IV, pp. 188-89, 190-91. It is notable that the passage concerning theology in *DAS*, which was *AL* translated ‘not without great and ample additions and enrichment thereof’ (*SEH*, VII, p. 14), is actually shorter than the equivalent passage in *AL*.

¹⁹ Weinberger, pp. 10-11; cf. *SEH*, III, p. 277, fn. 1.

²⁰ The censors found other material within it offensive enough to suppress this work, however, though they found nothing in the matter of *NO* to warrant its suppression, objecting simply to the words with which Bacon had praised James in his preface, see Fattori.

James's tactic of Spanish appeasement was allowing Catholicism to gently re-introduce itself, at least into the upper reaches of the nobility, and even James's recently deceased wife, Anna, had converted from Lutheranism.²¹ James's attempts to shore up Jacobean succession via the marriage of Charles to the Catholic Spanish Infanta had only very recently foundered. More importantly, perhaps, was the perception that James was losing the confidence of his people while his successor, Charles, was increasing his popularity to the detriment of the royal authority, a perception expressed, for example, in a letter of May 1624 by the Venetian ambassador.²² It may well be that Bacon's efforts were as much to ensure that there was nothing controversial within his work that might offend James as a desire to allow the work a wider European audience.

It is, however, as interesting to note what Bacon expanded upon as what he omitted – arguments regarding the place of authority in both human and divine subjects:

But as the use of the human reason in things divine is of two kinds, so likewise in the use there are two kinds of excess; the one when it inquires too curiously into the manner of the mystery; the other when the same authority is attached to inferences as to principles.²³

Bacon here calls for a 'divine logic' which might not only 'lull to sleep the vanity of curious speculations [...] but also in some degree to assuage the fury

²¹ According to Cyndia Clegg, 'prospects of a Spanish alliance seem to have made conversion to Catholicism fashionable at court' (Clegg, p. 208).

²² See Clegg, p. 163. What does seem certain is that the reaction to James's policies over the Palatinate question led, at the very least, to the favouring of 'Arminians' with regards position, though this may be considered as being due more to political pragmatism than to any doctrinal conviction. The result, along with the efforts of Launcelot Andrewes, who MacCulloch describes as possessing a 'gentle Catholic spirituality', however, was to ensure that Charles, himself a 'High-Churchman', was increasingly influenced by the Arminian bishops, a state of affairs which led, inevitably, to the dominance of Laudianism in the latter part of the 1620s and the 1630s. MacCulloch calls Charles's actions at this time 'an attempt at Counter-Reformation without the Jesuits' (MacCulloch, pp. 510, 515-20).

²³ *SEH*, V, p. 115 (*SEH*, I, p. 833). Here Bacon draws a clear distinction between principles, which are clearly set down in scripture, and inferences, which are humane interpretations of scripture: Bacon warns against granting authority to the words of man over the words of God.

of controversies, wherewith the church is troubled'.²⁴ Bacon here wishes to differentiate between those disagreements which are legitimate, and those which are, in effect, heretical, noting 'that there are some articles, wherein if a man dissent he is placed beyond the pale of the covenant; but that there are others in which he may dissent, and yet remain within it.'²⁵

Before we move towards Bacon's apparent demonstration of this principle at work in *New Atlantis*, it is as well that we consider how Bacon's approach to religion first manifested itself within his philosophy, and how this changed over time. *De augmentis*, it must also be noted, was not only a 'translation' of the *Advancement of Learning*, but was a work intended and expected to be read before, and not after, *Novum organum*, as he suggested to Launcelot Andrewes in 1622.²⁶

Viewed in this progressive sense, it is interesting to note how Bacon's expressions of theology change over time, not least that only two writings directly concerning theology make it into print in Bacon's lifetime: the *Meditationes sacræ* – published alongside the essays in editions from 1597 to 1624, only being removed from the 'final' edition in 1625 – and the essay 'On Religion', first appearing in the 1612 edition of the Essays, before being

²⁴ *SEH*, V, p. 115 (*SEH*, I, p. 833).

²⁵ *SEH*, V, p. 115 (*SEH*, I, p. 834). It is interesting also to note that of the four things which Bacon stated were known only to God, 'the misteries of the kingdome of glorie; the perfection of the Lawes of Nature: the secrets of the heart of Man: and the future succession of all ages' (*OFB*, IV, p. 187), only two survive the 'translation': 'there are two things which are known to God the author of the Scriptures, but unknown to man; namely, the secrets of the heart, and the successions of time' (*SEH*, V, p. 117 (*SEH*, I, p. 835)).

²⁶ See *SEH*, VII, pp. 13-14. The engraved title for *DAS*, however, reads 'OPERA | FRANCISCI | BARONIS | DE | VERVLAMIO, | VICE-COMITIS | SANCTI ALBANI; | [rule] | TOMVS PRIMVS: | [rule] | Qui continet | *De Dignitate & Augmentis Scientiarum* | LIBROS IX.' The engraved title does not, therefore, place *DAS* as Part I of the *Instauratio magna*, but of Bacon's *Works*, though Rawley's letter 'To The Reader' does (*De augmentis* (London: John Haviland, 1623), ¶2^r-¶2^v). It is also interesting to note that Bacon mentions nothing of his personal *Index* to Andrewes, an omission, given the nature of their relationship and the rest of the letter, which might be considered strange. Bacon was also concerned generally with the future reception of works, even dedicating some of them in this fashion (see *SEH*, V, p. 215 (*SEH*, II, p. 103)), effectively treating his philosophy in a similar manner to that which he treated the scriptures, as works that needed to speak not only to those present and living, but 'to men of every age and nation' (*SEH*, V, p. 118 (*SEH*, I, p. 836)).

heavily revised, and renamed 'Of Unity in Religion,' for the 1625 edition.²⁷

b. The progression of the philosophical programme

The first glimmer of Bacon's philosophical programme can be seen in 1592, in a letter he sent to his uncle, Lord Burghley, bemoaning his lack of advancement:

Lastly, I confess that I have as vast contemplative ends, as I have moderate civil ends: for I have taken all knowledge to be my province; and if I could purge it of two sorts of rovers, whereof the one with frivolous disputations, confutations, and verbosities, the other with blind experiments and auricular traditions and impostures, hath committed so many spoils, I hope I should bring in industrious observations, grounded conclusions, and profitable inventions and discoveries; the best state of that province.²⁸

His next expression of intent, and a deeper analysis of those problems besetting knowledge, is to be found in the short piece *The Praise of Knowledge*, a speech read to court in 1592 as part of the larger piece *Of Tribute; or, giving that which is due*.²⁹ It is in this piece that Bacon first suggests not only that 'the sovereignty of man lieth hid in knowledge', but also that the three great inventions of recent years, printing, artillery and the compass, were 'stumbled upon and lighted on by chance'.³⁰ Neither of these two pieces, however, considers religion, or gives the reader more than an idea of Bacon's widest aims. The first considered expressions are to be found in *Cogitationes de scientia rerum* and *Valerius terminus*, which lay unpublished until Isaac Gruter's *Francisci Baconi de verulamio scripta in naturali et universali philosophiâ* of 1653, and Stephens' *Letters and Remains* of 1734, respectively.³¹

²⁷ *OFB*, XV, pp. lxxv, lxxxv, lxxii, 11. *Meditationes sacræ* was first published in Latin, but by the second edition of the Essays of 1597 had been translated into English (*SEH*, VII, pp. 229-30).

²⁸ *LL*, I, p. 109.

²⁹ *Francis Bacon: The Major Works*, pp. 22-51.

³⁰ *Ibid.*, p. 36. For more on this subject, see Archer, *Sovereignty and Intelligence*, pp. 120-39

³¹ *SEH*, III, pp. 4, 201.

Both works, with the *Cogitationes de scientia rerum* surviving in somewhat mutilated form, were written before the *Advancement of Learning*, around 1602-3.³² *Valerius terminus* corresponds closely enough to parts of both the *Advancement of Learning* and *Novum organum* for Ellis to name it ‘the earliest type of the *Instauratio*’, and at the end of the manuscript in which it survives was the *Temporis partus masculus*, preceded by a short prayer, entitled *Temporis partus masculus, sive Instauratio Magna imperii humani in universum*.³³ This title is particularly significant as it is Bacon’s first use of the term *instauratio*, a term which Bacon never fully explained, but one which, according to Charles Whitney, ‘bound together ritual, architectural, political, and prophetic meanings’, from its place in the title of the *Instauratio magna* itself to its use in *De sapientia*.³⁴

Whitney notes, however, that Bacon also utilises it in a specifically Baconian fashion, simultaneously to represent a sense of restoration *and* beginning, combining religious pre-occupations with secular ones, which illustrates the question encountered by critics when considering Bacon, his works and the Instauratio: to what degree is Bacon’s entire project impelled, nourished and affected by his theological beliefs and preoccupations?³⁵ It is the *apparent*

³² Spedding suggests that *Cogitationes* was written before *Valerius terminus*, but notes that not only is it practically impossible to date with any accuracy, but that the former is more of a collection of pieces than any concrete expression of intent. His justification for dating the *Cogitationes* before *Valerius terminus* relies, therefore, on the not unreasonable observation that sections of the *Cogitationes*, not least the first fragment concerning the limits and ends of knowledge, are the same argument as is to be found in both *Valerius terminus* and the later *AL* (*SEH*, III, pp. 179-82).

³³ *SEH*, III, pp. 202, 523; for *Temporis partus masculus*, see *SEH*, III, pp. 527-39 and its translation in Farrington, pp. 59-72. Bacon himself described *Temporis partus masculus* as ‘the first chapter of a book of the same argument, written in Latin, and destined to be separate and not public’ (*SEH*, III, p. 523).

³⁴ Charles Whitney, ‘Francis Bacon’s Instauratio: Dominion of and over Humanity’, *Journal of the History of Ideas*, 50, (1989), 371-90 (p. 378). In *Francis Bacon and Modernity*, Whitney notes that the word is also to be found in Statius’ miscellany *Silvae*, as well as in the title of Tycho Brahe’s *Astronomiae instauratae progymnasmatum* (pp. 50-55). For Bacon’s usage of the term in *De sapientia*, see *SEH*, VI, pp. 648, 661, 676, 721, 737, 753.

³⁵ The word instauratio was contemporary coinage, as demonstrated by the *OED*, but tended to be used with respect to one meaning, generally renewal *or* establishment in the sense of ‘setting up’. For renewal, the *OED* cites T. Cartwright *Confut. Rhem. N. T.* (1618), p. 621, ‘at

tension between theology and science in Bacon's work which is in need, it seems, of resolution – for both Bacon and reader alike.

c. Theology and philosophy

1605 saw the publication of Bacon's first major philosophical work, the *Advancement of Learning*. Divided into two books, this work sought first to justify the project of increasing the knowledge of mankind, and secondly to review the state of knowledge of mankind, the latter task being undertaken largely in order to identify the lacunae in human knowledge.³⁶ The first three pages of this work are an embedded dedicatory letter, designed to flatter King James in order to promote the cause of both book and author. Having flattered James appropriately, Bacon now turns his attention to the clearing of the way for learning, to refuting those criticisms which it has suffered, so that his project might be received in an appropriate light:

I think good to deliuer it [the dignitie of Learning] from the discredites and disgraces which it hath receiued; all from ignorance; but ignorance seuerally disguised, appearing sometimes in the zeale and iealousie of Diuines; sometimes in the seueritie and arrogancie of Politiques, and sometimes in the errors and imperfections of learned men themselues.³⁷

In the *Advancement of Learning*, Bacon begins his argument by stating that he wishes to defend learning from three separate causes of ignorance, springing from divines, politiques, and learned men themselves. Bacon notes that criticism of the gaining of knowledge by divines centres around three ideas, the first being that 'thaspiring to ouermuch knowledge, was the originall temptation and sinne, whereupon ensued the fal of Man', the second 'that

the time of the instauration of all things'; Selden (1612) who notes Drayton's *Poly-Olb* xi. p. 186, 'if you referre it to instauration of what was discontinued by Wilfrids returne to his Archbishopphric'. For establishment, it suggests Stubbes *Anat. Abus.* (1583), p. 81, 'to instaure abbeis, prieries, nunries'; and Raleigh, *History of the World* (1614), II, p. 491, 'knowing the instauration of these games to haue been in the 408th yeare after Troy'.

³⁶ See *OFB*, IV, pp. 5, xvii-xxx.

³⁷ *Ibid.*, p. 5.

knowledge hath in it somewhat of the Serpent, and therefore where it entreth into a man, it makes him swel', and the third being St. Paul's warning that '*we be not spoyled through vaine Philosophie*'.³⁸ Bacon counters the first charge by noting that the knowledge which led to the Fall was the 'proude knowledge of good and euill, with an intent in man to giue law vnto himselfe, and to depende no more vpon Gods commaundements, which was the fourme of the temptation', not the knowledge he is promoting in the *Advancement of Learning*, the 'pure knowledg of nature and vniuersality, a knowledge by the light whereof man did giue names vnto other creatures in Paradise, as they were brought before him, according vnto their properties'.³⁹

With regards the charge of excessive pride engendered through knowledge, Bacon first notes that, as Solomon said, '*also hee hath placed the world in Mans heart, yet cannot Man finde out the worke which God worketh from the beginning to the end*',⁴⁰ reading this as suggesting that as God has made man capable of comprehending the world, though not the 'supreame or summarie law of Nature', that 'nothing parcell of the world, is denied to Mans enquirie and inuention'.⁴¹ Bacon's conclusion is that as there is no limit placed by God on the capacity of the mind of man, it is not the quantity but the quality of the knowledge which can cause dangerous pride. The solution, for Bacon, is the 'correctiue spice' of charity, which 'maketh knowledge so soueraigne', by which knowledge must be 'referred to the good of Men and Mankind'.⁴²

Before tackling the third issue, that philosophy can lead to atheism, Bacon explains the three limitations to knowledge resulting from the three criticisms:

The first, *That wee doe not so place our felicitie in knowledge, as wee forget our mortalitie*. The second, *that we make application of our knowledge to giue our selues repose and contentment, and not distast or repining*. The third: that we

³⁸ *Ibid.*, pp. 5-6.

³⁹ *Ibid.*, p. 6; cf. p. 155.

⁴⁰ *Ibid.*, p. 6.

⁴¹ *Ibid.*, p. 7.

doe not presume by the contemplation of Nature, to attaine to the misteries of God.⁴³

Bacon concludes his argument by stating that inquiry into nature cannot reveal ‘the nature or will of God’ as it can only reveal ‘no perfect knowledg, but wonder, which is broken knowledge’. While he admits that ‘diuers great learned men haue beene hereticall, whilst they haue sought to flye vp to the secrets of the Deitie by the waxen winges of the Sences’, it is not knowledge itself which is to blame, but failure to recognise the weaknesses of the human senses.⁴⁴ Against the suggestion that remaining ignorant of second causes forces a man to have a ‘more devoute dependance vppon God, which is the first cause’, Bacon first enlists the book of Job as an aid, before concluding that, to the contrary,

it is an assured truth, and a conclusion of experience, that a little or superficial knowledge of Philosophie may encline the minde of Man to Atheisme, but a further proceeding therein doth bring the minde backe againe to Religion.⁴⁵

It is at this point that Bacon moves a little away from the defence of learning in which the Bible is used as a textual authority to answer the clerical critics of learning, towards demonstrating a biblical *imperative* to learning:

To conclude therefore, let no man vppon a weake conceite of sobrietie, or an ill applyed moderation thinke or maintaine, that a man can search too farre, or bee too well studied in the Booke of Gods word, or in the Booke of Gods workes; Diuinitie or Philosophie; but rather let men endeauour an endlesse progresse or proficiencie in both: only let men beware that they apply both to Charitie, and not to swelling; to vse, and not to ostentation; and againe, that they doe not vnwisely

⁴² *Ibid.*, p. 7.

⁴³ *Ibid.*, p. 7. Bacon does, however, later consider ‘NATVRALL THEOLOGIE [...] that knowledge or Rudiment of knowledge concerning GOD, which may be obtained by the contemplation of his Creatures’ (*Ibid.*, p. 78).

⁴⁴ *Ibid.*, p. 8.

⁴⁵ *Ibid.*, pp. 8-9. This is a point he reiterates in ‘Of Atheisme’ (1612): ‘It is true, that a little Philosophy inclineth Mans Minde to *Atheisme*; But depth in Philosophy, bringeth Mens Mindes about to *Religion*: For while the Minde of Man, looketh upon Second Causes Scattered, it may sometimes rest in them, and goe no further: But when it beholdeth, the Chaine of them, Confederate and Linked together, it must needs flie to *Providence*, and *Deitie*’ (*OFB*, XV, p. 51).

mingle or confound these learnings together.⁴⁶

What Bacon refers to here is the two-book metaphor by which God's Scriptures show his will, while God's works show his power, and the verse from Matthew which authorises it: 'ye err, not knowing the Scriptures, nor the power of God.'⁴⁷

Written not long previously, *Valerius terminus* rehearses the arguments found in the *Advancement of Learning*, without diluting them with secular reasoning (though he happily utilises secular analogy) while also confronting more overtly theological concerns. The work does not begin with a dedication, but with these lines:

In the divine nature both religion and philosophy hath acknowledged goodness in perfection, science or providence comprehending all things, and absolute sovereignty or kingdom. In aspiring to the throne of power the angels transgressed and fell, in presuming to come within the oracle of knowledge man transgressed and fell; but in pursuit towards the similitude of God's goodness or love (which is one thing, for love is nothing else but goodness put in motion or applied) neither man or spirit ever hath transgressed, or shall transgress.⁴⁸

Bacon follows this with eight pages of theological defences of knowledge, in which he not only justifies, but explains such things as the nature of the fall of both men and angels, in order to ensure that no-one can see his scheme as a method of '*knowing good and evil*',⁴⁹ the cause of man's fall. Bacon is also keen to differentiate between this knowledge and the natural knowledge with

⁴⁶ *OFB*, IV, p. 9.

⁴⁷ Matthew 22. 29. Bacon refers to this idea more than once: see *An Advertisement Touching the Controversies of the Church of England* (*LL*, I, p. 74); *Meditationes sacrae* (*SEH*, VII, p. 252); *Cogitata et visa* (*SEH*, III, p. 597; Farrington, p. 79); *Filum labyrinthi* (*SEH*, III, p. 501); *Valerius terminus* (*SEH*, III, p. 221); *AL* (*OFB*, IV, pp. 9, 37); *NO*, (*OFB*, XI, p. 145); *Historia naturalis et experimentalis* (*SEH*, II, p. 14 (*SEH*, V, p. 132)). *DAS*, (*SEH*, I, p. 469). Bacon also alludes to the two book idea in the *Parasceve* (*OFB*, XI, p. 469), while castigating those who search for philosophy in the Bible (*OFB*, IV, p. 188; *OFB*, XI, p. 103). The metaphor of nature as a book, in which could be read God's power, was extant in the writings of theologians such as Hugh of St. Victor, Vincent of Beauvais, William of Conches and Alan of Lille: see Peter Harrison, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998), pp. 44-56, 59.

⁴⁸ *SEH*, III, p. 217.

which man was graced, 'being in his creation invested with sovereignty of all inferior creatures'.⁵⁰ Considering that 'knowledge is of the number of those things which are to be accepted of with caution and distinction', and that 'it is not easy to discern where the issues and streams thereof will take and fall', Bacon 'thought it good and necessary in the first place to make a strong and sound head or bank to rule and guide the course of the waters; by setting down this position or firmament, namely, *That all knowledge is to be limited by religion, and to be referred to use and action*'.⁵¹

Bacon, having defended his programme against theological criticism, now utilises Matthew 22. 29 as a biblical imperative to learning.⁵² In the earlier, and exclusively theological, *Meditationes sacræ*, Bacon had used this verse specifically to enter into a discourse on heresy.

Meditationes sacræ has been described as 'unexceptionably orthodox'⁵³ and, generally speaking, it is exactly that, though there are suggestions that it subtly contradicts what might be considered the Calvinist orthodoxy on the subject of free will. Taking the form of eleven short discourses, or essays, the *Meditationes sacræ* runs through a relatively standard set of Christian concerns. The final essay, 'Of Heresies', concerns the manner in which heresy is not merely a result of incorrect actions, but can be seen to result from inaction. Quoting Matthew 22. 29 as a subheading, Bacon begins his interpretation:

This canon is the mother of all canons against heresies. The cause of error is twofold: ignorance of the will of God, and ignorance or superficial consideration of the power of God. The will of God is more revealed through the Scriptures: *Search the Scriptures*; his power more through his creatures: *Behold and*

⁴⁹ *Loc. cit.*

⁵⁰ *Loc. cit.*

⁵¹ *SEH*, III, p. 218.

⁵² *Ibid.*, p. 221; *OFB*, IV, pp. 9, 37.

⁵³ Zagorin, p. 50. It is also notable that the *Meditationes sacræ* was published on its own in 1641, though anonymously, as *A confession of faith penned by an orthodox man of the reformed religion*, (London: for William Hope, 1641).

consider the creatures. So is the plenitude of God's power to be asserted, as not to involve any imputation upon his will. So is the goodness of his will to be asserted, as not to imply any derogation of his power.⁵⁴

It is from this passage that Matthews identifies the possibility that, for Bacon, superficial or ignorant consideration of the creatures is as much heresy as superficial or ignorant consideration of the scriptures.⁵⁵ Bacon makes explicit its relation to the 'two book' metaphor in *Valerius terminus*, where he writes that God is 'laying before us two books or volumes to study if we will be secured from error; first the Scriptures revealing the will of God, and then the creatures expressing his power'.⁵⁶

Benjamin Milner has suggested that Bacon's interpretation of this verse from Matthew changes over the course of his works, suggesting of aphorism 89 of *Novum organum*, that 'this interpretation of a favorite text is both radical and astonishing for its exaltation of natural philosophy to the level of Scripture'.⁵⁷ The aphorism, however, reads 'and so to religion natural philosophy is rightly given as her most faithful servant, the former manifesting God's will, the latter His power',⁵⁸ so it seems strange that Milner should consider that Bacon is suggesting that the servant is equal to the master.⁵⁹ Milner not only errs in his suggestion that Bacon is raising natural philosophy to the level of scripture, but also errs in his conflation of religion with scripture, as well as failing to take note of Bacon's later expressions of the importance of understanding the book of nature. In the *Abecedarium novum naturæ*, and *Historia naturalis et experimentalis*, for example, Bacon re-iterates the importance of understanding the book of works in terms of the 'alphabet' of

⁵⁴ *SEH*, VII, p. 252.

⁵⁵ Matthews, pp. 118-19.

⁵⁶ *SEH*, III, p. 221. This is repeated verbatim in *AL* (*OFB*, IV, p. 37).

⁵⁷ Benjamin Milner, 'Francis Bacon: The Theological Foundations of Valerius Terminus', *Journal of the History of Ideas*, 58 (1997), 245-64 (p. 263).

⁵⁸ *OFB*, XI, p. 145.

⁵⁹ The word *ancilla* (*SEH*, I, p. 197) is translated as 'handmaid' in *SEH*, IV, p. 89, so this can hardly be attributed to differing translations.

nature.⁶⁰ Indeed, the relevant part of aphorism 89 reads as follows:

For he was not wrong who said: *Ye do err, not knowing the scriptures, and the power of God*—thus mingling and joining together in an indissoluble bond information regarding His will with a meditation on His power. Meanwhile it is small wonder that the growth of natural philosophy has been held back when religion, which has such influence over men’s souls, has, through the ignorance and reckless zeal of some, been kidnapped and turned against it.⁶¹

If anything, Bacon is more explicitly stating that the religious man must seek knowledge of God’s power as it occurs in nature. This passage also shows that Bacon, unlike Milner, does not confuse religion with scripture. Bacon wrote in *De augmentis*, that ‘it is not for nothing that the Apostle called religion, “Our reasonable service of God”’.⁶² For Bacon, scripture is the revelation upon which religion depends, whereas religion is the activity of mankind built upon this revelation: ‘religion, whether considered with regard to morals or mysteries, *depends* on revelation from God.’⁶³ In like fashion, it is in nature that God’s power is revealed, and the activity built upon this natural revelation is natural philosophy. The important point for Bacon is to ensure that the interpretation of the revelation, be it scriptural or natural, is freed from superstitious or disputatious error. There seems to be little difference for Bacon between superstitious and erroneous religion based not on scripture, but on the specious authority of Popes or Church Fathers, and the superstitious and erroneous philosophies based not on the observation of nature, but on the specious authority of ancients such as Aristotle – both of these errors Bacon sees as being built upon ‘vain disputation’.⁶⁴

⁶⁰ *OFB*, XIII, p. 173; *SEH*, V, p. 133 (*SEH*, II, p. 15); *SEH*, V, p. 426 (*SEH*, III, p. 22); see *OFB*, XIII, pp. xxxix-xl.

⁶¹ *OFB*, XI, pp. 145-47.

⁶² *SEH*, V, p. 113 (*SEH*, I, pp. 831-32); *OFB*, IV, p. 183.

⁶³ *SEH*, V, p. 113 (*SEH*, I, p. 831) (my emphasis).

⁶⁴ Milner also ignores Bacon’s arguments in the preface to the *Historia naturalis et experimentalis* where Bacon criticises current philosophy: ‘I know not whether we more distort the facts of nature or our own wits; but we clearly impress the stamp of our own image on the creatures and works of God, instead of carefully examining and recognising in them the stamp of the Creator himself’ (*SEH*, V, p. 132 (*SEH*, II, p. 14)).

For Bacon, the most important thing is that we deal both in ‘right’ religion and ‘right’ philosophy.⁶⁵ In the *Confession of Faith*, Bacon writes as follows:

the Church hath no power over the Scriptures to teach or command anything contrary to the written word, but is as the Ark, wherein the tables of the first testament were kept and preserved: that is to say, the Church hath only the custody and delivery over of the Scriptures committed unto the same; together with the interpretation of them.⁶⁶

In a similar fashion, Bacon is suggesting that natural philosophy has no power to change or usurp the power of God, merely to interpret it. This power of interpretation does not extend to the ability to suspend the laws of nature, such as God does when he performs a miracle, but merely to understanding them and manipulating them, for the greater good of mankind.⁶⁷ It is here that Bacon approaches once more the concept of Christian charity as the driving and directing force behind natural philosophy.⁶⁸ There is no fundamental difference between the exhortation in *Valerius terminus* that ‘*all knowledge is to be limited by religion*’,⁶⁹ and that in *Novum organum*: ‘Let the human race only be given the chance to regain its God-given authority over nature, then indeed will right reason and true religion govern the way we exert it.’⁷⁰

Having argued that the proper investigation of nature is not only incapable of causing the damnation of the soul, but that it is also an imperative, and one

⁶⁵ He refers to James using these terms, too, in *AL*: ‘Neither ought a Man to make scruple of entring into these things for inquisition of truth, as your Maiestie hath shewed in your owne example: who with the two cleere eyes of Religion and naturall Philosophy, haue looked deeply and wisely into these shadows, and yet proued your selfe to be of the Nature of the Sunne, which passeth through pollutions, and it selfe remaines as pure as before’ (*OFB*, IV, pp. 63-64. Cf. *SEH*, IV, p. 296 (*SEH*, I, p. 498)).

⁶⁶ *SEH*, VII, p. 225.

⁶⁷ For Bacon, miracles are ‘new creation’ (*SEH*, VII, pp. 221, 243).

⁶⁸ It is not only Christian charity to which he appeals, but to humility, as he repeats the formulation he used in *Valerius terminus* in the *Abecedarium*, namely that ‘it is no less true in this human kingdom of knowledge than in God’s kingdom of heaven, that no man shall enter into it *except he become first as a little child*’ (*SEH*, III, p. 224; *OFB*, XIII, p. 173. Cf. *SEH*, V, p. 133 (*SEH*, II, p. 15)).

⁶⁹ *SEH*, III, p. 218

⁷⁰ *OFB*, XI, p. 197.

which 'leadeth to the greater exaltation of the glory of God',⁷¹ Bacon considers, in *Valerius terminus*, how such knowledge ought to be wielded:

And therefore it [knowledge] is not the pleasure of curiosity [...] but it is a restitution and reinvesting (in great part) of man to the sovereignty and power (for whensoever he shall be able to call the creatures by their true names he shall again command them) which he had in his first state of creation.⁷²

The ends of the Baconian reformation of Natural Philosophy are not merely an improvement of man's lot, but a restitution of man's original authority over nature – an authority figured in terms of knowledge. While Bacon identifies the investigation of nature as a biblical imperative, he does not connect this investigation with the salvation of the mortal soul, something over which God still retains absolute and continuous control.⁷³ While in the *Meditationes sacræ* Bacon promotes a religion of good works, he nowhere identifies good works as a visible manifestation of election, as Calvin and others do.⁷⁴ Bacon does not seem to accord with what has come to be known as the 'Merton Thesis', which links the advancement of knowledge and the puritan expression of the reformed faith in the late 16th and early 17th centuries.⁷⁵

⁷¹ *SEH*, III, p. 221.

⁷² *Ibid.*, p. 222.

⁷³ *SEH*, VII, p. 221.

⁷⁴ *Ibid.*, p. 249, see Milner, p. 246. Cf. *Institutes*, III.xiv.20, III.xxiv.4. See William R. Stevenson, Jr., *Sovereign Grace: The Place and Significance of Christian Freedom in John Calvin's Political Thought* (New York, Oxford: Oxford University Press, 1999), p. 77; William Perkins, *A Reformed Catholicke* (London: John Legate, 1611), B6^v-B7^r. Cf. William Perkins, *A Golden Chaine*, trans. by R. H., 2nd edn (Cambridge: John Legate, 1597), M2^v: 'good workes they are made effectes of predestination'.

⁷⁵ This thesis suggests that the pious Puritan, convinced of his elect status, gives expression to this status through the performance of good works, understanding that such performance was an infallible sign of election, as good works could only be carried out by the individual in receipt of divine grace (cf. *Institutes*, II.ii.6). It must be noted, however, that Merton is not suggesting a *causal* link in the manner which many of his critics suggest. See Dorothy Stimson, 'Puritanism and the New Philosophy in 17th Century England', *Bulletin of the Institute of the History of Medicine*, 3 (1935), 321-4; Robert K. Merton, 'Puritanism, Pietism and Science', *The Sociological Review* 28 (1936), 1-30; Robert K. Merton, 'Science, Technology and Society in Seventeenth Century England', *Osiris*, 4 (1938), 360-632. For later discussion of this thesis see Richard A. Greaves, 'Puritanism and Science: The Anatomy of a Controversy', *Journal of the History of Ideas*, 30 (1969), 345-368; John Morgan, 'Puritanism and Science: A Reinterpretation', *The Historical Journal*, 22 (1979), 535-560; Gary A. Abraham, 'Misunderstanding the Merton Thesis: A Boundary Dispute between History and Sociology', *Isis*, 74 (1983), 368-87; Robert K. Merton, 'The Fallacy of the Latest

Bacon is very careful, in *Valerius terminus*, to argue that investigation into the natural world must be undertaken with appropriate notice of biblical injunctions.⁷⁶ He states that nature was not to be studied in order to ‘attain to any light for the revealing of the nature or will of God’,⁷⁷ and while he does state repeatedly that study of his creatures can lead to an understanding of God’s power, he is careful to point out that God is not his works: ‘For as all works do shewe forth the power and skill of the workeman, and not his Image: So it is of the works of God; which doe shew the Omnipotencie and wisdome of the Maker, but not his Image.’⁷⁸

Having argued that learning is not to be seen as a challenge to divine authority or scripture, but is an imperative to those who wish to be ‘secure from error’, Bacon moves his position subtly in the *Advancement of Learning*:

For our Sauour saith, *You erre not knowing the Scriptures, nor the power of God*: laying before vs two Bookes or volumes to studie, if we will be secured from error: first the scriptures, reuealing the will of God; and then the creatures expressing his power; whereof the later is a key vnto the former; not onely opening our vnderstanding to conceiue the true sence of the scriptures, by the generall notions of reason and rules of speech; but chiefly opening our beleefe, in drawing vs into a due meditation of the omnipotencie of God, which is chiefly signed and engrauen vppon his workes. Thus much therefore for diuine testimonie and euidence, concerning the true dignitie and value of learning.⁷⁹

Word: The Case of “Pietism and Science”, *The American Journal of Sociology*, 89 (1984), 1091-1121; Steven Shapin, ‘Understanding the Merton Thesis’, *Isis*, 79 (1988), 594-605). See also Webster and R. Hookyaas, *Religion and the Rise of Modern Science* (Edinburgh and London: Scottish Academic Press, 1972).

⁷⁶ Morgan suggests that ‘some puritans, it is true, found it possible to produce works pertinent to the new philosophy without involving theology. Henry Gellibrand’s *Institution trigonometricall* (1635) made no mention whatsoever of any inspiration by the deity: it was a straightforwardly utilitarian mathematical text with no outward pretension to godliness. This sort of work did not offend puritan sensibilities for the very reason that it *made no religious claims*’ (Morgan, p. 556). As has been noted, as James’s ecclesiastical policy became increasingly politically motivated, Bacon may have simply found it easier to avoid anything but the most uncontroversial theological points.

⁷⁷ *SEH*, III, p. 218.

⁷⁸ *OFB*, IV, pp. 78-79. Cf. *SEH*, IV, p. 341 (*SEH*, I, p. 545).

⁷⁹ *OFB*, IV, pp. 37-38. Cf. *SEH*, III, p. 221.

In *Valerius terminus*, the second book shall merely ‘certify us that nothing which the first teacheth shall be thought impossible’,⁸⁰ whereas in the *Advancement of Learning*, it has become ‘a key vnto the former’. Where the study of the book of nature shall serve as a manner of proof of the things contained within the scripture, now learning not only allows for more accurate translation and thus interpretation of the scripture, but also draws the individual inexorably into the belief that God exists, while scripture instructs man as to the manner of belief required of man by God: the mysteries of faith.

It is not until *New Atlantis*, however, that Bacon actually presents an idealised depiction of the acquisition of religious truth, in which the relationship between theology and natural philosophy is one of mutual authorisation. In his philosophical works, scripture is used first as imperative and supporting authority to his natural philosophical project, before natural philosophy is presented as a support, and then a key, to religion – neither is privileged above the other, they form instead a mutually supporting framework. Just as scripture authorises the pursuit of natural philosophy, so natural philosophy seems to be able to authorise parts of scripture. The Bensalemite revelation makes evident this mutually supporting relationship, as the acquisition of the scripture depends upon a correct interpretation of natural phenomena.

d. The Bensalemite revelation

The revelation on Bensalem is delivered in a highly symbolic manner, and in circumstances which subtly remind the narrator, and the reader, exactly how privileged the island of Bensalem is, and exactly how it has come to be so.⁸¹

The mysterious column of light, itself more than redolent of the pillar of flame which guides the Israelites out of Egypt,⁸² is a sign which needs interpretation,

⁸⁰ *SEH*, III, p. 221.

⁸¹ See *NA*, b3^v-b4^v (*SEH*, III, pp. 137-39).

⁸² Exodus 13. 21, 33. 9; Nehemiah 9. 12. It is notable that in Exodus 33. 9, the pillar of cloud

and it is ‘*one of our Wise Men, of the Society of Salomons House*’, who is on hand to make this interpretation.⁸³ The symbolic inclusion of the cross of light on the top, something that the Bensalemites could not possibly be expected to understand as they have no knowledge of Christ, is also redolent of the vision seen by Constantine before the battle of Milvian Bridge. The ‘wise man’ deems the column to be a miracle, and offers up a prayer asking for the correct interpretation of the miracle. The result of this is that his boat is freed from its enforced stasis and allowed to approach closer, so that the revelation might take place. The importance of this episode is not so much the revelation which it allows, but the manner in which the interpretation is described.

The brother of Salomon’s House makes it plain that his ‘society’ has been granted the knowledge to ‘*discerne (as farre as appertaineth to the Generations of Men) Between Diuine Miracles, Workes of Nature, Works of Art, and Impostures and Illusions of all sorts*’.⁸⁴ It is this knowledge, granted by God, which allows the brother to declare that this column of light is a ‘*true Miracle*’.⁸⁵ While the brother does not explain the exact process through which he has made such a judgement, or interpretation, it seems that it is through natural philosophy rather than any direct communication from God as might befit a prophet from the Bible, say, which gives him this power: natural philosophy interprets natural phenomena while God alone can provide the interpretation for divine phenomena. The brother, therefore, knows enough natural philosophy to know that what he is seeing is not natural. The only way to discern a miracle, according to Bacon’s way of thinking (a way of thinking which accords directly with that of the brother of Salomon’s House), is by demonstrating that the phenomenon in question breaks or violates one of the laws of nature, as can be seen by comparing the words of the ‘wise man’ with

denotes communication with God: ‘And it came to pass, as Moses entered into the tabernacle, the cloudy pillar descended, and stood *at* the door of the tabernacle, and *the Lord* talked with Moses.’

⁸³ NA, b3^v (SEH, III, p. 137).

⁸⁴ NA, b3^v-b4^r (SEH, III, p. 137).

⁸⁵ NA, b4^r (SEH, III, p. 137).

Bacon's own from the *Advancement of Learning*:

And for-as-much, as we learne in our Bookes, that thou neuer workest Miracles, but to a Diuine and Excellent End, (for the Lawes of Nature are thine owne Lawes, and thou exceedest them not but vpon great cause).⁸⁶

But as for the Narrations touching the Prodigies and Miracles of Religions, they are either not true, or not Naturall; and therefore impertinent for the Storie of Nature.⁸⁷

There is, sadly, no more detailed mention of what books the 'wise man' refers to, though there does remain the delightful suspicion that these are simply the works of Francis Bacon, as Bacon also refers to miracles in the *Meditationes sacræ*, the *Confession of Faith*, and the *Advancement of Learning*:

(and every miracle is a new creation, and not according to the law of the first creation).⁸⁸

Likewise that whensoever God doth break the law of Nature by miracles, (which are ever new creations,) he never cometh to that point or pass, but in regard of the work of redemption, which is the greater, and whereto all God's signs and miracles do refer.⁸⁹

And therefore there was neuer Miracle wrought by God to conuert an Atheist, bycause the light of Nature might haue ledde him to confesse a God: But Miracles have been wrought to conuert Idolators, and the superstitious, because no light of Nature extendeth to declare the will and true worship of God.⁹⁰

These passages also demonstrate clearly what both the 'wise man' and the Governor of the House of Strangers seem to be suggesting, that while the Bensalemites had what must be called a 'natural knowledge of God', they were not yet instructed regarding the correct manner of worshipping him, that

⁸⁶ NA, b4^r (SEH, III, pp. 137-38).

⁸⁷ OFB, IV, p. 64.

⁸⁸ SEH, VII, p. 243.

⁸⁹ *Ibid.*, p. 221.

⁹⁰ OFB, IV, p. 78. Cf. OFB, XV, p. 51; DAS, which adds a clause: 'and the superstitious, who acknowledged a deity but erred in his worship' (SEH, IV, p. 341 (SEH, I, p. 545)).

is, they were yet to become Christians.⁹¹ The ‘wise man’ has observed, in effect, that the column of light breaks one of the laws of nature set down by God at creation, and thus it must be a miracle.⁹² Jerry Weinberger denies that this is possible, suggesting that natural science ‘could not with any certainty distinguish between natural oddities and miracles, both of which are by definition unique’,⁹³ later suggesting that for this to be the case, it would be necessary ‘to understand all the courses of nature’.⁹⁴ To the first objection, it is merely sufficient to note that the brother of Salomon’s House explicitly states that they have been granted the ability to make this differentiation, while to the second objection it seems all that would be needed would be for an occurrence to contradict one law already known, such as one of the laws concerning lumen, for example.⁹⁵ Indeed, it seems that while Bacon is happy to suggest that natural philosophy can authenticate a miracle – as there can be no greater example of God’s power than his ability to create than to break the laws of nature he himself has given rise to – he is scathing regarding the usual manner of authentication, namely the ‘facilitie of credite, and accepting thinges weakely authorized or warranted’:

wee see the experience and inconuenience of this error in ecclesiasticall Historie, which hath too easily receiued and registred reports and narrations of Miracles wrought by Martyrs, Hermits, or Monkes of the desert, and other holy men; and there Reliques, Shrines, Chappels, and Images: which though they had a passage for [a] time, by the ignorance of the people, the superstitious simplicitie of some, and the politique tolleration of others, holding them but as diuine poesies: yet after a periode of time, when the mist began to cleare vp, they grew to be esteemed, but as old wiues fables, impostures of the Cleargie,

⁹¹ Bacon, in ‘Of Atheisme’, ascribes no blame to heathens who do not know God, as ‘even those Barbarous People, have the Notion, though they have not the Latitude, and Extent of it. So that against *Atheists*, the very Savages take part, with the very subtillest Philosophers’ (*OFB*, XV, p. 52).

⁹² Or one of those adjusted after the Fall, see *SEH*, VII, pp. 220-21.

⁹³ Weinberger, p. 167.

⁹⁴ Jerry Weinberger, ‘Francis Bacon and the Unity of Knowledge: Reason and Revelation’, in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 109-27 (p. 118). See also Jerry Weinberger, ‘On the miracles in Bacon’s *New Atlantis*’, in *Francis Bacon’s New Atlantis* (see Aughterson, above), pp. 106-28.

⁹⁵ Such as might eventually have resulted from *Topica inquisitionis de luce et lumine*, for example (see *OFB*, XII, pp. 244-57). Bacon also states, in *NO*, that ‘in the true setting up of every axiom, the power of the negative instance is actually greater’ (*OFB*, XI, p. 85).

illusions of spirits, and badges of Antichrist, to the great scandall and detriment of Religion.⁹⁶

While Bacon is not here suggesting that religion itself is at fault, he is certainly challenging the over-attribution of authority to institutions which do not in any way deserve it.⁹⁷ The ‘wise man’ of Salomon’s House not only demonstrates the authority of natural philosophy to discriminate between the miraculous and the merely rare, but also demonstrates that, on Bensalem, Salomon’s House is credited with great authority: it is to the ‘wise man’ the people turn to interpret the phenomena. The brothers of Salomon’s House are, in effect, high priests of the sense.⁹⁸ Their authority, however, is based not on disputation or specious philosophy designed to convince their audience, such as Bacon despised, but on a deep knowledge of nature acquired over many hundreds of years of careful observation and correct practice of natural philosophical principles. The authority wielded by the brothers of Salomon’s House is that of truth, as ascertained by experiment.⁹⁹

The ‘wise man’ does not pass judgement on his own authority, nor on the authority of Salomon’s House, but on the authority of their knowledge to differentiate between miracles and impostures, supplied to their institution by God himself. Just as Bacon himself points to the investigation of nature as a method of discerning miracles, while utilising scripture as his authority to do so, the institution of Salomon’s House (for the ‘wise man’ is not an individual so much as a symbol of right natural philosophy) is able to identify miracles

⁹⁶ *OFB*, IV, p. 26. For the importance of the witnesses to the Bensalemite revelation, and also the manner in which the miracle, being at sea, makes it impossible for a shrine to be set up to commemorate it, see Renaker, p. 188.

⁹⁷ Cf. *DAS*, , where this same passage appears, omitting the part which begins ‘which though they had passage for [a] time’ (*SEH*, I, p. 456).

⁹⁸ A term Bacon used of himself: ‘Hence I believe that I present myself as high priest of the sense (from which all natural knowledge should, unless we prefer madness, be derived), and learned interpreter of its oracles’ (*OFB*, XI, p. 35).

⁹⁹ This is the explicit end of Salomon’s House, instituted ‘*for the finding out of the true Nature of all Things, (wherby GOD mought haue the more Glory in the Workemanship of them, and Men the more fruit in the vse of them,)*’ (*NA*, c4^r (*SEH*, III, p. 146)). It is interesting to note how Rawley manipulated this trope in handing Bacon’s *Sylva sylvarum*, as a natural

through application of natural philosophy, though only because of previous (if somewhat opaque) divine instruction.

The institution of Salomon's House has acquired knowledge of the book of nature, through observation and experiment, and has been granted the ability to distinguish between natural occurrences, impostures and miracles, that is, it controls the interpretation of natural phenomena, just as the Church, for Bacon, 'hath only the custody and delivery over of the Scriptures committed unto the same; together with the interpretation of them',¹⁰⁰ Salomon's House is, in effect, the Church of the natural world, but a church based not on the specious authority of pope, Church Fathers and tradition, but on the correct study and interpretation of natural phenomena.¹⁰¹

That the institution of Salomon's House is diametrically opposed to the philosophical institutional currents in Bacon's time, is made clear in these words from *Historia naturalis*:

And now of late by the regulation of some learned and (as things now are) excellent men (the former variety and licence having I suppose become wearisome), the sciences are confined to certain and prescribed authors, and thus restrained are imposed upon the old and instilled into the young; so that now (to use the sarcasm of Cicero concerning Cæsar's year), the constellation of Lyra rises by edict, and authority is taken for truth, not truth for authority.¹⁰²

On Bensalem, authority is held in truth, and this truth is either natural or scriptural. Just as the movement away from the corrupt Catholic Church, whose teachings were considered to be based not on scripture but on earthly authority and tradition, allowed the protestant to begin the process of a re-

history effectively a chapter of the book of God's works, to Charles I in the dedicatory letter which accompanied it. See above, pp. 62-63.

¹⁰⁰ *SEH*, VII, p. 225.

¹⁰¹ It is often noted that the father of Salomon's House, when he appears, does so in a guise of overwhelming sartorial authority, dressed in a manner which might have shamed a pope, but it is also to be noted that he is but one of several 'fathers', and also that he is at no point named.

¹⁰² *SEH*, V, p. 132 (*SEH*, II, p. 14).

establishment of the ‘natural’ church, the *sola scriptura*, so the dedication of the institution of Salomon’s House allows for the direct delivery of perfect scripture, and it allows for this by enabling the truth about nature to be ascertained.¹⁰³ While, according to Matthews, one of Bacon’s conditions for the Instauration is ‘civil peace and prosperity’,¹⁰⁴ a condition plainly met on the island, it is also clearly connected with an absence of doctrinal controversy.¹⁰⁵

It is for this reason that there is little indication of any doctrinal controversy or confessional stance in the Christianity extant on the island of Bensalem. Most of the islanders are simply ‘Christians’, and while there are priests, priesthood is a vocation which stands alongside normal social employment, as evidenced by the Governor of the House of Strangers, who states that ‘*I am by Office Gouverner of this House of Strangers, and by Vocation I am a Christian Priest; And therefore am come to you, to offer you my seruice, both as Strangers, and chiefly as Christians*’.¹⁰⁶ The state of Christianity on the island is noted also by the narrator, who remarks to his fellow sailors that ‘*we are come here amongst a Christian People, full of Piety and Humanity*’.¹⁰⁷ Beyond this, there is little to inform the reader with regards the islanders’ confessional stance, beyond its increasingly apparent perfection in humility and charity.¹⁰⁸ It is unlikely that it is an accident that the Christianity displayed on Bensalem accords with the Christianity Bacon apparently desires, at least according to *An Advertisement*

¹⁰³ See *OFB*, IV, p. 37. For more on the perfection of the Bensalemite scripture, see below, pp. 265-70.

¹⁰⁴ Matthews, p. 306.

¹⁰⁵ Cf. *SEH*, V, pp. 115-16 (*SEH*, I, pp. 833-34).

¹⁰⁶ *NA*, b2^v (*SEH*, III, p. 135).

¹⁰⁷ *NA*, b2^r (*SEH*, III, p. 134).

¹⁰⁸ Briggs suggests that, for the sailors, ‘Bensalem is a kind of heaven’ (see John Channing Briggs, ‘Bacon’s science and religion’, in *The Cambridge Companion to Bacon* (see Rose-Mary Sargent, above), pp. 172-99 (p. 192)). Perhaps the only sign on the island of any confessional affiliation is the wearing of a red cross on the turban of the Governor of the House of Strangers (*NA*, b2^r; *SEH*, III, p. 135), a symbol associated with Catholicism. The red cross has also been read as a sign of affiliation to the Rosicrucians by Frances Yates (Yates, p. 126), and was a detail particularly expanded upon by John Heydon in his re-write of *NA*, *The Holy Guide*, who re-named Salomon’s House ‘The Temple of the Rosie Crosse’ (*The Holy Guide*, c7^r).

*Touching the Controversies of the Church of England, Certain Considerations Touching the Better Pacification and Edification of the Church of England, and 'Of Unity in Religion.'*¹⁰⁹

While the interpretation of the 'wise man' leads directly to the establishment of what appears to be 'perfect' Christianity on the island of Bensalem, this interpretation is reliant on the laws of nature being, to some degree at least, constant as well as vulnerable to comprehension by mankind. Bacon tackles these issues in the *Confession of Faith*, the *Advancement of Learning*, and *Novum organum*.¹¹⁰

For Bacon, laws are eternal, immutable other than by God, and apart from the 'supreame or summarie law of Nature'¹¹¹ itself, open to discovery by mankind. The 'wise man' has – both through his correct interpretation of natural phenomena, and in his humility in asking through prayer for a correct interpretation of a phenomena he has already identified as a miracle – uncovered, if not the summary law of nature which is God's power, the scripture which is God's will.¹¹² He has also, albeit unwittingly, uncovered another vital piece of Bacon's Instauration, the role of providence.

e. The role of providence

The contents of the Bensalemite ark were the canonical books of the Bible and a letter, which read as follows:

I Bartholomew, a Seruant of the Highest, and Apostle of IESVS CHRIST, was warned by an Angell, that appeared to me, in a vision of Glory, that I should commit this Arke to the flouds of the Sea. Therefore, I doe testifie and declare, vnto that People, where GOD shall ordaine this Ark to come to Land, that in the same day, is come vnto them Saluation and Peace, and Good Will, from the

¹⁰⁹ *LL*, I, pp. 74-95; *LL*, III, pp. 103-27; *OFB*, XV, pp. 11-16.

¹¹⁰ See *SEH*, VII, pp. 220-21; *OFB*, IV, p. 7; *OFB*, XI, p. 203.

¹¹¹ *OFB*, IV, p. 7.

¹¹² Once more, humility is a vital connection between the kingdom of man and of heaven, see *SEH*, III, p. 224; *OFB*, XIII, p. 173.

Father, and from the LORD IESVS.¹¹³

Bartholomew was given his ark directly from an angel, in a similar manner to the number of scrolls which are delivered to Old Testament prophets, and the ark was sent by divine providence to Bensalem.¹¹⁴ Bacon used the manifestations of providence in several differing ways, the first being as another support and justification for his entire project, and as Charles Whitney has shown, the very name of his project, the *Instauratio magna*, carried with it prophetic connotations, ‘suggesting that classical and biblical prophetic contexts provide him with a framework for understanding and engendering historical change’.¹¹⁵

Sidney Warhaft suggests that it was because of providence, the directed and foreknown ordering of the world’s history, that Bacon considered the world knowable, citing William Perkins as an exemplar of the contemporary view of providence, whose definition included the suggestion that nothing casual happened on earth, that is, apart from God’s direction, and also that ‘providence is shown to exist by the fact that the prophecies, particularly those of the Bible, “come to pass in the same manner as they were foretold” many years before’.¹¹⁶ Bacon’s view of providence does not exactly equate with that of Perkins, as Bacon allowed for the existence of ‘casual events’ to some degree. The connection between prophecy and providence was, however, something which Bacon considered throughout his works, not least in the *Advancement of Learning*, where he suggested that the history of prophecy was not only lacking, but that its creation would be advantageous in several senses, for ‘the better confirmation of faith, and for the better illumination of

¹¹³ NA, b4^v (*SEH*, III, p. 138).

¹¹⁴ For the delivery of texts in the Bible to prophets, see Ezekiel 3. 1-4; Isaiah 30. 8, 34. 4; Jeremiah 36. 2; and Revelation 1. 11.

¹¹⁵ Whitney, *Francis Bacon and Modernity*, p. 5.

¹¹⁶ Sidney Warhaft, ‘The Providential Order in Bacon’s New Philosophy’, in *Francis Bacon’s Legacy of Texts* (see Charles C. Whitney, above), pp. 151-67 (p. 152), citing “An exposition of the Symbole or Creede of the Apostles”, in William Perkins, *Works* (London, 1603).

the Church, touching those parts of Prophecies, which are yet vnfulfilled'.¹¹⁷

Unlike Perkins and others, however, Bacon was less than convinced by those prophecies which did not spring from the Bible, writing in his essay 'Of Prophecies': 'My Judgement is, that they ought all to be *Despised*; And ought to serve, but for Winter Talke, by the Fire side'.¹¹⁸ Bacon draws a distinction between these vulgar prophecies derived from poetry and astrology 'that haue been of certaine Memory, and from Hidden Causes', and those to which he accords more credit, '*Divine Prophecies*', 'Heathen Oracles', and 'Naturall Predictions'.¹¹⁹

Bacon's use of the prophecy of Daniel 12. 4, and its importance to his conception of the Instauration itself, has been well documented.¹²⁰ It signified that there was to be an increase in knowledge coinciding with an increase in travel and exploration, as it 'manifestly hints and signifies that it was fated (i.e. Providence so arranged it), that thorough exploration of the world (which so many long voyages have apparently achieved or are presently achieving) and the growth of sciences would meet in the same age'.¹²¹ The ramifications of this for a reading of *New Atlantis* are great. *New Atlantis* concerns a ship lost at sea which discovers a previously unknown island called Bensalem. A Bensalemite official explains to the sailors how its learning has advanced over the previous three millennia through its continued navigation of the world,

¹¹⁷ *OFB*, IV, p. 71. Bacon here also notes that divine prophecies are not subject to the narrow, human view of time, and 'therefore are not fulfilled punctually, at once, but haue springing and germinant accomplishment throughout many ages, though the height or fulnesse of them may referre to some one age' (*OFB*, IV, p. 72).

¹¹⁸ *OFB*, XV, p. 114.

¹¹⁹ *Ibid.*, p. 112.

¹²⁰ See Matthews, pp. 301-09, Warhaft, and Whitney, *Francis Bacon and Modernity*, pp. 23-24, 33, 50-51.

¹²¹ *OFB*, XI, p. 151. Cf. *AL*, which suggests that 'we see it is already performed in great part' (*OFB*, IV, p. 71). Bacon does change the versions he uses, however, as in *AL* he quotes it as '*Plurimi pertransibunt, & Multiplex erit Scientia*', while in *NO* it appears as '*Multi pertransibunt, & multiplex erit scientia*' (*OFB*, XI, p. 150). In *Redargutio philosophiarum* Bacon replaces the & with *et* (*SEH*, III, p. 584), while the version used on the engraved title of *IM* is different again: '*Multi pertransibunt & augibitur scientia*' (*OFB*, XI, plate one, facing p. xxxii).

leaving the sailors possessed of great knowledge, in the form of the descriptions of the workings of Salomon's House. Furthermore, the Bensalemite official explains how the scriptures were brought to his island in an ark through the powers of divine providence, and finally the ship which, one must assume itself arrived at the island through providential intervention, will now carry back to Europe the 'scriptures' of natural philosophy: the secrets of Salomon's House.

Bacon works harder than this to create a situation in which the Instauration seems to have been foretold prophetically, by explicitly connecting the instauration of knowledge not only with navigation, but with the reform of the Church, stating that the reformation of religion must be accompanied by a reformation of philosophy:

And wee see before our eyes, that in the age of our selues, and our Fathers, when it pleased God to call the Church of Rome to account, for their degenerate manners and ceremonies: and sundrie doctrines, obnoxious, and framed to vphold the same abuses: At one and the same time, it was ordayned by the diuine prouidence, that there should attend withall a renouation, and new spring of all other knowledges.¹²²

What Bacon achieves here is one step further than his original use of the Bible as a support to his programme of learning, as now he seeks to connect the prophecies within the Bible with recent historical events to demonstrate that not only is his programme supported by the Bible, but it has been predicted by the Bible, as well: 'HISTORY of PROVIDENCE, containeth that excellent correspondence, which is betweene Gods reuealed will, and his secret will.'¹²³

¹²² *OFB*, IV, p. 37. He also connects the two more subtly in suggesting that providence and 'discourse of reason' came together in Luther's reaction to the 'degenerate traditions of the Church' (*OFB*, IV, p. 21).

¹²³ *OFB*, IV, p. 72. That Bacon considers the correspondence 'for the most part [...] not legible to the Naturall Man', yet has displayed the providential and prophetic arguments for his instauration as if displayed in letters so high that '*He that runneth by, may read it*', further indicates just how carefully Bacon is building his argument. Bacon is also careful to connect prophecy only with general movements or ages, rather than specific historical events, such as was beloved of millennialist writers such as Broughton, whose use of prophecy was, ultimately, designed to ascertain the exact time of the day of judgement.

Works detailing the particular works of divine providence were not lacking in Bacon's time, as Alexandra Walsham has shown, even if they revolved around the implications of individual, and often quite benign, acts which Bacon would doubtless term 'acts of nature', as well as having a possibly over-eager emphasis on the nature of providential acts as aids to faith:

Providential histories were "an easie and profitable apprenticeship or schoole for every men to learne to get some wisdome at another mans cost", a "looking glasse" reflecting back the likely fate of the viewer should he or she fail to repent and amend.¹²⁴

Bacon, however, was more interested in providing authority for his *Instauratio* than ensuring continuing faith amongst the people.

f. The problem of free will and chance

Providence was not, for Bacon, the deterministic providence of Calvin, which allowed for the interpretation of any event in terms of God's will. For Calvin, that God was seen to be in active control of absolutely every occurrence on earth was of great importance:

Those do not err quite so grossly who attribute government to God, but still, as I have observed, a confused and promiscuous government which consists in giving an impulse and general movement to the machine of the globe and each of its parts, but does not specifically direct the action of every creature. It is impossible, however, to tolerate this error. For, according to its abettors, there is nothing in this providence, which they call universal, to prevent all the creatures from being moved contingently, or to prevent man from turning himself in this direction or in that, according to the mere freedom of his own will. In this way, they make man a partner with God,—God, by his energy, impressing man with the movement by which he can act, agreeably to the nature conferred upon him, while man voluntarily regulates his own actions. In short, their doctrine is, that the world, the affairs of men, and men themselves, are governed by the power, but not by the decree of God.¹²⁵

¹²⁴ Walsham, p. 69, citing Thomas Beard, *The Theatre of Gods Judgements* (1597), A3^r.

¹²⁵ *Institutes*, I.xvi.4. See Matthews, pp. 116-37 for a more detailed exposition of both

Calvin believed in a ‘special providence’, suggesting that God does not merely foresee human events, but that he foresees what will happen because he has decreed it, even down to the most minute detail, including, quite naturally, ‘even to a sparrow’.¹²⁶

Considering Bacon’s upbringing and family circumstances, it does not seem unreasonable to assume that, at least during the early part of his life, Bacon was a reasonably committed Calvinist. In the *Meditationes sacræ*, he indeed seems to adopt this Calvinist view of providence, especially considering the relationship between God’s will and the unfolding of the universe, as Calvin wrote: ‘God is deemed omnipotent [...] because, governing heaven and earth by his providence, he so over-rules all things that nothing happens without his counsel.’¹²⁷

Bacon, like Calvin, considers the connection between God’s will and power as vital, as he suggests while discussing heresy in the *Meditationes sacræ*:

So is the plenitude of God’s power to be asserted, as not to involve any imputation upon his will. So is the goodness of his will to be asserted, as not to imply any derogation of his power.¹²⁸

For Bacon, heresy is the denial of God’s power: ‘Atheism and Theomachy rebels and mutinies against the power of God; not trusting to his word, which reveals his will, because it does not believe in his power, to whom all things

Calvin’s position and Bacon’s ‘response’ to it in the *Meditationes sacræ* and the *Confession of Faith*.

¹²⁶ *Ibid.*, I.xvi.1; III.xxiii.6. See Matthew 10. 29. For Stevenson, Calvin’s special providence means ‘not only intentional design and general governance on God’s part but extensive, intricate, and painstaking care as well’ (Stevenson, p. 116). This view of providence was echoed by Godfrey Goodman, who wrote that God’s providence ‘stoopes euen to the meanest and basest action of man, as the falling downe of his haire, &c.’ (Godfrey Goodman, *The Fall of Man*, a5^v).

¹²⁷ *Institutes*, I.xvi.3

¹²⁸ *SEH*, VII, p. 252.

are possible'.¹²⁹ Bacon continues to explain that the heresies which deny the power of God (in which he includes atheism, Manichaeism, and Neoplatonism) all ultimately seek to 'discharge the will of God from all imputation of evil'.¹³⁰ He explains his final degree of heresy, in perfectly Calvinistic terms:

The third degree is of those who limit and restrain the former opinion to human actions only, which partake of sin: which actions they suppose to depend substantively and without any chain of causes upon the inward will and choice of man; and who give a wider range to the knowledge of God than to his power; or rather to that part of God's power (for knowledge itself is power) whereby he knows, than to that whereby he works and acts; suffering him to foreknow things as an unconcerned looker on, which he does not predestine and preordain.¹³¹

This explanation of heresy seems to accord with Calvin's conception of a God *active* in his creation, a God whose government does not consist merely of an initial impulse followed by the occasional intervention where deemed necessary, but one who governs by continual and eternal decree: nothing happens which has not been foreseen, foreknown and, therefore, willed by, the creator.¹³² As Milner observes, 'what Bacon affirms in his meditation against all three heresies, but particularly the third, is the unity of God's foreknowledge and power, while he implicitly denies that human sin devolves simply and freely from the will of man'.¹³³ Yet Bacon continues, and

¹²⁹ *Ibid.*, p. 253.

¹³⁰ *Loc. cit.*

¹³¹ *Loc. cit.* Here Bacon specifically and purposefully connects foreknowing with predestining (with relation to the soul) and preordaining (with relation to the temporal world). Bacon here seems to be suggesting that while man may have the appearance of free will, it is an illusion created by God, who acts through man. This is an opinion apparently reinforced in *AL*: 'The prerogative of God extendeth as well to the reason as to the will of Man; So that as we are to obey his law though we finde a reluctance in our wil; So we are to believe his word, though we finde a reluctance in our reason' (*OFB*, IV, p. 182; cf. *SEH*, V, p. 111 (*SEH*, I, p. 839)). The difference, however, seems to be that the later passage refers only to the *prerogative* of God: while we are bound to obey God should he choose to order us, gone is the suggestion that every step we take is *necessarily* directed by God.

¹³² The puritan divine William Perkins held that God's creation was an act of government, 'that by his word alone, he, without any instruments, meanes, assistance, or motion produced all sorts of things' (Perkins, *A Golden Chaine*, B2^v). It is from this standpoint that he, like Bacon, can equate the word of God, as found in the scriptures, with his will.

¹³³ Milner, pp. 247-48.

complicates the issue somewhat, suggesting that God does not, perhaps, directly control everything:

And yet for all that it is very truly said that *God is not the author of evil*; not because he is not author,—but because not of evil.¹³⁴

This desire to remove the possibility of God being considered the author of sin is plainly a move away from Calvin's thought, apparently making Bacon become one of those who, 'do not err quite so grossly', as he suggests that 'the affairs of men, and men themselves, are governed by the power, but not by the decree of God'.¹³⁵

In the *Confession of Faith*, we can trace a further movement away from Calvin's deterministic line:

¹³⁴ *SEH*, VII, p. 254. Bacon is clearly contradicting Calvin here, who states that 'I have already shown clearly enough that God is the author of all those things which, according to these objectors, happen only by his inactive permission' (*Institutes*, I.xviii.3). See also Matthews, p. 124 and *passim*. Bacon here seems to follow Perkins, who wrote that 'God permitteth euill, by a certaine voluntarie permission, in that he forsaketh the second cause in working euill' (Perkins, *A Golden Chaine*, B2^r).

¹³⁵ *Institutes*, I.xvi.4. The issue of God's responsibility for sin hinged, ultimately, on whether he or Adam was responsible for the Fall: if God, then the punishment of man was manifestly unfair. This led directly to the dual doctrines of super and infra-lapsarianism, the former stating God knew and decreed the fall, having planned it from the beginning of creation, including the salvation of man, the latter stating that he merely used the fall as an opportunity for the salvation of man (Richard A. Muller, 'John Calvin and later Calvinism', in David Bagchi and David C. Steinmetz, eds. *The Cambridge Companion to Reformation Theology* (Cambridge: Cambridge University Press, 2004), pp. 130-49 (p. 144)). He attempts to avoid the issue of God's punishment for man's sin being unjust if God is responsible for everything by differentiating between God's will and his precept, suggesting that man does not act in an evil manner simply because God *allows* him to do so (has given him *permission* for such an act) but because this act is his will (*Institutes*, I.xviii.1). In carrying out an evil act, man carries out God's command, as he must do in all things, but the command is not to be confused with the will of God: the will of God is the outcome of the action, whereas the command of God is to carry out the action (*Institutes*, I.xviii.4). Calvin does allow for the appearance of free will, however, even as he denies its existence: 'All that we say is that God is in charge of the world which he established and not only holds in his power the events of the natural world, but also governs the hearts of men, bends their will this way and that in accordance with his choice, and is the director of their actions, so that they in the end do nothing which he has not decreed, whatever they may try to do' (John Calvin, *The Bondage and Liberation of the Will*, trans. by G. I. Davies, ed. by A. N. S. Lane (Grand Rapids, Michigan: Baker Books, 1996), p. 38), a get-out clause similar to the doctrine of temporary faith, whereby some of the reprobate are given temporary faith which is not the saving faith of

That he made all things in their first estate good, and removed from himself the beginning of all evil and vanity into the liberty of the creature; but reserved in himself the beginning of all restitution to the liberty of his grace; using nevertheless and turning the falling and defection of the creature, (which to his prescience was eternally known) to make way to his eternal counsel touching a Mediator, and the work he proposed to accomplish in him.¹³⁶

While Bacon has denied that sin is a result of the *simple* free will of man, in a similar manner to Calvin's suggestions that while man may have the evil intent, God is the power which allows or even impels the evil action, he seems here to have moved away from this line of reasoning.¹³⁷ Bacon now apparently allows more liberty for the creature than Calvin, allowing Matthews, for one, to read this as 'an explicit statement that the Fall was entirely the result of human free will'.¹³⁸ This contrasts with Milner, who suggests that this passage shows that Bacon adhered to the Calvinist supralapsarian doctrine of Beza and Perkins, whereby God had pre-ordained salvation before the creation, and pre-ordained who was to be saved:

All this implies that Bacon goes far beyond the predestination espoused by the Church of England's 39 Articles and the double predestination of the Lambeth Articles to affirm the supralapsarian doctrine with Calvin and his successors, that God not only knows that man will fall but has "in eternal counsel" ordained it [...] This is the logical consequence of the teaching affirmed in the *Meditationes*, namely, the teaching that denies any incongruity between the foreknowledge and foreordination of God. If God foreknows, he predestines; if he foreknows the fall, he determines it. The *Confession* picks up right where the *Meditationes* leaves off.¹³⁹

Milner seems, however, to err in ascribing Bacon's use of the term 'eternal counsel' to mean his eternal decree, as Bacon's words 'using nevertheless and turning the falling and defection of the creature', suggest not that God had already *decreed* what would happen, merely that he *knew* what would happen,

the elect (MacCulloch, p. 390).

¹³⁶ *SEH*, VII, p. 220.

¹³⁷ *Ibid.*, p. 253. Cf. *Institutes*, I.xviii.3; I.xviii.1.

¹³⁸ Matthews, p. 151. Calvin, for his part, considers that while Adam had 'a free choice of good and evil', he had not been granted the 'constancy to persevere' (*Institutes*, I.xv.8), and he criticizes those who ascribe Adam's fall to free will (*Institutes*, III.xxiii.7).

and decided to allow this event to become the path towards the eventual salvation of man, his 'eternal counsel'.¹⁴⁰

While the *Meditationes sacræ* does, indeed, suggest that God's foreknowledge and foreordination are essentially the same, the *Confession of Faith* sheds doubt on this assumption, if only because for Bacon, God allowed the 'beginning of all evil and vanity into the liberty of the creature'. Bacon chooses his words carefully, allowing that God foreknew the fall without explicitly stating that he foreordained it. It is in the *Confession of Faith* that Bacon begins his movement towards another view of providence, one in which God still accomplishes his will, but in which, unlike Calvin's providence, his work is not direct, but through secondary causes:

That notwithstanding God hath rested and ceased from creating since the first Sabbath, yet nevertheless he doth accomplish and fulfil his divine will in all things great and small, singular and general, as fully and exactly by providence, as he could by miracle and new creation, though his working be not immediate and direct, but by compass; not violating Nature, which is his own law upon the creature.¹⁴¹

This is not quite a description of a God who is, in Calvin's words, 'a momentary Creator, who completed his work once and for all, and then left it',¹⁴² but it is a movement away from the Calvinist God who actively governs all things, 'sustaining, cherishing, superintending, all the things which he has

¹³⁹ Milner, p. 255. Cf. *Institutes*, II.xii.5; III.xxiii.7.

¹⁴⁰ Bacon is here allowing for the foreknowledge of God to be separate from the manner in which things are accomplished. In the *Admonition Against Judicial Astrology*, however, Calvin uses the same term to reinforce the idea that God's foreknowledge and foreordination are as one: 'I am not against but that one may seeke in the heauenly creatures the begynnyng and cause of the accedentes which are sene here in the earth. I take this worde beginninge not as the first and principall cause, but as an inferiour meanes to Goddes wyll: yea, and such a one as he useth as a preparation to accomplyse hys worke euen so as he determined in his eternall counsell.' Jean Calvin, *An admonition against astrology iudiciall and other curiosities, that raigne now in the world: written in the french tonge by Ihon Caluine and translated into English, by G.G.*, (London: Roulande Hall, 1561), Ci^v.

¹⁴¹ *SEH*, VII, p. 221. Cf. *Institutes*, I.xvi.4.

¹⁴² *Institutes*, I.xvi.1.

made, to the very minutest, even to a sparrow'.¹⁴³ Bacon has not dispensed with Calvin's thought entirely, but he is moving away from the ascription of everything to the *immediate* and *direct* workings of God.¹⁴⁴

Calvin, too, allows for secondary causes, though he is careful to remind the reader that what he terms 'inferior means' are still squarely under God's direct control, harking back to earlier arguments concerning contingent free will, by which 'a thing may be done voluntarily, though not subject to free choice'.¹⁴⁵ Calvin does differentiate between human choice within the spiritual and temporal domains, but even here shies away from allowing man any real agency:

whenever God is pleased to make way for his providence, he even in external matters so turns and bends the wills of men, that whatever the freedom of their choice may be, it is still subject to the disposal of God.¹⁴⁶

In a similar manner, Calvin discusses secondary causes in nature, suggesting that 'with regard to inanimate objects, again, we must hold that though each is possessed of its particular properties, yet all of them exert their force only in so far as directed by the immediate hand of God'.¹⁴⁷ It is here that Bacon diverges from Calvin's thought most fully, moving away from the concept of secondary causes in which the inanimate objects of nature are simply 'instruments, into which God constantly infuses what energy he sees meet,

¹⁴³ *Ibid.*, I.xvi.1.

¹⁴⁴ It is as well to remember here that, for Bacon as for most people in the early-modern period, the earth and all of creation was designed expressly for the use of man (*SEH*, III, p. 217). Matthews also considers Bacon's movement from use of the temporally specific words 'predestine and preordain' in *Meditationes sacrae* to the a-temporal talk of the 'elect' in the *Confession of Faith* as further evidence that Bacon was moving himself away from Calvinist beliefs on the subject (Matthews, p. 152. Cf. Milner, p. 255). When discussing the seemingly unfortunate early life of Queen Elizabeth, Bacon also finds space for the concept of providence as a non-deterministic force: 'All of which I mention to show how Divine Providence, meaning to produce an excellent Queen, passed her by way of preparation through these several stages of discipline' (*SEH*, VI, p. 306).

¹⁴⁵ *Institutes*, II.v.1.

¹⁴⁶ *Ibid.*, II.iv.7.

¹⁴⁷ *Ibid.*, I.xvi.2.

and turns and converts to any purpose at his pleasure'.¹⁴⁸

In the *Advancement of Learning*, Bacon states that 'certaine it is, that God worketh nothing in Nature, but by second causes, and if they would haue it otherwise beleued, it is meere imposture, as it were in fauour towards God'.¹⁴⁹ As already noted, Bacon felt that natural philosophy ultimately led to a greater understanding of the power of God, and thus, contrary to Calvin's protestations, allowing for second causes strengthens belief rather than leads to atheism:

but when a man passeth on further, and seeth the dependance of causes, and the workes of prouidence; then according to the allegorie of the Poets, he will easily beleue that the highest Linkes of Natures chain must needes be tyed to the foote of *Iupiters* chaire.¹⁵⁰

It is not, however, until the *Novum organum* of 1620 that Bacon finally explains his conception of secondary causes, and the exact form of this connection between God and nature: 'nothing really exists in nature besides individual bodies, carrying out pure, individual acts according to law'.¹⁵¹ No longer is there the fully expressed direct dependance on God found in the *Meditationes sacræ*, but a conception of the laws of nature as immutable and part of God's original design as suggested in the *Confession of Faith*:

He created heaven and earth, and all their armies and generations, and gave unto them constant and ever-lasting laws, which we call *Nature*, which is nothing but the laws of creation; which laws nevertheless have had three changes or times,

¹⁴⁸ *Ibid.*, I.xvi.2.

¹⁴⁹ *OFB*, IV, p. 8.

¹⁵⁰ *OFB*, IV, p. 9.

¹⁵¹ *OFB*, XI, p. 203. In this Bacon disagrees with Hooker, who suggests that 'we are not of the opinion therefore, as some are, that nature in working hath before her certaine exemplary draughts or patternes, [...] those things which nature is said to do, are by diuine arte performed, vsing nature as an instrument'. It is, however, this effecting of things through nature which Hooker considers to be providence: 'the naturall generation and process of all things receiueth order of proceeding from the settled stabilitie of diuine vnderstanding. This appointeth vnto them their kinds of working, the disposition wherof in the puritie of Gods owne knowledge and will is rightly tearmed by the name of *Prouidence*' (Richard Hooker, *Of the Laws of Ecclesiastical Polity*, 4th edn (London: William Stansby, 1617), F4^v-F5^r).

and are to have a fourth and last.¹⁵²

Bacon thus equates creation with law, and notes different sets of laws, effectively equating to ages: the first age was the creation of heaven and earth without form; the second was the six-days' work; the third was the privation which occurred after the Fall; and the fourth was to be the end of the world itself. According to Bacon, 'the laws of Nature, which now remain and govern inviolably till the end of the world, began to be in force when God first rested from his works and ceased to create; but received a revocation in part by the curse, since which time they change not'.¹⁵³

While Bacon here expresses a concept of law remarkably similar to the laws on Bensalem, which appear to have been designed by Salomona and remained inviolate ever since, he has, throughout his religious works, manipulated the religious arguments to allow for the independent agency of man. The effect of this is that man might co-operate with God's will, and as Matthews points out, 'from beginning to end the Instauration writings present man as the agent of his own recovery, if he would but choose to set out on the new way which God had prepared and which Bacon was illuminating'.¹⁵⁴ It is from this standpoint that Bacon can state that 'it is true, that in two points the curse is peremptory and not to be removed; the one that vanity must be the end in all human effects, eternity being resumed, though the revolutions and periods may be delayed'.¹⁵⁵ For Bacon, divine foreknowledge does not mean divine ordination, nor does it mean that what will happen must happen at a certain time.¹⁵⁶

Bacon is happy to accept that there are laws of nature which govern how things behave, and, furthermore, we have seen how he also believes that these

¹⁵² *SEH*, VII, pp. 220-21.

¹⁵³ *SEH*, VII, p. 221.

¹⁵⁴ Matthews, p. 329.

¹⁵⁵ *SEH*, III, p. 222.

¹⁵⁶ For this conclusion according with the views of Arminius, see below, p. 176, fn 181.

laws are available for discovery by man. His apparent belief that the future is not foreordained, merely foreknown, comfortably accommodates both his prophetic supports for the Instauration and his continual assertions that future events are contingent upon the behaviour of mankind: if mankind applies himself to right philosophy, great works will surely follow which will improve the state of man, and serve to gradually restore the sovereignty man enjoyed before the Fall. Both of these ideas are demonstrated within *New Atlantis*, in which the island of Bensalem has both escaped from the apparent necessity of human empires to fail, and moved towards a regaining of the adamic control over nature, not least as indicated by the sailors' protestations that '*It seemed to vs, that we had before vs a picture of our Saluation in Heauen*'.¹⁵⁷

A more pressing result of Bacon's belief both in the possibility of discovering some of the laws which govern creation and that the future is unwritten is also apparent on Bensalem: the brothers of Salomon's House employ what they term 'Naturall Diuination' as a method not only of telling what disasters may befall their island, but of allowing them to escape them. On Bensalem, the ability to make a judgement regarding the future allows for its manipulation.¹⁵⁸

g. Salomon's House, Natural Divination, and the mutability of the future

The brothers of Salomon's House utilise a type of divination in order to predict the future course of natural events, in order that they may make recommendations regarding how these future events may be changed through intelligent intervention:

And wee doe also declare Naturall Diuinations of Diseases, Plagues, Swarmes of Hurtfull Creatures, Scarcety, Tempests, Earthquakes, Great Inundations, Cometts, Temperature of the Yeare, and diuerse other Things; And wee giue

¹⁵⁷ NA, b2^v (*SEH*, III, p. 136).

¹⁵⁸ Bacon in no way includes the salvation of the soul within the compass of human influence, however.

Counsell thereupon, what the People shall doe, for the Preuention and Remedy of them.¹⁵⁹

In Bacon's works, the concept of natural divination seems, however, to have changed over time. When mentioned in *De augmentis*, natural divination is compared with artificial divination, where the latter is akin to making predictions through observations of natural phenomena, while the former is akin to prophecy:

Divination has been anciently and not unfitly divided into two parts; Artificial and Natural. Artificial makes prediction by argument, concluding upon signs and tokens; Natural forms a presage from an inward presentiment of the mind, without the help of signs.¹⁶⁰

Natural divination, according to *De augmentis*, stems either from the intrinsic power of the mind, the so-called 'Primitive' divination, which manifests itself in 'sleep, in extasies, and near death',¹⁶¹ or divination by 'influxion', that is, 'that the mind, as a mirror or glass, receives a kind of secondary illumination from the foreknowledge of God and spirits'.¹⁶² It seems that the 'diviner' is allowed to project into the future through privileged access to the divine foreknowledge, what may well be termed prophecy, though Bacon does not explicitly connect this type of divination to either the Bible or any particular revelation. He allows, through the use of the term 'secondary illumination', for the divine use of any secondary cause to allow the individual access, presumably very limited access, to the divine foreknowledge. It would be

¹⁵⁹ NA, g2^r (SEH, III, p. 166). Cf. NA, f4^v (SEH, III, p. 165). See also DAS, where Bacon talks of predictions which may be made through 'Sane Astrology': 'Predictions may be made of comets to come, which (I am inclined to think) may be foretold; of all kinds of meteors, of floods, droughts, heats, frosts, earthquakes, irruptions of water, eruptions of fire, great winds and rains, the various seasons of the year, plagues, epidemic diseases, plenty and dearth of grain, wars, seditions, schisms, transmigrations of peoples, and in short of all commotions or greater revolutions of things, natural as well as civil' (SEH, IV, p. 353 (SEH, I, p. 558)).

¹⁶⁰ SEH, IV, p. 399 (SEH, I, p. 607). Cf. OFB, IV, p. 104. Della Porta and Acosta both talked of divination in terms of magic, wisdom and fraud. See Porta, *Natural Magick*, D1^r, 2F2^v, and Joseph Acosta, *The naturall and morall historie of the East and West Indies*, trans. by E. G. (London: Val. Sims for Edward Blount and William Aspley, 1604), 2D4^r, in EEBO.

¹⁶¹ SEH, IV, p. 399 (SEH, I, p. 608).

¹⁶² SEH, IV, p. 400 (SEH, I, p. 608). See Katharine Park, 'Bacon's "Enchanted Glass"', *Isis*,

possible to infer from this that God allows mankind to divine the future through investigation of his second book, the book of nature, if it wasn't for the fact that Bacon has already stated that artificial divination 'argues from causes'.¹⁶³ Thus, it seems that natural divination is divination from divine inspiration, while artificial divination is divination derived from the concerted study of nature, the unravelling of cause and effect, and the noting of correlations: everything, in fact, that it seems is carried out by the brothers of Salomon's House.¹⁶⁴ The natural divination undertaken by the brothers is what Bacon terms artificial divination in *De augmentis*, but what he explores in two works of natural history, *Historia ventorum* and *Sylva sylvarum*.

In the earlier work, *Historia ventorum*, Bacon indicates his desire to establish correspondences between occurrences:

From the kinds of winds let the inquiry pass on to the things which help to produce them (I do not say *efficientes* of them, for that is more than I mean; nor *concomitants*, for that is less, but *confaciens*, things which help to make them); and those which are supposed to excite or calm them.¹⁶⁵

What Bacon is suggesting here, as is the general tenor of his works of natural history, is simply that a well-ordered investigation into natural phenomena can allow us to make connections with other phenomena and thus predict related occurrences with confidence, 'for as they perform a dance, it would be pleasant to know the order of it':¹⁶⁶

From the powers of winds let the inquiry pass on to their prognostics, not only on account of the use of predictions, but because they lead the way to causes. For prognostics show either the preparations of things before they are produced into

75 (1984), 290-302.

¹⁶³ *SEH*, IV, p. 399 (*SEH*, I, p. 607).

¹⁶⁴ 'History of Natural divinations' is also no. 79 of the *Catalogue of Particular Histories* appended to the *Parasceve*. Here, however, it is sandwiched between the 'History of the intellectual faculties: thinking, fantasy, discourse, memory, etc.' and the 'History of insights into or secret interpretations of dreams' (*OFB*, XI, p. 481).

¹⁶⁵ *SEH*, V, p. 141 (*SEH*, II, p. 21).

¹⁶⁶ *SEH*, V, p. 143 (*SEH*, II, p. 22).

action, or their commencements before they are perceptible to the sense.¹⁶⁷

It is in his enquiry into the prognostics of wind that Bacon re-uses the term natural divination, now placing it firmly in the natural world, and removing, it seems, all prophetic or providential elements:

The purer part of Divination should be the more received and practised, in proportion as it is wont in general to be corrupted by vanity and superstition. Natural Divination is sometimes more certain, sometimes more treacherous, according to the nature of the subject with which it deals. For if the subject be of a constant and regular nature, the prediction is certain; if it be of a variable nature, and compounded as it were of nature and chance, the prediction is uncertain. But yet even in a variable subject, if rules are diligently framed, a prediction will generally hold good, and will not err much from the truth, though it does not hit the exact point of time.¹⁶⁸

Bacon's prognostics, taken from a diligent collection of facts – his natural history – leads him also to conjecture, wondering whether it were not possible to discover a method 'of prognosticating and forming an opinion upon other things by means of the winds; for instance, whether in any part of the sea there are continents or islands, or whether the sea is open; a thing of use in new and unknown navigations'.¹⁶⁹ While this, in itself, might make the reader think of the very first lines of *New Atlantis*, where the sailors 'predict' landfall by observing a cloudmass, Bacon is here moving towards utilisation of historical records of semi-natural phenomena, such as agriculture: 'For predictions from the winds concerning crops, fruits, and diseases, consult the Histories of Agriculture and Medicines.'¹⁷⁰

Natural divination is further removed from divine inspiration than it appears,

¹⁶⁷ *SEH*, V, p. 145 (*SEH*, II, p. 24).

¹⁶⁸ *SEH*, V, p. 187 (*SEH*, II, p. 66). It is interesting to note that when Bacon discusses the search for connections, he does so using a legal metaphor: 'And therefore, in the law of nature, as well as in the civil law [*Itaque in Jure Civili, ita in Jure Naturæ*], we must proceed with sagacity of mind to look for like and analogous cases.' (*SEH*, V, p. 195 (*SEH*, II, p. 73)).

¹⁶⁹ *SEH*, V, p. 199 (*SEH*, II, p. 77).

¹⁷⁰ *SEH*, V, p. 199 (*SEH*, II, p. 78). Cf. the *Catalogue of Particular Histories* appended to the *Parasceve*, where Bacon includes such topics as medical histories (nos. 59-66), and the *History of Agriculture*, no. 115 (*OFB*, XI, pp. 481-83).

and suggests a movement away from reliance on the internal senses, often equated by Bacon with error, and towards reliance on the authority of observation, experience and experiment. Using the schema as presented in *De augmentis*, the divination in *Historia ventorum* is plainly a kind of artificial divination, though one attempting to make predictions based on concrete observations rather than ‘the inspection of entrails, the flights of birds, and the like’.¹⁷¹ But Bacon calls the divination in *Historia ventorum* natural divination, suggesting that he truly sees such divination not as quasi-prophetic, but as a predictive science, based on observation and, effectively, though Bacon never makes this explicit, hypotheses.¹⁷² The divination of *De augmentis* is based on divine history, whereas the divination in *Historia ventorum* is based on secular history, not least what might be considered histories of nature ‘vexed’, namely records of grain yields and such like information provided by histories of agriculture and so forth. What was artificial in *De augmentis* has become natural in *Historia ventorum*. Considering that *Historia ventorum* was published before *De augmentis*, this might seem strange, but if we consider further the order in which these works were intended to be read, what in Part I of the *Instauratio* is termed artificial divination has, by Part III, become natural divination. This feeling is reinforced by the appearance of the term in *Sylva sylvarum*, where, in Experiment 737, concerning ‘prognostics of hard winters’, Bacon notes that

¹⁷¹ *SEH*, IV, p. 399 (*SEH*, I, p. 607). It is interesting to note that in *Historia ventorum*, Bacon does, include what information may be drawn from the behaviour of birds, such as particular types of gatherings or preening presaging varying types of winds (*SEH*, V, pp. 193-94 (*SEH*, II, p. 72)).

¹⁷² Bacon does use the term *hypothesibus* in *Historia naturalis* (*SEH*, II, p. 14 (*SEH*, V, p. 132)), where he writes ‘*Theses Hypothesibus anteposuerunt*’, in a line which translates ‘these fickle and wrong-headed philosophies, which have put theses before hypotheses’ (from *OFB*, XII, forthcoming). Prof. Rees points out that the contrast between the two words is not self-evident, and that theses is itself a very rare word in Bacon, occurring, for example, in a cosmological context in *Descriptio globi intellectualis* (*OFB*, VI, p. 132), in connection to the very limits of the heavens, and where it refers to assertions made without any empirical evidence. As for hypotheses, Prof. Rees notes that Bacon ‘almost invariably uses it to refer (often disparagingly) to the convenient fictions of geometrical astronomy (see *OFB*, VI, pp. 134, 186, 188)’, but that that is not what it means here, where it may mean ‘a reasonable inference from evidence’ (personal communication with Prof. Graham Rees, 12 Oct, 2006). For the use of the term hypothesis in the Renaissance, see Shapiro, *A Culture of Fact*, pp. 143-45.

for common people, stores of ‘haws and heps do commonly portend cold winters, and they ascribe it to God’s providence’ before noting that ‘the natural cause may be [...]’.¹⁷³ Bacon here seems to be suggesting that what may appear to some as the direct result of God’s providence may, in fact, simply be the result of natural causes. Thus prediction of hard winters, in this case, may be ascribed to some natural mechanism leading to ‘stores of haws and heps’ rather than the direct hand of God providing mankind with a sign.

Indeed, considering that the natural divination of *De augmentis* relied on an ‘inward presentiment of the mind’, it may be instructive that in Century IX of *Sylva sylvarum*, which concerns ‘Experiments in consort, touching *Perception* in bodies *Insensible*, tending to *Natural Divination* or *Subtill Trials*’,¹⁷⁴ Bacon notes that there are more subtle ways of divining change than the naked human senses, such as the weather-glass, which ‘will finde the least difference of the *Weather*, in *Heat*, or *Cold*, when Men finde it not’.¹⁷⁵ These ‘*Subtill Perceptions*’ of bodies also serve ‘as a Principall *Meanes* of *Natural Divination*; For that which in these *Perceptions* appeareth early, in the great *Effects* cometh long after’.¹⁷⁶ Bacon finally fixes natural divination as being concerned with nature, rather than, as we saw in *De augmentis*, from ‘an inward presentiment of the mind’:¹⁷⁷

Wee shall therefore now handle only, those two *Perceptions*, which pertaine to *Natural Divination*, and *Discovery*: Leauing the Handling of *Perception* in other Things, to be disposed Elsewhere. Now it is true, that *Divination* is attained by other *Meanes*; As if you know the *Causes*, if you know the *Concomitants*; you may iudge of the *Effect* to follow: And the like may be said of *Discovery*; But wee tie our Selues here, to that *Divination* and *Discovery* chiefly, which is Caused by an *Early*, or *Subtill Perception*.¹⁷⁸

¹⁷³ SS, 2B2^v (SEH, II, p. 576). Cf. SS, Z1^v, 2E2^v-2E3^r (SEH, II, pp. 554-55, 605-09).

¹⁷⁴ SS, 2E1^r (SEH, II, p. 602).

¹⁷⁵ *Loc. cit.* This is an expression of Bacon’s general idea of assisting the senses through technology, as perception in bodies is ‘far more subtle than the sense.’

¹⁷⁶ SS, 2E1^v (SEH, II, p. 602).

¹⁷⁷ SEH, IV, p. 399 (SEH, I, p. 607). Cf. OFB, IV, p. 104.

¹⁷⁸ SS, 2E1^v (SEH, II, p. 603).

It seems as if the brothers of Salomon's House, in their natural divinations, rely not so much on 'secondary illumination from the foreknowledge of God and spirits',¹⁷⁹ but on their knowledge of the natural world gained through experiment and long-term observation. The result of this ability is that, as well as having escaped the rigours of cyclical time through policy and secrecy, creating a linear time through which they move, inexorably progressing in terms of knowledge, they are capable of projecting into the future – at least with regard to natural phenomena – along that same timeline, without the direct help of the divine foreknowledge. The types of providential scheme which abounded in Bacon's time, and the types of prophetic history which accompanied it, were attempts to know the history of mankind which was already written, especially soteriological history. The natural divination of the brothers of Salomon's House, however, has a very different purpose, as it allows them, once they have made their predictions, to '*giue Counsell thereupon, what the People shall doe, for the Preuention and Remedy of them*'.¹⁸⁰ The brothers of Salomon's House are not content merely to predict the future, they wish to change it.

For the brothers of Salomon's House to predict natural occurrences with a view to putting into place strategies with which to prevent or remedy them necessitates the possibility of a mutable futurity, rather than a rigid, deterministically foreknown and foreordained unfolding of the universe, even down to the last sparrow.¹⁸¹ This is a possibility Bacon apparently considered

¹⁷⁹ *SEH*, IV, p. 400 (*SEH*, I, p. 608).

¹⁸⁰ *NA*, g2^r (*SEH*, III, p. 166).

¹⁸¹ Interestingly, for such a mutable futurity to be consonant with divine foreknowledge (which encompasses soteriological, natural and civil histories), it is necessary for Bacon to believe that there are multiple futures possible at any one time, while God is aware which specific one will come to pass. This is a position intriguingly close to that of Arminius: 'He [God] knows all *possibilia*, whether they are in the capability (*potentia*) of God or of the creature; in active or passive capability; in the capability of operation, imagination, or enunciation: he knows all things that could have an existence, on any hypothesis; he knows things other than himself, whether necessary or contingent, good or bad, universal or particular, future, present or past; he knows things substantial and accidental of every kind [*Disp pub.*, IV.xxxi]' (cited in Richard A. Muller, *God, Creation and Providence in the Thought of Jacob Arminius* (Grand Rapids, Michigan: Baker Books, 1991), p. 147).

as early as *Meditationes sacræ*, as, while considering the uses of earthly hope, Bacon quotes the following passage:

The task can show no face that's strange to me:
Each chance have I pondered, and in thought rehearsed.¹⁸²

It is this conception of multiple possible outcomes following any event which leads Bacon to his discourse on chance and fortune, and also the main consideration underpinning the Instauration, 'that chance discovereth new inventions by one and one, but science by knots and clusters'.¹⁸³ As Bacon states in *Valerius terminus*:

The fulness of direction to work and produce any effect consisteth in two conditions, certainty and liberty. Certainty is when the direction is not only true for the most part, but infallible. Liberty is when the direction is not restrained to some definite means, but comprehendeth all the means and ways possible; for the poet saith well *Sapientibus undique latæ sunt viæ*, and where there is the greatest plurality of change, there is the greatest singularity of choice.¹⁸⁴

In the *Advancement of Learning*, Bacon points the reader scathingly to the fact that 'they which discourse of the Inventions and Originals of thinges, referre them rather to *Chaunce*, than to *Art*, and rather to *Beasts, Birds, Fishes, Serpents, than to Men*'.¹⁸⁵ What Bacon is suggesting is simple, namely that rather than stumbling across inventions and discoveries as man has done thus far, the intelligent and systematic application of natural philosophy will promote new discovery:

And if you like better the tradition of the Grecians, and ascribe the first Inventions to Men, yet you will rather beleue that *Prometheus* first stroake the flints, and maruailed at the sparke, than that when he first stroke the flints, he expected the sparke; and therefore we see the *West Indian Prometheus*, had no intelligence with the *Europæan*, because of the rareness with them of flint, that gaue the first occasion: so as it should seeme, that hetherto men are rather

¹⁸² *SEH*, VII, p. 247.

¹⁸³ *SEH*, III, p. 247.

¹⁸⁴ *Ibid.*, p. 235.

¹⁸⁵ *OFB*, IV, p. 108.

beholden to a wilde Goat for Surgerie, or to a Nightingale for Musique or to the *Ibis* for some part of Phisicke, or to the Pot-lidde, that flew open for Artillerie, or generally to *Chaunce*, or any thinge else, than to *Logicke* for the Inuention of Arts and Sciences.¹⁸⁶

Bacon wishes, as far as is possible, to eliminate chance as a method of discovery, as he suggests in the *Novum organum*, ‘there remains mere experience which is called accident if it happens by itself, but experiment if it is deliberately sought out’. Bacon’s scheme involves ‘starting from experience ordered and digested and not at all topsy-turvy or haphazard, and thence educing axioms, and from established axioms, working down again to new experiments’.¹⁸⁷ Reiterating his almost continual guidance against simply following ancient and well-trodden paths, Bacon reinforces his insistence on striving to understand causes rather than effects, noting several examples that, before their eventual and entirely fortuitous discovery, any man would have considered impossible from a mere description of their effects, such as artillery, silk and the compass. Bacon also reminds his readers that there are ‘other discoveries of the kind which make us believe that mankind can pass by and step over outstanding discoveries even though they lie at our feet’, citing printing.¹⁸⁸ What Bacon is ultimately suggesting is that while his method of the painstaking accumulation of data followed by inductive interpretation may appear to take an inconvenient amount of time, and remain free of gains in the short term (as it seeks light, and not fruit) it will in the long term lead to more knowledge which will, in turn, lead to a greater ability to control nature: ‘For nature is not conquered save by obeying it; and that which in thought is equivalent to a cause, is in operation equivalent to a rule.’¹⁸⁹

¹⁸⁶ *OFB*, IV, pp. 108-09. Cf. Farrington, p. 95 (*SEH*, III, p. 614).

¹⁸⁷ *OFB*, XI, p. 131. It must not be thought that Bacon despised chance, however, as he states that ‘chance without doubt is a useful originator of things, but scatters her blessings on mankind only after tedious and tortuous wanderings’ (Farrington, p. 73 (*SEH*, III, p. 591)).

¹⁸⁸ *OFB*, XI, pp. 167-69.

¹⁸⁹ *Ibid.*, p. 65. Bacon’s caution against striving for works from the outset is illustrated by several metaphors, including suggesting that a cripple will outrun the fit man if he is on the correct path (Farrington, p. 118 (*SEH*, III, p. 572)), and the image of Atalanta (*OFB*, XI, pp. 39, 111).

The nature of chance itself was a matter of no little controversy in early-modern England, primarily due to its necessary interaction with the forces of providence. Calvin had stated clearly that chance simply did not exist, suggesting that ‘what we call Chance is nothing else than the reason and cause of which is secret’.¹⁹⁰ For Calvin, while future events may seem uncertain, they are merely those events which remain hidden to us.¹⁹¹ The nature of chance (and also of fate) were topics of great interest in early-modern England, as can be seen in the controversy over a sermon preached by puritan William Ames against gaming on the grounds that it was a violation of divine providence. A sermon was later preached by Thomas Gataker refuting Ames’ views, and both were eventually published to form the basis of a long-running dispute within the puritan community regarding just how much control God assumed over the day-to-day running of the universe.¹⁹² According to Margo Todd, Gataker ‘finally arrived at an identification of Nature with Chance: he gave the proper definition (“as the holy ghost useth”) of ‘Nature, and so of Fortune or Chance’ as “a power or faculty in the creature distinct from God’s providence guiding and ruling ... the same to such ends as he seeth good: so is Fortune or Chance also an affection or action of the creature distinct from the same providence”’.¹⁹³ Part of this controversy over chance revolved around the possibilities of making predictions based on analysis of providential acts, in prophetic terms, or the attribution of exceptional events, such as storms and especially harsh winters, to divine punishment. Todd concludes that, in a manner similar to Bacon, several scholars (notably Christopher Heydon),

¹⁹⁰ *Institutes*, I.xvi.8.

¹⁹¹ This is a suggestion which Bacon in some ways supports when he suggests that ‘for as in ciuill actions he is the greater and deeper pollitique, that can make other men the Instruments of his will and endes, and yet neuer acquaint them with his purpose: So as they shall doe it, and yet not knowe what they doe, then hee that imparteth his meaning to those he employeth: So is the wisdome of God more admirable, when Nature intendeth one thing, and Prouidence draweth forth another; then if hee had communicated to particular Creatures and Motions the Characters and Impressions of his Prouidence’ (*OFB*, IV, p. 87). Bacon also noted providence as instrumental in the fortunes of monarchs, namely Henry VII, Elizabeth I, and James I (*SEH*, VI, pp. 27, 306; *OFB*, IV, p. 68).

¹⁹² See Margo Todd, ‘Providence, Chance and the New Science in Early Stuart Cambridge’, *The Historical Journal*, 29 (1986), 697-711.

¹⁹³ Todd, p. 707, quoting Gataker, *On the nature and uses of lots* (1619), pp. 10, 21. Todd also

suggested that apparently natural events, such as a particularly cold winter, must be attributed to natural causes rather than to providence or ‘blind Fortune’.¹⁹⁴ While Bacon agrees broadly with this view, as demonstrated in the section in *New Atlantis* on natural divination, it is plain that in his discourses on chance, he refers not to natural events or phenomena themselves, but to the discovery of the possibilities of the application of their principles. As early as *The Praise of Knowledge*,¹⁹⁵ Bacon was considering the role of chance in human discoveries, and by *Cogitata et visa*, he was suggesting that a methodical approach to learning might eliminate its vagaries,¹⁹⁶ while in both *Valerius terminus* and *Filum labyrinthi*, Bacon notes that the advantage of ‘science’ over chance is not the form of the discovery made, but the speed with which it might be made. Experiment effectively shortens the timescale between ignorance and enlightenment:

chance discovereth new inventions by one and one, but science by knots and clusters.¹⁹⁷

Chance sometimes discovereth inventions; but that worketh not in years, but ages.¹⁹⁸

It is for this reason that John Tinkler has astutely noted that ‘Bacon’s idea of experiment is a controlled way of speeding up time in order to force the kinds of occurrences that happen only rarely and accidentally in nature’.¹⁹⁹ Tinkler does not note just how radical this position might be, however. Bacon did, after all, suggest that ‘ACCELERATION of *Time*, in *Works of Nature* may well

notes that Gataker was both familiar with Bacon’s work and praised him in later writings.

¹⁹⁴ Todd, p. 703. Todd argues that the upshot of his argument was that if events can be predicted with reference to natural causes, rather than attributed to divine providence, then the utilisation of temporal events as guides to conscience, a practice popular amongst puritans, as shown in works such as Thomas Beard’s *Theatre of Gods Judgements* (1597), and Robert Bolton’s *Instructions for a right comforting afflicted consciences* (1631), was necessarily erroneous.

¹⁹⁵ *Francis Bacon: The Major Works*, p. 36.

¹⁹⁶ Farrington, pp. 95-96 (*SEH*, III, p. 614); see above, p. 128.

¹⁹⁷ *SEH*, III, p. 247.

¹⁹⁸ *Ibid.*, p. 496.

¹⁹⁹ John F. Tinkler, ‘Bacon and History’, in *The Cambridge Companion to Bacon* (see Rose-

seem that he also uses such images not only as an illustration of the nature of chance and its role in discovery, but also to demonstrate how chance may be reduced, as he wrote in *Novum organum*:

Any mind rightly pondering the matter must be dumbfounded that no mortal has put his heart and soul into opening and laying down a route for the human intellect, a route running direct from the sense itself, and experience marshalled and well-grounded, but that instead everything has been left to the blindness of traditions, the swirling bluster of arguments, or the turbulent waves of chance, and experience undisciplined and ungrounded.²⁰⁵

Now this kind of experience is nothing more than (as they say) an unbound broom, and just the groping of benighted men trying steadfastly to feel their way to the right road by luck, when they would have been much wiser to wait for day, or strike a light, and then set off.²⁰⁶

Bacon gives another example of how the setting of a path, even if it is ultimately erroneous, is better than simply setting out blindfolded, when he talks of how Columbus gave reasons why he felt he would discover land before he set off across the Atlantic. That these reasons were initially rejected didn't stop him from discovering land.²⁰⁷

Bacon's last, and in many ways most comprehensive, conflation of chance, providence, voyages, discovery and creation came in *New Atlantis*. The sailors arrive on Bensalem apparently entirely by chance, having been blown off course and then becalmed in the South Seas. Becoming utterly lost, and perceiving of their situation as hopeless, they appeal to God to, in effect, re-enact his creation, which they figure as discovery:

Yet we did lift vp our Harts and Voices to GOD aboue, who *sheweth his Wonders in the Deepe*; Beseeching him of his Mercy, that as in the *Beginning* He discovered the *Face* of the *Deepe*, and brought forth *Dry-Land*; So he would now

²⁰⁵ *OFB*, XI, p. 129.

²⁰⁶ *Ibid.*, p. 131. Bacon regularly uses the metaphor of the pathway, stressing the importance of taking the 'right road', as well as the term 'labyrinth' (*OFB*, XI, pp. 57, 131). For more on Bacon's use of pathway metaphors, see Vickers, *Renaissance Prose*, pp. 179-80.

²⁰⁷ *OFB*, XI, p. 151.

discouer Land to vs, that we mought not perish.²⁰⁸

Bensalem is thus revealed to the sailors in terms of biblical discovery, while their observation that ‘the next Day about Euening, we saw within a Kenning before vs, towards the North, as it were thick Cloudes, which did put vs in some hope of Land’,²⁰⁹ also recalls Bacon’s language of discovery in *Valerius terminus*, in which he writes that with regards ‘the revealing and discovering of new inventions and operations’, that ‘your eye cannot pass one kenning without further sailing’.²¹⁰ This ‘further sailing’ is exactly what the sailors now embark upon, both literally and figuratively, as they bend their course in the direction of the clouds, as they have read them as possibly indicative of land in an area of the ocean they knew ‘was vtterly vnknowne’.²¹¹

Perhaps the most important point to make regarding the voyage on which the sailors originally embarked is that it was not one of discovery, but one towards ‘*China and Iapan, by the South Sea*’.²¹² The sailors are blown off course and becalmed, and while this might be attributed to divine providence, the tenor of Bacon’s works suggest that this is most likely simply an accident, as the sailors fall prey to the vagaries of the weather. Once lost, however, the sailors appeal to God, and it might thus be considered that the appearance of the ‘thicke clouds’ are, in fact, the work of providence. Whether the clouds are the work of providence or chance, however, is less relevant than the fact that the sailors are still required to act on the information presented to them. The sailors, while entirely passive up to the point of their despair at becoming lost and becalmed, become active by first praying to God and appealing to his mercy, before interpreting the ‘thicke clouds’ as if they were a sign from God.

²⁰⁸ NA, a3^r (*SEH*, III, p. 129). Cf. Genesis 1. 9: ‘And God said, Let the waters under the heaven be gathered together unto one place, and let the dry *land* appear: and it was so.’

²⁰⁹ NA, a3^r (*SEH*, III, p. 129).

²¹⁰ *SEH*, III, p. 235. Bacon also uses the phrase in a letter to James, ‘and because in the beginning of my trouble, when in the midst of the tempest I had a kenning of the harbour which I hope now by your Majesty’s favour I am entring into’ (*LL*, VII, p. 357).

²¹¹ NA, a3^r; (*SEH*, III, p. 129).

²¹² NA, a3^r (*SEH*, III, p. 129).

The Governor of the House of Strangers, however, is in no doubt that, like the sailors' discovery, it is a *'rare Accident'*.²¹³ He explains that the island has had no visitors for thirty seven years,²¹⁴ before noting that of the visitors they have received, only thirteen have chosen to return to their own lands (though, interestingly, not in their own ships). The importance of chance in this equation is accentuated further in the Governor's comments regarding how their reports of their time on the island must have been received for there seem to have been no attempts to 're'-discover it: *'What those few that returned may haue reported abroad I know not. But you must thinke, Whatsoeuer they haue said, could bee taken where they came, but for a Dreame.'*²¹⁵ For the sailors, it is impossible to accurately delineate the boundaries between chance, providence and experiment.

What *is* obvious, however, is the difference between the desperate opportunism of the sailors when confronted with the possibility of death and the calm, considered and consistently organised voyages of discovery undertaken by the Bensalemites and their organised and long-term devotion to exploring nature as described by the father of Salomon's House. Bensalem maintains a trade with the outside world, trading earthly things for *'GODS first Creature, which was Light: To haue Light (I say) of the Growth of all Parts of the World'*,²¹⁶ once more conflating discovery with creation, though here the discovery is of a more historical than a natural philosophical nature. It is this same light which is sought by the institution of Salomon's House on the island itself, figured by the father in these terms:

*The End of our Foundation is the Knowledge of Causes, and Secrett Motions of Things; And the Enlarging of the bounds of Humane Empire, to the Effecting of all Things possible.*²¹⁷

²¹³ NA, c3^r (SEH, III, p. 143).

²¹⁴ NA, b2^v (SEH, III, p. 135).

²¹⁵ NA, c3^v (SEH, III, p. 145).

²¹⁶ NA, c4^v (SEH, III, p. 147).

²¹⁷ NA, e2^r (SEH, III, p. 156).

Both methods of obtaining knowledge are institutionalised and, in contrast to the somewhat random nature of the sailors' own voyage of accidental discovery, governed by rules designed to limit the effects of chance on their efficiency: they are also decreed, unlike all attempts at discovery in the 'west', by the ancient law of Solamona himself.²¹⁸

h. Conclusion

In 1592, Bacon wrote that 'the sovereignty of man lieth hid in knowledge; wherein many things are reserved, which kings with their treasure cannot buy, nor with their forces command'.²¹⁹ It is this same sovereignty which Bacon states that man lost, along with his 'innocency' at the Fall, and which he sought to re-establish through his programme of philosophical reform. This sovereignty is the true authority over nature which stems from knowledge of the truth of nature, just as the true religious authority is to be found not in the prescriptions of the earthly church, but in the scripture itself. Through his reading of scripture, and as demonstrated in the *New Atlantis*, Bacon suggested that investigation of nature, and the re-establishment of man's prelapsarian authority over nature, was not merely possible, but effectively an obligation. Bacon identified man's failure to progress in the sciences with his movement towards error in religion, and identified both with a providential age in which knowledge and right religion would prevail. Arguing against the idea of a deterministic world of the type Calvin espoused, Bacon further suggested that application of correct philosophical precepts would allow man to escape the unfruitful cycle of authority and disputation into which he had fallen. Further to this, his argument that man could eliminate chance as the discoverer of inventions through the thorough and methodical application of inductive reasoning to the painstakingly accumulated masses of natural-

²¹⁸ NA, c4^f-c4^v (SEH, III, p. 146).

²¹⁹ Francis Bacon: *The Major Works*, p. 36.

historical data necessary to Bacon's programme demonstrates experiment as the authoritative interpreter of nature.

Religion, for Bacon, is a matter of authority, providing the authority for natural philosophy just as it supplies authority for the royal prerogative. The divine right of kings is mirrored, effectively, by the divine right of philosophy. Bacon did not, however, merely have a problem with the self-proclaimed authority of past philosophers, but also with the conundrum of how to present his ideas, or, more specifically, how to avoid presenting his ideas as 'authoritative' while ensuring that the reader, for he necessarily utilised textual methods for the promulgation of his 'gospel', could not avoid being convinced by the truthful 'authority' of his project.

Finally, it seems as if one of the most important theological questions revolves around the subject of determinism, free will and the existence of chance. Bacon wrote in 1620 that 'in such difficult circumstances we must then lose faith both in the naked force of human judgement and even in chance success'.²²⁰ That chance could only exist within a non-deterministic worldview is plain from Bacon's manoeuvring around the Calvinist orthodoxy, while *New Atlantis* appears to be a meditation on the nature of chance and how, through careful experimentation, what Bacon termed 'a clue, and a sound policy',²²¹ chance could to some degree be eliminated, and the discovery of things unknown accelerated.

²²⁰ *OFB*, XI, p. 19.

²²¹ *Loc. cit.*

Chapter Four: Textual reliability and the manipulation of the authorial persona

Bacon, as has often been noted, was particularly vocal on the subject of received authority, and especially that of received authors, claiming that it was one of the greatest hindrances to the advance of the sciences. This chapter will investigate the nature of Bacon's relationship with the received authors, but especially his relationship with himself as an author. Considering the importance of the famous doctrine of idols in terms of authority, I shall investigate the manner in which Bacon manipulated his own authorial presence, from the first expressions of the *Instauratio* such as *Valerius terminus* to the latest in *Novum organum*. This investigation shall consider the paratexts to various works, as well as the manner in which Bacon sought to negotiate with James using both public and private letters, and also the way in which he approached the question of authority within the preface to the *Instauratio magna*. Finally, this chapter will investigate Bacon's thoughts on the textual assertion of authority and the manner in which his ideas were performed in print.

a. Bacon and the ancients

Francis Bacon had a complicated relationship with the 'ancients', those philosophers and writers the recovery of whose texts the humanist revolution in learning, the protestant revolution in religion, and Bacon's own intellectual development, had largely relied.¹ In the *Advancement of Learning*, he wrote, as part of the dedication to King James at the beginning of Book II, the

¹ In respect of the Reformation, I refer to the manner in which philological techniques were applied to the scriptures, not least by Luther, as Bacon himself points out in *AL*, writing that he 'was enforced to awake all Antiquitie, and to call former times to his succors, to make a partie against the present time: so that the ancient Authors, both in Diuinitie, and in Humanitie, which had long time slept in Libraries, began generally to be read and reuolued'

following:

For why should a few receiued Authors stand vp like *Hercules Columnes*, beyond which, there should be no sayling, or discovering, since wee haue so bright and benigne a starre, as your Ma: to conduct and prosper vs?²

In doing so, he signalled one of his major concerns with received authority, the manner in which it stultified philosophic growth. The issue was not whether the ancient authors were right or wrong, but the blind and unquestioning acceptance of their ideas:

And as for the ouermuche credite that hath beene giuen vnto Authors in Sciences, in making them Dictators, that their wordes should stand, and not Consulls to giue aduise; the dammage is infinite that Sciences haue receiued thereby, as the principall cause that hath kept them lowe, at a stay without groweth or aduancement.³

Bacon's particular distaste for Aristotle was reported by William Rawley:

Whilst he was commorant in the university, about sixteen years of age, (as his lordship hath been pleased to impart unto myself), he first fell into the dislike of the philosophy of Aristotle; not for the worthlessness of the author, to whom he would ever ascribe all high attributes, but for the unfruitfulness of the way; being a philosophy (as his lordship used to say) only strong for disputations and contentions, but barren for the production of works for the benefit of the life of man.⁴

(*OFB*, IV, p. 21).

² *OFB*, IV, p. 55.

³ *Ibid.*, p. 27. Cf. Farrington, pp. 75-76 (*SEH*, III, p. 594).

⁴ *SEH*, I, p. 4. Rawley here repeats his habitual assertion of privileged access to Bacon. There are several critics who suggest that Bacon, for all his anti-Aristotle rhetoric, was perhaps more Aristotelian than he may have liked to admit (Robert E. Larsen calls his words 'dying echoes of a misunderstood Aristotelianism', see 'The Aristotelianism of Bacon's *Novum Organum*', *Journal of the History of Ideas*, 23 (1962), 435-50 (p. 50), though Larsen primarily attempts to attribute Bacon's conceptions of form to Aristotle, when they are very different from the Aristotelian understanding); Lisa Jardine suggests that Bacon was a 'man of experimental science on the one hand; Aristotelian essentialist on the other', see '*Experientia literata* or *Novum Organum*?' in *Francis Bacon's Legacy of Texts* (see Charles C. Whitney, above), pp. 47-67 (p. 61); Michael Malherbe writes that 'on the particular point of the ends of science, Bacon breaks with dialectic and proves resolutely Aristotelian', see 'Bacon's Critique of Logic' in *Francis Bacon's Legacy of Texts* (see Charles C. Whitney, above), pp. 69-87 (p. 75); see also Weimann, pp. 199-200; Julian Martin, 'Francis Bacon, Authority and the Moderns', in *The Rise of Modern Philosophy*, ed. by Tom Sorell (Oxford, Oxford University

Bacon was not alone in harbouring a distaste for Aristotle, as Paolo Rossi has suggested:

Bacon was voicing the general opinion of his age, defining some of its essential demands, when he strove to rehabilitate the mechanical arts, denounced the sterility of Scholastic logic, and planned a history of arts and sciences to serve as foundation for the reform of knowledge and of the very existence of mankind.⁵

Criticism of Aristotle was neither new nor rare by the time Bacon published the *Advancement of Learning*. The many individuals who disagreed profoundly with the Aristotelian worldview included Petrus Ramus, Paracelsus, Gianfrancesco Pico, Pico della Mirandola, Bernardino Telesio, Giambattista Benedetti, Giordano Bruno and Jean Bodin.⁶

Bacon, like Campanella and Gilbert, decried the reliance on received authority over and above experience, and would have agreed heartily with these words of Gilbert's:

errors have steadily been spread abroad and been accepted—even as evil and noxious plants ever have the most luxuriant growth—down to our day, being propagated in the writings of many authors who, to the end that their volumes might grow to the desired bulk, do write and copy all sorts about ever so many

Press, 1993), p. 87; Kathleen Aughterson, 'Awakening from a deep sleep: the heuristic status of tropes in the writing of Francis Bacon' (unpublished doctoral thesis, University of Oxford, 1990), pp. 27-31, 124-59; Solomon, p. 197). It must, however, be pointed out that Bacon was no simple-minded anti-Aristotelian, as, for example, he was full of praise for his *Historia animalium* (see *OFB*, IV, p. 26), and often introduces him with words like 'Aristotle sayth well' (see *OFB*, IV, p. 119).

⁵ Rossi, p. 9.

⁶ See Zagorin, p. 32; Charles B. Schmitt, 'Experimental Evidence for and against a Void: The Sixteenth-Century Arguments', *Isis*, 58 (1967), 352-66. Aspects of Aristotle's thought singled out for criticism included his ideas on the vacuum and the eternity of the earth, the latter leading Bodin to predicate an entire chapter of his *Methodus* in opposition to him (see Bodin, pp. 304-06). Bodin, however, like many others, was not averse to using his ideas when it suited (Kenneth D. McRae, 'Ramist Tendencies in the Thought of Jean Bodin', *Journal of the History of Ideas*, 16 (1955), 306-23 (p. 320)). Telesio, too, formed much of his philosophy in direct opposition to Aristotle, and Bacon's naming of Telesio as a 'modern' may be connected with this (Neil Van Deusen, 'The Place of Telesio in the History of Philosophy', *The Philosophical Review*, 44 (1935), 417-34 (p. 419), in *JSTOR*). For Bacon on Telesio, see *OFB*, VI, pp. 251-65; *LL*, VII, p. 378.

things of which they know naught for certain in the light of experience.⁷

He was, however, less than happy with Gilbert's other pronouncements, suspecting that he was less interested with removing the obstacles to knowledge which the received authors represented than demolishing their authority that it may be replaced with his own, identifying this error early on, in the *Cogitata et visa*:

Then our fellow-countryman, Gilbert, having displayed great steadiness and constancy of judgment in his painstaking investigation of the magnet and deployed a great retinue, nay, an army of experiments in support, promptly threatened the foundation of a new sect in Natural Philosophy.⁸

In Baconian terms, Gilbert merely repeats the error of Aristotle, as 'hee neuer nameth or mentioneth an Auncient Author or opinion, but to confute and reprove: wherein for glorie, and drawing followers and disciples, he tooke the right course'.⁹ What Gilbert is attempting to do mirrors the behaviour of Aristotle, who, as Bacon never tires of reminding his reader, 'like the Ottoman Turk, did not think he could reign secure until he had slain his brothers'.¹⁰

Bacon's critique of Aristotle and other received authors rested on the idea that they 'infect their meditations, opinions, and doctrines with some conceits which they haue most admired, or some Sciences which they haue most applied',¹¹ and that 'their workes and Acts are rather matters of Magnificence and Memorie, then of progression and proficiencie, and tende rather to augment the masse of Learning in the multitude of learned men, then to

⁷ William Gilbert, *William Gilbert on the Loadstone and Magnetic bodies, and on the great magnet of the earth*, trans. by P. Fleury Mottelay (London: Bernard Quaritch, 1893), pp. 2-3.

John M. Headley, 'Tommaso Campanella and Jean de Launoy: The Controversy over Aristotle and his Reception in the West', *Renaissance Quarterly*, 43 (1990), 529-550.

⁸ Farrington, p. 85 (*SEH*, III, p. 603). Cf. *OFB*, XI, pp. 89-91; *SEH*, V, p. 202 (*SEH*, II, p. 80). For a more positive Baconian view of Gilbert, see *OFB*, XI, pp. 329-31, 513n.

⁹ *OFB*, IV, p. 81.

¹⁰ Farrington, p. 110 (*SEH*, III, p. 565). Cf. Farrington, p. 84 (*SEH*, III, p. 602); *OFB*, XI, p. 107.

¹¹ *OFB*, IV, p. 30.

rectifie or raise the Sciences themselves'.¹² Bacon disliked rhetorical 'methods' for a similar reason, namely that once knowledge is 'comprehended in exact Methodes; it may perchance be further polished and illustrate, and accommodated for vse and practise; but it encreaseth no more in bulke and substance'.¹³ Such issues, for Bacon, revolved around the belief, extant in modern disciples as much as in the ancient authors themselves, that knowledge was complete:

And let no one hold that the sciences have gradually grown up, and have at last reached a certain condition, and now come (as if they had run their proper course) to a standstill in the works of just a few authorities.¹⁴

Bacon places the blame for some of this intellectual inertia firmly at the feet of the scholastics, whose method, based on the logic of Aristotle, he considered less as an attempt at discovery and more as a tool for pure disputation, suggesting both a physical and intellectual divorce from the 'real world':

their wits being shut vp in the Cels of a few Authors (chiefely *Aristotle* their Dictator) as their persons were shut vp in the Cells of Monasteries and Colledges, and knowing little Historie, either of nature or time, did out of no great quantitie of matter, and infinite agitation of wit, spin out vnto vs those laborious webbes of Learning which are extant in their Bookes.¹⁵

Here Bacon touches on one of his other contestations, that man should attempt to make his mind fit the world, rather than the world fit his mind, as he believed the scholastic philosophers did:

But as in the inquirie of the diuine truth, their pride enclined to leaue the Oracle

¹² *Ibid.*, p. 56.

¹³ *Ibid.*, p. 30. Bacon here refers to methods, such as the Ramist, suggesting that if you present scientific material as if it were complete, and exhibiting no loose ends, then the reader may think there is nothing left to say on the subject. See *OFB*, XI, p. 139; Farrington, pp. 75-76 (*SEH*, III, p. 594).

¹⁴ *OFB*, XI, p. 13.

¹⁵ *OFB*, IV, p. 24. Cf. *NO*, where Bacon says that Aristotle 'made his natural philosophy a mere slave to his logic, and so rendered it virtually useless and disputatious' (*OFB*, XI, p. 89).

of Gods word, and to vanish in the mixture of their owne inuentions: so in the inquisition of Nature, they euer left the Oracle of Gods works, and adored the deceiuing and deformed Images, which the vnequall mirrour of their owne minds, or a few receiued Authors or principles, did represent vnto them.¹⁶

That is, he suggests, the mind of man ought to work on matter, and is thus limited by it, but working by itself its task is endless:

and such is their methode, that rests not so much vpon euidence of truth prooued by arguments, authorities, similitudes, examples; as vpon particular confutations and solutions of euerie scruple, cauillation & obiection: breeding for the most part one question as fast as it solueth another; euen as in the former resemblance, when you carry the light into one corner, you darken the rest.¹⁷

While Bacon disliked the scholastic method of disputation, not least because it dealt with words rather than things, the primary problem Bacon had with received authority was the manner in which it was so easily and unquestioningly accepted, a situation reinforced by the educational system as predicated on the passing down of one system of knowledge rather than a devotion to ‘fresh light and innovations’.¹⁸ Not only did Bacon believe that ‘as soon as men surrender to authority they cease to be creative and take their servile status as bodyguards of one man’,¹⁹ but he also noted that the tendency of men towards ‘accepting or admitting thinges weakely authorized or warranted’²⁰ was also a major problem for the sciences, and could be traced, ultimately, to the method in which knowledge was transmitted, ‘as may be soonest beleued; and not easilest examined’.²¹ The problem lay in the contract between pupil and master, the manner in which information and learning is passed from one to the other:

For as Knowledges are now deliuered, there is a kinde of Contract of Error,

¹⁶ *OFB*, IV, p. 25. Cf. Rawley’s words at the end of *SS*’s letter ‘To The Reader’ (*SS*, A3^r (*SEH*, II, p. 337)).

¹⁷ *OFB*, IV, p. 25.

¹⁸ Farrington, p. 79 (*SEH*, III, p. 597). For Bacon’s objections to scholastic logic as embodied in the syllogism, see *OFB*, IV, p. 110.

¹⁹ Farrington, p. 97 (*SEH*, III, p. 616).

²⁰ *OFB*, IV, p. 26.

betweene the Deliuerer, and the Receiuer: for he that deliuereth knowledge; desireth to deliuer it in such fourme, as may be best beleued; and not as may [be] best examined: and hee that receiueth knowledge, desireth rather present satisfaction, than expectant Enquirie, & so rather not to doubt, than not to erre: glorie making the Author not to lay open his weaknesse, and sloth making the Disciple not to knowe his strength.

But knowledge, that is deliuered as a threade to bee spunne on, ought to bee deliuered and intimated, if it were possible, *In the same Methode wherein it was inuented*; and so is it possible of knowledge induced.²²

In this way, Bacon discriminated between what he saw as the two methods of the handing down of knowledge, the magistral, which relied primarily on the authority of the author and the acquiescence of the pupil, and the initiative, which relied on the knowledge being presented in a manner inviting not acceptance but investigation.²³

b. Authority and the doctrine of idols

Perhaps the best-known of Bacon's arguments concerning the over-zealous acceptance of authority is to be found in his doctrine of idols, the primary function of which is to identify the errors into which mankind falls, and which complicate or render useless attempts to make judgements concerning the world around us. Bacon identifies four classes of illusion: the Idols of the Tribe; the Idols of the Cave; the Idols of the Market; and the Idols of the Theatre. The first idol concerns the manner in which man's senses are untrustworthy, Bacon describing the human senses as an uneven mirror, which mingles its own nature with that of things, thus distorting them. The second idol concerns the predilections of particular individuals, the result of education or temperament, books read and perhaps authorities personally

²¹ *Ibid.*, p. 31. Cf. *SEH*, III, p. 226; Farrington, pp. 75-76 (*SEH*, III, p. 594).

²² *OFB*, IV, p. 123. Cf. *OFB*, IV, p. 28.

²³ See *SEH*, IV, pp. 448-54; Farrington, pp. 75-76 (*SEH*, III, p. 594). For more on the differentiation between the two types of learning, and the ultimate manifestation of the initiative method in print, the aphorism, see Stephen Clucas, "'A Knowledge Broken': Francis Bacon's Aphoristic Style and the Crisis of Scholastic and humanist Knowledge Systems", in *English Renaissance Prose* (see Bruce, above), pp. 147-72; Snider, pp. 55-68; Martin Elsky, *Authorizing Words: Speech, Writing, and Print in the English Renaissance*

admired. The third idol concerns the inability of men to agree on the meanings of words, which ends up forcing men into disputations over words rather than following a path of true discovery. The fourth and final idol, that of the Theatre, omitted from the *Advancement of Learning*, and only considered en passant in *De augmentis*, concerns the manner in which received philosophical dogmas and shoddy modes of demonstration have been handed down from generation to generation. The most complete discussion of the doctrine of idols is to be found in Book I of *Novum organum*, aphorisms 45-67.²⁴

In aphorisms 45-52, Bacon delineates the problems which beset man as a result of the Idols of the Tribe. The intellect, suggests Bacon, is prone not only to considering that there is more order in things than it actually finds, but also to making everything agree with conceptions which have won its approval, whether justified or not. It is easily won over by things that ‘strike and enter the mind suddenly and in one go’, while it also ‘cannot therefore conceive of any end or limit to the world, but always compulsively hankers after something beyond’.²⁵ The intellect is ‘contaminated by the will and affections; and this begets *As-you-like-it Sciences*. For man would rather believe what he wishes to be true’,²⁶ and while the senses are beyond repair, Bacon does suggest a way of limiting the damage:

For the sense is by nature a weak and wandering thing; and instruments to

(Ithaca and London: Cornell University Press, 1989), p. 209; Fish, pp. 86-87.

²⁴ The first mention of the idols occurs in the *Temporis partus masculus* (Farrington, pp. 69, 72 (*SEH*, III, pp. 536, 539)), where Bacon lists the idols of the Stage, the Market-Place and the Cave; *Valerius terminus* (*SEH*, III, p. 245), where he lists four, the Tribe, Palace (considered a ‘scribe’s mistake for Place’, Farrington, p. 40) Cave, and Theatre. The first discussion appears, albeit in truncated form, in *AL* (*OFB*, IV, pp. 116-17), where the idols of the Theatre are omitted. After another discussion of the doctrine in *DAS* (*SEH*, IV, pp. 431-34 (*SEH*, I, pp. 643-46)). It reaches its fullest state in *NO* (*OFB*, XI, pp. 79-109). This occurs in typically Baconian non-sequential fashion, as it was written before *DAS* (although designed to be read after it), where the discussion occurs over several pages, though Rees notes that the *Distributio operis* only mentions three idols (*OFB*, XI, pp. li-lvii). See also Gaukroger, pp. 122-27; Farrington, p. 40.

²⁵ *OFB*, XI, p. 85.

²⁶ *Ibid.*, p. 87.

amplify and sharpen the senses do not count for much; but all truer interpretation of nature is accomplished by means of instances, and apt and appropriate experiments, where the sense judges only the experiment while the experiment judges nature and the thing itself.²⁷

This is an indispensable formulation for Bacon's inductive method, as delineated within *Novum organum*, and is the only way for the intrinsic weakness of man's senses to be overcome.

Bacon discusses the Idols of the Cave in aphorisms 53-58, noting that 'men fall in love with particular sciences and reflections either because they fancy that they are their authors and discoverers, or because they have invested a great deal of work and become entirely steeped in them'.²⁸ It is for this reason that Aristotle 'made his natural philosophy a mere slave to his logic',²⁹ and it is also responsible for the philosophies of the chemists and otherwise sound investigators such as Gilbert. Bacon differentiates between those beset with a love for antiquity and those with a love for novelty, suggesting that a wiser course is to be steered between these two, 'neither ruining what the ancients rightly laid down nor despising what the new men rightly put forward'.³⁰

For Bacon, the Idols of the Market, which he discusses in aphorisms 59-60, are those 'which have slipped into the intellect through the alliance of words and names, are the greatest nuisances of the lot'.³¹ Bacon is critical of the manner in which words are utilised, not least because that while men believe that 'their reason rules words', it is also the case that 'words turn and bend *their* power back upon the intellect; and that has made philosophy and the sciences sophistical and inactive'.³² Bacon notes that 'great and solemn disputes of learned men often end in controversies about words and names; and so it would be wiser (following the custom and practice of the

²⁷ *Loc. cit.*

²⁸ *Ibid.*, p. 89.

²⁹ *Loc. cit.*

³⁰ *Ibid.*, p. 91.

³¹ *Ibid.*, p. 93.

mathematicians) to reduce these controversies to order by beginning with definitions'.³³ While he notes that the problem with definitions is that they are made up of words, Bacon is perhaps more concerned with reifications such as 'fortune, first mover, planetary orbs', and words which are ill-defined, such as 'Moist'.³⁴ The answer to the first problem is a simple refutation of the theories which support these words, while the second problem Bacon identifies as more pernicious.

Bacon investigated the possibilities of a 'philosophical grammar' at length, hoping to find a way in which misunderstandings could be avoided and which could effect wide and comprehensive dissemination of philosophical theories, considering the possibilities of adamic language, hieroglyphs and real characters.³⁵ Understanding that the meanings of words, as with 'real characters', were effectively '*ad placitum*, where it is adopted and agreed upon at pleasure',³⁶ Bacon criticised those 'schoolmen' who coined neologisms 'to expresse their owne sence, and to auoide circuite of speech, without regard to the purenesse, pleasantnesse, and (as I may call it) lawfulnessse of the Phrase or word'.³⁷ In a similar manner, he castigates Plato for not despising the investigation of original etymologies, something Bacon considered a fruitless exercise, as it carried with it the specious authority of the exploration of the recesses of authority, but led, in practice, to a situation in which any individual may fix an original etymology of his own onto a word, one convenient for his own purposes, while claiming through appeal to the ancients (appropriated via his etymological 'art') an intrinsic truth and authority for his definition.³⁸

Bacon, however, understood that in wishing to break the stranglehold of

³² *Loc. cit.*

³³ *Loc. cit.*

³⁴ *Ibid.*, p. 95.

³⁵ See *SEH*, III, p. 222; *SEH*, IV, pp. 439-44 (*SEH*, I, pp. 651-57).

³⁶ *SEH*, IV, pp. 439-40 (*SEH*, I, pp. 651-52).

³⁷ *OFB*, IV, p. 22.

custom, opinion, received authority and the unrealised distorting nature of the mind, his task was made doubly difficult by the reader's comprehension of old concepts and words: 'people will still make sense of things new in themselves in terms of things which are old.'³⁹ Confronted with the option of presenting something entirely new or something mixed with the old, he characteristically attempted both.⁴⁰ Equally characteristically, Bacon explained as much to the reader:

wherein I desire, it may bee conceiued, that I vse the word METAPHISICKE, in a differing sense, from that, that is receyued: And in like manner I doubt not, but it will easilie appeare to men of iudgement, that in this and other particulers, wheresoeuer my Conception & Notion may differ from the Auncient, yet I am studious to keepe the Auncient Termes.⁴¹

This is but one example of where Bacon re-interprets a piece of ancient philosophical terminology, and in doing so effectively neuters the received usage. By remaining 'studious to keepe the Auncient Termes' even (or especially) when his 'Conception & Notion may differ from the Auncient', Bacon is merely following the logical path set out in *Redargutio philosophiarum*:

Well I know that the tablets of the mind are not like ordinary writing-tablets. On them you can write nothing till you have expunged the old; in the mind you cannot expunge the old except by writing in the new.⁴²

³⁸ *SEH*, IV, p. 441 (*SEH*, I, p. 654).

³⁹ *OFB*, XI, p. 77.

⁴⁰ See *SEH*, VII, pp. 13-14, for Bacon explaining to Launcelot Andrewes the difference between *AL* and *NO*.

⁴¹ *OFB*, IV, p. 80-1. Cf. *SEH*, IV, pp. 366-67 (*SEH*, I, p. 573); *OFB*, XI, p. 59. Aughterson considers Bacon's re-use and re-figuring of ancient terms to be a function of his rhetorical sensibility as well as an acknowledgement of the dangers of neologistic usage, suggesting also that it amounts to a re-definition of the 'plain style.' (Kathleen Aughterson, 'Redefining the Plain Style: Francis Bacon, Linguistic Extension, and Semantic Change in The Advancement of Learning', *Studies in Philology*, 97 (2000), 96-143).

⁴² Farrington, pp. 132, 103 (*SEH*, III, pp. 584, 558). In *DAS*, the headings of Book III, chapter five include the 'Purification of the word Magic' (*SEH*, IV, p. 365 (*SEH*, I, p. 571)). Whitney suggests, however, that Bacon wishes to create a tabula rasa first, rather than writing out the old by writing in the new (see Whitney, *Francis Bacon and Modernity*, p. 160).

Bacon's understanding of the Idols of the Market allows him to formulate a strategy designed to neuter their pernicious effects. In pursuing a two-pronged assault, the first being the effective colonisation of old technical terms, allowing him to use their accumulated force while simultaneously rendering them useless for the exposition of the received philosophies, and by informing his reader that he is subtly adjusting the received understanding of these terms, Bacon manages to challenge and partially neuter the authority of the ancients without attempting simply to do away with them all, while subtly contradicting the belief that the sciences had come to a head of perfection with the ancients.⁴³ Further to this, his insistence on explaining that he is using the old terms in a new way allows for his definitions to not appear authoritative: Bacon allows for their meanings to change once more, should this become necessary. The problem of removing the received authority of the ancients while not appearing to usurp it to himself is one Bacon struggled with at length, and one which was perhaps most apparent in his fourth set of idols, the Idols of the Theatre.

⁴³ Other technical terms Bacon appropriates include Platonic forms, the Aristotelian four causes and elements, instances, induction, particulars and the aphorism. In appropriating 'form', Bacon re-interprets Plato's term while highlighting his error in considering forms as abstract from matter (*OFB*, IV, p. 83; cf. Farrington, p. 115 (*SEH*, III, p. 569); *OFB*, XI, p. 203). Having adjusted the Aristotelian four causes (*OFB*, IV, p. 82. Cf. *OFB*, XIII, p. xxxvii, fn. 14; cf. Aristotle, *Physics*, 194b23-b32), Bacon reminds the reader that he is using terms in his own, specific fashion, 'PHISICKE, (taking it according to the deriuation, & not according to our Idiome, for MEDICINE)' (*OFB*, IV, p. 82), before eventually dispensing with the final cause entirely (*SEH*, IV, p. 365 (*SEH*, I, p. 571)). Bacon decries Aristotle's four elements in *Cogitata & visa* (Farrington, p. 86 (*SEH*, III, p. 604)), before re-considering them in the *Parasceve*, where once more he highlights that this is not an authoritative action, but merely one to elucidate his point, 'but I want the elements to be understood in such a way as to mean not the primordia of things, but the greater masses of natural bodies' (*OFB*, XI, p. 461). Julie Robin Solomon has suggested that the 'instance' found in Book II of *NO* is derived from 'a Scholastic term denoting an example used to refute or confirm a proposition' (Solomon, p. 171), and one which Bacon assigns a preceding rather than a supporting role. Bacon freely adapts the term induction, noting that his induction is different (and far superior) to the received usage (*OFB*, XI, p. 163; *OFB*, IV, p. 109; Farrington, p. 115 (*SEH*, III, p. 569)). Solomon notes a re-positioning of particulars in Bacon's philosophy (Solomon, pp. 164-65; *OFB*, XI, p. 71), while his use of legal terminology and especially the aphorism has been noted by Barbara Shapiro, amongst others (see *A Culture of Fact: England, 1550-1720* (Ithaca and London: Cornell University Press, 2000), pp. 107-11). We have already seen Bacon's personal appropriation of the term 'instauratio', and his habit of relating his works to 'classics' while highlighting their 'modern' status with the word 'new', such as in *Novum*

The final idols Bacon investigates, in aphorisms 61-67, the Idols of the Theatre, 'have migrated into men's souls from the dogmas of philosophers and misguided laws of demonstration'.⁴⁴ Bacon does not merely mean old or even current philosophies, but once more accepts that such errors might also be found in the future, if care is not taken to avoid drawing authority from 'tradition, credulity and carelessness'.⁴⁵

The idols illustrate the difficulty man finds in differentiating between those authoritative sources of knowledge, such as nature and scripture, and the specious authority of received wisdom and auto-authorised individuals such as Aristotle and Gilbert.⁴⁶ It is the fourth class of idol, the Idols of the Theatre, however, which most closely concern the manner in which philosophies win over their audiences:

true consent consists in agreement reached (after proper examination) by free judgements. But by far the greatest number of those who have subscribed to *Aristotle's* philosophy surrendered themselves to it on the precedent and authority of others, so that rather than consenting to it, they followed along in sheep-like unanimity. But even if there were a true and general consent, it is so far distant from real and solid authority, that it should provoke a violent presumption to the contrary.⁴⁷

Authority inheres not in authors or methods, but in nature itself, and this authority is to be understood through interpretation, 'the true and natural work of a mind freed from the fetters that restrain it'.⁴⁸ Bacon wrote that it was the manner in which knowledge was handed down which was of paramount importance, and this was through the written word: 'And no discovery should be sanctioned save that it be put in writing. Only when that becomes standard

organum and *New Atlantis*, has been well documented (see also *OFB*, IV, p. 106).

⁴⁴ *OFB*, XI, p. 81.

⁴⁵ *Ibid.*, p. 83.

⁴⁶ As Bacon writes in *Redargutio philosophiarum*, 'now if any man in philosophy ever came in his own name, Aristotle is that man. He is his own authority throughout' (Farrington, p. 113 (*SEH*, III, p. 567)). One might, however, consider that Aristotle was authorised more by tradition than by himself.

⁴⁷ *OFB*, XI, p. 123.

⁴⁸ *Ibid.*, p. 197.

practise, with experience at last becoming literate, should we hope for better things.’⁴⁹ It seems perfectly natural therefore, that Bacon should begin to experiment with the literary form of his works. Between 1603 and 1609 Bacon did exactly that, producing several manuscript works; *Temporis partus masculus*, *Valerius terminus*, *Cogitata et visa*, *Filum labyrinthi*, and *Redargutio philosophiarum*.⁵⁰

These works, while illustrating the development of Bacon’s thought itself, also, as Colclough has noted, ‘form an extended reflection on the best way of establishing and retaining textual authority while avoiding the deceptive or ‘magistral’ modes of instruction which Bacon deplors in the philosophy of the ancients’.⁵¹ The methods of presentation and transmission Bacon experimented with find their ultimate expression in his *Instauratio magna* of 1620, a work which most fully explores and expresses Bacon’s thoughts on authority, both the manner in which it can be expressed, and the ultimate place in which it is to be found, nature and scripture.

c. The first manipulations of the authorial persona

The works just mentioned, written between the years of 1603 and 1609, existed purely in MS form, leading several critics to suggest that they were, therefore, designed for private circulation, and possibly private criticism, by members of his close circle, such as Tobie Matthew, who Bacon sent a work

⁴⁹ *Ibid.*, p. 159. This is one meaning of Bacon’s *experientia literata*. The other is explained in *DAS* and concerns ‘methods of experimenting’ whereby men may increase knowledge not through the method of inquiry presented by Bacon’s *Organon*, but by applying or manipulating existing knowledge in new ways – Bacon terms it ‘rather a sagacity and a kind of hunting by scent, than a science’ (*SEH*, IV, pp. 413-21 (*SEH*, I, 623-33); see also *OFB*, IV, pp. 111-13; Lisa Jardine, ‘*Experientia literata* or *Novum Organum*? The Dilemma of Bacon’s *Scientific Method*’, in *Francis Bacon’s Legacy of Texts* (see Charles C. Whitney, above), pp. 47-67).

⁵⁰ *SEH*, III, pp. 527-39 (Farrington, pp. 59-72); *SEH*, III, pp. 215-52; *SEH*, III, pp. 591-620 (Farrington, pp. 73-102); *SEH*, III, pp. 496-504; *SEH*, III, pp. 543-85 (Farrington, pp. 103-33). For dates and information regarding these works, see Farrington, pp. 11-18. For the transmission of these texts, see *LL*, III, pp. 363-66; *LL*, IV, pp. 137-38.

⁵¹ Colclough, p. 83.

– most likely *Redargutio philosophiarum* – in 1609, describing it as ‘the only part [of the *Instauratio*] which hath any harshness’.⁵² Similarly, Chamberlain’s comments regarding *Novum organum* that the deceased Henry Cuffe had ‘long since perused it’, presumably date from when both Bacon and Cuffe were part of Essex’s circle, and probably refer to the lost *Temporis partus maximus*.⁵³

While the dating of *Valerius terminus* and the *Temporis partus masculus* is not accurate enough to decide which was written first, their mode of presentation does differ substantively: the former affects a pseudonymous author, while the latter highlights its concern with the publishing of knowledge in its very first line.⁵⁴

A work concerned with the justification of knowledge, *Valerius terminus* does not merely approach the nature of authority, but it also performs it. Even though it exists purely in manuscript form, this manuscript affects a title-page, which does not include the actual author’s name:

Valerius Terminus
of the Interpretation of Nature
with the Annotations of
*Hermes Stella*⁵⁵

⁵² *LL*, IV, p. 137.

⁵³ PRO SP14.117.37, J. C. to D. C. London, October 28, 1620; Farrington, pp. 12-13. Cuffe was executed in the aftermath of Essex’s rebellion, but he, Francis and Anthony had been part of the Earl of Essex’s circle in the late 1500s, where presumably Cuffe had read the lost *Temporis partus maximus*, which can be dated to 1585 by Bacon’s letter to Father Fulgentio in 1625 (*LL*, VII, p. 533). Bacon had begun his association with Essex during the 1580s, while Cuffe was employed as a secretary by Essex at some point in the mid 1590s (see Jardine and Stewart, pp. 132, 147-49; Hammer, p. 29).

⁵⁴ *SEH*, III, pp. 206-13; Farrington, p. 11. Spedding notes that the beginning and first chapter of *Temporis partus masculus* follow immediately after *Valerius terminus*, leading him to conclude that ‘the design and commencement of the work may therefore, in default of other evidence, be safely referred to the time when Bacon revised the manuscript of *Valerius Terminus*’ (*SEH*, III, p. 523).

⁵⁵ *SEH*, III, facsimile of the title-page of *Valerius terminus* (a2^r), and also p. 215. The end of this ‘title-page’, which also includes a list of contents, states that ‘None of y^e Annotations of stella are sett down in these fragments’ (*SEH*, III, facsimile (a2^v), p. 216).

Spedding reads this title as if *Valerius terminus* were a pseudonym, suggesting that ‘it is impossible to ascertain the motive which determined Bacon to give to the supposed author the name of Valerius Terminus, [...] It may be conjectured that by the name Terminus he intended to intimate that the new philosophy would put an end to the wandering of mankind in search of truth’,⁵⁶ while Matthews reads it as the work’s title, translating it as ‘a strong or healthy ending’.⁵⁷

If Spedding is correct, then Bacon’s use of a pseudonym, and one which conveniently translates in such a way as to have some relevance to the matter contained within, serves partially as a removal of the author from the work, and partially as the establishment of a plainly fictional one, suggesting that there is no desire for the appropriation of any authority, nor for any fame, in the writing of this work. The use of the second pseudonym, however, ‘Hermes Stella’, is perhaps more indicative of Bacon’s particular position. It seems most likely that the name is intended to refer to King James, as Bacon refers to him both in terms of the mythical figure Hermes and of a star in the *Advancement of Learning*.⁵⁸ No annotations survive and, indeed, probably never existed. The most likely explanation is put forward by Kiernan, who suggests that the reference to Hermes was a way of including James and, by default, his sovereign authority in the project.⁵⁹ While *Valerius terminus* was

⁵⁶ *SEH*, III, p. 201. Bacon does refer to a Valerius in the *Historia vitae et mortis*, ‘M. Valerius Corvinus was a centenarian’ (*SEH*, V, p. 246 (*SEH*, II, p. 135)). Terminus does not only refer to endings, but to boundaries, as well as being a Roman deity who presided over boundaries.

⁵⁷ Matthews, p. 304. Both of these conjectures are reasonable enough considering that part one of *Valerius terminus* was given the subtitle ‘the endes and limitts of knowledge’, before Bacon crossed it out (*SEH*, III, facsimile (a2^r), p. 215), and that the other ‘title’ of the work would translate easily as *de interpretatione naturæ*.

⁵⁸ ‘So as your Maiestie standeth inuested of that triplicite, which in great veneration, was ascribed to the ancient *Hermes*; the power and fortune of a King; the knowledge and illumination of a Priest; and the learning and vniuersalitie of a Philosopher’ (*OFB*, IV, p. 5); Bacon also refers to James as ‘so bright and benigne a starre’ (*OFB*, IV, p. 55). There is also more than a hint of the occult philosopher Hermes Trismegistus at work here. Hermes also functioned as a messenger for Bacon, see Solomon, pp. 53-55.

⁵⁹ Kiernan writes of the annotator of *Valerius terminus* that ‘Bacon may have intended to exploit this Hermes association, and persuade the learned James to supply commentary on his

presumably not written for consumption by anyone other than chosen individuals, Bacon is manipulating, however mildly, his own position within this work. In the 'next' work, the *Temporis partus masculus*, or the *Masculine Birth of Time*, Bacon chooses a different stance, one which not only considers but also enacts the handing down of knowledge from one to another.⁶⁰

The first chapter of this work is entitled 'The Legitimate Mode of Handing on the Torch of Science', and its first words set it up as a monologue directed from a man of authority towards a younger man, whom he addresses thus: 'I find, my son, that many men, whether in publishing or concealing the knowledge of nature they think they have won, fall far short of a proper standard of honour or duty.'⁶¹ Chapter two is taken up by a vitriolic attack, designed for 'clearing of sham philosophers out of our path. [...] it will be safer to condemn them one by one by name; for their authority is great and if not named they will be thought to be excepted'.⁶² Bacon rounds up the usual suspects, such as Aristotle and Plato, but also rounds on moderns such as Cardan, Ramus, Gilbert, and Villa Nova. Though his attacks follow his usual themes, such as calling Aristotle a 'cheap dupe of words', Plato a 'deluded theologian', and Galen a spinner of 'idle theories of causation', his ultimate aim is, as before, that 'science is to be sought from the light of nature, not from the darkness of antiquity'.⁶³ Apparently realising that such attacks on individual philosophers were pointless, not least because to systematically

treatise, thereby involving the king in his programme to renew knowledge' (*OFB*, IV, p. 207n).

⁶⁰ The title of this work also resists simple explanation, as Henri Durel-Leon has shown that it alludes to Exodus 1. 16 (Durel-Leon, pp. 553-56), where the Hebrew midwives are ordered to kill any male children born to Hebrew women.

⁶¹ Farrington, p. 61 (*SEH*, III, p. 528). It is interesting that Farrington and Colclough disagree regarding the form of this writing, with the former considering it an example of the 'initiative' method of knowledge transmission (Farrington, p. 61, fn. 2), and the latter suggesting that this relationship sets up a 'magistral and hierarchical' situation, albeit one in which the listener is already a 'sympathizer to the new ideas' (Colclough, pp. 83-84). If we are to consider this a 'magistral' work, it is, perhaps, important to note that it is anonymous, thus escaping the censure accorded to most philosophies by Bacon of attempting to win consent for their theories for personal glory.

⁶² Farrington, p. 63 (*SEH*, III, p. 529).

⁶³ Farrington, pp. 63-69 (*SEH*, III, pp. 529-35).

refute each and every one would leave no time for the building of the new philosophy, Bacon took a different direction in his next work, *Cogitata et visa*.⁶⁴

Cogitata et visa, or *Thoughts and Conclusions*, eschews the magistral approach of *Temporis partus masculus*, and begins with a title-page trumpeting the name of its author, before beginning with the words, ‘Franciscus Bacon sic cogitavit [...] Itaque visum est ei’,⁶⁵ or as Farrington translates, ‘Francis Bacon thought thus [...] Hence he drew three conclusions’.⁶⁶ Rather than being pseudonymous or anonymous, Bacon here draws attention to his own name, which was perhaps beginning to accrue its own authority following the success of the *Advancement of Learning*. While Bacon’s initial use of his own name occurs in the third person, perhaps echoing the habit of Caesar, whose commentaries affected the same device, each subsequent section begins with the same formulation, ‘Cogitavit et illud’, or ‘he thought also thus’.⁶⁷ This work, while using the Baconian name in such

⁶⁴ Bacon’s next work was the *Advancement of Learning* (1605), but here Bacon indulges in no experiments with the authorial position, presenting what, in comparison to these MS works, is a standard treatise on the issue of learning. *AL* also manipulates ancient authority in a far more traditional way, partly to establish Bacon’s own intellectual credentials, and partly to suggest that Bacon’s plan ‘required a survey and even incorporation of the works of the ancients in order to suggest a way forward for learning’ (Colclough, p. 85). The difference between his published and his ‘private’ output can be attributed to his relatively lowly position – *AL* is very much an attempt to gain favour with the new king – and the as-yet unformed nature of his project. Regarding Bacon’s attacks on philosophers and philosophies, perhaps his single most concerted effort occurs in *De principiis atque originibus* (*OFB*, VI, pp. 196-267) which purports to be a description of ‘The Philosophy of PARMENIDES AND TELESIO and especially that of DEMOCRITUS as it is treated of in the fable of CUPID’, and also of Coelum (*OFB*, VI, p. 197), and promises to discuss the doctrines of other sects (*OFB*, VI, pp. 211), yet does not complete the discussion and evaluation of Telesio. Bacon later writes, in *NO*, that ‘confuting particular doctrines is pointless’ (*OFB*, XI, p. 97).

⁶⁵ *SEH*, III, p. 591. A formula repeated at the beginning of the *Instauratio magna* (*OFB*, XI, p. 2; see below, p. 214).

⁶⁶ Farrington, p. 73 (*SEH*, III, p. 591).

⁶⁷ *SEH*, III, pp. 591-620. see Colclough, p. 85. Here Farrington’s translation does Bacon a disservice, as he utilises several different formulations, such as ‘he thought also as follows [...] He thought also [...] Another reflection [...] Another thought [...] A further reflection [...] He pursued also [...] Another train of thought [...] Another meditation [...]’ (Farrington, pp. 73-79 (*SEH*, III, pp. 591-97)), while also beginning several of his paragraphs with statements, such as ‘The nature of words’ (Farrington, p. 80 (*SEH*, III, p. 599)), where Bacon used his ‘Cogitavit et illud’ formulation. For Caesar’s commentaries, see Farrington, p. 45; Julius Caesar, *Julius Caesar’s Commentaries of his Wars in Gaul, and Civil War with*

a manner as either to suggest remote detachment or as an indication that its contents are at the very least worth considering, is a further movement away from *Temporis partus masculus* in that, rather than stating a position, it is a presentation of thoughts followed by a conclusion, such that ‘the work allows room for dissent, the fruits of which, Bacon emphasizes, have been stunted by the enslaving power of authority’.⁶⁸

Redargutio philosophiarum, or the *Refutation of Philosophies*, follows the use of pseudonymity, anonymity and a third-person format with a new method of presentation, one in which the dissemination of knowledge takes centre-stage in a fictional presentation which in some ways rehearses the conclusion of *New Atlantis*.

Redargutio philosophiarum opens with a short introduction by the anonymous author, where he states his own desires, ‘I am preparing a refutation of philosophies but know not how to begin’.⁶⁹ The author reminds the reader of some of the errors afflicting the earlier works, such as ‘the hosts of errors are so many and so great that it is impossible to engage them singly’.⁷⁰ The needs noted in this introduction follow Bacon’s general prescriptions, such as the need for establishing first principles, preparing the mind to dispense with its innate prejudices, and the need to deal with received philosophies: ‘Then, with a view to undermining their authority, I shall point out, within the philosophies themselves, certain monstrous errors and intellectual absurdities.’⁷¹

Pompey, trans. by Col. Martin Bladen, 2nd edn (London: W. Pearson for J. Knapton et al, 1712), B2^v. Other authors also wrote in the third person, though often under assumed identities, such as Coryate who includes, as part of the paratextual material accompanying his 1611 *Crudities*, a character of himself ‘Done by a charitable friend’ (Thomas Coryate, *Coryats Crudities* (London: William Stansby, 1611), b1^r [this is the second set of sigs. for b, and thus is effectively b9^r]).

⁶⁸ Colclough, p. 85. In this manner, *Cogitata et visa* also more closely resembles the mode of transmission of knowledge recommended in *AL*, the aphoristic method (*OFB*, IV, p. 123).

⁶⁹ Farrington, p. 103 (*SEH*, III, p. 557).

⁷⁰ *Loc. cit.*

⁷¹ Farrington, p. 103 (*SEH*, III, p. 558). Spedding suggests that this work was later termed the ‘caution against the Idols of the Theatre’ (*LL*, III, p. 364).

Having listed a set of Baconian preoccupations, the narrator recounts that, having explained his desires to a friend, this friend told him of a meeting which he attended in Paris. In what appears to have been an exclusive gathering of ‘mature’ gentlemen of high social and political standing, an address was delivered by ‘a man of peaceful and serene air, save that his face had become habituated to the expression of pity’,⁷² a description which more than resembles Bacon’s later description of the father of Salomon’s House, as ‘a *Man* of middle Stature, and Age, comely of Person, and had an Aspect as if he pittied Men’.⁷³ The speaker takes his seat ‘not on a platform or pulpit, but on a level with the rest’,⁷⁴ before delivering his speech which is ultimately an attack on received authority, critical of the Greeks, and explaining the difficulties of persuading his audience of the truth even if they were prepared to accept it, due to the unprepared nature of their minds.

The author, or, more properly, the reporter, ends his preface with the observation that his source stated that his version of the address was ‘very inferior to the original’.⁷⁵ Also, in this work, the speaker states that ‘I contend not for the palm of wit nor lay claim to the sceptre of authority’,⁷⁶ and while he attacks Aristotle in Baconian fashion, his attack is more centred on Aristotle’s authority than his philosophy, suggesting that ‘even though Aristotle were the man he is thought to be I should still warn you against receiving as oracles the thoughts and opinions of one man’,⁷⁷ and that his audience should ‘apply yourselves to the study of things themselves. Be not for ever the property of one man’.⁷⁸

⁷² Farrington, p. 104 (*SEH*, III, p. 559).

⁷³ *NA*, e1^r (*SEH*, III, p. 154).

⁷⁴ Farrington, p. 105. The father of Salomon’s House also urges the narrator to sit beside him as he delivers his description of his institution (*NA*, e2^r (*SEH*, III, p. 156)).

⁷⁵ Farrington, p. 105 (*SEH*, III, p. 560).

⁷⁶ Farrington, p. 110 (*SEH*, III, p. 564).

⁷⁷ Farrington, p. 114 (*SEH*, III, p. 568).

⁷⁸ Farrington, p. 115 (*SEH*, III, p. 569).

The text ends with a request by the friend to the narrator that, having declared himself happy to hear the story, ‘when you write on these matters, find room to include my report and not suffer the fruit of my travels to perish’.⁷⁹

It was, however, not until the *Instauratio magna* of 1620, the work which contained both a plan of Bacon’s *Instauratio* entitled the *Distributio operis*, and Part II of the *Instauratio*, *Novum organum*, that Bacon finally produced a work which combined publication, presentation, narrative schemes and textual content around the subject of authority.

d. The assertion of authority in the *Instauratio magna*

The first official copy of Bacon’s *Instauratio magna*, as presented to King James on 12 October, 1620, was a work which exuded authority. The presentation copy given to James was one of a few large-paper copies printed which had been lavishly bound in velvet for the great and the good, and was accompanied by a private letter which addressed the King in terms somewhat different to those included in the text’s printed dedicatory letter, also to James. As Graham Rees has demonstrated, practically every aspect of the work’s physical appearance worked towards the assertion of authority:

The presentation copies with their generous margins enhance the impression of solemn distinction created by the whole edition’s typography, historiated initials, and ornaments, not to mention the famous engraved title which appeared in all copies of this edition save the ones bound with *Operum ... tomus*. In fact the texts of 1620 came into the world laden with authority: they were written by the incumbent Lord Chancellor, and their *mise-en-page*, the signals delivered by their mere and formidable appearance, announce their gravity. To cap it all the texts were brought out by the King’s Printers, holders of privileges conferred by royal patent—a direct expression of royal prerogative—, privileges which extended much sounder guarantees of a text’s authenticity and weight than any other London printer could then offer.⁸⁰

⁷⁹ Farrington, p. 133 (*SEH*, III, p. 585).

⁸⁰ *OFB*, XI, p. xcix.

Bacon's use of the King's Printers did more than simply guarantee the text's authenticity, however, as the *Instauratio magna* was one of nine folio editions published by the King's Printers between 1616 and 1620, including the *Workes* of King James, in both English and Latin. These editions, suggest Wakely and Rees, were part of a concerted attempt to promote 'an "official" idea of national culture—an idea that was eventually to prove as durable as it was influential'.⁸¹

Thus it seems that Bacon's work became part of a canon of works considered to be of prime importance, one formed of the following: the *Works* of James I in English (1616), and Latin (1619), the first two parts of Marc' Antonio de Dominis' *De republica ecclesiastica* (1617 and 1620), the Italian, Latin, and English versions of Paolo Sarpi's *Historia del Concilio Tridentino* (1617, and 1620), Henry Saville's edition of Thomas Bradwardine's *De causa Dei* (1618), and Bacon's *Instauratio magna*.⁸² That these were all folios was also important, as the format was in itself indicative of 'durability of tradition and an intent to bring together in an exhaustive whole consecrated authors and the summas of religious, juridicial, or secular knowledge'.⁸³ As Wakely and Rees point out, the publishing of weighty tomes on weighty issues was a well-considered tactic on the part of James:

James's self-promotion as a wise and learned Solomon, a sacred king and a *Rex pacificus* who ruled by the pen not the pike, went much further. It helped sustain an idea and iconography of kingship supported by a select body of distinguished authors. By accepting the dedications of these texts, and in some cases pressing for their publication, James was forging a link between the folio form, the printed word, and himself as prime mover in the genesis of epoch-making editions.⁸⁴

⁸¹ Wakely and Rees, p. 468.

⁸² *Ibid.*, p. 470.

⁸³ Henri-Jean Martin, *The History and the Power of Writing*, trans. by Lydia G. Cochrane (University of Chicago Press: Chicago and London, 1988), p. 310. Cited in Wakely and Rees, p. 475.

⁸⁴ Wakely and Rees, p. 475.

While Bacon eschewed the power of received authority, and indeed bemoaned man's inability to look beyond its precepts, his attitude towards royal authority was somewhat different, and the decision to include the *Instauratio magna* amongst these folios should not be seen as an attempt merely to accrete authority to it by association. Bacon was, after all, a committed monarchist who believed strongly that the monarch held a special place in terms of authority, discoursing regularly on the subject of monarchy, not least the union of the kingdoms,⁸⁵ and calling natural philosophical reason 'prerogative.'⁸⁶ In addition to this, the ancient King of Bensalem, Solamona, is subject to special reverence on the island, while Bacon repeated not only the Solomonic commonplace James so appreciated, but also Solomon's own words, '*The glorie of God is to conceale a thing, But the glorie of the King is to find it out*'.⁸⁷

Ultimately, the appearance and provenance, both intellectual and physical, of Bacon's *Instauratio magna* could have hardly been designed to confer more authority on the actual text within – from the extremely carefully written paratextual material to the engraved title to the text itself, the *Instauratio magna* was designed, ultimately, to lead the reader into submitting themselves to the authority of nature.

As a man who considered that the greatest impediment to man's progress was the reliance on ancient authorities rather than nature, Bacon eschewed the tactics available to, for instance, Bishop Montague in the letter 'To The Reader' which accompanied James's 1616 *Workes* – the reliance on a roll-call

⁸⁵ See *AL*, where Bacon is concerned with the creation of a history of England and Scotland, 'after the manner of the sacred Historie, which draweth downe the storie of the Tenne Tribes, and of the Two Tribes, as Twinnes together' (*OFB*, IV, p. 67. Cf. *LL*, III, pp. 249-52).

⁸⁶ Farrington, p. 90 (*SEH*, III, p. 608). See also Royal or political motion (*OFB*, XI, p. 409), and *Prærogatiuas Instantiarum* (*OFB*, XI, p. 272).

⁸⁷ *OFB*, IV, p. 36; *OFB*, XI, pp. 23, 195; *SEH*, III, pp. 220, 500; Proverbs 25. 2.

of authorities, both scriptural and secular, to make his case⁸⁸ – which Bacon had happily employed when he wrote the *Advancement of Learning*:

Now I, in thrall to an undying love of truth, have committed myself to the hazards, hardships and loneliness of the open road and, trusting for support to the Lord's help, I have kept my mind proof against the shock and marshalled ranks of opinion, against my own inner hesitations and misgivings, and against obscurity and darkness of things, and the disembodied imaginings that beset us round, so that at last I can bring to generations present and future guidance more reliable and sure.⁸⁹

It is reasonable to assume that, in the case of the *Instauratio magna*, Bacon was intimately involved in every step of the process, and was responsible for every significant feature of the text. It is difficult to gauge exactly what Bacon's expectations were for the large-paper copies and the standard-paper copies issued in 1620.⁹⁰ Unfortunately, presentation copies of the *Instauratio magna* are particularly rare, and only one personal accompanying letter survives, that from Bacon to James, making it hard to discern any distributive strategy on Bacon's part.⁹¹ Sir Henry Wotton, however, had been given three copies by Thomas Meautys, presumably accompanying the letter he received from Bacon, dated October 20th, a mere eight days after the initial presentation to James, one of which he purposed to give to Johannes Kepler.⁹² The

⁸⁸ King James, *The Workes of the most high and mightie Prince, James ... King of Great Britaine, France and Ireland, Published by James [Montague] Bishop of Winton and Deane of his Maiesties Chappel Royall* (London: Robert Barker and Iohn Bill, 1616), b1^r-e2^v.

⁸⁹ *OFB*, XI, p. 21. For the complex use of authority in *AL*, see Colclough, 'Of the alleading of authors', pp. 18-31.

⁹⁰ See *OFB*, XI, pp. xciii-xcix.

⁹¹ Large-paper presentation copies of *IM* were also sent to Cambridge and Oxford university libraries, the Cambridge copy's letter opening with the words 'as your son and pupil, I desire to lay in your bosom my new-born child. Otherwise I should hold it for a thing exposed' (*LL*, VII, p. 136, fn. 1), suggesting such a presentation was partly for protection. Indeed, on presenting *AL* to Sir Thomas Bodley, Bacon had written that Bodley's collection was 'an Ark to save learning from deluge' (*LL*, III, p. 253). For Colclough, this placement of works in university libraries was not merely for protection, however, as he suggests that, in lodging *IM* to the libraries of Oxford and Cambridge, he 'has constructed a highly "magistral" object, and placed it alongside the ancients in Bodley's "ark of learning", perhaps attempting physically as well as intellectually to take the place of Aristotle's *Organon*' (Colclough, 'Of the alleading of authors', p. 36).

⁹² *LL*, VII, p. 131; BL Add. MS 39254, fols. 60-61b, Wotton to Bacon, 17 December, 1620. The letter from Bacon to Wotton does not, however, mention the *IM*, nor give any indication

contents of Wotton's reply to Bacon's letter suggest that Kepler was not an *intended* recipient, merely a serendipitous one, a demonstration of why Wotton was given these copies, in order to disseminate Bacon's work to any of influence who might be interested:

60 There I found Kepler a man famous
 in the sciences as your Lordship knowes: To whome I
 purpose to convay from here one of youre
 bookes that he may see we have some of oure
 owne that can honoure our King as well as he hath
 done with his Harmonica.⁹³

Beyond the outside appearance and the company which the *Instauratio magna* kept, the first thing the reader would see was the famous engraved title, replete with its authoritative tropes. The general aspect of the page seems to at the very least complicate the concept of traditional and imposed authority, if not actively undermine it. The twin pillars, presumably representing the Pillars of Hercules, or the traditional limits of navigation, Bacon had previously used as a textual metaphor.⁹⁴ The ship at the centre of the page has either already passed them, or is about to do so, just as Bacon, refusing to accept the limits upon knowledge set by the ancient authors, makes clear within *Novum organum* itself.⁹⁵ Bacon's engraved title also brings to mind Charles V's motto *non plus ultra*, once more subverting a well-known expression of imperial authority.⁹⁶ Above the ship, and between the columns, was the

of how Wotton was expected to distribute these copies. I know of no record of whether Kepler received this copy, what happened to it or of his thoughts regarding it.

⁹³ BL Add. MS 39254, fol. 61^r.

⁹⁴ *OFB*, IV, p. 55.

⁹⁵ *OFB*, XI, pp. 107-09, 119-21. In *NA* the Governor of the House of Strangers also notes that the Bensalemite navy penetrated them centuries ago: 'And for our owne Ships, they went sundry Voyages; as well to your Streights, which you call the Pillars of Hercules' (*NA*, c1^v (*SEH*, III, p. 141)).

⁹⁶ Rees suggests that in this manner Bacon 'in effect converts the geopolitical device of Charles V into a device for representing the politics of the intellectual globe' (*OFB*, XI, p. 490n). See also Earl Rosenthal, 'Plus ultra, non plus ultra, and the columnar device of emperor Charles V', *Journal of the Warburg and Courtauld Institutes*, 34 (1971), 204-28. Bacon also uses this term in a natural philosophical sense in *Historia densi et rarii*: 'There is a boundary or *non ultra* of dense and rare, but not in any entity known to us' (*OFB*, XIII, p. 163; cf. *OFB*, XI, p. 371).

primary textual message of the engraved title, and this might be considered to be somewhat odd, as it privileges the author over the work, by a not inconsiderable margin:

FRANCISCI
DE VERULAMIO/
Summi Angliæ
CANCELLARIS/
Instauratio
magna⁹⁷

Bacon then makes another choice which further complicates the expression of authority in the *Instauratio magna*. The next piece to meet the reader's eye is not the dedicatory letter, as might be expected, but a short exordium beginning thus:

FRANCIS
OF VERULAM
REASONING THUS WITH HIMSELF
CONCLUDED THAT
it would be in the interest of the living
and of those yet to come
to hear his words.⁹⁸

The dedication itself was a matter of no little importance, and, as Anderson has suggested, in some circumstances the dedication may be considered more important than the text itself, not least with a text as difficult as *Novum organum*, and especially when you consider the energies Bacon expended in

⁹⁷ See *OFB*, XI, plate one, facing p. xxxii.

⁹⁸ *Ibid.*, p. 3. It was usual practice for the dedicatory letter to come before any letter To The Reader, and Bacon stuck to this order almost exclusively between *De sapientia* (1609) and the *SS* (1626/7): *Historia naturalis*, *The History of the Reign of Henry VII*, and *SS* were dedicated to Charles, while the *De sapientia* and the 1625 edition of the *Essays* were dedicated to the Earl of Salisbury and the Duke of Buckingham, respectively. Book I of *AL*, was, of course, an extended dedication. There are examples where this positioning is not adhered to, such as in Coryate's *Crudities*, where the first thing to greet the reader after the engraved title is an emblematic analysis of the engraved title – the Dedicatory letter (to Prince Henry) follows immediately on from this.

order to direct James's reading.⁹⁹ That Bacon chose to upset his readers' expectations is interesting, though even more so when you consider that, at exactly the point where the reader (and that includes King James) might expect *his* name to be blazoned with all typographical pomp across the page, there is, instead, the author's. Not only that, but James gets his Lord Chancellor 'reasoning thus with himself'. Bacon has begun his most important work, and the work thus far presented as most replete with (received) authority – authority received, we recall, through Bacon's position as Lord Chancellor, his closeness to King James, and the work's printing by the King's Printers – with an apparent campaign to set *himself* – or, at the very least, his reason – up as an authority.¹⁰⁰

Bacon capitalises on his readers' potential disorientation by presenting an exordium delivered in a similar fashion to some of his earlier works, in the third person, and the past tense. This exordium, while it begins with Bacon's name, is oddly shorn of both the standard mark of authority while failing to assert itself as part of the work in question – it is unsigned and untitled. Its opening, having ascertained that Francis of Verulam carried out a process of reasoning in the past, and came to a conclusion, is followed with an explanation: '*Since he knew for a fact that the human intellect was the author of its own difficulties by not applying calmly and opportunely the right remedies which lie within man's power.*'¹⁰¹ It does, however, still bear features of a dedicatory letter, a letter 'To The Reader', and a preface: it claims authority from Bacon's reason and protection from future readers; it contains parenthetical explanations of his thought processes;¹⁰² and the argument contained within it serves as a perfectly adequate mini-preface of what is to come, anticipating the actual preface to follow.

⁹⁹ Anderson, p. 640.

¹⁰⁰ This authority does, however, differ in nature from the received authority to which Bacon refers in aphorism 84 of *NO* (*OFB*, XI, p. 133). The nature of authority is, as Bacon correctly identifies, that of the encouragement or even compelling of assent.

¹⁰¹ *OFB*, XI, p. 3.

¹⁰² Cf. Rawley's letter 'To The Reader' for *SS*.

This mode of presentation imitates that of his earlier work, the *Cogitata et visa*, with which it also shares its introduction. Where *Cogitata et visa* begins ‘Franciscus Bacon sic cogitavit’, this exordium opens with ‘FRANCISCVS DE VERVLAMIO SIC COGITAVIT’:¹⁰³ the only change is Bacon’s title. If one came across the text with only a passing knowledge of Bacon’s name one would be forgiven, upon reading this exordium, for thinking that a) Francis of Verulam was dead, and that he had quite possibly died no little time ago, and that b) the author believed that his reform of natural philosophy has been successful: he is what might be called a ‘new ancient.’

While the exordium appears as if written concerning a past figure, itself perhaps attributable more to an attempt to express remote detachment than to any oblique claim to ‘ancient’, authoritative status, there is the author’s voice in the present – that is, the moment of reading – to consider. The author explains or adds to his description of Bacon’s thoughts in a sort of ‘aside’ (‘whence comes manifold ignorance of things’, ‘to which scarcely anything on earth or, at any rate, earthly things can compare’), how Bacon’s work appears at the moment of reading (‘but while this may seem an endless task from the outset’), and finally what the author feels about the future (‘for this matter can come to a conclusion’). The author thus communicates to the reader the fact that the author not only understands (and agrees with) Bacon, but also that he, too, believes that these matters can reach a successful conclusion.¹⁰⁴

None of these pasts, presents or futures are fixed or qualified in any sense other than the reader’s apprehension of them. This is unusual, as in most letters, be they dedicatory letters or letters ‘To The Reader’, there tends to be

¹⁰³ *SEH*, III, p. 591; *OFB*, XI, p. 2.

¹⁰⁴ There is even a hint that the author is writing as if they *have* been, if not brought to a successful conclusion, then at the very least set on the right road: the manipulation of tenses and the authorial voice, almost ventriloquizing Bacon, does resemble that of an editor

some manner of temporal fixing, whether it is implicit (the rough time of writing being easily apprehendable through various clues) or semi-explicit (when the author writes on a specific subject, topic or theme which has date). In the Dedicatory letter to James which follows this first ‘letter’, for example, it is plain that, at the very least, the letter was written while James was on the throne, alive, and while Bacon was still Lord Chancellor – this narrows down the timescale to between 1618 and 1621. Similarly, James Montague, editor of James’s *Works*, places the Dedicatory letter accompanying the 1616 *Workes* of James within a rough time scale due to his discussion of the death of Henry – the elder brother of dedicatee Prince Charles – who had died in 1612.¹⁰⁵

The exordium appears to have been written in order to *resist* such temporal categorisation, while the desire to speak to individuals from a different time also presents itself as Bacon is said to have thought that the work ‘would be in the interest of the living and of those yet to come’, without defining when these moments were meant to occur.¹⁰⁶ If the exordium *was* designed to be read equally in the future as in the present (or, possibly, in a continuous present which exists through its ‘fixing’ of a past moment in which the work was written), we must also note that Bacon was no stranger to appealing to future ages rather than his own. This is illustrated by the Dedicatory letter which accompanied *Historia vitae et mortis*, which begins ‘To the present and future ages, greeting’,¹⁰⁷ and the preface which accompanied *Abecedarium novum naturae*, which includes the following words:

As for me, I am pretty sure that, because I have little faith in the genius of our times, my own words (as far as the work of instauration is concerned) could be accused of lacking an age or era to match them. [...] That is why I am devoted to

presenting an historical text.

¹⁰⁵ Often the dedicatory letter was itself actually dated, such as in the 1597 edition of Bacon’s *Essays*, dedicated to Bacon’s brother Anthony.

¹⁰⁶ *OFB*, XI, p. 3.

¹⁰⁷ *SEH*, V, p. 215 (*SEH*, II, p. 103). Published in 1623, this work may be considered to be pre-dedicated to Charles, as it is, effectively, part of the *Historia naturalis et experimentalis* dedicated to him in 1622 – the same might be said of *SS*, however, and in this work Rawley repeats the dedication, though for reasons which have been fully considered.

posterity and put forward nothing for the sake of my name or taste of others, but, knowing well enough the nature of the things that I impart, I deal out work for ages to come.¹⁰⁸

These two works, however, *foreground* their concern with the future, unlike the exordium which is hard to read in any other light than the present. It seems designed to appear as if it has been written after the fact, and by a third, and presumably dispassionate, party – and to be read in the ‘now’, whenever that may turn out to be.¹⁰⁹ Indeed, it seems, until the reader reaches the dedicatory letter itself, to be something of historical rather than authoritative interest – it effectively bases its authority on the perceived results of the work, rather than the authority and protection of the dedicatee.¹¹⁰ It presents Bacon in the way that he appears in the future, as the individual who started mankind on the right road to knowledge. The *Instauratio magna* is thus presented as something which derives its authority not from what has gone before, but from what is to come: the instauration of man’s knowledge.¹¹¹

In his exordium, Bacon pays great attention to the state of the audience, that is, *when* the audience is actually reading. In this way, it seems as if he is subtly anticipating future readings of him as a prophet of the intellectual world – just as James plainly wished to be viewed as a biblical patriarch by *his* posterity. The image of Bacon as a prophet or a priest of the intellect was one alluded to by Rawley:

¹⁰⁸ *OFB*, XIII, p. 173.

¹⁰⁹ If, for example, the first contact a reader had with *NO* was its appearance in the *OMT* of 1638, this exordium would read as a third-party prefatory piece, if a somewhat strange one.

¹¹⁰ In this sense, we might even consider that Bacon is purposely obscuring the dedicatee, along the lines that he explains in *AL*: ‘Neither is the moderne dedications of Bookes and Writings, as to Patrons to bee commended: for that Bookes (such as are worthy of the name of Bookes) ought to haue no Patrons, but Truth and Reason: And the ancient custome was, to dedicate them only to priuate and equall friendes, or to entitle the Bookes with their Names, or if to Kings and great persons, it was to some such as the argument of the Booke was fit and proper for; but these and the like Courses may deserue rather reprehension, than defence’ (*OFB*, IV, p. 20).

¹¹¹ Bacon has previously stated that ‘when any art fails to achieve something, they [the authorities of that art] insist that such an achievement is impossible on the authority of that same art’ (*OFB*, XI, p. 15). With regards the Instauration, he here authorises it by projecting into the future, where he expects the tangible evidence of its success and viability, works, to

His fame is greater and sounds louder in foreign parts abroad, than at home in his own nation; thereby verifying that divine sentence, *A prophet is not without honour, save in his own country, and in his own house.*¹¹²

Bacon wrote of himself using priestly metaphors, such as ‘in this way I believe that I have solemnised a true, lawful and enduring marriage between the empirical and rational faculties’,¹¹³ and as follows:

Hence I believe that I present myself as high priest of the sense (from which all natural knowledge should, unless we prefer madness, be derived), and learned interpreter of its oracles; so that whereas others merely claim to watch over and cherish the sense, I do so in fact.¹¹⁴

In the exordium, Bacon does not explicitly present himself as an authority, as not only is the author officially anonymous, but the appeals made are to ‘Bacon’s reason’ and the judgement of future ages, that is, the results of Bacon’s project: in effect, Bacon expects his natural philosophy to be judged by its works.¹¹⁵

Bacon is speaking, at least officially, and apparently through a third party, to his general readership, both in the present and the future. In the dedicatory letter which follows it, however, the negotiation is far more complex, as Bacon speaks both directly to the King, and indirectly to the wider readership. While the dedicatory letter to James is very much a virtuoso example of a public negotiation, the private letter which accompanied James’s copy of the *Instauratio magna* suggests that the negotiation with James performed in public – the appeal for financial support for his programme of philosophical reform – is not an entirely accurate representation of the negotiation which was taking place.

accrue.

¹¹² *SEH*, I, p. 15.

¹¹³ *OFB*, XI, p. 21.

¹¹⁴ *Ibid.*, p. 35.

¹¹⁵ As he suggests, in *Redargutio philosophiarum*, it ought to be judged (Farrington, pp. 123-

On first glance, the dedicatory letter simply reiterates several of Bacon's concerns regarding authority and the need to attend to nature rather than man, while seeking to play down his own part in the affairs, while simultaneously flattering and cajoling James into lending his support, not only financial but nominal, to the entire project. If, however, we read the 'public' and the 'private' letters in tandem, as, no doubt, James himself would have done, a subtly different argument reveals itself.

e. Public and private negotiations: the letters of the *Instauratio magna*

While the printed, or 'public' dedicatory letter demonstrates the complex relationship which existed between the King, his Chancellor and their public as represented by their readership, and the expert manner in which Bacon manipulates both of his audiences, the 'private' letter allows us to observe some of Bacon's tactics a little more clearly – not least because it was presumably intended for the King's eyes only.¹¹⁶ Just as any letter must be considered in context, that is, within the wider correspondence in which it forms a part, so too must the dedicatory letter as published, and the private letter which accompanied it, be considered as a part of the same discourse.¹¹⁷ The first thing that the private letter does is draw the King's attention to the different nature of the public and private discourse:

24 (*SEH*, III, pp. 576-77)).

¹¹⁶ The letter exists in three forms other than the transcription included in *LL*, VII, pp. 119-20. The first is a draft with annotations in Bacon's hand, (LPL Gibson MS 936, art 129. Bacon to James [12 October 1620]), the second is the letter itself (NLS MS Bacon to James, 1620), while the third is a copy of this letter (BL Harleian MS 6896). Chamberlain's comments that 'in sending yt to the King he wrote that he wisht his Majestie might be as long in reading it as he hath been in composing and polishing yt, which is well nigh thirtie yeares' (PRO. SP14.117.37) suggest that perhaps this letter was not as private as it might have appeared.

¹¹⁷ In this respect, we might consider the private letter to have been an 'enclosure', or an additional piece designed to illuminate the official, or easily intercepted, message. For more on enclosures, both verbal and written, see P. E. Hammer, *the Polarization of Elizabethan Politics: The Political Career of Robert Devereux, 2nd Earl of Essex, 1585-1597* (Cambridge: Cambridge University Press, 1999), pp. 152-53, 196; Robyn Adams, "'Both Diligent and Secret': The Intelligence Letters of William Herle" (unpublished doctoral thesis, University of London, 2004), pp. 134-35.

· yt may pleas your most Exc^t Ma^{tie}

5 It being one thing to speak or write, (specially to a king,) in
publike, another thing in priuate; although I haue dedicated
a woorke, or rather a portion of a woork, (which at last
I haue ouercomen) to your Ma. by a publike Epistle,
where I speak to yow in the hearing of others: yet I
thought fitt also, humbly to seek accesse for the same,
not so much to your person, as to your iudgment, by
these priuate lynes.¹¹⁸

In the first sentence, Bacon immediately highlights both the nature of this communication, the private letter, and also his ability to speak to the King both in public and in private. Bacon seems at first to suggest that the act of speaking and writing are practically the same, but the important factor is the presence of an audience: whether you speak *or* write to a king in public, you necessarily have an audience, or, as may be more relevant, a witness. It seems that Bacon writes this letter so that their discourse may be away ‘from the hearing of others’, something which was not only difficult, but plainly vitally important to Bacon, as his continual desire to seek audience with the King testifies.¹¹⁹ There may, however, be another reason, as can be found in his essay ‘Of Negotiating’, where he writes the following:

It is generally better to *deale* by Speech, then by Letter; And by the Mediation of a Third, then by a Mans Selfe. Letters are good, when a Man would draw an Answer by Letter backe againe; Or when it may serve, for a Man's Justification, afterwards to produce his owne Letter.¹²⁰

Bacon certainly received a letter back from James (though not, however, containing the positive response he might have wished), and may even have wished to keep a more accurate record which could, at a later date, be presented, should the need arise.¹²¹ It seems that the first letter of this

¹¹⁸ NLS MS Bacon to James, 1620.

¹¹⁹ Jardine and Stewart, pp. 493-98.

¹²⁰ *OFB*, XV, pp. 145-46.

¹²¹ See BL Add. MS 5503, fols. 101^v-102^f; *LL*, VII, pp. 122, 129-30; *Letters of King James VI*

sequence is made up of both the public and the private letter, as the private letter seems to be largely a qualification and explanation of the public.

The public letter begins straightforwardly and traditionally enough, with a list of James's honours, though from this formal address Bacon immediately shifts to what might be considered a calculated informality:

*Your Majesty may perhaps accuse me of theft on the grounds that I have stolen from government business the time that I have taken to write this work. And I have no defence to offer.*¹²²

With this opening line, Bacon is affecting the form of the personal letter, what Day defined as 'the familiar and mutuall talke of one absent friende to another'.¹²³ He does this through informality of style, an especially effective device when juxtaposed against the rigid formality of the letter's opening address, yet he does something more, as he also imagines the response of the addressee, creating the effect of an Erasmian epistolary conversation, the 'mutual exchange of speech between absent friends'.¹²⁴ This device ensures that the 'lay' reader, that is, anyone who is not the addressee, feels as if they are reading a truly private letter. Bacon thus establishes the relationship between himself and James as one of a relaxed, easy intimacy, not least because Bacon feels he can make a joke about what he has stolen from the King, a tactic which also gives a powerful impression of the position Bacon occupies within government. The letter's first line, therefore, tells the reader more about Bacon's position and relationship with the King than it does about the accompanying work and its fitness to redound to James's glory: Bacon's line that he 'has no defence to offer' is simply a modesty formula, the affected abasement of a man who knows that no such charge will follow.

& I, ed. by G. P. V. Akrigg (Berkeley, Los Angeles, London: University of California Press, 1984), pp. 374-75.

¹²² OFB, XI, p. 7.

¹²³ Day, B4^v.

It is this argument which Bacon employs next, however, in considering the worthiness of his project, something which, tellingly, he places in the future:

*for time past cannot be recovered, unless it happen that the time taken from your affairs can—if such things have any worth—redound to the memory of your name and the honour of your age.*¹²⁵

In this way Bacon is also doing exactly what he said he could not do, offering a defence, but one which, as in the exordium, relies on the future, and thus time – what Bacon regularly terms the ‘author of authors’ – before a judgement can be made. Bacon continually refers to things temporal, both in these letters and throughout his works. Regarding *Novum organum*, he states that the things contained within the work are not only *quite new*, but also ‘*framed on an extremely ancient archetype*’, laying tacit claim, therefore, to a mastery of both times, the future in terms of his work and the past in terms of his comprehension of the world and nature. He considers the work ‘*more as the birth of time than of talent*’, merely thinking that ‘*the only remarkable thing in it is that its beginnings and such deep suspicions about received doctrines should have entered anyone’s head*’.¹²⁶

Bacon ascribes his work not just to God, but also to James’s times, writing that ‘*if there be any good in what I propose it should be attributed to God’s infinite mercy and goodness, and to the blessedness of Your Majesty’s times*’. That the blessedness of the times is to be ascribed to God is perhaps an obvious statement, but it allows Bacon to conflate James with his times, implying that James’s wisdom is, to a large degree, one of the indicators of the blessedness of his times: ‘*Deservedly does this Regeneration and Instauration of the sciences belong to the times of the wisest and most learned of kings*’.¹²⁷ In this way, Bacon allows James, and the public audience, to infer that the

¹²⁴ Jardine, *Erasmus, Man of Letters*, p. 150.

¹²⁵ *OFB*, XI, p. 7.

¹²⁶ *Loc. cit.*

¹²⁷ *Loc. cit.*

blessedness of the times and the wisdom of the King are, in effect, the same thing: James's wisdom is the times' blessing.

Bacon even suggests that his service to James might reach beyond the grave:

*and that, as I have served you in life with wholehearted devotion, so after death I may perhaps bring it to pass that your times may blaze forth to future generations with this flame new kindled in the dark recesses of philosophy.*¹²⁸

Certainly, if the concept of patronage was predicated on a mutually beneficial exchange between patron and client, we can see here what Bacon is offering James, in full view of the Latin-reading public: the eternal fame due the man behind the 'Regeneration *and* Instauration' of the sciences. While it seems that Bacon has not only offered this glory to James with no apparent thought of reward, and that the reader might be forgiven for inferring that this glory is inevitably James's, there is more at work here than the suggestion that even when Bacon steals from James he serves him. What is different about Bacon's approach is that he, like Rawley after him, is putting forward the work, and not the author, as the client.

There must, therefore, be more to the patronage required by Bacon for the Instauration than simply coming to his mind during James's reign. It is all very well for Bacon to provide the means to make James's name famous to posterity, but there must be some sort of return made on Bacon's investment, even if this investment was made with someone else's capital: the *Instauratio magna*, a work of time, not talent, was formulated during the time Bacon 'confesses' he stole from James's affairs.¹²⁹ Bacon's desires are not to be couched in straightforward language, no matter how much Bacon wishes the reader to think that they are:

¹²⁸ *Loc. cit.*

¹²⁹ While this comment of Bacon's is plainly a playful device, designed to highlight the relationship between himself and James to the public audience, it also serves a serious point, namely to imply that the work of the *IM* does, in effect, already belong to the king, and was

It remains for me to submit a petition not unworthy of Your Majesty, and one absolutely essential to the matter in hand, which is that as you stand comparison with Solomon in so many things—in weightiness of judgement, the peace of your realm, largeness of heart, and, indeed, the noble variety of books you have written—you would rival that same king by putting in hand the collecting and perfecting of a true and rigorous natural and experimental history which (stripped of philological matters) may be designed for the building up of philosophy, and which I shall describe in its proper place, so that at last, after so many ages of the world, philosophy and the sciences may be no longer an airy and floating fabric but a solid construction resting on the firm foundations of well weighed experience of every kind. As for me, I have supplied the Organum, but its material must be sought in the things themselves.¹³⁰

It may be expected that a ‘request’ might be just that, a simple request, but Bacon takes 100 words of Latin to enclose the request ‘*that you should take order for the collecting and perfecting of a natural history*’. The extra words serve two functions, the first being flattery and the second being a more detailed explanation of exactly what Bacon means when he uses the words ‘natural history.’ Bacon manages to work in a flattering reference to James’s likeness to Solomon alongside a flattering reference to the *Instauratio magna* and thus Bacon himself, a re-iteration of the effect of this on the way in which the future will look upon James and his reign – including a diagnosis of the present ills of philosophy – and a quick explanation of the *Instauratio magna* and Bacon’s philosophy itself. The intention is to make James’s granting of this request seem inevitable to all who should read this letter: inevitable not just because of Bacon’s arguments for its granting, but also because of James’s great qualities.¹³¹ The astute reader will, at this point, realise that Bacon will only be able to serve the King after death if the King serves him now, by granting his request: a request, moreover, that will surely only benefit the world and the King’s name, not Bacon, his humble servant.

undertaken as a service to the state.

¹³⁰ *OFB*, XI, pp. 7-9.

¹³¹ Of course, James never granted Bacon’s request, but this lack of success does not mean that the letter was not a rhetorical success – it may well be that to many readers, James’s

If the public letter suggests that, while the proposed work may redound to the glorious memory of James, it requires James to make it happen, which he will inevitably do, the private letter casts this deal in a different light:

And

30 to tell your Ma. trewly what I think; I accownt your
 fauor may be to this woork, as much as an hundreth
 years tyme. for I am perswaded, the woork will
 gayne upon mens myndes in Ages; but your gracing
35 it may make it take hold more swiftly.¹³²

Bacon's public stance, being that James should follow the example of Solomon and make orders for the gathering and collecting of a natural history so that philosophy may rest on the solid foundation of experience, suggests that if James, this most wise of kings, will not make it happen, it never shall. Privately, however, Bacon is persuaded that 'this woork will gayne upon mens myndes in Ages'. In other words, the outcome is certain, it is merely the timing which is not. The suggestion in the public letter that the work relies on James's favour is now turned around, and Bacon is privately presenting James with an opportunity to put his name to something which is inevitable. He coincidentally may recoup some hundred years of time in the process: surely a good payback for the time Bacon admits he has already stolen. Where publicly Bacon's work is up for negotiation, the private letter makes James's position in posterity the matter of this exchange. It is almost as if Bacon, or the Instauration, is now the patron and James the client.

Bacon's drawing of a connection between James and Solomon is not simply a matter of flattery, following on from his usage of the same analogy in the *Advancement of Learning*, and that of others such as Bishop Montague, but also seems to follow Erasmus's suspicions regarding flattery, as Lynne Magnusson suggests:

granting of Bacon's wishes *did* appear inevitable.
¹³² NLS MS Bacon to James, 1620.

Surprisingly for someone who so robustly condemns flattery directed at kings, Erasmus accepts the strategy of giving tacit advice to a ruler or king “through false praise”: “I suspect that panegyrics of princes were invented for this very purpose, that under the semblance of praise they should, without offence or shame, be reminded of their faults. Otherwise what would be more repulsive than such flattery?”¹³³

By introducing the comparison between James and Solomon and then listing the qualities this entails, Bacon makes it easy to miss the fact that he is actually suggesting that James has yet to come up to the mark. Without the panegyric, the exhortation reads thus ‘that you who resemble Solomon in so many things would further follow his example’.¹³⁴

In the private letter, freed from the constraints of performative necessity, Bacon changes the tack of his flattery, appealing to James’s fervent belief in the divine right of kings: ‘I thought fitt also, humbly to seek accesse for the same, not so much to your person, as to your iudgment, by these priuate lynes’.¹³⁵ Bacon, apparently, does not seek access to the King for himself, but seeks access to the King’s judgement for the work. While the public letter makes it hard to differentiate between Bacon and the work, and for whom protection or patronage is sought, in the private letter, Bacon makes it plain: patron and client are no longer James and Bacon, but kingly judgement and the work. Bacon’s use of the term judgement is particularly shrewd and subtle as for James, judgement sat at the very heart of his ideas of kingship. James had tangled with parliament several times over his views of kingship, judgement and the law:

As far as he was concerned, the King was the lawmaker of his country. Law was

¹³³ Lynne Magnusson, *Shakespeare and Social Dialogue: Dramatic Language and Elizabethan Letters* (Cambridge: Cambridge University Press, 1999), pp. 69-70 (citing Erasmus, *On Writing Letters*, p. 189).

¹³⁴ See *OFB*, IV, pp. 4, 35-36. In his letter To The Reader which accompanied James’s 1616 *Workes*, Montague mentions Solomon six times, directly comparing him to James once, while James regularly compared himself to Solomon.

¹³⁵ NLS MS Bacon to James, 1620.

an expression of a king's divine right: kings made the law, and kings could alter it at their pleasure. "Kings are properly judges," he was to pronounce, "and judgement properly belongs to them from God."¹³⁶

It is no accident that the biblical king Bacon chose to compare and contrast with James was renowned for his wisdom and judgement, and that Bacon, a few lines into the private letter, terms James 'the greatest master of Reason, and auctor of beneficence'.¹³⁷ This, however, is merely the preamble to Bacon's *pièce de résistance*, where he moves from the public recycling of a Solomonic commonplace into a direct comparison with the God of Genesis, who 'formed man *of* the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul':¹³⁸

30 This woork is but a new body of Claye, whearunto your Ma.
by your Cowntenance and protection, may breath life.¹³⁹

Bacon has subtly changed what was a simile – 'you who resemble' – into a direct metaphor.¹⁴⁰

Gibson has noted a 'disorientating split between language and intention',¹⁴¹ inherent within the Renaissance game of patronage, and this split is exemplified in the differences between the public and the private letter. While the latter has a certain informality due simply to its use of the vernacular as against the public letter's more formal and measured Latin, the public letter

¹³⁶ Stewart, p. 233.

¹³⁷ NLS MS Bacon to James, 1620.

¹³⁸ Genesis 2. 7.

¹³⁹ NLS MS Bacon to James, 1620.

¹⁴⁰ Cf. *De sapientia*: 'Tradition says that Man was made by Prometheus, and made of clay' (*SEH*, VI, p. 745, 668). It is interesting here to compare the final version with the draft, which reads as follows: 'This worke, is but a newe body of clay, wherein / your Majestie ^{^by^} bring your Countenance and protection / may breath life.' (LPL MS 939, art 129, ll. 35-36: see Appendix 8). The manner in which the word 'bring' has been crossed out here also suggests that Bacon changed his mind as he was (presumably) dictating this letter. This alteration makes the comparison more direct than he seems originally to have intended. In both letters and works, Bacon often quoted scripture in Latin, but here chooses to paraphrase in the vernacular. For Bacon's use and manipulation of biblical quotations, see Henri Durel-Leon, pp. 621-2, 633; Zagorin, p. 45 and p. 241, fn. 58; Farrington, p. 132, fn. 1.

¹⁴¹ Jonathan Gibson, 'King Lear and the Patronage System', p. 95.

representing the public language of this exchange, is qualified and, at times, subtly contradicted by the private, which gives a better indication of the actual intention behind this proposed exchange.

The public letter creates a nexus of possibility and contingency, with phrases such as, ‘*if such things have any worth*’, ‘*may perhaps*’, ‘*unless it happen*’, ‘*I may perhaps*’, ‘*I myself am certainly inclined*’, ‘*and doubtless there is an element of chance*’, and ‘*may be no longer*’, which makes its meaning hard to pin down.¹⁴² Bacon poses questions in such a manner as it is hard to accurately ascertain their subject: for example, does he refer to the things within his work or the memory of James’s name and the honour of his age when he asks ‘*if such things have any worth*’?¹⁴³ He even affects uncharacteristic uncertainty on the worth of the *Instauratio magna* itself: ‘*if there be any good in what I propose*’.¹⁴⁴ This contrasts markedly with the private letter, which also refers specifically to *Novum organum*:

10 The woork, in what Colors soeuer it may be sett foorth,
is no more but a new Logique: teaching to inuent and
judg by Induction (as fynding Syllogisme incompetent
for Sciences of Nature) and thearby to make Philosophy
and Sciences both more trew, and more Actiue.

15 This tending to inlarge the bowndes of Reason, and to endowe
Mans Estate with new valew.¹⁴⁵

The private letter is more direct, with phrases such as ‘I have’; ‘is no more but a new Logique’; ‘was no unpropper Oblation’; ‘the reason why’; ‘to speak plainely’; ‘there is’; ‘this woorke is but’; ‘trewly what I thinke’; ‘I am perswaded’; ‘I Confesse’. While these phrases refer either to the work or to Bacon himself, gone is the sense of the subtly vacillating Bacon of the public

¹⁴² *OFB*, XI, pp. 7-9.

¹⁴³ *OFB*, XI, p. 7.

¹⁴⁴ *Loc. cit.* Compare this to his comments on *NO* in *Historia naturalis*: ‘they prefer to walk on in the old path, and not by the way of my Organum, which in my estimation if not the only is at least the best course’ (*SEH*, V, p. 133 (*SEH*, II, pp. 15-16)).

¹⁴⁵ NLS MS Bacon to James, 1620.

letter, as the 'private' Bacon is somewhat more forthright, not least in his estimation of his own worth:

One

40 thing I Confesse I am ambitious of; with hope: which
 is that after these beginnings, and the wheele once sett
 on going; men shall suck, more trewth out of Christian
 pennes; then hitherto they haue doon owt of Heathen;
 I say with hope: bicause I hear my former book of
 Aduancement of Learning is well tasted in the Uni
45 uersities hear, and the English Colleges abroad: And
 this is the same Argument sunken deeper.¹⁴⁶

In the public letter, Bacon obscures meaning through his use of language, allowing for the possibility of the meaning being fixed in retrospect, in light of the actions of James regarding this work. He presents a strong concept of futurity, imagining how the future will one day view the present as past (a concept shared with other works which appeal directly to this future, and appealing that they may better view the present than Bacon's contemporaries sometimes did). Finally, his use of contingent language allows James the opportunity of creating this future.

In the private letter, with its direct language, Bacon is playing a very different game, however. He continues the themes picked up in the public letter, mixing more direct flattery with his general argument being that these works are inevitable: it is merely James's decision whether it is he whose name shall, like Solomon's, be connected with such an advance in natural philosophy for ages to come.

To the public, the public letter is designed to demonstrate the close bond between Bacon and James while making a strong, if not irresistible, case for James's support. To James, the public letter is to be read by a posterity looking to grant James all honour due for his vision and reason, in his

¹⁴⁶ *Loc. cit.*

executing of Bacon's plans. It is the private letter which makes this dual reading possible for James.

f. The preface to the *Instauratio magna*

While it is possible to attribute necessary authority in the exordium to Bacon's reason and the future, the dedicatory letter suggests that Bacon's plan involves a weaning of man away from the received knowledge of the ancients and the inculcation of a new way of knowledge based on the light of nature, even though he admits that '*the things I speak of are certainly quite new in their very kind, but are framed on an extremely ancient archetype, i.e. the very world itself, and the nature of things and of the mind*'.¹⁴⁷ Bacon notes that '*the only remarkable thing in it is that its beginnings and such deep suspicions about received doctrines should have entered anyone's head*',¹⁴⁸ before stating that this new philosophy must be built on a 'true and rigorous natural and experimental history', which must be, and Bacon uses parentheses here, '*stripped of philological matters*'.¹⁴⁹ It is not, however, until the preface to the *Instauratio magna* that Bacon begins to state exactly what he means by '*deep suspicions about received doctrines*'.

Having hinted at the work's nature in the dedicatory letter, while problematizing the authority claimed by the letter, both by its placement after the exordium and the accompanying private letter, Bacon begins to lay his cards on the table, albeit face down. Having suggested that it is incredible that anyone should think to challenge received authority, Bacon begins his preface by doing more than merely challenging it, unleashing a withering critique upon received authority in general – though he differs in *his* distaste for received authority from that of philosophers such as Paracelsus in paying

¹⁴⁷ OFB, XI, p. 7.

¹⁴⁸ *Loc. cit.*

¹⁴⁹ *Ibid.*, p. 9.

particular attention to the *receivers* of this authority,¹⁵⁰ while also damning those who seek to set themselves up as alternative authorities. He begins, however, with these, somewhat more positive words:

*Concerning the condition of the sciences: that it is unprosperous,
nor much improved; and that a way completely different
from the one known before should be opened for
the human intellect, and other helps devised
to let the mind exert its proper authority
over the nature of things.*¹⁵¹

This passage is a précis of what is to come, shorn of all rhetorical tropes and excessive explanation, and concerns the replacement of what *is* in order to allow ‘*proper authority*’ to be exerted: this proper authority is here the return to the pre-lapsarian knowledge enjoyed by Adam, a re-assertion of man’s original power, an authority based on knowledge of nature.¹⁵² In order to achieve this, man must free himself from the shackles of improper authority, that is, authority derived from man, and not from God or nature, as exemplified by those philosophers who do not seek the truth of things, but to replace dogma with dogma.¹⁵³

Bacon begins his process, one designed to unseat generations of philosophers and render useless whole libraries full of books, with a gentle piece of humility: ‘In my view’.¹⁵⁴ This beginning distances Bacon from the dogmatic expression of ‘fact’ which he so openly derides while simultaneously demonstrating that he, Bacon, has an opinion which is worth reading. This

¹⁵⁰ While there was a Paracelsian and Hermetic disavowal of received authority, it differed from that of Bacon: the former tended to the belief that purity of the soul was the vital ingredient to the accumulation of knowledge, whereas Bacon was less concerned with the purity of the soul, and more with the commerce of mind and things (Mebane, pp. 33-34).

¹⁵¹ *OFB*, XI, p. 11.

¹⁵² See *OFB*, XI, p. 23, and Harrison, pp. 205-65. Again, there is a fundamental difference between the Paracelsian obsession with a return to the golden age and Bacon’s desire to regain Adamic knowledge and power. The Paracelsians wish a *return* to this pre-lapsarian golden age, whereas it seems that Bacon merely wants to re-gain the power which man possessed, in order that man may assert it in the *future*.

¹⁵³ *OFB*, XI, p. 17.

¹⁵⁴ *Ibid.*, p. 11.

opening invites gentle assent while leading the reader away from what Bacon considers to be the ‘wrong’ path, and is merely one of a number of points where he manipulates the authorial voice.

Bacon often follows up a sentence in which he has made an impersonal assertion with one in which he attempts to place the reader and the author in the same position. Thus we see ‘*Et de vtilitate apertè dicendum est*’ (And as for its utility, it must openly be declared¹⁵⁵) followed closely by ‘*Ita habent & Scientiæ, quibus insueuimus*’ (Thus the sciences we are accustomed to¹⁵⁶). In this way, Bacon allows himself to differentiate between the evidence open for all to see and his opinions.

Rather than adopt a pedagogical tone, using the second person, or a hectoring tone, utilising the first person, Bacon is attempting to reinforce the reader’s feeling that what he and Bacon are looking at is the same, and thus naturally leading the reader to a point of agreement: it is almost a joint voyage of discovery. More importantly, perhaps, it allows Bacon – who has already expressed surprise that *anyone* should have grown to distrust received authorities – to give his readers the feeling that they are not to blame for their errors. Considering here Bacon’s focus on the nature and culpability of the *receivers* of this authority, this is an important point. Bacon is gently creating an ‘us and them’ situation, one in which the reader, while he might once have happily received his magistral teaching imposed from ‘above’, so to speak, is now being led gently down the path of right discovery. One of the few comments on the *Instauratio magna* which approaches this problem is that of Sir Henry Wotton, who, while perhaps not the most disinterested of readers, certainly seems to have been moved to at least *think* by Bacon’s work:

¹⁵⁵ *OFB*, XI, pp. 10-11. Rees translates this line as ‘I must openly declare’, which is one of the possible translations of the gerund *dicendum*. The gerund does, however, allow for a more impersonal effect, ‘one must openly declare’, or ‘it must openly be declared’, and is one which Bacon uses regularly, such as *Videndum* in *Historia & Inquisitio de animato & inanimato* (*OFB*, XIII, pp. 228-35).

¹⁵⁶ *OFB*, XI, pp. 12-13.

Therefore when

20 I have my selfe once perused the whole I
determine to have it read peece by peece
at certain howers in my domestique coll=
edge as an ancient author: For I have
learnt this much by it already that wee

26 are extreemely mistaken in the computa=
tion of antiquity by searching it backwards
because indeed the first times were the youngest
especially in point of naturall discovery
& experience.¹⁵⁷

There are a number of points of note here, firstly that Wotton does not say *you have taught me* but ‘I have learnt this much by it’, which is either a vote of confidence for Bacon’s approach or an indication of Wotton’s diplomatic skills. Secondly, Wotton mentions that he is to have the work read to him ‘as an ancient author’, which Bacon could take either as a subtle dig or as no mean compliment: certainly, it reinforces the temporal displacement of the author Bacon encouraged in the exordium. Thirdly, the point that Wotton picks up on is the misapplication of time with regards ancient status, a point Bacon has made before, and will repeat in both the preface and *Novum organum* itself.¹⁵⁸

That Bacon was loath to waste a good image is something of a commonplace, but here it resembles his use in the preface of different voices, each designed to gain and reinforce the trust of his readers, often by re-directing their gaze, not least in the communal observation of the mistakes of others:

But if anyone is persuaded by this long-standing consensus, as if it were by Time’s verdict, let *him* know that his reasoning is extremely flawed and ineffectual. For *we* do not know for the most part what has become known and made public in the sciences and arts in different times and places; much less do

¹⁵⁷ BL Add. MS 39254, fols. 60a-60b.

¹⁵⁸ *OFB*, XI, pp. 11, 133.

we know what individuals have attempted and pursued in private.¹⁵⁹

Here Bacon not only recruits his readers onto his side, but also gently introduces them to two of his other preoccupations, accurate record keeping and open, collaborative research. Bacon manages to keep his audience in a state of authorial identification through consistent manipulation of the second/third person dichotomy, occasionally inserting the first person when stating something with which his audience might not immediately agree, as this consecutive series of sentences clearly shows:

Indeed, they have mostly set themselves certain small-scale tasks, [...] For no one thoroughly and successfully investigates the nature of anything just by looking at the thing itself; [...] And we should not, above all, overlook the fact [...] It has looked (I say) for fruit-bearing and not light-bearing experiments.¹⁶⁰

The use of parenthesis here is typically Baconian, indicating an impersonal opinion, allowing the statement an existence somewhere between a statement of fact and one of opinion. Up until this point, it seems as if every time Bacon has included the words 'I think' or 'in my view' at the beginning of a sentence, and he does so to ensure that there can be no counter charges of dogmatism being levelled at his work: the previous, parenthetical insertion '(I say)' does go some way to the removal of this anti-dogmatic barrier. After this point, parentheses are used much in the same manner as they were in the exordium, as asides, designed partially to give a little more information and partially to soften the voice of what could very easily be viewed as a hectoring attempt to command assent, not what Bacon wants at all.

In his manipulation of tone and voice, Bacon is attempting to lead the reader into a state of agreement, trying to entice the reader into allowing his arguments to speak for themselves, a point he makes explicit:

¹⁵⁹ *Ibid.*, p. 15 (my emphases).

¹⁶⁰ *Ibid.*, p. 17.

I have not (I say) sought nor do I plan to ensnare men's judgements by force or fraud; instead I want to lead them to the things themselves and their interconnections, so that they may see for themselves what they possess, what they may assert, and what they may add and contribute to the common good.¹⁶¹

At times, it is almost as if he wishes to remove himself from the argument. This is something which might seem at odds with the overt assertion of authority one encounters in the *Instauratio magna* as a 'print event', but actually seems to reinforce the feeling of anonymity of the individual, if you consider Bacon's part in the *Instauratio magna* to be merely that of prophet or communicator on behalf of the state, both of James's kingdom and the 'kingdom of man'. Bacon achieves this removal by placing the reader beside him as he writes, rather than in front of him: the voyage is one of discovery, not of demonstration.¹⁶²

By utilising the third person plural, he includes the audience in his conversation, reducing the distance between author and reader – the act of reading becomes, therefore, a collaborative act, just as he considers the act of discovery to be. As he suggested on several occasions, the *Organon* removes the necessity for individual genius from the equation.¹⁶³

In a similar manner to the *Advancement of Learning*, which sought less to evaluate what knowledge mankind did possess than what knowledge it was lacking, and in *Redargutio philosophiarum*, which was an attempt at the *pars destruens*¹⁶⁴ of his entire enterprise, the clearing of the way such that the new philosophy might take root, Bacon is somewhat backward about explaining what *ought* to be done. Indeed, at first glance contents himself merely with pointing out exactly what *has* been done, and why it is at best misguided, at worst actively harmful. What positive recommendations he does provide are

¹⁶¹ *Ibid.*, p. 21.

¹⁶² For the Baconian method as one of discovery, see Whitney, *Francis Bacon and Modernity*, pp. 143, 197.

¹⁶³ Farrington, p. 119, fn. 1 (*SEH*, III, p. 573).

¹⁶⁴ *LL*, III, pp. 364-65.

couched firmly in the negative. Instead of saying, 'look beyond the received arts', or 'discover and improve discoveries', he allows the reader to come to these conclusions himself:

The consequence of wildly overvaluing the received arts is that men do not look beyond them; the consequence of undervaluing their own strength is that they waste it on trivia and do not try to test it on the business of real weight.¹⁶⁵

all handing down and passing on of the disciplines is practised and embodied in the relationship of master and pupil, not of discoverer and improver of discoveries.¹⁶⁶

Indeed, the first twelve activities listed which Bacon would consider to be vital (looking beyond the received knowledge, investigating true helps for the future, discovering and improving upon discoveries, etc), are all but one couched in the negative, as things which have not been done, apart from his exhortation:

it is useful and actually necessary [...] to rid ourselves of excessive respect and admiration for things discovered already (and to do that briskly and without pretence), with a wholesome warning to men not to exaggerate their abundance or over-praise their utility.¹⁶⁷

This example is the only one Bacon gives which contains a negative as an exhortation rather than an example of man's error by omission: Bacon is telling his reader what men ought *not* do, rather than pointing out what they *haven't* done, with the implication that they *ought* to have.

It is after this point that Bacon introduces himself, not as an authority to be obeyed blindly, but to indicate that he is presenting a Baconian opinion.

all the effort given to trying things out has from the very start inquired into certain works set for it in advance, and has chased after these with premature and

¹⁶⁵ *OFB*, XI, p. 11.

¹⁶⁶ *Ibid.*, p. 13.

¹⁶⁷ *Ibid.*, p. 11.

untimely zeal; it has looked (I say) for fruit-bearing and not light-bearing experiments, without imitating God's order which created light alone on the first day, giving the whole day to that and not to producing any of the material works which He turned to on the days following.¹⁶⁸

From this point, Bacon utilises negatives as something which either should not be done or, more importantly, something which Bacon himself will not or does not intend to do. His plans move into a positive phase, following a criticism with positive suggestions, 'but the journey has always to be made [...] our tracks must be guided by a clue' and so forth.¹⁶⁹ There has been a movement within the text, therefore, from a position of mere observation of what has and has not been done up until now, with the constant reminder of the failure of the former to progress the sciences in any manner, to one where Bacon attempts to distance both himself and his 'method' from these errors.

Generally, Bacon's tactics here seem to be an enactment of the suggestion mooted in *Redargutio philosophiarum*:

A man may earnestly wish to rescue himself from long association with error; the motives which prompt him to join my cause may be generous and noble; but he still needs to know what he ought to think about the ancient and received opinions. It remains true, however, that the human mind is not like a wax tablet. On a tablet you cannot write the new till you rub out the old; on a mind you cannot rub out the old except by writing in the new.¹⁷⁰

Of course, Bacon has adopted a singularly circuitous route in telling his readers what they ought to think about received opinions. This is plainly because if he simply states his case, he will be open to accusations that he, too, has merely followed the example of his philosophical forebears:

Nevertheless we have not been short of men who, with greater daring, have taken everything on themselves and, by sheer force of wit, flattened and razed all earlier knowledge and made way for themselves and their own dogmas; but they

¹⁶⁸ *Ibid.*, p. 17.

¹⁶⁹ *Ibid.*, p. 19.

¹⁷⁰ Farrington, p. 103 (*SEH*, III, p. 558).

have done little good with their turbulence since they have not increased philosophy and the arts in fact and in works but have only rung the dogmatic changes and fought to deliver the realm of opinion into their own hands—and with scant result since errors can be diametrically opposed but their causes be almost the same.¹⁷¹

Bacon is extremely careful not to fall into this trap – one might read the entire manipulation of the tropes of authority in the preliminaries to the *Instauratio magna* as a concerted attempt to undermine these tropes and place the authority back into the hands of his readers, supported, of course, by their experimentally-assisted observation of things – and states as much near the end of the preface:

For I do not seek either by victory in debate, appeals to antiquity, and arbitrary claim to authority, or even by cloaking myself in obscurity, to dignify or commend any of my discoveries with any majesty, which is the sort of thing anyone could easily do if he were trying to aggrandise himself rather than enlighten the souls of others. I have not (I say) sought nor do I plan to ensnare men's judgements by force or fraud; instead I want to lead them to the things themselves and their interconnections, so that they can see for themselves what they possess, what they may assert, and what they may add and contribute to the common good.¹⁷²

In this short passage, Bacon implicitly criticises the sophists, the humanists, and the alchemists. Bacon states that his aim is to lead his readers to the evidence so that they might make their own judgement. Bacon is careful not to simply dismiss thousands of years of philosophy out of hand, and attempts to give credit where credit is due. As he has said, he does not wish to appropriate the authority of those he criticises, and just as he expresses no surprise that men have been taken in by received authority, he also suggests that those men who formed the basis of this authority did very well, considering:

But this should not be taken to mean that absolutely nothing has been accomplished during so many ages and with so much work. For I do not

¹⁷¹ *OFB*, XI, p. 17.

¹⁷² *Ibid.*, p. 21. This echoes the protestations of the 'serene man' in *Redargutio philosophiarum* (Farrington, p. 110 (*SEH*, III, p. 564)).

complain about things already discovered. And the ancients showed themselves to be marvellous men in things which rest on wit and abstract meditation. But as in earlier times when men only had the stars to sail by, they could indeed coast along the shores of the Old World or cross lesser or mediterranean seas; but before they could cross the oceans and discover the regions of the New World, the use of the mariner's compass, as a more trustworthy and certain guide, had first to be found out. By the same token what has been discovered in the arts and sciences are of the same sort that could have been discovered by use, meditation, observation and argument; for they lay pretty close to the senses and to common notions.¹⁷³

In the preface to the *Instauratio magna*, Bacon attempts to square a very difficult circle, informing the readership in what manner the entire process of human learning and discovery ought to change, while simultaneously denying that he has any authority to do so. The authority, he suggests, rests with nature itself – even though this authority can only be approached over time, and through the use of experiment. Having demonstrated his mastery of the manifestations of early-modern authority, he then sets about subverting this authority, disorientating his reader that he might be more easily led to the investigation of nature, where he will, Bacon assumes, finally understand the manner in which the sciences must now be overhauled. The preliminaries to the *Instauratio magna*, and *Novum organum* itself, are the first serious expression of over twenty years of investigation into the nature of authority, an expression whose delivery was largely authenticated by the nature of Bacon's personal authority, intellectual, political and associative. It is this manipulation of authority which allows him to state in the plan of the work that 'after coasting past the old arts, I will next make the human intellect ready to take to the high seas'.¹⁷⁴

g. The *Parasceve*, the Natural Histories, and the performance of reliability

While *Novum organum* may fairly be considered a work which dealt with, or at the very least attempted to deal with, the nature and legitimate assertion of

¹⁷³ *OFB*, XI, p. 19.

authority, Bacon was well aware, as we have seen, of the need to maintain an discourse with traditional modes of asserting authority, even if this authority had, for him at least, been discredited – the preface begins, lest we forget, with the assertion that it is designed ‘to let the mind exert its proper authority over the nature of things’.¹⁷⁵ In the *Distributio operis*, or *Plan of The Work* included in the *Instauratio magna*, he explained the process of his reconstruction of learning in terms of a six-part plan.¹⁷⁶ As we have seen, Part I was to be occupied by *De augmentis*, as even though this work had not been expressly written to be placed here, Bacon considered that it ‘may serve in lieu of the first part of the Instauration, and acquit my promise in that part’.¹⁷⁷ Part II was the *Novum organum* itself, though, typically, this part remained unfinished, an omission Bacon explains in the preface to *Historia naturalis et experimentalis*:

my Organum, even if it were completed, would not without the Natural History much advance the Instauration of the Sciences, whereas the Natural History without the Organum would advance it not a little. And therefore, I have thought it better and wiser by all means and above all things to apply myself to this work.¹⁷⁸

The *Distributio operis* had explained that after Part II, in which Bacon sought to ‘make the human intellect ready to take to the high seas’,¹⁷⁹ Bacon would prepare the ‘*The Phenomena of the Universe, or Natural and Experimental History for the building up of Philosophy*’.¹⁸⁰ This natural history was to be of a ‘new kind and construction’, designed not for ‘displaying the variety of things’, but ‘to illuminate the discovery of causes’.¹⁸¹ This collection was vital

¹⁷⁴ *Ibid.*, p. 29.

¹⁷⁵ *Ibid.*, p. 11.

¹⁷⁶ For further discussion of Bacon’s plan for his *Instauratio Magna*, and the relative positioning of the various works within it, see *OFB*, VI, pp. xvii-xxxv; *OFB*, XI, pp. xlvi-xxlix; *OFB*, XIII, pp. xix-xxix.

¹⁷⁷ *SEH*, VII, p. 14.

¹⁷⁸ *SEH*, V, pp. 133-34 (*SEH*, II, p. 16).

¹⁷⁹ *OFB*, XI, p. 29.

¹⁸⁰ *Ibid.*, p. 27.

¹⁸¹ *Ibid.*, pp. 37-39.

for Bacon's project as no 'force of wit, reflection, or argumentation'¹⁸² could substitute for it. Typically, Bacon considered that up until this point, natural histories were lacking:

Now in the first place the very information of the sense is both defective and deceptive; observation slack, patchy and left to chance; what has been handed down empty and founded on hearsay; practice fixed on its work and servile; experimental effort blind, stupid, wandering and prematurely broken off; and finally natural history is trivial and meagre—and between them these have assembled thoroughly unsound matter for the intellect to build philosophy and the sciences.¹⁸³

Bacon proposed to 'not just put together a history of nature free and unconstrained [...] but much more of nature restrained and vexed, namely when it is forced from its own condition by human agency, and squeezed and moulded'.¹⁸⁴ It is, however, his next statement with which we are most concerned:

Now in the choice of narratives and experiments I judge that I have been more cautious than people who have dealt with natural history so far. For I accept only what I have seen myself or at least examined with the utmost severity, such that I do not exaggerate to make things seem miraculous but record only what is unsullied and undefiled by fables and vanity. And so that they will trouble the sciences no longer, I expressly identify and nail every one of the lies still received and bandied about—lies which, through many generations of breathtaking neglect, have prevailed and grown chronic.¹⁸⁵

Bacon then adds that in every new experiment, he will append an account of how it was performed, so that any inherent methodological faults may be seen, and people will be encouraged to come up with ever more reliable proofs. And finally, he notes that he will add his own observations to many experiments.

¹⁸² *Ibid.*, p. 37.

¹⁸³ *Loc. cit.* Cf. *OFB*, VI, p. 5.

¹⁸⁴ *Ibid.*, p. 39.

¹⁸⁵ *Ibid.*, p. 41. The perennial suggestion that Bacon was merely a philological philosopher who never actually indulged in any experimentation himself is untrue. The last letter he wrote, for example, notes that just before the illness which led to his death, he was 'desirous to try an experiment or two, touching the conservation and induration of bodies' (*LL*, VII, p. 550). Further evidence of his activities can be found in Book II of *NO* (*OFB*, XI, pp. 353-55), and

Novum organum itself was, of course, intended as a partial fulfilment of Part II of the *Instauratio magna*, and as such concerned his ‘method’ of the interpretation of nature. He saw fit, however, to include within the *Instauratio magna* the *Parasceve ad historiam naturalem*, or *Preparative to a Natural History*, a work which bore the subtitle ‘A DESCRIPTION OF A NATURAL AND EXPERIMENTAL HISTORY OF A KIND FIT TO SERVE AS A Plan for the Basis and Foundations of the True Philosophy’, a short explanation of how, exactly, a natural history ought to be compiled, together with a *Catalogus historiarum particularium* numbering 130 topics for investigation and inclusion in this great natural history.¹⁸⁶

Bacon begins this work by explaining his reasons for publishing the *Instauratio* in parts, namely to ‘put it out of danger’, as well as noting that his natural history, which he intends to describe in this work, ‘could not be accomplished without enormous effort and investment, for it requires an army of workers and is (as I have said elsewhere) a work fit for a king’.¹⁸⁷ Naturally, Bacon considers that current natural histories are insufficient for the task, explaining that natural histories are of two types, being either ‘for the sake of knowledge’, or as ‘the primary matter of philosophy, and the basic stuff and raw material of true induction’.¹⁸⁸ Bacon rolls off a list of traditional authorities in his critique of extant natural histories, undermining their status not by suggesting that their works are necessarily useless or flawed, but that they are not useful for the functional purpose Bacon has in mind. Bacon considers them works designed for the fixing rather than the advancing of knowledge, ‘for neither *Aristotle*, nor *Theophrastus*, nor *Dioscorides*, nor *Pliny*, and still less the *Moderns*, have ever set themselves the goal of which we speak for natural history’.¹⁸⁹ Rather than seek support from the ancients here, Bacon seems to be utilising their omissions as evidence for the worth of

Phænomena universi (OFB, VI, p. 41), amongst others.

¹⁸⁶ OFB, XI, pp. 451, 473, 475-85.

¹⁸⁷ *Ibid.*, p. 451.

¹⁸⁸ *Ibid.*, p. 455.

his goal. Once more, it seems as if Bacon claims authority not from the ancients or any expressions of his own genius, but in the expectation of knowledge acquired through the inductive processes outlined in the *Novum organum*. Bacon has introduced something of which the reader will be aware and subverted it – here by displaying the poverty of the ancients – and the lack of any universal authority inhering within them. He does not, as shall be seen, necessarily deride their discoveries completely, but more the general consideration that there is no moving forward from their statements, that they represent a *non plus ultra*.¹⁹⁰

The *Parasceve*, accordingly, is concerned with the manner of production of natural histories for use not as simple stores of knowledge, but as a precursor to the construction of axioms:

those who take on the job of writing natural history in future ought never to forget that they should not aim to please the reader nor even to derive immediate material advantage from their narrations, but to seek out and collect the abundance and variety of things which alone will do for constructing true axioms. For if they remember this, they themselves will determine the means of doing this kind of history. For the end governs the means.¹⁹¹

Bacon is careful to warn the reader away from three habits which, he suggests, ‘augment the mass of the work enormously but do little or nothing to increase its value’.¹⁹² Bacon derides both the over-detailed explanation of minute differences between species, and ‘superstitious stories’ and ‘the experiments of ceremonial magic’,¹⁹³ but it is no surprise that the first problem which expands natural histories to no end is, for Bacon, the matter of authority:

¹⁸⁹ *Ibid.*, p. 455-57.

¹⁹⁰ Peter Harrison has written persuasively on the textual basis of many contemporary natural histories (Harrison, pp. 64-78).

¹⁹¹ *OFB*, XI, p. 457.

¹⁹² *Ibid.*, p. 457. This relates directly to Bacon’s critique of the scholastics in *AL*, where he accuses them of augmenting their meagre knowledge with disputations and creations of their own intellect such that they ‘spin out vnto vs those laborious webbes of Learning which are extant in their Bookes’ (*OFB*, IV, p. 24).

In the first place then, no more of antiquities, citations and differing opinions of authorities, or of squabbles and controversies, and, in short, everything philological. No author should be cited save in matters of doubt; and no controversies be introduced save in matters of great moment; and as for everything to do with oratorical embellishment, similitudes, the treasure-house of words, and suchlike emptinesses, get rid of it entirely.¹⁹⁴

Bacon is suggesting that authorities ought not to be quoted in order to support a statement in need of support, but to suggest that it is dubious – a quite radical movement from contemporary humanist practice.

In suggesting that the writer of a natural history cites an authority not in support of his statement, but to suggest that there was no direct experience of the phenomena noted, Bacon is not only following on from his prescriptions regarding the transmission of knowledge as seen above, and further complicating the authority of the ancients, but is also confronting the issue of reliability of information head-on:

But as for the reliability of materials taken into the natural history, they are of necessity wholly reliable, of doubtful reliability, or downright unreliable. Now the first sort should be put down plain; the second with a note, for instance with a phrase like *they say*, or *they report*, or *I have it on good authority*, and the like. For it would be very hard work to put down the arguments about reliability pro and contra, and they would no doubt hold up the writer no end.¹⁹⁵

Bacon gives one instance when an author ought to be cited, and again it is not to assert the authority of the information, but to cast doubt upon it:

But if the instance has more nobility, either because of its use or because a great deal depends on it, then certainly the author's name should be given, and not just the bare name but some note as to whether he had it from hearsay or reading (which is mostly what *C. Pliny* gives you), or his own direct knowledge; and also whether it belonged to the writer's time or was older; and again whether it was

¹⁹³ *OFB*, XI, p. 459.

¹⁹⁴ *Ibid.*, p. 457. Suggestions that these prescriptions amount to a statement of intent of Bacon's adopting or adjusting the 'plain style' of unadorned writing ignore the fact that Bacon is here advocating a specific writing style for the production of natural histories, not for the production of all written works (see Aughterson, 'Redefining the plain style').

¹⁹⁵ *OFB*, XI, p. 467. Cf. Expt. 34, SS, C1^v (*SEH*, II, p. 354); *OFB*, XI, p. 253.

the sort of thing which, if true, would have been witnessed by many others; and lastly whether that author was a frivolous and idle chatterer or a man of sobriety and rigour; and anything else like that which affects one's estimate of reliability.¹⁹⁶

Bacon thus proposes a shorthand by which readers may judge the reliability of reported instances, and one of these shorthands is that an author's name should only be included in the matter of an instance of great import, use, or doubt yet even here a note must be appended showing how the authority in question came across this information, whether from personal experience, reading or hearsay. Bacon's interest in the reliability of experiments is further demonstrated when he reiterates his clarion call for clarity of thought and expression, suggesting that:

in the case of any new or more subtle experiment, the way of performing it should be added so that people will be free to make up their minds whether it is trustworthy or not, and also so that their industry will be stirred up to look for more exact ways (if possible) of doing the experiment.¹⁹⁷

Finally, he repeats his concern that 'if there is anything in any narration which is doubtful or worrying, I would not at all want it to be suppressed or kept quiet but to be put in writing plainly and clearly by way of a note or advice'.¹⁹⁸ This concern with reliability and clarity is reinforced by his final words, which bear a particularly forensic flourish:

These questions are like a kind of particular *Topics*; for (taking my cue from civil suits) I mean, in this *Great Action* or *Trial*, which has been granted and set up by Divine Providence (and by which the human race fights to re-establish its rights over nature), to cross-examine by articles the arts and nature itself.¹⁹⁹

After the *Parasceve*, Bacon produced little in the way of natural historical material, at least compared to his expressed intentions. In 1622, Bacon

¹⁹⁶ *OFB*, XI, p. 467.

¹⁹⁷ *Ibid.*, p. 469.

¹⁹⁸ *Loc. cit.*

¹⁹⁹ *Ibid.*, p. 473.

published what was to be the first of a series of natural histories, gathered under the title of *Historia naturalis et experimentalis ad condendam philosophiam: sive phænomena universi; quæ est instaurationis magnæ pars tertia*.²⁰⁰ In the dedicatory letter addressed to Prince Charles (which Rawley was later to appeal to in his letter to *Sylva sylvarum*), Bacon wrote the following:

The first fruits of my Natural History I most humbly offer to your Highness; a thing like a grain of mustard-seed, very small in itself, yet a pledge of those things which by the grace of God will come hereafter. For I have bound myself as by a vow every month that the goodness of God (whose glory is sung as in a new song) shall add to my life, to complete and set forth one or more parts of it, according as they be more or less difficult or extensive.²⁰¹

Bacon provided the reader with a list of the first six natural histories which were to be completed, and quite typically managed to produce substantial versions of only three of them, *Historia ventorum*, *Historia vitæ et mortis*, and *Historia densi et rari*, while the other three, *Historia gravis et levis*, *Historia sympathiæ et antipithææ rerum*, and *Historia sulphuris, mercurii, et salis* barely made it to the planning stage, and never advanced beyond the form they took in this work, that of prefaces.²⁰²

Historia ventorum is the first work in which we might observe Bacon's habits regarding the citing of authorities in natural histories, and note the degree to which he follows the *Parasceve*'s prescriptions regarding the writing of natural histories, and Bacon's use of what might be usefully termed 'reliability

²⁰⁰ *SEH*, II, p. 14.

²⁰¹ *SEH*, V, p. 127 (*SEH*, II, p. 9).

²⁰² The three introductions (*SEH*, V, pp. 202-06; *SEH*, II, pp. 80-83), were published in *Historia naturalis et experimentalis* after *Historia ventorum* in 1622, while the *Historia vitæ et mortis* did not appear until 1623 (*SEH*, II, p. 3), and the *Historia densi et rari* remained unpublished until 1658 (*SEH*, II, p. 229). Bacon produced other pieces which either seem to fall into of his category of natural history, or were later absorbed into other works, including *Inquisitio de magnete* (*SEH*, V, pp. 403-05 (*SEH*, II, pp. 311-12)), *Topica inquisitionis de luce et lumine* (*OFB*, XIII, pp. 244-57), *Calor et frigus* (*SEH*, III, pp. 643-52), *Historia soni et auditus* (*SEH*, III, pp. 659-80), *Phænomena universi*, *De fluxu et refluxu maris*, and the *De vijs mortis* (*OFB*, VI, 2-61, 64-93, 270-359), but these mostly remained unpublished until many years later, some by Isaac Gruter in 1653.

formulations.’ Certainly, Bacon does seem to adhere to his idea that ‘no author should be cited save in matter of doubt’²⁰³ when he cites Pliny in just this manner, while simultaneously highlighting Pliny’s methods, that is, the simple citation of another source: ‘Pliny quoting Eudoxus asserts that the same series of winds returns every four years; which does not appear to be true, for the revolutions are not so rapid.’²⁰⁴

Bacon names authorities with the intention of suggesting inaccuracy or doubt in several other places within this work, not least in his use of Acosta’s work on the subject of winds:

Persons sailing in the open sea between the tropics are aware of a steady and continual wind (called by the sailors *Brize*) blowing from East to West. This wind is so strong, that partly by its own blast, and partly by its influence on the current, it prevents vessels sailing to Peru from returning by the same way.²⁰⁵

Spedding accurately notes that Bacon is drawing on Acosta in this section, and it is notable that Bacon does not cite his source, a habit sometimes taken as evidence that, on occasion, Bacon was ‘simply a transcriber’,²⁰⁶ though here Acosta is not mentioned because there is, for Bacon, no doubt regarding this statement. Bacon does cite Acosta by name in *Historia ventorum*, however, and does so to indicate doubt:

Acosta does not appear to be very consistent, when he says in one place that south winds blow during almost the whole year in Peru and along the coasts of the South Sea, and in another that sea-winds generally blow there.²⁰⁷

It appears that Bacon has been more than diligent in his philological research, but he is not, however, simply stating that Acosta got it wrong, as he merely

²⁰³ *OFB*, XI, p. 457.

²⁰⁴ *SEH*, V, p. 174 (*SEH* II, p. 53).

²⁰⁵ *SEH*, V, p. 147 (*SEH*, II, p. 26). As Spedding suggests, this derives from Acosta, K1^r-K2^r.

²⁰⁶ *SEH*, II, p. 328. Spedding notes that ‘Comines and Scaliger are, I think, the only two modern writers mentioned’ (*SEH*, II, p. 329), even though Bacon calls Telesius the ‘best of the novellists’ (*SS*, D3^r (*SEH*, II, p. 370)), and mentions both Paracelsus (*SS*, E4^r, N3^r, Z2^r (*SEH*, II, pp. 383, 459, 555)) and Galileo (*SS*, 2D1^r (*SEH*, II, p. 596)).

notes an inconsistency. Acosta later states that ‘vpon all that coast it blowes continually with onely one winde, which is South and Southwest, contrary to that which dooth vsually blow vnder the burning Zone’,²⁰⁸ while he earlier has remarked that ‘at *Peru*, and vnder all the Equinoctiall it is not so, for every morning the winde from the sea doth cease, and the Sunne beginnes to cast his beames; and for this reason they feele the greatest heat in the morning, vntill the returne of the same windes, which otherwise they call the tide or winde of the sea, which makes them first to feele cold’.²⁰⁹

Spedding suggests that, because the coast of Peru runs from north-west to south-west, there is in fact no inconsistency in Acosta, but Bacon seems more concerned with the fact that the South wind is actually a land wind, wondering whether Acosta was confused by the name of the South Sea, ‘and he takes the west wind, because it blows from the South Sea, for the south’.²¹⁰ Whether there is inconsistency in Acosta is not the issue, however. If Bacon considered that there was perhaps some inconsistency, then it is right that he indicates that Acosta’s words here be not taken at face value. Bacon does seem to be using authority to cast doubt on observations rather than simply to lend credence to his own claims. Bacon is, however, less than consistent in this use of authority, as he elsewhere cites both Acosta and Gilbert by name where it seems that he perceives no reason to doubt their observations.²¹¹ While *Historia vitæ et mortis* includes several instances of reliability formulations, perhaps the most useful text from which we can deduce just how carefully Bacon followed, or attempted to follow, his own rules regarding the use of authorities and the linguistic flagging of the reliability of various reports is in

²⁰⁷ *SEH*, V, p. 152 (*SEH*, II, p. 32).

²⁰⁸ Acosta, N4^r.

²⁰⁹ *Ibid.*, I1^r.

²¹⁰ *SEH*, V, p. 152 (*SEH*, II, p. 32).

²¹¹ *SEH*, V, p. 161 (*SEH*, II, p. 40). While Bacon does cite authorities in the positive sense (naming fifteen in this manner in twenty-one instances), it must be noted that contemporary natural histories relied heavily on this type of authority. On just one page from Porta’s *Natural Magick*, for example, we find the following formulations on one page: ‘*Albertus* writeth’; ‘*Columella* writes’; ‘*Philostratus* writes’; ‘*Solinus* writes’; ‘*Isiodore* saith’ (Porta, *Natural Magick*, H4^v). See also Harrison, pp. 73-78.

the posthumously published *Sylva sylvarum*.

Sylva sylvarum is often held to be a cobbled-together collection of ‘facts’ drawn from various works such as Pliny’s *Natural History*, Aristotle’s *Problems*, *Meteorologies* and the pseudo-Aristotelian *De mirabilibus auscultationibus*, Porta’s *Natural Magick*, and Sandys’s *Travels*.²¹² What it is certainly not generally considered to be is a work of any great originality. The editor of the Victorian edition, R. L. Ellis, describes Expt. 458 and its source in Porta’s *Natural Magick*, before noting that ‘we find that Bacon was in this case simply a transcriber’.²¹³ Graham Rees, through analysis of Additional MS 38693 which contains drafts of the text in the hand of William Rawley, has demonstrated that these assumptions about *Sylva sylvarum* are, if not totally unfounded, at the very least wrong-headed.

The issue is not whether Bacon took his material from other works, but the manner in which he manipulated this material, and, more importantly, the manner in which he presented it. Rees notes, for example, that when it came to accusations of harvesting his material from books or hearsay, ‘the drafts show that he was particularly fastidious about signalling borrowed material. Take, for instance, the drafts of Expts. 361, 797 and 77 (fols. 31r-v) ’.²¹⁴

In discussing these particular portions of the MS, Rees also suggests the following:

The differences noted here (especially the vacillation over Expts. 361 and 797)

²¹² *SEH*, II, pp. 327-9. Critics tend to discuss the work in a very cursory manner, describing it as ‘a compilation’ (Sarah Hutton, ‘Persuasions to Science’, in *Francis Bacon’s New Atlantis* (see Aughterson, above), pp. 48-59 (p. 56)) or ‘a miscellany of scientific curiosities’ (Paul Salzman, ‘Narrative contexts for Bacon’s *New Atlantis*’, in *Francis Bacon’s New Atlantis* (see Aughterson, above), pp. 28-47 (p. 42)), as well as generally considering it in the shadow of its companion text, *NA*. The work generally lacks scholarly appraisal, a problem to be addressed in *OFB*, XIV, forthcoming.

²¹³ *Ibid.*, p. 328.

²¹⁴ Graham Rees, ‘An Unpublished Manuscript by Francis Bacon: *Sylva Sylvarum* Drafts and Other Working Notes’, *Annals of Science*, 4 (1981), 377-412 (p. 388). It is important to note

almost suggest over-scrupulousness. Bacon clearly wanted (i) to ensure that borrowed material could be identified and distinguished from his own, and (ii) to implement his declared intention of not burdening natural history with the traditional and ostentatious parades of authorities. One way in which he achieved both (i) and (ii) was to use the stock formula ('It is reported')—a formula which occurs dozens of times and in a variety of forms in the *Sylva*.²¹⁵

Indeed, the vacillation over these two experiments is instructive, as a comparison of parts of the MS with the published versions of experiments will demonstrate. The MS reads as follows:

Aristotle ~~it is reported~~ ^{^eth^} ~~of auncient time~~, that
in part of Media

Aristotle ~~it is reported~~ ^{^eth^} there are some blinde fires

Aristotle reporteth of a kind of iron in Cyprus²¹⁶

These three lines read like so in the published work:

'It is reported by one of the ancients, that in part of Media ...',²¹⁷

'There be also some blind fires under the stone ...',²¹⁸

'It is reported by some of the ancients that in Cyprus...'²¹⁹

The sections of Add. MS 38693 relevant to the question of authority and citation, being fols. 30^r-31^v, and 51^r-52^v, are in the hand of William Rawley, Bacon's secretary, amanuensis and, possibly significantly, the editor of *Sylva sylvarum*.²²⁰ Bacon's habit was to dictate to his secretaries and then amend the

that Bacon himself was damning of those who presented hearsay as 'fact', see above, p. 243.

²¹⁵ Rees, 'An Unpublished Manuscript', p. 389.

²¹⁶ BL Add. MS 38,693, fol. 31^r.

²¹⁷ SS, N4^r (*SEH*, II, p. 461) (Expt. 361).

²¹⁸ *Loc. cit.*

²¹⁹ SS, 2D2^v (*SEH*, II, p. 598) (Expt. 797).

²²⁰ See 'Catalogue of Additions to the Manuscripts in the British Museum in the Years 1912-1915. Part I Descriptions (published by the Trustees of the British Museum. Add. 38,092 –

manuscripts as he saw fit, and he also seems to have regularly changed his mind while in the act of dictation.²²¹ What this MS *seems* to indicate when considered alongside the final text of publication, is not so much a straightforward process of assimilation of the information of others, but a continual consideration of how the information ought to be presented.

In the first example, experiment 361, ‘it is reported of auncient time’ is adjusted to ‘Aristotle reported that’, and is finally printed as ‘it is reported by one of the ancients’. The process is of attribution to a time, then to an individual, and finally to an anonymous ‘ancient’. Ellis footnotes the title ‘*Experiment solitary touching subterrany fires*’, suggesting that it derives from Pliny, but this is incorrect, as no reference exists in Pliny to such ‘eruptions of flames’ in ‘*Media*’.²²² Bacon is, therefore, suggesting that he has a source for this material other than first-hand experience. Of the seventeen examples of reliability formulae in Add. MS 38693, eight are published verbatim in *Sylva sylvarum*, six are adjusted before going to press, two are simply left out of the printed experiment, and one is deleted in the notes themselves.²²³

Indeed, one of the most striking features of *Sylva sylvarum* as a text is the relentless use of formulations of this kind – Rees’ description of the ‘stock formula’ *it is reported* as being used ‘dozens of times and in a variety of

39,255 – EG. 2890-2909’).

²²¹ LPL MS 936, art 129, a draft of a letter from Bacon to James, shows where Bacon clearly changes his mind mid-sentence on several occasions, while also later correcting the dictated draft in his own hand. Aubrey notes his habit of using secretaries in his *Brief Lives*, writing that Bacon would wander his garden with Hobbes, meditating, ‘and when a notion darted into his mind, Mr. Hobbes was presently to write it down’ (John Aubrey, *Aubrey’s Brief Lives*, ed. by Oliver Dick (London, Secker and Warburg, 1950), p. 9).

²²² SS, N4^f (*SEH*, II, p. 461) (Expt. 361). See Pliny the Elder, *The historie of the vworld Commonly called, the naturall historie of C. Plinius Secundus*, trans. by Philemon Holland (London: Adam Islip, 1601), E5^v-E6^v, in *EEBO*.

²²³ Formulae found on fols. 30^f, 31^v, 32^f, 32^v, 51^f, 51^v, and 52^v (Expts. 33, 362, 25, 571, 477, 478 and 481), make it to press verbatim, while ‘It is reported, that batts’ (fol. 32^f, Expt. 899), and ‘There are many ancient and received traditions’ (fol. 52^f, Expt. 493), are missing from their respective printed Expts. See Appendix 9: Table of reliability formulae in BL Add. MS 38693.

forms,²²⁴ doesn't come close to describing the sheer volume of formulae which make up *Sylva sylvarum*. The word 'reported' or 'report' is used no less than sixty-five times in *Sylva*, with many of these uses having different qualifications, such as 'which is anciently reported' (Expt. 267); 'It is a Report of some good credit' (Expt. 364); 'it is reported by one of the *Ancients*, of credit' (Expt. 400); 'It is reported by some' (Expt. 495); 'as is reported' (Expt. 535); 'as they report' (Expt. 608) and so forth.²²⁵ Further to this, other formulaic words or phrases with a nod to the reliability of a statement include seem, conceive, observe, receive, thought, held, affirmed, examples, opinion, noted, I judge, no doubt, commonly believed, it hath been tried, it is probable, confirmed, it is certaine, and it is evident, while compound phrases include 'it is credibly affirmed', 'it is Common *Experience*', 'it is conceiued by some (not improbably,)', amongst hordes of others.²²⁶ It is also interesting to note just how many experiments begin not with the information, but with the formulation of reliability, and also how often several experiments in a row begin with the same formulation.²²⁷ In some ways, this suggests that *Sylva sylvarum* might be less of a Baconian natural history as described in the *Parasceve* than a critical commentary on extant natural histories.

While it is not to be suggested that *Sylva sylvarum* is the perfectly realised manifestation of a Baconian method of presenting natural historical information with a measure of information regarding its reliability included within the text – Bacon still included several named authorities within the text, some of whom he cites in 'traditional' fashion²²⁸ – it seems that with this

²²⁴ Rees, 'An Unpublished Manuscript', p. 389.

²²⁵ SS, K2^r, N4^r, O4^r, R3^v, S4^v (*SEH*, II, pp. 430, 462, 474, 497, 510).

²²⁶ To more fully appreciate the sheer quantity and variety of these formulae, see Appendix 10: A selection of reliability formulae found in *Sylva sylvarum* (1626/7).

²²⁷ Over 250 Expts. begin with a formulation of reliability (of over 450 Expts. including such formulations). For repetition of formulation, see Expts. 76-9; 178-79, 192; 361-62, 364; 428-31; 456-58, 461-62, 464; 515-17; 547-49; 627-29; 670, 672-3, 677, 686, 691, 693, 695, 696; 785-87. There are many other examples of clusters of formulations separated by three or four experiments.

²²⁸ Bacon names nineteen different authorities in SS, fifteen positively (in twenty-one instances), six negatively, and two in formulations indicating no value judgement.

work and the *Parasceve*, Bacon has at least attempted to adjust the manner in which received authority is utilised within texts. His method seems designed to undermine nominal authority and also to encourage further investigation, just as the removal, in the greater proportion of the experiments in *Sylva sylvarum*, of the actual authorising name, and its replacement with a formulation, signals a practical movement away from belief in received authority and a reliance on received authority as a tool of justification.

Throughout his works, and culminating in the *Sylva sylvarum*, Bacon confronts the issue of nominal and received authority. From his manipulation of the physical appearance of his own works, through his manipulations of the authorial persona, to his thoughts on how received authority is treated within his philosophy to how information is to be presented to the reader to encourage critical investigation rather than simple assent, Bacon seeks to remove the stultifying influence of a famous name on the course of knowledge. For Bacon, authority inheres not in the pronouncement of an ancient figure, but in demonstrations of reliability, where the influence of the individual is, as far as is possible, entirely removed from the equation.

h. Conclusion

When Bacon wrote that in universities of his day men ‘learn nothing there but to believe: first to believe that others know that which they know not; and after, that themselves know that which they know not’,²²⁹ he identified a major thread which would come to dominate his work, the manner in which specious authority could be asserted, and asserted textually. While he castigated Aristotle for the manner in which he sought to overthrow past philosophers, he was equally damning of those moderns who either sought to effect the same domination, or who meekly followed the ancient prescriptions without question. This condemnation not only found its way into his famous

²²⁹ *Francis Bacon: The Major Works*, p. 36.

doctrine of idols, but also fuelled his search for a way in which knowledge could be reliably handed down from generation to generation, allowing for its continual growth, while avoiding the stunting influence of received authority. Early in his philosophical career, he attempted to find a reliable way in which to present the new philosophy without simply repeating the mistakes of past philosophers he had identified. These experiments culminated in the publication of the *Instauratio magna* in 1620, a work which manipulated every type of authority available to Bacon, political, philosophical and philological. The *Instauratio magna* was a work which tackled head on, in every part, the problems of authority, while attempting to promote a system in which the only truly reliable authorities were those of scripture and nature:

I do not seek either by victory in debate, appeals to antiquity, any arbitrary claim to authority, or even by cloaking myself in obscurity, to dignify or commend any of my discoveries with any majesty; which is the sort of thing anyone could easily do if he were trying to aggrandise himself rather than enlighten the souls of others.²³⁰

Bacon also approached the King directly, demonstrating, in his private letter which accompanied the work, his mastery of the textual form, as well as his understanding of the different audiences to whom he appealed. Finally, Bacon included within the *Instauratio magna* a work designed to be a blueprint for his series of natural histories, to direct the future writers of these histories how to present their works, and how to overcome the limitations of philological form. This blueprint was, to a degree, followed in the *Sylva sylvarum*, which might be considered to be a performance of the problems of philological authority.

²³⁰ OFB, XI, p. 21.

Afterword: Authority on an island

For Bacon, authority inhered not in the dogmas of the received philosophers, the methods of the Ramists, the claims of a lost knowledge of the Golden Age which could be re-discovered through the obscure rituals of the alchemists, or the disputatious methods of the scholastics. For Bacon, authority inhered in the truth which lay in the books of scripture and nature, and the reliability with which these truths could be uncovered, which lay in the right interpretation of scripture and the right interpretation of natural phenomena. In his treatment of history, both natural and civil, Bacon demonstrated that true authority lay in the accumulated wisdom of unbroken lines of experience supported by centuries of accurate and complete textual records. In his treatment of religion, Bacon did not seek to divorce it from natural philosophy, but to assert their parallel nature: as he stated in *Historia naturalis*, the work of natural history was ‘to unroll the volume of Creation, to linger and meditate therein, and with minds washed clean from opinions to study it in purity and integrity’.¹ The key to unlocking the secrets of the book of nature was the experiment, which allowed mankind to avoid making judgements based on the faulty senses and fallible intellectual powers, as well as breaking its reliance on chance for new discoveries. When considering the communication of natural philosophical truths, he desired to communicate them in the manner that they were discovered, not the manner that they would be best believed: authority of demonstration inhered not in the specious authority of scholastic disputation and belief in great figures of philosophy, but in the openness of this demonstration.

Authority, for Bacon, inhered in truth – scriptural, natural, experimental and historical. Bacon articulated a set of problems, the doctrine of idols, which he felt stood between mankind and philosophical progress. In *New Atlantis*, he

¹ *SEH*, V, p. 132 (*SEH*, II, pp. 14-15).

presents the reader with a simple demonstration of what might obtain were these idols to be overcome. The idols concerned the untrustworthiness of the senses, the personal predilections of the individual, the problems with words, and the faulty methods of passing down knowledge from generation to generation. Each of these problems is dealt with in *New Atlantis*, the first through the experimentation of Salomon's House, the second through the consensus on the island of Bensalem concerning the wisdom of their late King, Solamona, the third through the mastery of languages, and the unique nature of their revelation, and the fourth through their scrupulousness in demonstrating knowledge (at least within the bounds of Salomon's House) in a manner designed not to achieve assent, but to invite comprehension.²

It is, therefore, in *New Atlantis* that Bacon approaches a new method of communicating his ideas, a new method of re-asserting the authority of scripture and nature, accurately interpreted by individuals and institutions dedicated not to the glorification of their own names or enrichment of themselves, but to the amelioration of man's condition on earth. In *New Atlantis*, Bacon presents the reader with a fictionalised account of how true authority may be acquired, how it might be asserted, and the benefits it might obtain, shorn of the pernicious and specious nominal authority of the author, and wrapped in a perhaps not overtly fictional framework. From the work's opening sequence to its final words, the problem of authority and its relationship to truth is confronted and critically examined.

² Renaker has suggested that Salomon's House may have been somewhat more proactive in the deception of its people, however, noting that the passage concerning the 'Houses of Deceits of the Senses' (*NA*, f4^r (*SEH*, III, p. 164)), reads more powerfully in the Latin, translating the appropriate passage as 'we could impose on men's sense an infinite number of things if we wanted to present these things as, and exalt them into a miracle' (Renaker, p. 193). The Latin reads as follows: '*Facile autem credetis, Nos, qui tot habemus verè Naturalia, quæ Admirationem moveant, posse etiam infinita Hominum Sensibus imponere, si ea in Miraculum ornare, exaltare, & vellemus*' (*OMT*, 2L3^f). Renaker's translation hinges on the word *imponere*, which, Professor Rees informs me, means, variously, to impose, force on, apply, put on, deceive, both in classical and Baconian Latin. He notes also that in *Novum organum* (*OFB*, XI, pp. 80-81, 82-83) it carries the meaning to impose or bestow, which does seem to support Renaker's conclusion (personal communication with Prof. Rees, 12 Oct, 2006).

a. *New Atlantis* and the absence of authority

New Atlantis is different from any other work that Bacon wrote, while it carries features which relate it to practically all of them. It is as well to point out that Francis Bacon the author, philosopher, politician, and peer, is entirely absent from the work.³ This absence has not, however, prevented critics such as David Spitz from repeatedly referring to the work's narrator as 'Bacon'.⁴ The narrator's anonymity, and that of every other character in *New Atlantis*, excepting Joabin the Jewish merchant and the two ancient kings, Altabin and Solamona, not only reflects Bacon's attempts to dispense with nominal authority that we have seen in works over a period of more than twenty years, but also leads us to consider the possibility that this work is effectively the next text in the series comprised of *Temporis partus masculus*, *Cogitata et visa*, and *Redargutio philosophiarum*. Indeed, when we consider the overall format of this work, that of a travel narrative, it is hard not to call to mind the end of *Redargutio philosophiarum*:

Then the narrator asked me what I had to say to it. 'I am happy', I said, 'at what you had to tell.' 'Then', said he, 'if, as you say, you like it, will you, when you write on these matters, find room to include my report and not suffer the fruit of my travels to perish.' 'A fair request', said I, 'and I shall not forget.'⁵

Similarly, it is hard not to see a resemblance between the father of Salomon's House who delivers the narrator the '*greatest Jewell I haue [...] a Relation of*

³ Indeed, if this work were to have appeared without the connection to *SS* provided to by Rawley, it might still, perhaps, be a matter of conjecture regarding whether Bacon had actually written it. Perhaps it is not insignificant that there are at least two copies of *SS* extant where the letter 'To The Reader' explaining the significance of the work and its relationship to *SS* has been cut out (Professor Michael Hunter owns one copy, and another apparently resides at the Folger Library in Washington: one of their copies, cs1968, is listed as 'lacking a2-3', the signatures on which the letter 'To The Reader' is to be found).

⁴ David Spitz, 'Bacon's "New Atlantis": A Reinterpretation', *Midwest Journal of Political Science*, 4 (1960), 52-61, in *JSTOR*.

⁵ Farrington, p. 133 (*SEH*, III, p. 585).

the true State of Salomons House',⁶ and the 'man of peaceful and serene air, save that his face had become habituated to the expression of pity'⁷ who delivers the philosophical address in *Redargutio philosophiarum*.

Brian Vickers has observed that for Bacon, as often as not, 'the sea is a vehicle of images for the discovery of knowledge and the enlarging of its boundaries',⁸ and it is perhaps from this standpoint that we may best read the position of the sailors at the work's beginning. The sailors, having set out from Peru for China and Japan, become, through a combination of difficult and inconvenient winds, utterly lost, with failing stores of food.⁹ They are not, however, simply geographically lost, however, as they also give themselves up for lost:

So that finding our selues, in the Midst of the greatest Wildernesse of Waters in the World, without Victuall, we gaue our Selues for lost Men, and prepared for Death. Yet we did lift vp our Harts and Voices to GOD aboue, who *sheweth his Wonders in the Deepe*; Beseeching him of his Mercy, that as in the *Beginning* He discovered the *Face* of the *Deepe*, and brought forth *Dry-Land*; So he would now discover Land to vs, that we mought not perish. And it came to passe, that the next Day about Euening, we saw within a Kenning before vs, towards the North, as it were thick Cloudes, which did put vs in some hope of Land; Knowing how that part of the South Sea was vtterly vnknowne; And might haue Islands, or

⁶ NA, e2^r (*SEH*, III, p. 156).

⁷ Farrington, p. 104 (*SEH*, III, p. 559). Cf. NA, e1^r (*SEH*, III, p. 154). It is reasonable, however, to suspect that if Bacon saw himself as within these works in any sense, it would most likely have been as these characters, the serene and almost obscenely well-dressed deliverers of knowledge to a willing and able audience. Indeed, Bacon was wont to consider himself a 'prophet' of the new learning, a conceit reinforced by William Rawley in his *Life of Bacon* (*SEH*, I, p. 15), and Abraham Cowley, whose ode prefacing Thomas Sprat's *History of the Royal Society* (1667) places Bacon as a latter-day Moses. Bacon called himself as 'buccinator' or 'trumpeter' of new learning in *DAS* (*SEH*, I, p. 579 (*SEH*, IV, p. 372)).

⁸ Vickers, *Renaissance Prose*, p. 186.

⁹ NA, a3^f (*SEH*, III, p. 129). There is a tendency to call the sailors 'shipwrecked' (see Briggs, p. 3) though the narrator himself points out that this is not the case, 'That for our Shipp, it was well; For we had rather mett with Calmes, and contrary windes, then any Tempests' (NA, a4^f (*SEH*, III, p. 130)). The standard manner to cross the Pacific was to set forth from California, rather than Peru, even though this was the route taken by the Coyans when they attempted to invade Bensalem (NA, c2^r (*SEH*, III, p. 142)). Thomas Cavendish made two such voyages, in 1586 and 1591. The first resulted in a successful circumnavigation, though they travelled to the Philippines rather than China, while the second, purposing for the South Sea, the Philippines, and China, ended in disaster (Richard Hakluyt, *The principal nauigations, voyages, traffiques and discoveries of the English nation* (London: George Bishop, Ralph Newberie and Robert Barker, 1599-1600), 3X4^f-3Z3^f, 4A5^f-4B4^v, in *EEBO*).

Continents, that hithertoo were not come to light.¹⁰

In becoming geographically lost, and fully aware of the fact, the sailors have assumed the conceit of the *Advancement of Learning*, in which the expression of knowledge is figured in terms of ignorance, as well as avoiding what Bacon regularly states is the chief cause of poverty: belief in riches.¹¹ The sailors' abandoning of themselves to the mercy of God further reinforces the sense that the sailors, stripped of any knowledge (and, thus, any authority apart from God and chance to which they may appeal for succour), are being prepared for enlightenment: as Bacon first suggested in *Valerius terminus*, 'it is no less true in this human kingdom of knowledge than in God's kingdom of heaven, that no man shall enter into it *except he become first as a little child*'.¹²

Having been effectively shorn of any residual authority by their position of ignorance, it is unsurprising that the narrator, upon their ship's sailing into the harbour on Bensalem, notes the symbols and manifestations of authority wielded by the islanders particularly closely. The ship is approached by 'diuers of the People, with Bastons in their Hands, (as it were) forbidding vs to land; Yet without any Cries or Fiercenesse, but onely as warning vs off, by Signes that they made'.¹³ The lack of cries or fierceness on the part of the islanders is perhaps best understood as indicative of their own attitude towards authority as a discourse rather than something to be imposed upon the newcomer by demonstrations or threats of brute force. In this sense, it appears that the Bensalemites rehearse Kevin Sharpe's observation that authority in the early-modern English state was less a question of coercion than one of

¹⁰ NA, a3^r (*SEH*, III, p. 129). The phrase 'not yet come to light' is particularly ironic here. For Bacon, light was a metaphor for knowledge (see Vickers, *Renaissance Prose*, pp. 189-93), as well as carrying the more usual meaning of religious enlightenment, and in the sailors' mouths, this may well refer to lands which have yet to be exposed to the light of European knowledge, technology and religious truth. That they are apparently harbouring colonial ambitions even when utterly lost and starving might be considered a metaphorical indicator of the fruitlessness of contemporary philosophical practice, relying on chance for new discoveries: that the land they encounter effectively colonises them is perhaps the final irony.

¹¹ See Farrington, pp. 75, 110 (*SEH*, III, pp. 593, 565); *OFB*, XI, p. 11.

¹² *SEH*, III, p. 224.

complicity, a negotiation between ruler and ruled.¹⁴ Authority is not a function of the imposition of power, but an acceptance of legitimacy by both sides. The Bensalemites do not simply impose their power onto the sailors, as the narrator makes clear when he notes that ‘ther made forth to vs a small Boate, with about eight Persons in it; wherof One of them had in his Hand a Tipstaffe of a yellow Cane, tipped at both ends with Blew, who came aboard our Shipp, without any shew of Distrust at all’.¹⁵

The Bensalemites show no fierceness, no sign of distrust, yet the sailors seem to recognise that a certain measure of authority is expressed in their implements, the bastons and tipstoffs. These oddly metonymic symbols of authority bore names which served not only to identify the objects themselves, but also the offices of those who carried them.¹⁶ The feeling of legitimate authority carried by these officials is further reinforced by the fact that the first official’s staff is tipped ‘at both ends with Blew’: as Elizabeth McCutcheon has noted, blue was the ‘color of truth and the color of truth’s agents, the cherubim, who are customarily blue in manuscript illuminations throughout the Middle Ages’.¹⁷ Whether the sailors recognise it or not, the authority wielded by the officials they first meet is not simply that of state officials, but is at its core based on truth and knowledge.

¹³ NA, a3^v (SEH, III, p. 130).

¹⁴ Sharpe, p. 854.

¹⁵ NA, a3^v (SEH, III, p. 130).

¹⁶ A baston was both a stick and the title of an officer of the court (especially one with prison duties), while a tipstaff was similarly used both for the badge of office and the carrier (OED). Later in the text, the narrator identifies a Bensalemite in terms of his badge of office once more: ‘The next Morning earely, ther came to vs the same *Officer*, that came to vs at first with his Cane, and told vs; *He came to conduct vs to the Strangers House*’ (NA, b1^r (SEH, III, p. 132)).

¹⁷ Elizabeth McCutcheon, ‘Bacon and the Cherubim: An iconographical reading of the *New Atlantis*’, *English Literary Renaissance*, 2, (1972), 334-355 (p. 343). Blue as a colour is all-pervasive in NA, seeming often to accord with individuals who are delivering information, with the word ‘blew’ occurring ten times. The sailors’ first contact has clothes of an ‘azure’ colour, while the Governor of the House of Strangers is also dressed partially in blue; the dorture in which the mother is hidden during the feast of the family is leaded in blue, while the father of Salomon’s House not only has a blue chariot, but attendants in blue hats and shoes, blue cushions and a blue cloth of state (NA, a4r, b2r, d1v, e1^r-e1^v (SEH, III, pp. 131, 135, 149, 155)). For the connection between the cherubim and the colour blue, see Exodus 26. 31.

Having noted carefully the initial signs of authority wielded by the Bensalemites, and having accepted this authority unquestioningly, the sailors are presented with a second layer of authority, one substantially more important than mere badges of office, and one which reaches beyond the merely symbolic: textual authority.

Wherevpon being not a little discomforted, we were aduising with ourselues, what we should doe. During which time, ther made forth to vs a small Boate, with about eight Persons in it; wherof One of them had in his Hand a Tipstaffe of a yellow Cane, tipped at both ends in Blew, who came aboard our Shipp, without any shew of Distrust at all. And when he saw one of our Number, present himselfe somewhat afore the rest, he drew forth a little Scroule of Parchment, (somewhat yellower than our Parchment, and shining like the Leaues of Writing Tables, but otherwise soft and flexible,) and deliuered it to our foremost Man. In which Scroule were written in Ancient *Hebrew*, and in Ancient *Greeke*, and in good *Latine* of the Schoole, and in *Spanish*, these wordes; *Land yee not, none of you; And prouide to be gone, from this Coast, within sixteene daies, except you haue further time giuen you. Meanewhile, if you want Fresh Water, or Victuall, or helpe for your Sick, or that your Ship needeth repaire, write downe your wants, and you shall haue that, which belongeth to Mercy.* This Scroule was Signed with a Stampe of *Cherubins Wings*, not spred, but hanging downwards; And by them a *Crosse*. This being deliuered, the *Officer* returned, and left onely a Seruant with vs to receyue our Answere. Consulting hereupon amongst our Selues, we were much perplexed. The Deniall of Landing, & Hasty Warning vs away, troubled vs much.¹⁸

The scroll represents a step up in terms of authority, because rather than simply communicating its position, as do the bastons and tipstuffs, it communicates what can only be considered to be the custom of the island itself. The sailors are being treated in exactly the same manner as any other strangers would be – the fact that these orders are written down merely accentuates the helplessness of the sailors, as there is plainly to be no negotiation whatsoever on their part.¹⁹ The scroll also serves to illustrate the

¹⁸ NA, a3^v (SEH, III, p. 130).

¹⁹ It is interesting to note the manner in which the sailors' agency is first removed and gradually re-established. The sailors are rendered helpless by lack of winds and delivered, presumably by God's providence, to Bensalem. Here they are further dominated by the islanders, who circumscribe and apparently pre-empt their every action – eventually,

privileging of written information on the island, not least because it requires the sailors to ‘*write downe your wants*’ rather than communicate them orally, presumably a way of preventing misunderstandings as well as providing written records which may be kept in Bensalem’s voluminous archives.

Further to this privileging of written communication, the scroll serves, in its quadrilingual message, to demonstrate both Bensalem’s longevity and its high level of learning, as well as, perhaps, indicating the depth of its understanding of ‘Western’ culture. The use of the what was effectively the linguistic triumvirate of Renaissance humanism, Hebrew, Greek, and Latin, not only demonstrates a certain cultural sophistication, but also carries with it indications of cultural longevity and, in the case of Hebrew, biblical authority. The fourth language, Spanish, is simply the primary language of imperialism – the language of most of the people voyaging in the Pacific – and, rather than suggesting that the sailors themselves were Spanish, is most likely included to demonstrate a specifically Baconian political point.²⁰

As well as demonstrating an intellectual and perhaps geopolitical authority through the manipulation of European languages, and the assertion of authority through textual means, the scroll bears two other marks of authority, the stamp of the cherubim and the cross. The fact that Bacon chooses to have the authority of this document asserted in the form of a seal is perhaps not surprising for a former keeper of the great seal and career politician, and indeed, sphragistic imagery is widespread throughout his works.²¹ The

however, having proved themselves worthy, the sailors are allowed greater agency, and finally shown the way to unlock the secrets of nature.

²⁰ Bacon considered the issue of Spain and its imperial might regularly in his works, see Timothy J. Reiss, “Seated Between the Old World and the New”, in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 223-46 (p. 227). It is, perhaps, something of a leap to assume that because the fourth language of this scroll is Spanish, and the sailors later reply was ‘in the *Spanish* tongue’ (NA, a4^r (SEH, III, p. 130)), that the sailors are themselves Spanish, as do Claire Jowett (‘Books will speak plain?’ Colonialism, Jewishness and politics in Bacon’s *New Atlantis*’, in *Francis Bacon’s New Atlantis* (see Aughterson, above), pp. 129-54 (p. 132)), Julie Robin Solomon (Solomon, p. 51), and Denise Albanese (Albanese, p. 99 and passim).

²¹ See Solomon, pp. 197-224.

cherubim, the emblem of the seal, were traditionally considered to be guardians of the Garden of Eden and also of knowledge, as well as of the ark of the covenant, though there their wings are outstretched rather than hanging downwards.²² As a device of authorisation, the cross needs no more explanation than the response of the narrator himself: ‘the Signe of the *Crosse* to that Instrument, was to vs a great Reioycing, and as it were a certaine Presage of Good.’²³

The scroll itself, with its implications of textual authority, highlights what seems to be somewhat of an obsession among the islanders. When the sailors are finally given leave to land, they are required to swear an oath regarding their peaceful intentions and of their purity from the sins of murder or piracy within the previous forty days: ‘Wherupon one of those that were with him, being (as it seemed) a *Notary*, made an Entry of this Act’.²⁴ Just as the sailors are requested to highlight their needs through textual means, so the oath they swear is entered into the Bensalemite records, and this record-keeping is something referred to on a number of occasions. The governor of the House of Strangers, when he is explaining to the sailors the history of the island, demonstrates repeatedly that the history which he recounts is not speculative history, but a history recorded in a sure and certain textual tradition, using

²² The cherubim in the Bible do not merely represent knowledge, but also act as its guardians. See Genesis 3. 24, ‘So he drove out the man; and he placed at the east of the garden of Eden Cherubims, and a flaming sword which turned every way, to keep the way of the tree of life’; Exodus 25. 20, ‘And the cherubims shall stretch forth *their* wings on high, covering the mercy seat with their wings’. They also guard the seat from which God speaks to Moses in Numbers 7. 89. Bacon considers the cherubim in several texts, not least *AL*: ‘To proceede to that which is next in order from God to spirits: we finde as farre as credite is to bee giuen to the celestiall Hierarchie, of that supposed *Dionysius* the Senator of Athens the first place or degree is giuen to the Angels of loue, which are tearmed *Seraphim*, the second to the Angels of light, which are tearmed *Cherubim*, and the third; and so following places to thrones, principalities, and the rest, which are all Angels of power and ministry; so as the Angels of knowledge and illumination, are placed before the Angels of Office and domination’ (*OFB*, IV, p. 33).

²³ *NA*, a4^r (*SEH*, III, p. 130).

²⁴ *NA*, a4^v (*SEH*, III, p. 131). Reiss suggests that ‘the “notary”-witnessed oath-taking, by which the sailors swore their peaceable intentions, parodied the *requerimiento* with which the Spanish justified their warlike impositions’, but he ignores the purely textual nature of this act (Timothy J. Reiss, “Seated Between the Old World and the New”, in *Francis Bacon and the Refiguring of Early Modern Thought* (see Catherine Gimelli Martin, above), pp. 223-46 (p. 227)).

phrases such as ‘(as appeareth by faithfull Registers of those times)’²⁵; ‘But the Records write it, as it is spoken’²⁶; ‘And I am the rather induced to be of this Opinion, for that I finde in ancient Records’.²⁷ This assertion is reinforced by his accentuation of the length of Bensalem’s historical records when compared with those of the west: ‘Of all this, there is with you sparing Memory, or none; But we haue large Knowledge thereof.’²⁸

The governor does not, however, merely state that he, as a representative of Bensalem, is well aware of the history of Europe, but demonstrates this fact in possibly his most important assertion of authority, the re-telling of European history to the sailors. As well as telling the sailors history of which they are unaware, such as the state of navigation three thousand years previously (in itself a complication to any idea they may hold of the present age representing the pinnacle of achievement, and also of the concept of the ‘New World’), he explains to them exactly which facts their authorities got right, and which ones they got wrong. The most important authority compromised (and, therefore, gently de-authorised) in this way is Plato, though it is important to emphasize that the governor is not attempting to replace Plato’s authority with his own, but with that of continual and accurate record-keeping.

b. The demonstration of superior traditions and knowledge on Bensalem

The governor describes Plato’s explanation of the ‘Great Atlantis’, as found in his *Timaeus* and *Critias*, in terms which accentuate its inaccuracy, while giving credit where it’s due:

For though the Narration and Description, which is made by a great Man with you; that the Descendents of Neptune planted there; and of the Magnificent

²⁵ NA, c1^v (SEH, III, p.141).

²⁶ NA, c4^f (SEH, III, p. 145).

²⁷ NA, c4^f (SEH, III, pp. 145-46).

²⁸ NA, c1^v (SEH, III, p. 141). It is interesting that in More’s *Utopia*, the island is described as having a history dating back 1760 years (Sir Thomas More, *Utopia*, trans. by Paul Turner (Harmondsworth: Penguin, 1965), p. 73).

*Temple, Pallace, Citie, and Hill; And the manifold streames of goody Nauigable Riuers, (which as so many Chaines enuironed the same Site, and Temple;) And the seuerall Degrees of Ascent, wherby Men did climb vp to the same, as if it had bin a Scala Cæli; be all Poetical & Fabulous: Yet so much is true.*²⁹

*And for the former of these, which was into Europe, the same Authour amongst you, (as it seemeth,) had some relation from the Egyptian Priest, whom he citeth. For assuredly such a thing ther was. But whether it were the Ancient Athenians, that had the glory of the Repulse, and Resistance of those Forces, I can say nothing: But certaine it is, there neuer came backe, either Ship, or Man, from that Voyage. Neither had the other Voyage of those of Coya vpon vs, had better fortune, if they had not met with Enemies of greater clemency.*³⁰

*Not by a great Earthquake, as your Man saith; (For that whole Tract is little subiect to Earthquakes;) But by a particular Deluge or Inundation.*³¹

The governor thus neatly illustrates how Plato not only received his story second or even third-hand, that is, without it being textually fixed, but also suggests that he filled in the gaps of his story with speculation, something Bacon found problematic and the governor himself refuses to do. The governor's refusal to name Plato explicitly not only removes the authority of his name, but also allows him to refer to him, not a little patronizingly, as 'a great Man with you', and 'your Man'. The governor's failure to refer to Plato by name simultaneously de-authorises him in terms of the narrative while it serves to fulfil one of Bacon's prescriptions for citation and the writing of natural history.³² In the *Parasceve*, as has been noted, he writes that one should never cite an author except in cases of doubt, noting also that in such cases note should be taken of the manner in which the authority received his information, by hearsay and so forth. The lack of the name of Plato serves here to suggest that there is no doubt whatsoever that Plato was wrong and the

²⁹ NA, c2^f (SEH, III, pp. 141-42).

³⁰ NA, c2^f (SEH, III, p. 142).

³¹ *Loc. cit.*

³² It is notable that in several other contemporary 'utopias', ancients and other authorities are mentioned by name. In *Utopia*, for example, Plato, Hippocrates, Galen, Aristotle, and others find their way into the text (*Utopia*, pp. 38, 57, 64, 66, 99-101), while Andreae's *Christianopolis* names several authorities, both ancient and modern, such as Socrates (p. 160), Tycho Brahe (p. 215), Cicero (p. 223), Aristotle (p. 227), and Luther (p. 243) (J. V. Andreae, *Christianopolis*, trans. by Edward H. Thompson (London: Kluwer Academic Publishers,

Bensalemite version of this history right. The addition of the genesis of Plato's information being hearsay, is also instructive on this point.³³

The governor has thus taken the sailors' history and repeated it back to them, adjusting it in the process to make it more accurate. By taking one of the great philosophers of the Western tradition, Plato, and gently pointing out that he sometimes spoke nonsense, and sometimes simply made things up, he removes him from his position of unassailable authority. The governor does not, as Bacon noted of both Aristotle and Gilbert, de-authorise Plato simply so that he might replace him, however: the authority of the 'great man' is replaced by the (presumably) commonly owned textual records and registers of Bensalem. His performance demonstrates that the Bensalemites are not only aware of the texts on which Western philosophy and history has been based, but that they are aware of their textual faults, and also of the truth which they cannot grasp.

It is not merely in the assertion of their greater knowledge of history, as evidenced in their *'faithfull Registers'*, however, that the Bensalemites assert a textual authority far greater than that accepted by the sailors (who function in this sense as representatives of Western civilisation and knowledge). The Bensalemites also lay claim to another text, and one far more dear to the sailors' heart: that of the scripture. While the astonishing nature of the Bensalemite revelation as foregrounded in terms of the authority of natural philosophy has already been discussed, it is as well to note just how great an expression of textual authority their revelation was. The Bensalemite scripture is, to put it simply, closer to God than any scripture the sailors might have possessed.

The Bensalemite revelation, we recall, was delivered via the device of a pillar

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³³ See *OFB*, XI, p. 467; *NA*, c2^r (*SEH*, III, p. 142).

of light out to sea, which was subsequently declared a miracle by one of the ‘wise men’ of Salomon’s House, after which his boat, which had previously been held stationary, was allowed to approach the column:

But ere he came neere it, the Pillar and Crosse of Light brake vp, and cast it selfe abroad, as it were, into a Firmament of many Starres; which also vanished soone after, and there was nothing left to be seen, but a small Arke, or Chest of Cedar, dry, and not wett at all with water, though it swam. And in the Fore-end of it, which was towards him, grew a small greene Branch of Palme.³⁴

The ‘wise man’ then proceeded to lift the ark into his boat, whereupon it opened itself, and in it he found the following items:

a Booke, and a Letter; Both written in fine Parchment, and wrapped in Sindons of Linnen. The Booke contened all the Canonick Bookes of the Old and New Testament, according as you haue them; (For we know well what the Churches with you receiue;) And the Apocalypse it selfe; And some other Bookes of the New Testament, which were not at that time written, were neuerthelesse in the Booke.³⁵

As the governor relates this story, he once more reminds the sailors that the Bensalemites are well aware of the scriptures received by the Western churches, though the true significance of this revelation is twofold, both temporal and textual. The Bensalemites have received a complete, and discrete, copy of the holy scriptures a mere twenty years after Christ’s death, well before the rest of the world was even beginning its journey of Christian evangelism. While the Bensalemites can therefore lay claim to having a scriptural tradition far older than any comparable Western tradition, it is also important to note that the governor calls them the ‘Canonick Bookes’, thereby effectively authorising (and pre-empting) the work of the synods of

³⁴ NA, b4^r (SEH, III, p. 138). Renaker suggests that this vanishing of all signs of the authorising miracle, along with its appearance out to sea, serves to prevent any shrine being erected on the site itself, thus ‘obviating millennia of superstitious practices’ (Renaker, p. 188).

³⁵ NA, b4^r (SEH, III, p. 138). The formula ‘we know well what you have’ is echoed by the father of Salomon’s House (NA, f1^v (SEH, III, p. 160)) and the governor in his historical discourse (NA, c1^v (SEH, III, p. 140)), and accentuates the authority of knowledge possessed

Rome and Carthage in AD 382 and 397 respectively.³⁶ The inclusion of the 'other bookes' of the New Testament, including the apocalypse, seems simply to be a commentary on the canonical controversies which had raged since the days of the apostles, and had become particularly important since the reformation, perhaps reflecting Bacon's desire for a church un-riven by controversy.³⁷

The Bensalemite scriptures, therefore, are the same as the Western ones, except that they are delivered to mankind earlier, with one degree less of removal from their source, and are as a result better, more accurate, and more authoritative. While the textual authority of the Bensalemite scripture is important, we must not lose sight of the other authorising devices with which they were delivered: the ark, the letter, and the sindons of linen. The ark itself has more than a feel of an intellectual or spiritual Noah's ark, while its parallels with the ark of the covenant are plain: an ark was traditionally something designed to keep something secret, while the ark of the covenant was, according to St. Paul, designed to carry the two tables of laws, Aaron's rod and the pot of manna.³⁸ The Bensalemite ark, as well as floating on the sea and containing divine testimony, was accompanied by a palm leaf (perhaps

on Bensalem.

³⁶ Renaker, pp. 187, 192. These two synods effectively mark the first fixing of the Biblical canon, and Renaker argues further that in Protestant tradition each miracle required a document, and each document a miracle: in this manner, the miracle of Bensalem serves as divine authorisation for the decisions of these two synods.

³⁷ For Bacon on religious unity, see 'Of Unity in Religion' (*OFB*, XV, pp. 11-16), and *An Advertisement Touching the Controversies of the Church of England* (*LL*, I, pp. 74-95). It may also be that several touches in *NA* itself also owe themselves to this stance of Bacon's, such as the red cross worn in the turban of the governor of the House of Strangers, as the red cross was a catholic emblem (*NA*, b2^r (*SEH*, III, p. 135)). On the subject of the canon, Luther, for example, had initially rejected the Book of Revelation (the Apocalypse of which the Governor speaks), and was dubious about James (Frank Kermode, 'The Canon', in *The Literary Guide to the Bible*, ed. by Robert Alter and Frank Kermode (London: Fontana, 1997), pp. 600-10), while Calvin was at odds with the Savoyard divine Castellio regarding the latter's rejection of the Song of Solomon (MacCulloch, p. 241). The fourth session of the Council of Trent, which began in April 1546, dealt specifically with canonical disputes with Protestants who rejected the idea that some of the apocrypha, such as the books of Sirach and Judith, were divinely inspired (David C. Steinmetz, 'The Council of Trent', in *The Cambridge Companion to Reformation Theology*, (see Muller, above), pp. 233-47 (pp. 235-36)).

³⁸ Exodus 2. 3; Hebrews 9. 4.

reminding the reader of the leaves placed in the path of Jesus when he entered Jerusalem), and was made of cedar wood, as was Solomon's temple.³⁹ The letter, while it provides apostolic authority, the requisite Biblical vision and confirmation that the ark's final resting place was not an act of chance but one ordained by God, also forms another link in the chain of textual authority which binds *New Atlantis* together.⁴⁰ The sindons of linen in which both Bartholomew's letter and the Bible were wrapped holds its own significance: the sindons were the linen in which Christ had himself been wrapped after his crucifixion.⁴¹

It seems as if Bensalem has received a fully-formed, discrete revelation somewhat in advance of any 'Western' Bible or, indeed, there was any consensus regarding the canonical works: and this without any controversy whatsoever. Bensalem has a complete revelation, and once more has had it for far longer than any equivalent Western church. This complete revelation has been delivered in circumstances which make it practically impossible to deny its status – the revelation is accompanied by so many symbols of authority, from the miracle itself to the palm leaf, it is a wonder that Bacon felt the need to labour his point any more. Yet the governor's statement that they received 'some books not at that time written' can only mean one thing – these books, at the very least, were written without the mediation of mortal man. While there is no sense that Bacon was disputing that the scriptures, as revealed

³⁹ John 12. 12-13; 1 Kings 6. 9. The importance of Solomon to the philosophy of Francis Bacon extends further than the biblical King's alleged writing of the first natural historical work in 1 Kings 4. 33, but has perhaps been insufficiently treated, other than in the context of *New Atlantis* (see Claire Jowett, "Books will speak plain"? , in *Francis Bacon's New Atlantis* (see Aughterson, above), pp. 129-54 (pp. 139-43); Solomon, pp. 220-24).

⁴⁰ For the text of this letter, see *NA*, b4^v (*SEH*, III, p.138).

⁴¹ See Frank Kermode, *The Genesis of Secrecy: On the Interpretation of Narrative* (Cambridge, Massachusetts, London: Harvard University Press, 1979), pp. 55-58. Kermode notes that the word *sindōn* is greek, meaning 'a garment made of fine linen; not precisely a shirt, rather something you might put on for a summer evening, or wrap a dead body in, if you were rich enough'. The word appears in Mark 14. 51-2, and the gospel of Clement of Alexandria, and states that 'the linen in which Joseph of Arimathea wraps the body is called a *sindōn*' (*Ibid.*, p. 61). My thanks to Professor Martin Dzelzainis and Dr. James Ward for this reference. It is also noteworthy that the father of Salomon's House wears 'a Sindon or Tippet of the same about his Neck' (*NA*, e1^r (*SEH*, III, p.154)).

works, were anything other than divine, it is plain, not least when the low regard in which protestants held early translations of the Bible is taken into account, that this scripture has a unique feature: its status as being untouched by human hand prevents any possibility of human scribal error, something which, in the previous hundred or so years, had become quite a serious issue.⁴²

The Bensalemite scriptures came, however, complete with yet another device, and one which finally ensured their absolute authority:

*There was also in both these writings, as well the Booke, as the Letter, wrought a great Miracle, Conforme to that of the Apostles, in the Originall Gift of Tongues. For there being at that time, in this Land, Hebrewes, Persians, and Indians, besides the Natiues, euery one redd vpon the Booke, and Letter, as if they had been written in his owne Language.*⁴³

The scriptures delivered to Bensalem are not only written earlier than any other known scripture, and they are not only delivered without the intervention of a potentially error-ridden human amanuensis, but their meaning is also delivered directly. The Bensalemites seem to have been forgiven, at least in part, the second curse of mankind, the curse of tongues.⁴⁴

The Bensalemite scripture was shorn of all errors of translation, all need for interpretation by priests, commentators, translators, Church Fathers, or any

⁴² See Gerald Hammond, 'English Translations of the Bible', in *The Literary Guide to the Bible* (see Kermode, above), pp. 647-66. This issue was tackled head-on in the preface to the AV Bible of 1611, which is careful not to denigrate previous translations as incorrect, even though the point of humanist translation was to be more fully *ad fontes*, or faithful to the sources, on the principle that the more accurate and faithful a translation is, the more authoritative it is, also: 'Now to the latter we answer, That we do not deny, nay, we affirm and avow, that the very meanest translation of the Bible in *English*, set forth by men of our profession, (for we have seen none of their's of the whole Bible as yet) containeth the word of God, nay, is the word of God: As the King's speech which he uttered in Parliament, being translated into *French, Dutch, Italian, and Latin*, is still the King's speech, though it be not interpreted by every translator with the like grace, nor peradventure so fitly for phrase, nor so expressly for sense, every where' (*The Bible*, p. lxii). Also *OFB*, IV, p. 189; see also below, p. 273, fn 60, on the mis-translation of the word 'karan' in Exodus 2. 29.

⁴³ NA, b4^v (*SEH*, III, pp. 138-39).

⁴⁴ The curse has, in effect, been lifted through the efforts of Salomon's House, one of whose members interpreted the column of light as a miracle, thus allowing the revelation to take place. In this sense, natural philosophy has, on Bensalem, plainly begun the process of the renovation of pre-lapsarian power and authority onto mankind. See *Valerius terminus* (*SEH*,

other intermediary. Bensalemite Christianity, it seems, is as close to the ideal protestant model of direct contact between scripture and individual as can be imagined. The Bensalemite Bible comes directly from the source, or *fons*, without need of human authority or *auctoritas*.

c. The assertion of authority through temporal and spatial manipulation

The delivery of the scriptures so far in advance of the scriptures available in the sailors' European homes, however, highlights another example of the Bensalemite assertion of authority over the sailors. Not content with signalling their authority through use of symbols, demonstrating it through history lessons, acts of textual domination and explanation of their perfect scripture, the Bensalemites also assert their authority over the sailors through their circumscription of both time and space. The scroll which the sailors are presented with in the harbour does not simply display textual, symbolic and religious authority, but asserts control over the sailors' temporal movements: the message is simply to prepare to leave within sixteen days, '*except you haue further time giuen you*', along with a promise, itself indicative of the charitable nature of Bensalem, to provide whatever assistance necessary.⁴⁵

As we have seen, Bacon had a lot to say about time, not least that acceleration of time was, in works of nature, perhaps '*Inter Magnalia Naturæ*', while in terms of miracles, it may be '*next to the Creating of the Matter*'.⁴⁶ While the manipulation of time with regards the Bensalemite scriptures seems merely to further assert the miraculous nature of the revelation, time on Bensalem itself was certainly an issue, as not only does the description of the works of Salomon's House contain several examples of their achieving this, albeit on a small scale, they exert almost total control over the sailors' use of time: their

III, p. 222).

⁴⁵ NA, a3^v (SEH, III, p. 130).

⁴⁶ SS, LA^r (SEH, II, p. 442).

time is not their own, but to be granted and removed at will.⁴⁷

Having delivered their answer to the Bensalemite scroll, which initially grants them a mere sixteen days before they must leave, the sailors are kept waiting for three hours before they are visited by another ambassador, of apparently increased importance (as indicated by his clothing, some of which is azure in colouring). The oath they are required to swear is figured temporally:

*If yee will sweare, (all of you,) by the Meritts of the SAVIOVR, that yee are no Pirates; Nor haue shed bloud, lawfully, nor vnlawfully, within fourtie daies past; you may haue License to come on Land.*⁴⁸

The oath figures the authority to come on land in temporal terms, the forty day proscription being a sort of spiritual quarantine plainly designed to call to mind Jesus' time in the wilderness, yet also one which accepts the oath of the sailors, suggesting once more that authority on Bensalem is based on a mutual exchange of trust. This exchange is the beginning of a series of incidents in which the sailors' time is manipulated by the Bensalemites. They are, for example, told that they are to be collected from their ship 'the next day, by sixe of the Clocke, in the Morning',⁴⁹ and when the appointed officer arrives, he notes that '*hee had preuented the Houre, because we might haue the whole day before vs, for our Businesse*'.⁵⁰ This is not the only incident of the gracious donation or restriction of the sailors' time. When they arrive at the Strangers House, they are informed of the strictures on their time with these words:

Yee are to know, that the Custome of the Land requireth, that after this day, and too morrow, (which we giue you for remouing of your people from your Ship,)

⁴⁷ The brothers of Salomon's House are capable of some manipulation of time: '*And we make (by Art) in the same Orchards, and Gardens, Trees and Flowers, to come earlier, or later, than their Seasons*' (NA, e4^r (SEH, III, p. 158)).

⁴⁸ NA, a4^v (SEH, III, p. 131).

⁴⁹ NA, a4^v (SEH, III, p. 132). This formulation is repeated later, 'The next day about 10. of the Clocke' (NA, b3^r (SEH, III, p. 136)).

⁵⁰ NA, b1^r (SEH, III, p. 132).

*you are to keepe within doores for three daies. But lett it not trouble you, nor doe not think your selues restrained, but rather left to your Rest and Ease.*⁵¹

It is also notable that this temporal restriction on their movements is explained with the words *'the Custome of the Land requireth'*, rather than any explicit order or mention of the law of the land.⁵² Indeed, the status of law on Bensalem is somewhat opaque, a situation which, if we are to believe William Rawley's letter 'To The Reader', was due to have been remedied, had not Bacon decided that his natural history was more important.⁵³ Other than the law mentioned by Joabin, who states that *'They haue also many wise and excellent Lawes touching Marriage'*,⁵⁴ and the mention of activities (primarily sexual in nature) which are unlawful,⁵⁵ there is only one actual law mentioned other than the *'Fundamentall Lawes of this Kingdome'*⁵⁶ expressed by the great lawmaker, Solamona, some 1900 years previously. Observing that his state *'mought bee a thousand wayes altered to the worse, but scarce any one way to the better'*,⁵⁷ Solamona seems to have framed a final law, the *'Interdicts and Prohibitions, which wee haue touching Entrance of Strangers'*.⁵⁸ there is no other mention of these laws, or of their contents, other than to suggest that while they were designed to keep the status quo,

⁵¹ NA, b1^v (SEH, III, p. 133). The narrator also notes when their time is up: 'The Morrow after our three dayes were past' (NA, b2^r; (SEH, III, p. 135)).

⁵² It is as well to note that here, just as after the sailors have been asked whether they are Christian, the narrator notes a gesture along with his interpretation, 'At which Answer the said Person lift vp his Right Hand towards Heauen, and drew it softly to his Mouth, (which is the Gesture they vse, when they thank GOD;)' (NA, a4^v (SEH, III, p. 131). Cf. SS, 2A4^v (SEH, II, p. 570)); 'lifting vp his Cane a little, (as they doe when they giue any Charge or Commaund) said to vs' (NA, b1^v (SEH, III, p. 133)). Once more, the narrator seems to respond to symbolic modes of authority – tipstaves and gestures. This leads to a discord between the governor's text, which suggests that 'Custome' requires the sailors' obedience, and the governor's apparent gesture, which suggests that he commands their obedience, albeit as a representative of the state.

⁵³ See Rawley's letter 'To The Reader' in NA, a2^r (SEH, III, p. 127).

⁵⁴ NA, d4^v (SEH, III, p. 153).

⁵⁵ NA, d4^r (SEH, III, p. 153).

⁵⁶ NA, c3^v (SEH, III, p. 144).

⁵⁷ NA, c3^r (SEH, III, p. 144).

⁵⁸ NA, c3^v (SEH, III, p. 144). Richard Serjeantson has noted that many utopias seem to have very few laws indeed, and that most are ruled by the custom or habit of the people, whose education allows their societies to run smoothly. Richard Serjeantson, 'Law, Education and the Ideal Society', unpublished paper given at *New Worlds Reflected*, Birkbeck College, University of London (Dec, 2005).

enough flexibility was built into them to allow for the individual discretion of state officials. The law is not a monolithic beast, but one which can take account of individual circumstances, albeit within a given framework. This is made amply clear in yet another expression of the power over the sailors' time, here the ability of the Bensalemites to grant time to them:

*The State hath giuen you Licence to stay on Land, for the space of sixe weekes: And let it not trouble you, if your occasions aske further time, for the Law in this point is not precise; And I doe not doubt, but my selfe shall be able, to obtaine for you, such further time, as may be conuenient.*⁵⁹

Here the governor has not only informed them of the accepted duration of their stay – a duration, it is to be noted, which was first sixteen days in the harbour before they had to leave, was then three days in Strangers House before they were able to leave, before finally becoming a six week grant to stay on land – but suggests that if the sailors so desire, he is himself capable of gaining a grant of extra time.

This circumscription of time is subtly accompanied by a circumscription of space. Having made the harbour, the sailors are told to be ready to leave, and that they are not to be permitted to land. Then they are permitted to land, but confined to Strangers House for three days, and when finally let loose, they are told that '*none of you must goe aboue a Karan, (that is with them a Mile and an halfe) from the walles of the Citty, without especiall leaue*'.⁶⁰ That the sailors accept the strictures placed upon them is made amply clear, though it may seem a little strange that the narrator considers them to be free even as he

⁵⁹ NA, b2^v (SEH, III, p. 135).

⁶⁰ NA, b2^v (SEH, III, p. 135). This use of a word immediately followed by the narrator's parenthetical definition follows on from Bacon's practice of re-defining technical vocabulary noted in chapter four. The word *karan* does not appear in the OED, though Weinberger, in his edition of NA (see *New Atlantis and The Great Instauration*, ed. by Jerry Weinberger, p. xxi), traces the word back to the Hebrew, meaning to shine, not least through annotations of Exodus 2. 29: 'for of the Hebrew *Karan*, which is to *shine*, or cast forth glorious beames, the name *Keren* or *Horne* is derived' (Henry Ainsworth, *Annotations upon the five books of Moses, the booke of Psalms, or, Canticles* (London: For John Bellamie, 1627), 2M6^v, in EEBO). William Bedwell, however, translates the word as 'to conioyne or knit together'

acknowledges they are restrained, if not physically, then by stricture:

We took our selues now for free men, seeing ther was no danger of our vtter Perdition; And liued most ioyfully, going abroad, and seeing what was to be seen, in the Citty, and places adiacent, within our *Tedder*.⁶¹

The narrator also demonstrates his complete understanding of the position in which the sailors find themselves when he notes both the methods with which the Bensalemites command and the possible ramifications of failing to behave in a Christian manner:

*For they haue by Commandement, (though in forme of Courtesie) Cloistered vs within these Walls, for three dayes: Who knoweth, whether it be not, to take some tast of our manners and conditions?*⁶²

While the Bensalemites have never sought to force their will upon the sailors, the narrator accepts that the sailors have little choice but to obey, not least because, as he immediately points out, if the Bensalemites are intent on testing the sailors' behaviour, '*if they finde them bad, to banish vs straight-ways; If good to giue vs further time*'.⁶³ The narrator has already remarked both on the miracle of their being saved, and also on the Christian piety and humanity of the people amongst whom they find themselves: it is almost as if he considers that this benign incarceration is an opportunity for them to mend their ways and, upon successful completion, they will find themselves, at the very least, in a place of earthly salvation:

*Therefore for GODS loue, and as we loue the weale of our Soules and Bodies, let vs so behaue our selues, as wee may be at peace with GOD, and may finde grace in the Eyes of this People.*⁶⁴

While the sailors seem initially to have based their obedience upon the

(William Bedwell, *Mohammedis imposturae* (London: Richard Field, 1615), O3^r, in *EEBO*).

⁶¹ NA, d1^r (*SEH*, III, p. 147).

⁶² NA, b2^r (*SEH*, III, p. 134).

⁶³ NA, b2^r (*SEH*, III, p. 134).

outward symbols of authority wielded by the Bensalemites, it soon becomes plain that this authority is not the simple wielding of power, but a benign authority based on charity, piety and, perhaps most importantly of all, a greater access to truth, historical or scriptural, than the sailors have at their disposal.⁶⁵ In his continuous description of the authoritative transactions between the sailors and the Bensalemites, the narrator gradually elucidates the sailors' acceptance of authority as it moves from mere recognition of warning signals, symbols and badges of authority and, eventually, the contract implicitly entered into when they enter the House of Strangers.

In *New Atlantis*, the mode of authority experienced by the sailors moves through several different phases. At the work's beginning, they have all autonomy removed from them as they float lost in an uncharted sea. Upon making the harbour, they are confronted by recognisable symbols of authority to which they respond, and over a period of time they are allowed more and more autonomy, culminating in their invitation to such social events as the feast of the family (itself a ceremony deeply concerned with modes of authority⁶⁶) until, eventually, the narrator is accorded the great honour of an audience with one of the visiting fathers of Salomon's House.⁶⁷

⁶⁴ *Loc. cit.*

⁶⁵ Bensalem as an island has a long history of not enforcing its power. The governor tells of how Altabin, the ancient Bensalemite king, deals with the threat of invasion by the Coyan forces by surrounding them with a greater power and, rather than destroying them, compels them to surrender and then assists them in getting back home. (*NA*, c2^r (*SEH*, III, p. 142)). While this story includes a display of power, there is no use of it, as the King seems merely to persuade the invaders that resistance is futile.

⁶⁶ The feast of the family is arranged in a strictly hierarchical manner, and includes, among other things, the only mention of the current Bensalemite monarch, who appears to assert his authority in a purely textual format, in the form of a scroll: 'This Scrowle is the *Kings Charter*, containing Guift of Reuenew, and many Priuiledges, Exemptions, and Points of Honour, granted to the *Father of the Family*; And it is euer stiled and directed; *To such an one, Our welbeloued Friend and Creditour*. Which is a Title proper onely to this Case. For they say, the King is Debter to no Man, but for Propagation of his Subiects, The Seale set to the *Kings Charter*, is the Kings Image, Imbossed or moulded in Gold; And though such *Charters* bee expedited of Course, and as of Right, yet they are varied by discretion, according to the Number and Dignitie of the *Family*' (*NA*, d2^r (*SEH*, III, p. 149)). For more on this ceremony, see Bruce, pp. 125-46; Aughterson, pp. 156-79 (pp. 164-70); Leslie, pp. 105-15.

⁶⁷ This individual demonstrates also that the relative authority of public servants in Bensalem can be ascertained by the sumptuousness of their clothing. The father of Salomon's House is

Yet the true expression of Bensalemite authority is not to be found merely in terms of standard forms such as clothing, gestures and the control of the sailors' temporal and spatial freedom, but is felt most acutely in the domination of what the sailors themselves carry as authority. The history which the sailors believe of their civilisation is shown by the governor of the House of Strangers to be erroneous and made up in large part of hearsay and speculation, where it is not simply 'all poetical and fabulous' – the Bensalemites know more about the Europeans, it seems, than the Europeans themselves. Yet the erroneous history carried, in cultural terms, by the sailors is not simply deemed erroneous: it is corrected. The governor of the House of Strangers re-tells the sailors the history of what they consider to be new lands, and re-tells the sailors the history handed down to them by Bacon's *bête noir*, received wisdom based on ancient, named authority. Furthermore, the Governor shows that the Bensalemites have a more pure understanding of scripture, and may even have had direct contact with that font of wisdom, Solomon himself.⁶⁸

d. The nature of Bensalemite authority

Albanese has suggested that 'the space both created and cleared by the premise of a utopianism based on natural philosophy changes the ground of authority: religious, civil and, ultimately, monarchical power are occluded and displaced by the inquisitional, by the power to probe nature'.⁶⁹ While she is

not the only individual splendidly attired, as his carriage is decked in blue velvet, as are his attendants, the fifty well-figured youths, while his carriage has a strange pushme-pullyou organisation of its horses, horses which apparently also need no direction (*NA*, e1^f-e1^v (*SEH*, III, pp. 154-55)). An uncharitable critic might be forgiven for reading this passage alongside reports of Bacon's own sartorial extravagance (see Jardine and Stewart, pp. 417-18) and conclude that if Bacon saw himself as any character within *NA*, it should be this man. It is, however, worth noting that when the narrator finally sits down with the father of Salomon's House, he remarks on the lack of badges of office in the same breath as he admires his underwear (*NA*, e1^v (*SEH*, III, pp. 155-56)).

⁶⁸ For the Bensalemites, of course, Solomon was a figure of wisdom before he was a biblical figure: the name Solamona is used in Bensalem before they have the Bible.

⁶⁹ Albanese, p. 99.

correct to a degree, she perhaps fails to appreciate both the difference between power and authority, and the fact that, on Bensalem, civil, religious and monarchical authority are not compromised but re-drawn and re-authorised by the power of right interpretation unclouded by the idols which beset humanity. The authority which the sailors carry in their hearts, the belief in the superiority of European culture, knowledge, and history, and their belief in the purity of their scriptures, is directly challenged on the island of Bensalem. It is, however, replaced by a culture, knowledge, history and scripture fundamentally the same as their own, but which carries the authority of truth, whether textual, temporal, natural or scriptural. *New Atlantis* ends, appropriately enough, with an authority figure, one of the fathers of Salomon's House, explaining to the narrator exactly how his institution goes about the task of acquiring knowledge:

*GOD blesse thee, my Sonne; I will giue thee the greatest Iewell I haue: For I will impart vnto thee, for the Loue of GOD and Men, a Relation of the true State of Salomons House. Sonne, to make you know the true state of Salomons House, I will keepe this order. First, I will set forth vnto you the End of our Foundation. Secondly, the Preparations and Instruments we haue for our VWorkes. Thirdly, the seuerall Employments and Functions wherto our Fellowes are assigned. And fourthly, the Ordinances and Rites which we obserue.*⁷⁰

The Bensalemite approach to natural philosophy, as then laid down by the father, stands as a fair approximation of Bacon's own preferred approach to the transmission of wisdom, displaying as it does the manner in which knowledge has been acquired.⁷¹ Indeed, every individual example of superior technological expertise on the island of Bensalem, such as the 'gray, or whitish Pills' given to the sailors to enhance their healing, derives from the methods which the father now describes.⁷² This is not, however, the final act or demonstration of authority in *New Atlantis*. This comes on the final page, when the father of Salomon's House gives the narrator permission (though, it

⁷⁰ NA, e2^r (SEH, III, p. 156).

⁷¹ See above, pp. 192-93.

⁷² NA, b1^v (SEH, III, p. 134).

must be said, there is a suggestion that this is a command) to publish his description of the workings of Salomon's House abroad:

And when Hee had sayd this, Hee stood vp: And I, as I had beene taught, kneeled downe, and He layd his Right Hand vpon my Head, and said; G O D *Blesse thee, my Sonne; And G O D blesse this Relation, which I haue made. I giue thee leaue to Publish it, for the Good of other Nations; For wee here are in G O D S Bosome, a Land vnknowne.* And so hee left mee; Hauing assigned a Valew of about two Thousand Duckets, for a Bounty to mee and my Fellowes. For they giue great Largesses, where they come, vpon all occasions.⁷³

While it may be suggested that the sailors merely shift allegiance from one received authority, that of their shared civilisation and cultural history, to that of Bensalem, the important point to note is that at practically every point along the way the sailors have either been given conclusive proof regarding the superior state of knowledge on Bensalem, or have deduced it for themselves, basing it on the pious and charitable nature of the islanders, not to mention the simple efficiency of their medicine and the richness of their society. The governor, for example, does not simply say that Plato was wrong, but explains why he was wrong, and asserts as evidence the textual tradition and longevity of the Bensalemite state. Furthermore, authority is only ever claimed on behalf of the state or the records held by the state, not least because, each apparent authority on Bensalem remains unnamed, serving to represent the state rather than himself.⁷⁴ The governor of the House of Strangers is both state official and Christian priest, itself an interesting bipolarity, while the father of Salomon's House is a figurative representative of an institution dedicated not to individual genius and authority, but collective effort and the methodised accumulation and interpretation of data. Each figure effectively transmits his knowledge in Baconian fashion, demonstrating from where it comes, rather than merely asserting its truth.

⁷³ NA, g2^r (SEH, III, p. 166).

⁷⁴ Of the three historical, rather than biblical, figures named on Bensalem, Altabin, Solamona and Joabin, only one of them is still alive and an active participant of the narrative itself.

e. Conclusion

New Atlantis is a text for which the nature of authority is of prime importance. It begins with a demonstration of the loss of authority and agency concomitant with the loss of knowledge, figured in spatial terms, and ends not only with a gift of knowledge, but of the correct way to begin the re-assertion of man's rightful sovereignty over nature, as explicitly sought by Bacon in *Valerius terminus*, and rehearsed in the *Instauratio magna* and the *Novum organum*. What the sailors are given is a way of replacing the faulty authority of the ancients and the senses with the authority of a sure and certain knowledge, both of nature and of scripture. Further to this, the narrator is given 'leave to Publish it; for the Good of other Nations'.⁷⁵

Just as Bacon's first attempts at writing down his philosophy were greatly influenced by the problem of textual authority, so here we see a work ending with an exhortation to publish from an acknowledged and justified authority – the authority of the father of Salomon's House comes not from himself, but from the institution which has flourished over hundreds of years. That the work itself (which is itself effectively the fruit of this exhortation and authorisation to publish) had its own moment of publication compromised is a matter of more than passing importance: its editor, William Rawley, we recall, had effectively lost his own authority, which he had acquired solely from proximity to Francis Bacon, and apparently used *New Atlantis* as part of a campaign to establish his own authority.

New Atlantis, therefore, seems to be a text which deals with the re-situating of traditional modes of authority, while simultaneously suffering from the need of individuals to assert such traditional modes of authority – Rawley is effectively promoting Bacon as a 'new Ancient', and himself as his agent. In *New Atlantis*, Bacon figures, in fictional terms, what he had stated was the

⁷⁵ NA, g2^r (SEH, III, p. 166).

only possible course open to mankind, in *Redargutio philosophiarum*:

Well I know that the tablets of the mind are not like ordinary writing-tablets. On them you can write nothing till you have expunged the old; in the mind you cannot expunge the old except by writing in the new.⁷⁶

Bacon's *New Atlantis* serves as a textual battleground in which multiple layers of authority are considered and explored, not least the textual, philosophical, religious, historical, authorial, and political aspects to authority. *New Atlantis* is, in effect, a critique of early-modern attitudes to authority, and attempts to look forward to new ways of figuring authority, encapsulating concerns first articulated as early as 1592, and as late as the compiling of the *Sylva sylvarum* in the latter half of 1625 and, for all we know, right up to Bacon's death in 1626.⁷⁷ While several of Bacon's contemporaries were concerned with the problem of received authority, with issues of textual reliability and the nature of political authority, none made authority into a structural component of their work in the same way that Bacon did. From the very first to the very last, Bacon's works were not merely informed by concerns regarding the nature and influence of authority, they were shaped by them.

⁷⁶ Farrington, pp. 132, 103 (*SEH*, III, pp. 584, 558).

⁷⁷ According to Aubrey's famous account, which he says he was told by Hobbes, Bacon died from the after-effects of stuffing a chicken with snow in order to test the use of snow as a preservative (Aubrey, *Brief Lives*, p. 16), the sort of experiment which would have fitted very neatly into *SS*, not least around Expts. 82 and 83, which concern the induration of bodies, and the effects of cold, and Expt. 788, which concerns the effects of snow on human bodies, albeit frostbitten ones (see Jardine and Stewart, pp. 502-11). Similarly, in Salomon's House caves are used for 'Coagulations, Indurations, Refrigerations, and Conseruations of Bodies' (*NA*, e2^v (*SEH*, III, p. 156)).

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1. The dedicatory letter to *Sylva sylvarum* (1626/7)¹

¶

TO THE MOST HIGH
AND MIGHTY PRINCE
CHARLES,
BY THE GRACE OF GOD,
King of *Great Britaine, France, and
Ireland, Defender of the Faith, &c.*

May it please your most Excellent Maiestie ;

THE whole Body of the *Naturall Historie*, either designed, or written, by the late *Lo. Viscount S. Alban*, was dedicated to your *Maiestie*, in his Booke *De Ventis*, about foure yeeres past, when your *Maiestie* was *Prince*: So as there needed no new Dedication of this *Worke*, but only, in all humblenesse, to let your *Maiestie* know, it is yours. It is true, if that *Lo.* had liued, your *Maiestie*, ere long, had beene inuoked, to the Protection of another *Historie*;

¶

VVhereof, not *Natures Kingdome*, as in this, but these of your *Maiesties*, (during the Time and *Raigne* of *King Henry the Eighth*) had beene the Subject: VVhich since it died vnder the Designation meereely, there is nothing left, but your *Maiesties* Princely Goodnesse, graciously to accept of the Vndertakers Heart, and Intentions; who was willing to haue parted, for a while, with his Darling *Philosophie*, that hee might haue attended your Royall Commandement, in that other *Worke*. Thus much I haue beene bold, in all lowlinesse, to represent vnto your *Maiestie*, as one that was trusted with his *Lordships Writings*, euen to the last. And as this *Worke* affecteth the *Stampe* of your *Maiesties Royall Protection*, to make it more currant to the *World*; So vnder the *Protection* of this *Worke*, I presume in all humblenesse to approach your *Maiesties* presence; And to offer it vp into your *Sacred Hands*.

Your MAIESTIES most Loyall

And Deuoted Subject,

VV. RAWLEY

¹ *Sylva sylvarum*, ¶^f-¶^v; SEH, II, pp. 333-34.

2. The letter 'To The Reader' for *Sylva sylvarum* (1626/7)²

A1^r

To the Reader.

HAuing had the Honour to be continually with my *Lord*, in compiling of this *Worke*; And to be employed therein; I haue thought it not amisse, (with his Lordships good leaue and liking,) for the better satisfaction of those that shall read it, to make knowne somewhat of his Lordships Intentions, touching the Ordering, and Publishing of the same. I haue heard his Lordship often say; that is hee should haue serued the glory of his owne Name, he had been better not to haue published this *Naturall History*: For it may seeme an Indigested Heap of Particulars; And cannot haue that Lustre, which Bookes cast into Methods haue: But that he resolued to preferre the good of Men, and that which might best secure it, before any thing that might haue Relation to Himselfe. And hee knew well, that ther was no other way open, to vnloose Mens mindes, being bound; and (as it were) Maleficiate, by the Charmes of deceiuing Notions, and Theories; and therby made

A1^v

Impotent for Generation of VVorkes; But onely no wher to depart from the Sense, and cleare experience; But to keep close to it, especially in the beginning: Besides, this *Naturall History* was a Debt of his, being Designed and set downe for a third part of the *Instauration*. I haue also heard his Lordship discourse, that Men (no doubt) will thinke many of the *Experiments* conteined in this Collection, to bee Vulgar and Triuiall; Meane and Sordid; Curious and Fruitlesse: And therefore he wisheth, that they would haue perpetually before their Eyes, what is now in doing; And the Difference betweene this *Naturall History*, and others. For those *Naturall Histories*, which are Extant, being gathered for Delight and Vse, are full of pleasant Descriptions and Pictures; and affect and seeke after Admiration, Rarities, and Secrets. But contrariwise, the Scope which his Lordship intendeth, is to write such a *Naturall History*, as may be Fundamentall to the Erecting and Building of a true *Philosophy*: For the Illumination of the *Vnderstanding*; the Extracting of *Axiomes*; and the producing of many Noble *Works*, and *Effects*.

² SS, A1^r-A3^r (*SEH*, II, pp. 335-37).

For he hopeth, by this meanes, to acquit Himself of that, for which he taketh *Himselfe* in a sort bound; And that is, the Aduancement of all Learning and Sciences. For hauing in this present VVorke Collected the Materialls for the Building; And in his *Novum Organum* (of which his Lordship is yet to publish

A2^r

A Second Part,) set downe the Instruments and Directions for the VVorke; Men shall now bee wanting to themselues, if they raise not Knowledge to that perfection, whereof the Nature of Mortall man is capable. And in this behalfe, I haue heard his Lordship speak complainingly; That his Lordship (who thinketh hee deserueth to be an Architect in this building,) should be forced to be a VVork-man and a Labourer; And to digge the Clay, and burne the Brick; And more than that, (according to the hard Condition of the *Israelites* at the latter end) to gather the Strawe and Stubble, ouer all the Fields, to burn the Bricks withall. For he knoweth, that except hee doe it, nothing will be done: Men are so sett to despise the Meanes of their owne good. And as for the *Basenes* of many of the Experiments; As long as they be Gods VVorks, they are Honourable enough. And for the *Vulgarnes* of them; true *Axiomes* must be drawne from plaine Experience, and not from doubtfull; And his Lordships course is, to make VVonders Plaine, and not Plaine things VVonders; And that Experience likewise must be broken and grinded, and not whole, or as it groweth. And for *Vse*; his Lordship hath often in his Mouth, the two kindes of Experiments; *Experimenta Fructifera*, and *Experimenta Lucifera*: *Experiments of Vse*, and *Experiments of Light*; And he reporteth himself, whether he were not a strange Man, that should thinke that

A2^v

Light hath no *Vse*, because it hath no Matter. Further, his Lordship thought good also, to add vnto many of the *Experiments* themselues, some *Glosse* of the *Causes*; that in the succeeding work of *Interpreting Nature*, and *Framing Axiomes*, all things may be in more Readines. And for the *Causes* herein by Him assigned; his Lordship perswadeth Himselfe, they are farr more certaine, than those that are rendred by Others; Not for any Excellency of his owne VVitt, (as his Lordship is wont to say) but in respect of his continuall Conuersation with *Nature*, and *Experience*. He did consider likewise, that by this Addition of *Causes*, Mens mindes (which make so much hast to fine out the *Causes* of things;) would not think themselues vtterly lost in a Vast VVood

of *Experience*, but stay vpon these *Causes*, (such as they are) a little, till true *Axiomes* may be more fully discouered. I haue heard his Lordship say also, that one great Reason, why he would not put these Particulars into any exact *Method*, (though he that looketh attentiuely into them, shall finde that they haue a secret Order) was, because hee conceiued that other men would now thinke, that they could doe the like; And so goe on with a further Collection: which if the *Method* had been Exact, many would haue despaired to attaine by Imitation. As for his Lordships Loue of Order, I can referr any Man to his Lordships Latine Booke, *De Augmentis Scientiarum*;

A3^r

Which (if my Iudgement be any thing) is written in the Exactest Order, that I know any Writing to bee. I will conclude with an vsual Speech of his Lordships. That this VVorke of his *Naturall History*, is the *World*, as GOD made it, and not as Men haue made it; For that it hath nothing of Imagination.

This Epistle is the same, that should haue been prefixed to this Booke, if his Lordship had liued.

W : Rawley.

3. The letter 'To The Reader' for *New Atlantis* (1626/7)³

a2^r

To the Reader.

THis *Fable* my *Lord* deuised, to the end that He might exhibite therein, a *Modell* or *Description* of a *Colledge*, instituted for the *Interpreting* of *Nature*, and the Producing of *Great* and *Marueilous Works* for the *Benefit* of *Men*; Vnder the Name of *Salomons House*, or the *Colledge of the Sixe Dayes Works*. And euen so farre his *Lordship* hath proceeded, as to finish that Part. Certainly, the *Modell* is more Vast, and High, then can possibly be imitated in all things; Notwithstanding most Things therin are within Mens Power to effect. His *Lordship* thought also in this present *Fable*, to haue composed a *Frame* of *Lawes*, or of the *best State* or *Mould* of a *Common-wealth*; But foreseeing it would be a long *Vvorke*, his Desire of Collecting the *Naturall History* diuerted him, which He preferred many degrees before it.

This *Vvorke* of the *New Atlantis* (as

a2^v

much as concerneth the *English Edition*) his *Lordship* designed for this Place; In regard it hath so neare Affinity (in one Part of it) with the Preceding *Naturall History*.

W : Rawley.

³ SS, a2^r-a2^v (*SEH*, III, p. 127).

4. Letterpress title of *Operum moralium ... tomus* (1638)⁴

Francisici
Baconi
Baronis de
Verulamo, Vice-Comitis
Sancti Albani, Operum
Moralium et Civilium

Tomus.

Qui continet

Historiam Regni Henrici Septimi, regis Angliæ.
Sermonis Fideles, sive Interiora Rerum.
Tractatum de Sapientiâ Veterum.
Dialogum de Bello Sacro.
Et Novam Atlantidem.

Ab ipso Honoratissimo Auctore, præterquam
in paucis, Latinitate donatus.
Curâ & Fide *Guilielmi Rawley*, Sacræ Theologiæ Doctoris, olim
Dominationi suæ, nunc Serenissimæ Majestati Regiæ, à Sacris.

In hoc volumine, iterum excusi, includuntur

Tractatis de Augmentis Scientiarum.
Historia Ventorum.
Historia Vitæ & Mortis.

⁴ *OMT*, letterpress title.

5. The general preface to *Operum moralium ... tomus* (1638)⁵

Lectori S.

EA quæ Honoratissimus Dominus, mihi olim in Mandatis dedit, Lectori ut exponerem, hæc sunt. Tomus primus Operum suorum antè editus est; Libri scilicet De Augmentis Scientiarum: In quibus etiam Partitiones Scientiarum tradidit, quas in primam Instaurationis partem constituit, Ordine deinceps sequi debuerat Novum Organum; atque inde cætera. Verùm cum nonnulla in Politicis & Moralibus habuisset, neutiquam sanè digna quæ perirent, visum fuit Dominationi suæ eadem interferere, & ex illis Tomum aliquem conficere. Tomus iste, historiam Regni Henrici Septimi, Regis Angliæ, complectitur; Quam primò, Linguâ vernaculâ edidet, postea autem ab Exteris audiit expeti. Accedunt, quas priùs Deliberationes Civiles & Morales inscripserat, Quas etiam in Linguas plurimas Modernas translatas esse novit; sed eas postea, & Numero, & Pondere, auxit; In tantum, ut veluti Opus Novum videri possint; Quas mutato Titulo, Sermones Fideles, sive interiora Rerum, inscribi placuit. Addi etiam voluit, Tractatum De Sapientiâ Veterum ante Annos complures Latinè editum, & intra præsidia hujus Tomi recipi. Postremò duo Fragmenta adjici mandavit; Dialogum de Bello Sacro; & Novam Atlantidem:

To the reader

These are the things which the most honourable Master gave to me once in his orders, and in what manner I was to set them before the reader. The first book of his works is already brought forth; Of the book of the Advancement of Learning you already know; In which besides the divisions of knowledge he proposed, he put down in the first part of the Instauration. To arrange in order he had owed the Novum Organum; from there he had several things in the counsels civil and moral, which were not worthy to perish, and from those to make ready the book. He folded together that well-known book, the History of King Henry VII, King of the Angles; publishing it first in the common tongue, thereafter, however, he heard it was desired from abroad, which they undertook before the Counsels Civil and Moral was written, and he also commissioned new translations into many modern tongues. But afterwards he increased them both in number and weight, in such a degree that they might be seen as a new work. Which with the titles changed, as the Faithful Sermons, or the interior of the things, are acceptable to be published. He also wished a working of the Wisdom of the Ancients, brought forth in Latin several years before, to be added before this work. And finally he ordered that two fragments

⁵ OMT, A3^r-A3^v.

Fragmentorum autem Genera tria esse
dixit. Primum eorum, quæ Libris integris
amissis, servata sunt; ut Somnium
Scipionis. Secundum eorum, quæ Auctor
ipse, vel Morte præreptus, vel aliis
Negotiis distractus, perficere non potuit; ut
Platonis Atlantis. Tertium eorum, quæ
Auctor itidem, ex composito & volens
deseruit. Ex quo genere sunt ista duo quæ
diximus. Neque tamen ea deseruit
Dominatio sua, fastidio Argumenti, sed
quod alia multa habuerat, quæ meritò
antecedere deberent. Hæc habui, quæ de
hoc præsentis Tomo monerem. De stilo
Operis hoc unicum adjiciam; Eum non
nimis tersum aut politum invenies;
Siquidem Honoratissimo Auctori id solùm
animo insederat; Res sectari, non verba. Si
quis autem vitio mihi vertat, Opus hoc, diu
ab Exteris expetitur, tam serò tandem
prodire; Sciat, Votis meis, ante hoc
tempus, in eodem evulgando, commodè
satisfieri non potuisse. Vale.

Guil. Rawley

be added, the Dialogue of the Holy War, and the New Atlantis: but he said that these were the three kinds of fragments. The first of them, which were preserved in whole books, which have been lost; as the Somnium Scipionis. The second of them which the author himself could not complete either because he was taken by death or he was distracted by other affairs; as the Atlantis of Plato. The third of them, which the author likewise abandoned voluntarily. And of this type are those two which we mentioned earlier, but he didn't abandon those by weariness or aversion to his subject, but that he had many other things that he had to put first. These things I was advised of the present volume. I will add one thing of the style of this work; which you may discover not exceedingly neat or polished; At any rate, the leaf had settled in the mind of the most honourable author: I was to pursue the thing, not the words. I am finally producing this work which had been long sought after by people abroad. By my prayers it could not have been properly finished before this time. ⁶

⁶ This translation owes much to the efforts of Dr. Michael Edwards and Professor Graham Rees.

6. The letter 'To The Reader' for *New Atlantis*, from *Operum moralium ... tomus* (1638)⁷

Lectori S.

To the reader

Fabulam hanc *Novæ Atlantidis* eo animo confinxit *Honoratissimus Auctor*, ut in eâ *Modulum* quendam & *Descriptionem Collegii*, ad *Interpretationem Naturæ*, & *Operum Magnitudinem ac Potentiam*, instituti, exhiberet: Idque nomine *Domûs Salomonis*, sive *Collegii Operum sex Dierum*, insigniret. Atque eò usque *Sermonis Filum* produxit, donec hoc conficeret. *Modulus*, (fateor,) pro more *Poeticæ*, grandior & celsior est, quàm qui, in omnibus, *Imitationi* pateat; Veruntamen, in plerisque, *Industria Hominum* sibi non diffidat. In animo etiam habuit, hac ipsâ in *Fabula*, *Librum de Legibus*, sive de *optimo Civitatis* statu, exarasse; Sed cùm *Opus* hoc prolixum futurum prævideret; Nec-non *Historiæ Naturalis* colligendæ, aliarumque *Instaurationis Partium* contexendarum, (quas longè potiores duxit,) desiderio abriperetur; Hîc pedem fixit. Hæc habui in *Mandatis*; *Lege*, & *Vale*.

This fable of the New Atlantis the most honourable author fashioned, so that he might include a measure and description of a brotherhood for the interpretation of nature, and of great works and power, and he distinguished it with the name of Salomon's House, or the college of the Six Days' Work. And he also brought forth the thread of his discourse until it was at length made ready. The model (I confess) is, in the manner of the poets, grander and more lofty, than that which lies open for imitation in all things; notwithstanding in the most part within the industry of mankind, if he does not despair. Furthermore, he had it mind to set down in this thing a book concerning the laws, of the best condition of the state; yet he foresaw this work had a long future; and in order to gather together the Natural History, and for the putting together of other parts of the Instauration. (which he considered by far preferable); here he fixed his foot. I had these things on his authority. Read, and farewell.⁸

Guil. Rawley

⁷ *OMT*, 2Hh2r.

⁸ This translation owes much to the efforts of Dr. Michael Edwards and Professor Graham Rees.

7. Francis Bacon to James I, Oct. 20, 1620 – NLS. Adv. MS. 33.1.7 vol 22, item 11

· yt may pleas your most Exc^t Ma^{tie}

It being one thing to speak or write, (specially to a king,) in
publike, another thing in priuate; although I haue dedicated
a woorke, or rather a portion of a woorke, (which at last
I haue ouercomen) to your Ma. by a publike Epistle,
5 where I speak to yow in the hearing of others: yet I
thought fitt also, humbly to seek accesse for the same,
not so much to your person, as to your iudgment, by
these priuate lynes.

The woorke, in what Colors soeuer it may be sett foorth,
10 is no more but a new Logique: teaching to inuent and
judg by Induction (as fynding Syllogisme incompetent
for Sciences of Nature) and thearby to make Philosophy
and Sciences both more trew, and more Actiue.

This tending to inlarge the bowndes of Reason, and to endowe
15 Mans Estate with new valew; was no unproper Oblation
to your Ma^{tie} who of men is the greatest Master of
Reason, and [^]Author of[^] Beneficence.⁹

Thear be two of your Cownsell, and one other Bisshop
of this Land, that knowe I haue been abowt, some
20 such woorke, neere thyrty years; So as I haue made no
hast. And the reason why I haue published it now,
(specially being unparfite) is (to speak plainely)
bycause I number my daies, and would haue it saued.

[page break]

Thear is another reason of my so doing, which is to trye, whither
25 I can gett help in one intended part of this woorke; namely

⁹ 'Author of' is here placed above the word 'Beneficence.'

the Compiling of ^A Naturall and Experimentall History,¹⁰
which must be the Mayne foundation, of a trew and
Actiue Philosophye.

30 This woork is but a new body of Claye, whearunto your Ma.
by your Cowntenance and protection, may breath life; And
to tell your Ma. trewly what I think; I accownt your
fauor may be to this woork, as much as an hundreth
years tyme. for I am perswaded, the woork will
35 gayne upon mens myndes in Ages; but your gracing
it may make it take hold more swiftly; which I
would be gladd of; it being a woork meant not for prayse
or glory, but for practize and the good of Men. One
thing I Confesse I am ambitious of; with hope: which
40 is that after these beginnings, and the wheele once sett
on going; men shall suck, more trewth out of Christian
pennes; then hitherto they haue doon owt of Heathen;
I say with hope: bicause I hear my former book of
Aduancement of Learning is well tasted in the Uni <
uersities hear, and the English Colleges abroad: And
45 this is the same Argument sunken deeper. And so
I euer humbly rest in praiers and all other dewties,

your Ma^{ties} most bownden and
deuoted Seruant

yorke howse this

12th of Oct. 1620

fr. verulam Cano

¹⁰ 'A' is here placed above the space between 'of' and 'Naturall.'

8. Bacon to James, Oct 12, 1620, draft with annotations – LPL Gibson MS
936, art 129

It may please your most excellent Majestie

It being one thing, to speak or write, specially to a king
in publique, another in private although I have
dedicated a worke or rather a porcion of a worke
wh^{ic}h at last, I have overcome to your Majestie by a
5 publique Epistle, where I speak to you in the
hearing of others, yet, I thought fitt also,
humbly to seek accesse for the same, not so
much to your person, as to your judgment by these
private lines.

10 The worke in whatt colors soever it may be sett
forthe, is no more but a new logick, teaching
to invent and judge by induction, (as finding
silogism incompetent for Sciences of Nature)
and thereby to make Philosophie & Sciences both
15 more true, and more Active;

This tending to enlarge the bounds of Reason
and to indowe mans Estate, w^{it}h newe value
was no improper oblacion to your Majestie: who of
men ~~and~~ ^{is} the greatest Master of Reason, and
20 auctor of beneficence.

There be :2: of your Councill, and ^{one} other Bishope
of

[Page break]

of this land, that knowe I have bin about some
such work, nere 30: yeares. So as I have
[s] made no hast. / And the reason why I
25 have published it now specially being unper=
fitt is to speak ~~truth~~ plainely, because I
number my daies, and would have it saved.
There is another reason of my so doing, wh^{ic}h is
to trie whether I can gett help, in one
30 intended part of this work, Namely the

compiling of a Naturall and Experimentall
History, which must be the main foundation of
a true and Active Philosophie;

This worke, is but a newe body of clay, wherein
35 your Majestie ^{^by^} ~~bring~~ your Countenance and protection
may breath life; And to tell your Majestie truly what
I thinke, I accompt your favour, may be to this
worke, as much as a hundred yeares time, for
I am persuaded, the worke will gaine upon mens
40 minds in ages but your gracing it may make it
take hold more swiftly, which I would be very
gladd

[page break]

glad of, it being a work ment, not for praise or
glory, but for ~~¶~~ practise and ^{^the^} good ^{^th^} of men. One
thing I confesse, I am ambitious of with hope, which

45 is that after these beginnings [^] and the wheele once sett on going [^] men shall suck more
Truth¹¹ out of Christian penns, then hitherto they
have done out of Heathen; And so I ever ^{^humbly^}

I say with hope rest in prayers and all other ^{^[humble]^} duties.

because I hear
my former booke
of Advancement
of learnyng is
well tasted in
your universities hear
and the English
colledges abroad
and this is the
same argument
sunke deeper

Your Majesties most bounden and
Devoted servant

[unsigned]

¹¹ The 'T' here is an over-written 't'

9. Table of reliability formulae in BL Add. MS 38693

Fol.	Text	Expt.	SEH	From MS to Print
30 ^r	It is affirmed constantly by ^many, as an usuall Experiment^ some , that [...]	33	p. 352	verbatim
30 ^v	as for the moving to a point or place, ^which was the opinion of the ancients^ it is a meere vanity	33	p. 352	verbatim
30 ^v	It is generally received	892	p. 636	adjusted
31 ^r	Aristotle it is reported ^eth^ of auncient time , that in part of Media	361	p. 461	adjusted
31 ^r	Aristotle it is reported ^eth^ there are some blinde fires	361	p. 461	adjusted
31 ^r	Aristotle reporteth of a kind of iron in Cyprus	797	p. 598	adjusted
31 ^r	It is reported, that there is	849	p. 620	adjusted
31 ^v	It is reported	362	p. 461	verbatim
32 ^r	It was reported by a sober ^man^ gentleman , that	25	p. 347	verbatim
32 ^r	It is ^a^ reported of some credit	364	p. 462	adjusted
32 ^r	It is reported, that batts	[899]	p. 638	omitted
32 ^r	Aristotle reports	none	N/A	N/A
32 ^v	In ^some^ mines in Germany, as is reported,	571	p. 517	verbatim
51 ^r	It hath been sett downe by one of the ancients,	477	p. 492	verbatim
51 ^v	They report that	478	p. 493	verbatim
52 ^r	There are many ancient and received traditions and observations touching the sympathy, and antipathy, of plants.	493	p. 496	Omitted
52 ^v	it is sett downe by diverse of the ancients,	481	p. 494	verbatim

10. A selection of reliability formulae from *Sylva sylvarum* (1626/7)

Expt.	Formulation
1	[...] And CÆSAR knew this well,
2	I remember to have Read, that Triall hath been made [...] But the same Man saith,
5	<i>Aristotle</i> giveth the Cause, vainely,
6	[...] So the <i>Apothecaries</i>
8	[...] As was said of <i>Alexander</i> ;
24	[...] And this <i>Democritus</i> called <i>Motus Plage</i> .
25	The Reiection which, I continually vse, of <i>Experiments</i> , (though it appeareth not) is infinit; But yet if an <i>Experiment</i> be probable in the Worke, and of great Vse, I receyve it, but deliuer it as doubtfull. [...] It was reported by a Sober Man,
26	The <i>French</i> , [...] doe report,
27	It seemeth that ther be these waies [...] which the <i>Ancients</i> thought (very probably)
28	It is reported by some of the <i>Ancients</i> [...] This is certaine, [...] Which obseruation well weighed,
29	[...] The like is reported by some of the <i>Ancients</i> , of the <i>Stalks of Lillies</i> .
31	[...] as the <i>Stoicks</i> held;
32	[...] And therefore the <i>Peripatetickes</i> (howsoever their opinion of an <i>Element</i> of <i>Fire</i> above the <i>Aire</i> is iustly exploded;) in that Point they acquit themselues well:
33	It is affirmed constantly by many, as an vsuall Experiment [...] (which was the Opinion of the <i>Ancients</i>) it is a mere Vanity.
34	It is strange how the <i>Ancients</i> took up <i>Experiments</i> upon credit, and yet did build great Matters vpon them.
35	It is reported of credit,
55	[...] To this adde that Precept of <i>Aristotle</i> [...] chiefly <i>Hippocrates</i> Rule is to bee followed;
57	[...] (as it is commonly beleued)
58	[...] There is an Excellent Obseruation of <i>Aristotle</i> ; [...] And it is most certaine, [...] And this we see notably proued
60	[...] I have tried (my selfe)
64	[...] <i>Hippocrates</i> Aphorism, In <i>Morbis minus</i> , is a good profound <i>Aphorisme</i> . [...] (no doubt)

65	<i>Physitians</i> do wisely prescribe, [...] For certaine it is,
68	It is found by Experience,
69	[...] (as hath beene noted by some) [...] It was the Tenet of <i>Parminedes</i> . It was the opinion of the <i>Author</i> of the discourse in <i>Plutarch</i> (for I take it that book was not <i>Plutarches</i> owne) [...] it was the opinion of <i>Telesius</i> ,
71	[...] For it is well to be noted,
76	It is reported by some of the <i>Ancients</i> ,
77	It is reported by one of the <i>Ancients</i> ,
78	It is reported of very good credit,
79	It is Reported also credibly,
80	It is especially to be noted,
82	It is very probable (as hath beene touched)
88	[...] which <i>Aristotle</i> hath well noted; [...] This <i>Experiment</i> wee made; And it sorted thus.
93	We have spoken before,
94	It is a work of Prouidence,
95	It is an Inveterate and received Opinion, [...] It is likewise Receiued,
96	It is receiued and confirmed by daily Experience,
98	[...] As <i>Democritus</i> said well,
99	It is certaine,
100	There is nothing more Certaine in Nature,
104	It is to be noted
114	It hath been anciently held, and obserued [...] But yet it hath been noted,
121	I heard it affirmed by a Man, that was a great Dealer in Secrets, but he was but vaine [...] But this much (no doubt) is true; [...] (as they talke generally
127	It hath beene anciently reported, and is still receiued, [...] And it is believed by some,
140	There is in <i>St Iames Fields</i> ,
151	I remember in <i>Trinity Colledge</i> in <i>Cambridge</i> ,
175	[...] And is conceiued, by some of the <i>Ancients</i> , not to come forth [...] But (it may be) it is neither;
178	It is euident ,
179	It is also euident,
186	But it will best (as it is said) appeare, [...] (as we said) [...] Surely, it hath been obserued by one of the <i>Ancients</i> ,
192	It is euident,
208	It is certaine,
213	It is certaine,

216	It is worthy the Enquiry,
222	[...] I my selfe haue tried,
230	It hath beene tried,
244	It is certaine, (as hath beene formerly touched,)
251	[...] there was an Old <i>Parisian</i> ,
267	[...] If it be true (which is anciently reported)
272	[...] For I haue heard of a Person who is very credible [...] Which (no doubt,)
276	[...] It is an old Tradition,
282	It seemeth, both in <i>Eare</i> and <i>Eye</i> ,
293	It is certaine [...] (as hath beene said;)
305	It is in common Practice,
351	The Opinion of some of the <i>Ancients</i> , [...] seemeth to Mee Probable;
352	The <i>Experiment</i> [...] we have diligently driuen and pursued [...] The <i>Triall</i> sorted thus.
353	[...] And therefore the Ancient <i>Observation</i> is true [...] (as they say)...
354	[...] There is also a received tale [...] Neither is it without cause, that Xenophon, [...] (hee saith) [...] (no doubt) [...] this hath been tried
On Paracelsus	[...] (in Vulgar Opinion) [...] (though the Opinion be vaine [...])
360	[...] They have a foolish Tradition in <i>Magicke</i> [...] (according to their vaine Dreams of <i>Sympathies</i>)
361	It is reported by one of the <i>Ancients</i> , [...] The Reason (no doubt) is,
362	It is reported,
364	It is a Report of some good credit,
368	Note, that in the <i>Experiment</i> of <i>Wax</i> aforesaid
371	[...] Good <i>Housewives</i> , to make their <i>Candles</i> burne the longer, use to lay them (one by one) in <i>Bran</i> , or <i>Flower</i> ,
380	There hath beene a Tradition [...] But vpon <i>Triall</i> of Six Weekes <i>Buriall</i> , there followed no Effect.
383	The General Opinion is [...] In <i>England</i> it is found not true;
395	Fifthly, The <i>Housewiues</i> doe finde a Difference in <i>Waters</i> , for the <i>Bearing</i> , or <i>Not Bearing</i> , of <i>Soape</i> :
396	[...] the <i>Rain-Water</i> is, by the <i>Physicians</i> , esteemed the Finest, and the best;
400	[...] It is reported by one of the <i>Ancients</i> , of credit, [...] And it is a Report also of Credit [...] And certaine it is, [...] In so much as it is Extant in Story,
413	[...] For the <i>Ancients</i> esteemed much of <i>Rosa Sera</i> .
415	[...] And it is reported also,
421	Men haue entertained a conceit that sheweth prettily; [...] But these are but

	Imaginations, and vntrue.
422	It is an assured Experience,
425	It is reported,
428	It hath beene practised in <i>Trees</i> ,
429	It hath beene practised in <i>Trees</i> ,
430	It is vsually practised,
431	It hath also beene practised (by some) [...] There hath beene practised also
440	It hath beene obserued,
442	[...] So they haue lately made a Triall,
443	It is prescribed by some of the <i>Ancients</i> , [...] But this seemeth to haue no greate Probabilitie.
444	It is reported, [...] The <i>Cause</i> is like to be, (if the <i>Experiment</i> be true,)
447	It is reported,
451	It hath beene generally receiued [...] But our <i>Experiment</i> of <i>Watering Wheat</i> with <i>Warne Water</i> (as hath beene said) succeeded not;
453	It hath been receiued, [...] Yet it is reported, that in the <i>Low-Countries</i> [...] I haue heard that it hath beene tryed vpon an <i>Elme</i> , and succeeded.
454	It is manifest by Experience,
456	It is reported,
457	It is reported
458	It is reported by one of the <i>Ancients</i> ,
460	<i>Coleworts</i> are reported by one of the <i>Ancients</i> ,
461	It is reported, [...] They speak also,
462	It is reported [...] Nay it is further reported [...] The ancient Tradition of the <i>Vine</i> is far more strange: [...] (as is said)
465	The <i>Ancients</i>
475	It is an <i>Experiment</i> of great pleasure, [...] It hath beene tryed (for certaine)
477	It hath been set downe by one of the <i>Ancients</i> , [...] It is reported also, [...] And it is prescribed also,
478	They report,
Prior to 478	There are many Ancient and Receiued Traditions [...] But these are Idle and Ignorant Conceits;
480	[...] (though that were anciently receiued) [...] yet (I doubt)
481	[...] there (as hath beene said) [...] as it is set down by diuers of the <i>Ancients</i> [...] (we conceiue) [...] So they have set downe likewise,
483	The Observation, if it holdeth, (as it is very probable,) [...] (as the <i>Ancients</i> have noted,)
493	Some of the <i>Ancients</i> , and likewise diuers of the <i>Moderne Writers</i> , that have

	laboured in <i>Natural Magicke</i> , [...] And they make it a Peece of the wonder,
494	[...] appeareth well in the <i>Experiment of Iuglers</i> .
496	It is certaine, [...] may be doubted.
499	[...] <i>Galen</i> also speaketh [...] Thus far I am of Opinion:
500	But lest our Incredulity may preiudice any profitable Operations in this kind, (especially since so Many of the Ancients have set them down,) [...] VVhich I have little Opinion of, [...] (I doubt,) [...] But I still doubt, [...] (as I have said before,) [...] I iudge therefore
501	It is a <i>Curiosity</i> ,
502	It is a <i>Curiosity</i> [...] Some doubt may be conceiued [...] But there is ordinary experience
503	It is a <i>Curiosity</i> ,
505	It is an ordinary <i>Curiosity</i> ,
506	Amongst <i>Curiosities</i> , [...] For this is certaine,
512	[...] For it hath beene noted,
513	It is a <i>Curiosity</i> also
515	It is reported also,
516	It is reported,
517	It is reported,
518	The Rule is certaine,
521	It is strange which is reported,
522	There is an old Tradition,
523	It is not impossible, and I haue heard it verified,
524	There is an Opinion in the Countrey,
525	It is certaine,
526	[...] This I conceiue also,
528	[...] (as I conceiue) [...] (for that opinion we have formerly rejected;)
532	It is certaine,
534	It is reported,
535	[...] (as is reported,)
547	It is reported,
548	It is reported,
549	It is reported,
550	It hath beene reported, though it be scarce credible,
556	[...] They have an idle Tradition, [...] But this is a Fable:
563	It is certaine,
565	It is Common <i>Experience</i> ,
566	It is reported,

568	It is reported by some of the <i>Ancients</i> ,
569	The <i>Ancients</i> haue noted,
570	The <i>Ancients</i> haue affirmed, [...] And besides it is doubtfull, [...] It hath likewise beene found,
571	[...] as is reported
572	Whereof the <i>Cause</i> is yeilded, by some of the <i>Ancients</i> , [...] And it is affirmed
573	It is certaine,
576	[...] And I doubt not,
577	[...] (as it should seeme,)
578	It is to be noted, that (commonly) [...] and it seemeth to be a Worke of Prouidence,
594	[...] The <i>Cause</i> is (as hath beene partly touched,)
600	[...] But the <i>Fen-Men</i> hold,
609	[...] There is a Fabulous Narration [...] But I suppose that the <i>Figure</i> maketh the <i>Fable</i> ;
611	It is reported by one of the <i>Ancients</i> ,
612	[...] For <i>Sugar</i> , to the <i>Ancients</i> it was scarce known [...] But I haue heard from one, that was industrious in Husbandry [...] It is reported also by some of the <i>Ancients</i> ,
613	The <i>Ancients</i> report of a <i>Tree</i> ,
618	[...] is reported by the <i>Ancients</i> ,
621	It is reported by one of the <i>Ancients</i> ,
623	It is reported,
627	[...] But it is reported by some,
628	It is reported, that
629	It is reported by some of the <i>Ancients</i> ,
634	It hath beene noted, [...] (no doubt)
638	[...] it is noted,
640	<i>Mushrooms</i> are reported to grow,
642	It is reported,
645	[...] And they report,
646	It is reported by one of the <i>Ancients</i> , [...] But I remember also I haue seene,
652	It is reported,
653	[...] And some of the <i>Ancients</i> doe report,
662	It hath been observed, by some of the <i>Ancients</i> , [...] It hath beene observed also [...] Howsoever some other of the <i>Ancients</i> have commended <i>Warme Winters</i> .
666	It is strange, which is observed by some of the <i>ancients</i> [...] And they note,

667	It is commended by the <i>Ancients</i> , [...] And it was generally received of old, [...] (as it seemeth)
668	[...] The <i>Ancients</i> had it, and that three ways:
670	[...] haue beene obserued [...] It hath beene observed,
671	It hath beene noted,
672	It hath beene obserued,
673	It hath beene obserued,
675	[...] As the Old Relation was of <i>Thales</i> [...] is believed
Prior to 677	[...] which, wee are not ignorant, but that some, both of the <i>Ancients</i> , and <i>Moderne Writers</i> , haue also laboured; But their <i>Causes</i> , and <i>Axiomes</i> , are so full of Imagination, and so infected with the old Received <i>Theories</i> , as they are meere <i>Inquinations</i> of <i>Experience</i> , and Concoct it not.
677	It hath been obserued, by some of the <i>Ancients</i> ,
679	It is reported by one of the <i>Ancients</i> ,
685	It hath beene noted by the <i>Ancients</i> ,
686	It hath beene obserued by the <i>Ancients</i> ,
689	It hath beene noted,
691	It was observed in the <i>Great Plague</i> [...] It is reported likewise,
692	[...] (which of late are growne into some Credite,) [...] (which some of the <i>Paracelsians</i> say
693	It hath beene observed by <i>Ancients</i> ,
695	It hath beene alwayes obserued,
696	[...] It is obserued [...] And it hath beene lately obserued by <i>Physitians</i> [...] it is received [...] And it is truly obserued [...] (as is observed by some of the ancients) [...] It hath beene obserued by the <i>Ancients</i> , [...] It is affirmed both by <i>Ancient</i> and <i>Moderne Obseruation</i> ,
697	The <i>Insecta</i> have been noted by the <i>Ancients</i> , to feed little: But
698	[...] And whereas some of the <i>Ancients</i> haue said [...] it is negligently obserued [...] It is said by some of the <i>Ancients</i> ,
723	It hath beene obserued by the <i>Ancients</i> , and is yet beleued [...] and we haue a merry Saying,
732	The <i>Casting</i> of the <i>Skin</i> is by the <i>Ancients</i> compared, to the <i>Breaking</i> of the <i>Secundine</i> , or <i>Caul</i> ; but not rightly:
736	It hath beene noted, [...] And the same <i>Prognosticke</i> , (as hath beene said before,)
737	It is an Observation amongst <i>Country-People</i> ,
743	It is reported of Credit, [...] Which if it be true, [...] For (that which is more strange,) it is credibly affirmed,

759	[...] <i>Elephants</i> are said to goe two Yeares; For the Received <i>Tradition</i> of ten Yeares is <i>Fabulous</i> .
762	[...] They have an old Tale in <i>Oxford</i> , that <i>Friar Bacon</i> walked between two <i>Steeple</i> s:
771	[...] I remember <i>Livy</i> doth relate, [...] But I finde in <i>Plutarch</i> , and Others,
774	It is reported,
776	It is, at this Day, in vse, in <i>Gaza</i> , [...] And it is said, there are some <i>Roomes</i>
779	It is reported, [...] The Thing is very strange, if it be true:
783	It is conceiued by some, (not improbably,) [...] It is reported also,
785	It hath beene noted by the <i>Ancients</i> , [...] And in Moderne Obseruation,
786	It hath beene noted by the <i>Ancients</i> ,
787	It hath beene noted by the <i>Ancients</i> ,
788	As the <i>Monke</i> proued out of the <i>Text</i> ;
789	[...] This was tried once, or twice, but I know not, whether there were any <i>Error</i> in the <i>Triall</i> .
791	[...] <i>Galilæus</i> noteth it well; [...] VVhich <i>Theory</i> , though it be false, yet the first <i>Experiment</i> is true.
794	There is, in the city of <i>Ticinum</i> ,
797	It is reported by some of the <i>Ancients</i> , [...] This is certaine, and knowne of Old; [...] As hath beene seene
800	[...] (as it was well said, by one of the <i>Ancients</i> , of <i>Earthy</i> and <i>Watry Substances</i> ;) [...] For as for the Pretty Assertion, that <i>Matter</i> is like a <i>Common Strumpet</i> that desireth all <i>Formes</i> , it is but a <i>Wandering Notion</i> .
819	[...] And therefore they say in <i>Wales</i> , when certaine <i>Hills</i> have their <i>Night-Caps</i> on, they meane <i>Mischief</i> . [...] (as they call it,)
832	It hath been obserued by the <i>Ancients</i> , [...] Certaine it is,
834	It is certaine,
836	[...] As for the Receiued Opinion,
837	[...] is fitly called, (by some of the <i>Ancients</i> ;))
839	[...] (as the <i>Ancients</i> vsed;)
848	[...] Insomuch as we haue lost those <i>Observations</i> , and <i>Preparations</i> of <i>Honey</i> which the <i>Ancients</i> had, [...] Insomuch as one of the <i>Ancients</i> relateth [...] Againe, in Ancient time, [...] They have also, at this day, in <i>Russia</i> ,
849	It is reported by the <i>Ancients</i> , [...] But I am doubtfull,
854	We haue partly touched before [...] It is reported, [...] For it hath been obserued, [...] We adde also,
855	[...] (as is affirmed,)
856	[...] <i> Egges</i> , as is reported by some, [...] It is reported by the <i>Ancients</i> ,

859	[...] And <i>Ficinus</i> fondly (as I conceiue) [...] It is said that <i>Witches</i>
860	There is an Ancient Receiued <i>Tradition</i> of the <i>Salamander</i> [...] It must have two Things, if it be true, to this <i>Operation</i> :
862	It hath beene obserued by the <i>Ancients</i> ,
864	It hath beene obserued by the <i>Ancients</i> ,
875	Shell-fish have beene, by some of the <i>Ancients</i> , compared and sorted with <i>Insecta</i> ; But I see no reason why they should;
881	It hath beene obserued by the <i>Ancients</i> ,
882	It hath beene set downe before [...] But it is further noted, by some of the <i>Ancients</i> ,
883	It hath beene obserued by the <i>Ancients</i> ,
886	It is reported, that amongst the <i>Leucadians</i> , in <i>Ancient</i> time,
887	There is, in some places, (namely in <i>Cephalonia</i>),
889	It is a Common <i>Experiment</i> , but the <i>Cause</i> is mistaken. [...] insomuch as I haue seen the <i>Glasse</i> , [...] But of this we will speak more,
892	For the <i>Increase</i> in <i>Moisture</i> , the Opinion Receiued is;
899	[...] It is noted by some of the <i>Ancients</i> ,
Intro to Century X	The <i>Philosophie</i> of <i>Pythagoras</i> , (which was full of <i>Superstition</i>) did first plant a <i>Monstrous Imagination</i> ; Which afterwards was, by the <i>Schoole</i> of <i>Plato</i> , and Others, Warred, and Nourished. It was, that the <i>World</i> was <i>One</i> , <i>Entire</i> , <i>Perfect</i> , <i>Living Creature</i> ; insomuch as <i>Appolonius</i> of <i>Tyana</i> , a <i>Pythagorean Prophet</i> ,
901	<i>Men</i> are to be Admonished that they doe not with-draw Credit, from the <i>Operations</i> of <i>Transmission</i> of <i>Spirits</i> , and <i>Force</i> of <i>Imagination</i> , because the <i>Effects</i> faile sometimes [...] The <i>Poet</i> speaketh not of <i>Sheepe</i> , but of <i>Lambs</i> .
902	<i>Men</i> are to be Admonished, on the other side,
903	<i>Men</i> are to be Admonished, [...] And therefore, as diuers wise <i>Iudges</i> have prescribed, and cautioned, [...] It is worthy the observing, and both in <i>Ancient</i> , and <i>Late times</i> .
910	[...] VVhich the <i>Writers</i> of <i>Natural Magicke</i> haue brought into an <i>Art</i> , or <i>Precept</i> :
911	[...] And not to receiue vpon Credit, or reiect vpon <i>Improbabilities</i> .
912	[...] And they report,
914	[...] VVhereof we haue had, in our time, <i>Experience</i> , twice or thrice;
916	[...] hath beene reported
923	It is an <i>Ancient Tradition</i> [...] Nay, they haue an <i>Opinion</i> , which seemeth <i>Fabulous</i> ;
924	The <i>Tradition</i> is no lesse <i>Ancient</i> ,

928	The <i>Following</i> of the <i>Plough</i> , hath been approued, for <i>Refreshing</i> the <i>Spirits</i> , [...] I knew a great <i>Man</i> , that liued Long,
933	There be some <i>Perfumes</i> , prescribed by the <i>Writers</i> of <i>Natural Magicke</i> , [...] (as they say,)
934	It is certaine, [...] It is related, that <i>Democritus</i> [...] I knew a <i>Gentleman</i> , that would fast (sometimes)
940	There was an <i>Ægyptian South-Sayer</i> , [...] Howsoeuer the Conceit of a <i>Predominant</i> or <i>Mastering Spirit</i> , of one <i>Man</i> ouer Another, is Ancient, and Received still, even in <i>Vulgar Opinion</i> .
942	It hath beene obserued,
944	The <i>Affections</i> (no doubt) [...] As for <i>Loue</i> , the <i>Platonists</i> , (some of them,) go so farre, as to hold [...] It hath beene noted also,
945	[...] The inquisition of this subject in our way (which is by induction) is wonderful hard: for the things that are reported are full of fables.
954	It is certaine,
960	[...] The <i>Vertues</i> of <i>Pretious Stones</i> , worne, haue been anciently and generally Receiued, [...] So much is true;
962	For <i>Corroboration</i> and <i>Confortation</i> [...] I commend
963	For <i>Opening</i> , I Commend
966	It hath been long receiued, and confirmed by diuers <i>Trialls</i> ; [...] I Iudge
968	[...] For as one saith prettily; [...] Surely, it is an Excellent <i>Axiome</i> ,
969	The <i>Writers</i> of <i>Naturall Magicke</i> commend [...] I doubt it is but a <i>Conceit</i> ;
970	It hath been Anciently Receiued, (For <i>Pericles</i> the <i>Athenian</i> vsed it,)
971	<i>Vide</i> the <i>Experiments</i> 95. 96. and 97.
973	We see [...] It is reported [...] It may be,
975	The <i>Ointment</i> , that <i>Witches</i> vse, is reported to be made [...] But I suppose
976	It is reported by some,
977	It hath been obserued, [...] and I make the same Iudgement of <i>Tobacco</i> ,
978	The <i>Writers</i> of <i>Naturall Magicke</i> report, [...] It is true, that [...] Yet it is said
982	It is reported, that
983	It hath beene anciently receiued,
986	[...] There be many Reports in <i>Historie</i> , [...] I my Selfe remember, [...] Which I told to diuers <i>English gentlemen</i> [...] There is an Opinion abroad, (whether Idle or no I cannot say,)
987	[...] I remember <i>Philippus Commineus</i> (a grave Writer,) reporteth;
993	It is an Ancient <i>Tradition</i> ,
994	The <i>Writers</i> of <i>Naturall Magicke</i> , doe attribute much [...] So much may be true;

997	[...] is a Common <i>Experiment</i> : [...] The <i>English Embassadors Lady</i> , who was a <i>Woman</i> farre from <i>Superstition</i> , told me, one day [...] They say the like is done,
998	It is constantly Receiued, and Auouched, [...] In this <i>Experiment</i> , vpon the Relation of <i>Men of Credit</i> , (though my selfe, as yet, am not fully inclined to beleue it,)

11. The text of *New Atlantis*, as published with *Sylva sylvarum* (1626/7)¹²

a3^r

NEW ATLANTIS.

WEE sayled from *Peru*, (wher wee had continued by the space of one whole yeare,) for *China* and *Iapan*, by the South Sea; taking with vs Victuals for twelue Moneths; And had good Windes from the East, though soft and weake, for fiue Moneths space, and more. But then the Winde came about, and settled in the West for many dayes, so as we could make little or no way, and were sometimes in purpose to turne back. But then againe ther arose Strong and Great Windes from the South, with a Point East; which carried vs vp, (for all that we could doe) towards the North: By which time our Victualls failed vs, though we had made good spare of them. So that finding our selues, in the Midst of the greatest Wildernesse of Waters in the World, without Victuall, we gaue our Selues for lost Men, and prepared for Death. Yet we did lift vp our Harts and Voices to GOD aboue, who *sheweth his Wonders in the Deepe*; Beseeching him of his Mercy, that as in the *Beginning* He discouered the *Face* of the *Deepe*, and brought forth *Dry-Land*; So he would now discouer Land to vs, that we mought not perish. And it came to passe, that the next Day about Euening, we saw within a Kenning before vs, towards the North, as it were thick Cloudes, which did put vs in some hope of Land; Knowing how that part of the South Sea was vtterly vnknowne; And might haue Islands, or Continents, that hithertoo were not come to light.

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Wherefore we bent our Course thither, wher we saw the Appearance of Land, all that night; And in the Dawning of the next Day, we might plainly discern that it was a Land; Flatt to our sight, and full of Boscage; which made it shew the more Darke. And after an Houre and a halfs Sayling, we entred into a good *Hauen*, being the Port of a faire *Citty*; Not great indeed, but well built, and that gaue a pleasant view from the Sea: And we thinking euery Minute long, till we were on Land, came close to the Shore, and offred to land. But straightwayes we saw diuers of the People, with Bastons in their Hands, (as it

¹² *NA*, a3^r-g2^r; *SEH*, III, pp. 129-66. This transcription was initially provided in electronic form by Dr. Maria Wakely, and is taken from the 1626/7 edition of *SS* held at the Huntington Library, California, shelfmark RB 43511.

were) forbidding vs to land; Yet without any Cries or Fiercenesse, but onely as warning vs off, by Signes that they made. Wherevpon being not a little discomforted, we were aduising with ourselues, what we should doe. During which time, ther made forth to vs a small Boate, with about eight Persons in it; wherof One of them had in his Hand a Tipstaffe of a yellow Cane, tipped at both ends with Blew, who came aboard our Shipp, without any shew of Distrust at all. And when he saw one of our Number, present himselfe somewhat afore the rest, he drew forth a little Scroule of Parchment, (somewhat yellower than our Parchment, and shining like the Leaues of Writing Tables, but otherwise soft and flexible,) and deliuered it to our foremost Man. In which Scroule were written in Ancient *Hebrew*, and in Ancient *Greeke*, and in good *Latine* of the Schoole, and in *Spanish*, these wordes; *Land yee not, none of you; And prouide to be gone, from this Coast, within sixteene daies, except you haue further time giuen you. Meanwhile, if you want Fresh Water, or Victuall, or helpe for your Sick, or that your Ship needeth repaire, write downe your wants, and you shall haue that, which belongeth to Mercy.* This Scroule was Signed with a Stampe of *Cherubins Wings*, not spred, but hanging downwards; And by them a *Crosse*. This being deliuered, the *Officer* returned, and left onely a Seruant with vs to receyue our Answere. Consulting hereupon amongst our Selues, we were much perplexed. The Deniall of Landing, & Hasty Warning vs away, troubled vs much; On the other

a4^r

side, to finde that the People had Languages, and were so full of Humanity, did comfort vs not a little. And aboue all, the Signe of the *Crosse* to that Instrument, was to vs a great Reioycing, and as it were a certaine Presage of Good. Our Answer was in the *Spanish* tongue; *That for our Shipp, it was well; For we had rather mett with Calmes, and contrary windes, then any Tempests. For our Sick, they were many, and in very ill Case; So that if they were not permitted to Land, they ran danger of their Liues.* Our other Wants we sett downe in particular, adding; *That we had some little store of Merchandize, which if it pleased them to deale for, it might supply our Wants, without being chargeable vnto them.* We offred some Reward in Pistoletts vnto the Seruant, and a peece of Crimson Veluett to be presented to the *Officer*: But the Seruant tooke them not, nor would scarce looke vpon them; And so left vs, and went back in another little Boate, which was sent for him.

About three Houres after we had dispatched our Answer, ther came towards vs, a Person (as it seemed) of place. He had on him a Gowne with wide Sleeues, of a kinde of Water Chamolett, of an excellent Azure Colour, farre more glossy then ours: His vnder Apparell was Green; And so was his Hatt, being in the forme of a Turban, daintely made, and not so huge as the *Turkish* Turbans; And the Lockes of his Haire came downe below the Brimms of it. A Reuerend Man was he to behold. Hee came in a Boate, gilt in some part of it, with foure Persons more onely in that Boate; And was followed by another Boate, wherein were some Twenty. When he was come within a Flight-shott of our Shipp, Signes were made to vs, that we should send forth some to meet him vpon the Water; which we presently did in our Shipp-Boate, sending the principall Man amongst vs saue one, and foure of our Number with him. When we were come within sixe yards of their Boate, they called to vs to stay, and not to approach further; which we did. And therupon the Man, whom I before described, stood vp, and with a loud voice, in *Spa-*

a4^v

nish, asked; *Are yee Christians?* We answered; *We were*; fearing the lesse, because of the *Crosse* we had seen in the Subscription. At which Answer the said Person lift vp his Right Hand towards Heauen, and drew it softly to his Mouth, (which is the Gesture they vse, when they thank GOD;) And then said: *If yee will sweare, (all of you,) by the Meritts of the SAVIOVR, that yee are no Pirates; Nor haue shed bloud, lawfully, nor vnlawfully, within fourtie daies past; you may haue License to come on Land.* Wee said; *Wee were all ready to take that Oath.* Wherupon one of those that were with him, being (as it seemed) a *Notary*, made an Entry of this Act. Which done, another of the Attendants of the Great Person, which was with him in the same Boate, after his Lord had spoken a little to him, said aloud; *My Lord would haue you know, that it is not of Pride, or Greatnes, that he commeth not aboard your Shipp; But for that, in your Answer, you declare, that you haue many Sick amongst you, he was warned by the Conseruatour of Health, of the Citty, that he should keepe a distance.* We bowed our selues towards him, and answered; *Wee were his humble Seruants; And accounted for great Honour, and singular Humanity towards vs, that which was already done; But hoped well, that the Nature, of the Sicknes, of our Men, was not infectious.* So he returned; And a while after came the *Notary* to vs aboard our Ship; Holding in his hand a Fruit of that Cuntry, like an Orange, but of colour between Orange tawney and Scarlett; which cast a most excellent Odour. He vsed it (as it seemeth) for a

Preseruatie against Infection. He gaue vs our Oath; *By the Name of Iesus, and his Merits*: And after told vs, that the next day, by sixe of the Clocke, in the Morning, we should be sent to, and brought to the *Strangers House*, (so he called it,) wher we should be accommodated of things, both for our VVhole, and for our Sick. So he left vs; And when we offred him some Pistoletts, he smiling said; *He must not be twice paid, for one Labour*: Meaning (as I take it) that he had Salary sufficient of the *State* for his Seruice. For (as I after learned) they call an Officer, that taketh Rewards, *Twice-paid*.

b1^r

The next Morning earely, ther came to vs the same *Officer*, that came to vs at first with his Cane, and told vs; *He came to conduct vs to the Strangers House; And that hee had preuented the Houre, because we might haue the whole day before vs, for our Businesse. For* (said he) *If you will follow my Aduice, ther shall first goe with me some few of you, and see the place, and how it may be made conuenient for you; And then you may send for your Sick, and the rest of your Number, which yee will bring on Land.* We thanked him, and said; *That this Care, which he tooke of desolate Strangers, GOD would reward.* And so sixe of vs went on Land with him: And when we were on Land, he went before vs, and turned to vs, and said; *He was but our Seruant, and our Guide.* Hee ledd vs through three faire Streets; And all the way we went, ther were gathered some People on both sides, standing in a Rowe; But in so ciuill a fashion, as if it had beene, not to wonder at vs, but to welcome vs: And diuers of them, as we passed by them, put their Armes a little abroad; which is their Gesture, when they bid any welcome. The *Strangers House* is a faire and spacious House, built of Brick, of somewhat a blewer Colour then our Brick; And with handsome windowes, some of Glasse, some of a kinde of Cambrick oyl'd. He brought vs first into a faire Parlour aboue staires, and then asked vs; *What Number of Persons we were? And how many sick?* We answered, *We were in all, (sick and whole,) one and fifty Persons, wherof our sick were seunteene.* He desired vs to haue patience a little, and to stay till he came back to vs; which was about an Houre after; And then hee led vs to see the Chambers, which were prouided for vs, being in number nineteene. They hauing cast it (as it seemeth) that foure of those Chambers, which were better than the rest, might receiue foure of the principall Men of our Company; And lodge them alone by themselues; And the other 15. Chambers were to lodge vs two and two together. The Chambers were handsome and cheerefull Chambers, and furnished ciuilly. Then he ledd vs to a long Gallery, like a

Dorture, where hee

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shewed vs all along the one side (for the other side was but VVall and VVindow,) seenteene Cells, very neat ones, hauing partitions of Cedar wood. VVhich Gallery, and Cells, being in all forty, (many more then we needed,) were instituted as an Infirmary for sick Persons. And he told vs with all, that as any of our Sick waxed well, he might be remoued from his Cell, to a Chamber: For which purpose, there were sett forth ten spare Chambers, besides the Number we spake of before. This done, he brought vs back to the Parlour, and lifting vp his Cane a little, (as they doe when they giue any Charge or Commaund) said to vs; *Yee are to know, that the Custome of the Land requireth, that after this day, and too morrow, (which we giue you for remouing of your people from your Ship,) you are to keepe within dores for three daies. But lett it not trouble you, nor doe not think your selues restrained, but rather left to your Rest and Ease. You shall want nothing, and there are sixe of our People appointed to attend you, for any Busines you may haue abroad.* VVee gaue him thanks, with all Affection and Respect, and said; *GOD surely is manifested in this Land.* VVee offred him also twenty Pistoletts; But he smiled, and onely saide; *What? twice paid!* And so he left vs. Soone after our Dinner was serued in; VVhich was right good Viands, both for Bread, and Meate: Better then any *Collegiate* Diett, that I haue knowne in *Europe*. VVe had also Drinke of three sorts, all wholesome and good; VVine of the Grape; A Drink of Graine, such as is with vs our Ale, but more cleare: And a kinde of Sider made of a Fruit of that Cuntry; A wonderfull pleasing and Refreshing Drink. Besides, ther were brought in to vs, great store of those Scarlett Orenge, for our Sick; which (they said) were an assured Remedy for sicknes taken at Sea. Ther was giuen vs also, a Boxe of small gray, or whitish Pills, which they wished our Sicke should take, one of the Pills, euery night before sleepe; which (they said) would hasten their Recouery. The next day, after that our Trouble of Carriage, and Remouing of our Men, and Goods, out of our Shipp, was somewhat settled and quiett, I thought good to call our

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Company together, and when they were assembled, said vnto them; *My deare Friends; Let vs know our selues, and how it standeth with vs. We are Men cast*

on Land, as Ionas was, out of the Whales Belly, when we were as buried in the Deepe: And now we are on Land, wee are but between Death and Life; For we are beyond, both the Old World, and the New; And whether euer wee shall see Europe, GOD onely knoweth. It is a kinde of Miracle hath brought vs hither: And it must bee little lesse, that shall bring vs hence. Therefore in regard of our Deliuerance past, and our danger present, and to come, let vs looke vp to GOD, and euery man reforme his owne wayes. Besides we are come here amongst a Christian People, full of Piety and Humanity: Let vs not bring that Confusion of face vpon our selues, as to shew our vices, or vnworthinesse before them. Yet there is more. For they haue by Commandement, (though in forme of Courtesie) Cloistered vs within these Walls, for three dayes: Who knoweth, whether it be not, to take some tast of our manners and conditions? And if they finde them bad, to banish vs straight-wayes; If good to giue vs further time. For these Men, that they haue giuen vs for Attendance, may withall haue an eye vpon vs. Therefore for GODS loue, and as we loue the weale of our Soules and Bodies, let vs so behaue our selues, as wee may be at peace with GOD, and may finde grace in the Eyes of this People. Our Company with one voice thanked me for my good Admonition, and promised me to liue soberly and ciuilly, and without giuing any the least occasion of Offence. So we spent our three dayes ioyfully, and without care, in expectation what would be done with vs, when they were expired. During which time, we had euery houre ioy of the Amendment of our Sick; who thought themselues cast into some Diuine Poole of Healing; They mended so kindely, and so fast.

The Morrow after our three dayes were past, ther came to vs a new Man, that we had not seen before, clothed in Blew as the former was, saue that his Turban was white, with a small red Crosse on the Topp. He had also a Tippet of fine Linnen. At his Comming in, he did bend to vs a

b2^v

little, and put his Armes abroad. Wee of our parts saluted him in a very lowly and submissiue manner; As looking that from him, wee should receyue Sentence of Life, or Death. He desired to speak with some few of vs: Wherupon sixe of vs onely staid, and the rest auoyded the Roome. He said; *I am by Office Gouverner of this House of Strangers, and by Vocation I am a Christian Priest; And therefore am come to you, to offer you my seruice, both as Strangers, and chiefly as Christians. Some things I may tell you, which I thinke you will not be vnwilling to heare. The State hath giuen you Licence to stay on*

Land, for the space of sixe weekes: And let it not trouble you, if your occasions aske further time, for the Law in this point is not precise; And I doe not doubt, but my selfe shall be able, to obtaine for you, such further time, as may be conuenient. Yee shall also vnderstand, that the Strangers House, is at this time Rich, and much aforehand; For it hath layd vp Reuenew these 37. yeares: For so long it is, since any Stranger arriued in this part: And therefore take yee no care; The State will defray you all the time you stay: Neither shall you stay one day the lesse for that. As for any Merchandize yee haue brought, yee shall be well vsed, and haue your returne, either in Merchandize, or in Gold and Siluer: For to vs it is all one. And if you haue any other Request to make, hide it not. For yee shall finde, we will not make your Countenance to fall, by the Answer ye shall receiue. Onely this I must tell you, that none of you must goe aboue a Karan, (that is with them a Mile and an halfe) from the walles of the Citty, without especiall leaue. We answered, after we had looked awhile one vpon another, admiring this gracious and parent-like vsage; That we could not tell what to say: For wee wanted words to expresse our Thankes; And his Noble free Offers left vs nothing to aske. It seemed to vs, that we had before vs a picture of our Saluation in Heauen: For wee that were a while since in the Iawes of Death, were now brought into a place, where we found nothing but Consolations. For the Commandement laid vpon vs, we would not faile to obey it, though it was impossible, but our Hearts should be enflamed to tread further vpon this Happy and Holy Ground.

b3^r

Wee added; That our Tongues should first cleaue to the Roofes of our Mouthes, ere we should forget, either his Reuerend Person, or this whole Nation, in our Prayers. Wee also most humbly besought him, to accept of vs as his true seruants, by as iust a Right, as euer Men on Earth were bounden; laying and presenting, both our Persons, and all we had, at his feete. He said; He was a Priest, and looked for a Priests reward; which was our Brotherly loue, and the Good of our Soules and Bodies. So he went from vs, not without teares of Tendernesse in his Eyes; And left vs also confused with Ioy and Kindnesse, saying amongst our selues; That wee were come into a Land of Angells, which did appeare to vs dayly, and preuent vs with Comforts, which we thought not of, much lesse expected.

The next day about 10. of the Clocke, the Gouvernour came to vs againe, and after Salutations, said familiarly; *That he was come to visit vs; And called for a Chaire, and satt him downe; And we being some 10. of vs, (the rest were*

of the meaner Sort; or else gone abroad;) sate down with him. And when we were sett, he began thus. *Wee of this Island of Bensalem (for so they call it in their Language) haue this; That by meanes of our solitary Situation; and of the Lawes of Secrecy, which we haue for our Trauellers; and our rare Admission of Strangers; we know well most part of the Habitable World, and are our selues vnknowne. Therefore because he that knoweth least, is fittest to aske Questions, it is more Reason, for the Entertainment of the time, that yee aske mee Questions, then that I aske you. We answered; That wee humbly thanked him, that he would giue vs leaue so to doe: And that wee conceiued by the tast wee had already, that ther was no wordly thing on Earth, more worthy to be knowne, then the State of that happy Land. But aboue all (we said) since that wee were mett from the seuerall Ends of the World; and hoped assuredly, that we should meete one day in the Kingdome of Heauen (for that we were both parts Christians) wee desired to know (in respect that Land was so remote, and so diuided by vast and vnknowne Seas, from the Land, wher our SAVIOVR walked on Earth)*

b3^v

who was the Apostle of that Nation, and how it was conuerted to the Faith? It appeared in his face, that he tooke great Contentment in this our Question: Hee said; Yee knit my Heart to you, by asking this Question in the first place; For it sheweth that you First seeke the Kingdome of Heauen; And I shall gladly, and briefly, satisfie your demaund.

About twenty Yeares after the Ascension of our SAVIOVR, it came to passe, that ther was seen by the People of Renfusa, (a City vpon the Easterne Coast of our Island,) within Night, (the Night was Cloudy, and Calme,) as it might be some mile into the Sea, a great Pillar of Light; Not sharp, but in forme of a Columne, or Cylinder, rising from the Sea, a great way vp towards Heauen; and on the topp of it was seene a large Crosse of Light, more bright and resplendent then the Body of the Pillar. Vpon which so strange a Spectacle, the People of the Citty gathered apace together vpon the Sands, to wonder; And so after put themselues into a number of small Boates, to goe nearer to this Marueilous sight. But when the Boates were come within (about) 60. yeards of the Pillar, they found themselues all bound, and could goe no further; yet so as they might moue to goe about, but might not approach nearer: So as the Boates stood all as in a Theater, beholding this Light, as an Heauenly Signe. It so fell out, that ther was in one of the Boates, one of our Wise Men, of the Society of Salomons House; which House, or Colledge (my

good Brethren) is the very Eye of this Kingdome; Who hauing a while attentiuely and deuoutly viewed, and contemplated this Pillar, and Crosse, fell downe vpon his face; And then raysed himself vpon his knees, and lifting vp his Hands to Heauen, made his prayers in this manner.

LORD God of Heauen and Earth; thou hast vouchsafed of thy Grace, to those of our Order, to know thy Workes of Creation, and the Secretts of them; And to discern (as farre as appertaineth to the Generations of Men) Between Diuine Mi-

b4^r

racles, Workes of Nature, Works of Art, and Impostures and Illusions of all sorts. I doe here acknowledge and testifie before this People, that the Thing which we now see before our eyes, is thy Finger, and a true Miracle. And for-as-much, as we learne in our Bookes, that thou neuer workest Miracles, but to a Diuine and Excellent End, (for the Lawes of Nature are thine owne Lawes, and thou exceedest them not but vpon great cause) wee most humbly beseech thee, to prosper this great Signe; And to giue vs the Interpretation and vse of it in Mercy; Which thou doest in some part secretly promise, by sending it vnto vs.

VWhen he had made his Prayer, hee presently found the Boate he was in, moueable and vnbound; whereas all the rest remained still fast; And taking that for an assurance of Leauē to approach, he caused the Boate to be softly, and with silence, rowed towards the Pillar. But ere he came neere it, the Pillar and Crosse of Light brake vp, and cast it selfe abroad, as it were, into a Firmament of many Starres; which also vanished soone after, and there was nothing left to be seen, but a small Arke, or Chest of Cedar, dry, and not wett at all with water, though it swam. And in the Fore-end of it, which was towards him, grew a small greene Branch of Palme; And when the wise Man had taken it, with all reuerence, into his Boate, it opened of it selfe, and there were found in it, a Booke, and a Letter; Both written in fine Parchment, and wrapped in Sindons of Linnen. The Booke contened all the Canonick Bookes of the Old and New Testament, according as you haue them; (For we

know well what the Churches with you receiue;) And the Apocalypse it selfe; And some other Bookes of the New Testament, which were not at that time written, were neuerthelesse in the Booke. And for the Letter, it was in these words.

b4^v

I Bartholomew, a Seruant of the Highest, and Apostle of IESVS CHRIST, was warned by an Angell, that appeared to me, in a vision of Glory, that I should commit this Arke to the flouds of the Sea. Therefore, I doe testifie and declare, vnto that People, where GOD shall ordaine this Ark to come to Land, that in the same day, is come vnto them Saluation and Peace, and Good Will, from the Father, and from the LORD IESVS.

There was also in both these writings, as well the Booke, as the Letter, wrought a great Miracle, Conforme to that of the Apostles, in the Originall Gift of Tongues. For there being at that time, in this Land, Hebrewes, Persians, and Indians, besides the Natiues, euery one redd vpon the Booke, and Letter, as if they had been written in his owne Language. And thus was this Land saued from Infidelity, (as the Remaine of the Old World was from Water) by an Ark, through the Apostolicall and Miraculous Euangelisme of Saint Bartholomew. And here hee paused, and a Messenger came, and called him from vs. So this was all that passed in that Conference.

The next Day, the same Gouvernour came againe to vs, immediately after Dinner, and excused himselfe, saying; That the Day before, he was called from vs, somewhat abruptly, but now he would make vs amends, and spend time with vs; if we held his Company, and Conference agreeable. Wee answered; That wee held it so agreeable and pleasing to vs, as wee forgot both Dangers past, and Feares to come, for the time wee heard him speake; And that wee thought, an Houre spent with him, was worth Yeares of our former life. He bowed himselfe a little to vs, and after we were set againe, he said; Well, the Questions are on your part. One of our Number said, after a little Pause; That there was a Matter, wee were no lesse desirous to know, then fearefull to aske, least wee might presume too farre.

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But encouraged by his rare Humanity towards vs, (that could scarce thinke our selues Strangers, being his vowed and professed Servants,) we would take the Hardines to propound it: Humbly beseeching him, if hee thought it not fit to bee answered, that hee would pardon it, though he reiected it. VVe said; VVe well obserued those his words, which hee formerly spake, that this happy Island, wher we now stood, was knowne to few, and yet knew most of the Nations of the World; which we found to be true, considering they had the Languages of Europe, and knew much of our State and Businesse; And yet we in Europe, (notwithstanding all the remote Discoueries, and Nauigations of this last Age) neuer heard any of the least Inkling or Glimse of this Island. This we found wonderfull strange; For that all Nations haue Enterknowledge one of another, either by Voyage into Forraigne Parts, or by Strangers that come to them: And though the Trauailer into a Forreine Countrey, doth commonly know more by the Eye, then he that stayeth at home can by relation of the Trauailer; Yet both wayes suffice to make a mutuall Knowledge, in some degree, on both parts. But for this Island, wee neuer heard tell of any Shipp of theirs, that had been seene to arriue vpon any shore of Europe; No, nor of either the East or West Indies, nor yet of any Shipp of any other part of the World, that had made returne from them. And yet the Maruell rested not in this; For the Situation of it (as his Lordship said,) in the secret Conclaue of such a vast Sea mought cause it. But then, that they should haue Knowledge of the Languages, Bookes, Affaires, of those that lye such a distance from them, it was a thing wee could not tell what to make of; For that it seemed to vs a condition and Proprietie of Diuine Powers and Beings, to be hidden and vnseene to others, and yet to haue others open, and as in a light to them. At this speach the Gouvernour gaue a gracious smile, and sayd; That we did well to aske pardon for this Question we now asked; For that it imported, as if we thought this Land, a Land of Magicians, that sent forth Spirits of the Ayre into all parts, to bring them Newes and Intelligence of other Countries. It was answered by vs all, in all possible humblenes, but yet with a Countenance taking knowledge, that

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we knew he spake it but merrily; That we were apt enough to think, ther was somewhat supernaturall in this Island; but yet rather as Angelicall, then Magicall. But to let his Lordship know truely, what it was, that made vs tender and doubtful to aske this Question, it was not any such conceit, but because

we remembred, he had giuen a Touch in his former Speach, that this Land had Lawes of Secrecy touching Strangers. To this he said; You remember it aright: And therefore in that I shall say to you, I must reserue some particulars, which it is not lawfull for mee to reueale; but there will bee enough left, to giue you satisfaction.

You shall vnderstand (that which perhaps you will scarce think credible) that about three thousand Yeares agoe, or somewhat more, the Nauigation of the World (specially for remote Voyages) was greater then at this Day. Doe not thinke with your selues, that I know not how much it is encreased with you, within these sixescore Yeares: I know it well; And yet I say, greater then, than now: Whether it was, that the Example of the Ark, that saued the Remnant of Men, from the vniuersall Deluge, gaue Men confidence to aduenture vpon the Waters; Or what it was; but such is the Truth. The Phœniceans, and specially the Tyrians, had great Fleetes. So had the Carthaginians their Colony, which is yet further West. Toward the East the Shipping of Egypt, and of Palestina was likewise great. China also, and the great Atlantis, (that you call America) which haue now but Iunks, and Canoa's, abounded then in tall Ships. This Island, (as appeareth by faithfull Registers of those times) had then fifteene hundred strong Ships, of great content. Of all this, there is with you sparing Memory, or none; But we haue large Knowledge thereof.

At that time, this Land was knowne and frequented by the Shipps and Vessells of all the Nations before named. And (as it commeth to passe) they had many times Men of other Countries, that were no Saylers, that came with them; As Persians, Chaldeans, Arabians; So as almost all Nations of Might and Fame resorted hither; Of whom we haue some Stirps, and little Tribes with vs, at this day. And for our owne Ships, they went sundry Voyages; as well to your Streights, which you call the Pillars of Hercules, As to other parts in the

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Atlantique and Mediterrane Seas; As to Paguin, (which is the same with Cambaline) and Quinzy, vpon the Orientall Seas, as farre as to the Borders of the East Tartary.

At the same time, and an Age after, or more, the Inhabitants of the great Atlantis did flourish. For though the Narration and Description, which is made by a great Man with you; that the Descendents of Neptune planted there; and of the Magnificent Temple, Pallace, Citie, and Hill; And the manifold streames of goody Nauigable Riuers, (which as so many Chaines

enuironed the same Site, and Temple;) And the seuerall Degrees of Ascent, wherby Men did climb vp to the same, as if it had bin a Scala Cæli; be all Poetical & Fabulous: Yet so much is true, that the said Country of Atlantis; As well that of Peru then called Coya, as that of Mexico then named Tyrambel, were mighty & proud Kingdomes, in Armes, Shipping, and Riches: So Mighty, as at one time, (or at least within the space of 10. Yeares,) they both made two great Expeditions; They of Tirambel through the Atlantique to the Mediterrane Sea; and they of Coya through the South Sea vpon this our Island: And for the former of these, which was into Europe, the same Authour amongst you, (as it seemeth,) had some relation from the Egyptian Priest, whom he citeth. For assuredly such a thing ther was. But whether it were the Ancient Athenians, that had the glory of the Repulse, and Resistance of those Forces, I can say nothing: But certaine it is, there neuer came backe, either Ship, or Man, from that Voyage. Neither had the other Voyage of those of Coya vpon vs, had better fortune, if they had not met with Enemies of greater clemency. For the King of this Island, (by name Altabin,) a wise Man, and a great Warriar; Knowing well both his owne strength, and that of his Enemies; handled the matter so, as he cut off their Land-Forces, from their Ships; and entoyled both their Nauy, and their Campe, with a greater Power then theirs, both by Sea and Land: And compelled them to render themselues without striking stroke: And after they were at his Mercy, contenting himselfe onely with their Oath, that they should no more beare Armes against him, dismissed them all in safety. But the Diuine Reuenge ouertooke not long after those proud Enterprises. For within lesse then the space of one Hundred

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Yeares, the Great Atlantis was vtterly lost and destroyed: Not by a great Earthquake, as your Man saith; (For that whole Tract is little subiect to Earthquakes;) But by a particular Deluge or Inundation; Those Countries hauing, at this Day, farr greater Riuers, and farr higher Mountaines, to poure downe waters, then any part of the Old World. But it is true, that the same Inundation was not deepe; Not past fourty foote, in most places, from the Ground; So that, although it destroyed Man and Beast generally, yet some few wild Inhabitants of the Wood escaped. Birds also were saued by flying to the high Trees and Woods. For as for Men, although they had Buildings in many places, higher then the Depth of the Water; Yet that Inundation, though it were shallow, had a long Continuance; whereby they of the Vale, that were not drowned, perished for want of Food, and other things necessary. So as

maruaile you not at the thin Population of America, nor at the Rudenesse and Ignorance of the People; For you must account your Inhabitants of America as a young People; Younger a thousand yeares, at the least, then the rest of the World: For that ther was so much time, betweene the Vniuersall Floud, and their Particular Inundation. For the poore Remnant of Humane Seed, which remained in their Mountaines, Peopled the Countrey againe slowly, by little and little; And being simple and sauage People, (Not like Noah and his Sonnes, which was the chiefe Family of the Earth) they were not able to leaue Letters, Arts, and Ciuillity, to their Posterity; And hauing likewise in their Mountainous Habitations beene vsed, (in respect of the Extreame Cold of those Regions,) to cloath themselues with the Skinns of Tygers, Beares, and great Hairy Goates, that they haue in those Parts; When after they came downe into the Valley, and found the Intollerable Heates which are there, and knew no meanes of lighter Apparell; they were forced to beginn the Custome of Going Naked, which continueth at this day. Onely they take great pride and delight, in the Feathers of Birds; And this also they tooke from those their Auncestours of the Mountaines, who were inuited vnto it, by the infinite Flights of Birdes, that came vp to the high Grounds, while the Waters stood below. So you see, by this maine Acci-

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dent of Time, wee lost our Traffique with the Americans, with whom, of all others, in regard they lay nearest to vs, wee had most Commerce. As for the other Parts of the World, it is most manifest, that in the Ages following, (whether it were in respect of Warres, or by a naturall Reuolution of Time,) Nauigation did euery wher greatly decay; And specially, farre Voyages, (the rather by the vse of Gallies, and such Vessells as could hardly brooke the Ocean,) were altogether left and omitted. So then, that part of Entercourse, which could bee from other Nations, to Sayle to vs, you see how it hath long since ceased; Except it were by some rare Accident, as this of yours. But now of the Cessation of that other Part of Entercourse, which mought be by our Sayling to other Nations, I must yeeld you some other Cause. For I cannot say, (if I shall say truly,) but our Shipping, for Number, Strength, Marriners, Pylots, and all things that appertaine to Nauigation, is as great as euer; And therefore why we should sit at home, I shall now giue you an account by it selfe; And it will draw nearer, to giue you satisfaction, to your principall Question.

There raigned in this Island, about 1900. yeares agoe, a King, whose

memory of all others we most adore; Not Superstitiously, but as a Diuine Instrument, though a Mortall Man: His Name was Solamona: And we esteeme him as the Law-giuer of our Nation. This King had a large heart, inscrutable for good; And was wholly bent to make his Kingdome and People Happy. He therefore taking into Consideration, how sufficient and substantiue this Land was, to maintaine it self, without any ayd (at all) of the Forrainer; Being 5600. Miles in circuit, and of rare Fertility of Soyle, in the greatest part thereof; And finding also the Shipping of this Country mought bee plentifully set on worke, both by Fishing, and by Transportations from Port to Port, and likewise by Sayling vnto some small Islands that are not farre from vs, and are vnder the Crowne and Lawes of this State; And recalling into his Memory, the happy and flourishing Estate, wherein this Land then was; So as it mought bee a thousand wayes altered to the worse, but scarce any one way to the better; thought nothing

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wanted to his Noble and Heroicall Intentions, but onely (as farr as Humane foresight mought reach) to giue perpetuitie to that, which was in his time so happily established. Therefore amongst his other Fundamentall Lawes of this Kingdome, he did ordaine the Interdicts and Prohibitions, which wee haue touching Entrance of Strangers; which at that time (though it was after the Calamity of America) was frequent; Doubting Nouelties, and Commixture of Manners. It is true, the like Law, against the Admission of Strangers without License, is an Ancient Law, in the Kingdome of China, and yet continued in vse. But ther it is a poore Thing; And hath made them a curious, ignorant, fearefull, foolish Nation. But our Law-giuer made his Law of another temper. For first, hee hath preserued all points of Humanity, in taking Order, and making Prouision for the Reliefe of Strangers distressed; whereof you haue tasted. At which Speach (as reason was) wee all rose vp, and bowed our selues. Hee went on. That King also still desiring to ioyne Humanity and Pollicy together; And thinking it against Humanity, to detaine Strangers here against their wills; And against Pollicy, that they should returne, and discouer their Knowledge of this Estate, he tooke this Course: He did ordaine, that of the Strangers, that should be permitted to Land, as many (at all times) mought depart as would; But as many as would stay, should haue very good Conditions, and Meanes to liue, from the State. Wherein hee saw so farre, that now in so many Ages since the Prohibition, wee haue memory not of one Shipp that euer returned, and but of thirteene Persons only, at seuerall times,

that chose to returne in our Bottomes. What those few that returned may haue reported abroad I know not. But you must thinke, Whatsoever they haue said, could bee taken where they came, but for a Dreame. Now for our Trauelling from hence into Parts abroad, our Law-giuer thought fit altogether to restraine it. So is it not in China. For the Chineses sayle where they will, or can; which sheweth, that thier Law of Keeping out Strangers, is a Law of Pusillanimity, and feare. But this restraint of ours, hath one onely Exception, which is admirable; Preseruing the good which com-

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meth by communicating with Strangers, and auoyding the Hurt; And I will now open it to you. And here I shall seeme a little to digresse, but you will by and by finde it pertinent. Yee shall vnderstand, (my deare Friends,) that amongst the Excellent Acts of that King, one aboue all hath the preheminance. It was the Erection, and Institution of an Order, or Society, which wee call Salomons House; The Noblest Foundation, (as wee thinke,) that euer was vpon the Earth; And the Lanthorne of this Kingdome. It is dedicated to the Study of the Works, and Creatures of GOD. Some thinke it beareth the Founders Name a little corrupted, as if it should be Solamona's House. But the Records write it, as it is spoken. So as I take it to bee denominate of the King of the Hebrewes, which is famous with you, and no Stranger to vs. For wee haue some Parts of his works, which with you are lost; Namely that Naturall History, which hee wrote of all Plants, from the Cedar of Libanus, to the Mosse that groweth out of the Wall; And of all things that haue Life and Motion. This maketh me thinke, that our King finding himselfe to Symbolize, in many things, with that King of the Hebrewes (which liued many yeares before him) honoured him with the Title of this Foundation. And I am the rather induced to be of this Opinion, for that I finde in ancient Records, this Order or Societie is sometimes called Salomons House; And sometimes the Colledge of the sixe Daies Workes: wherby I am satisfied, That our Excellent King had learned from the Hebrewes; That GOD had created the World, and all that therein is, within sixe Dayes; And therefore hee instituting that House, for the finding out of the true Nature of all Things, (wherby GOD mought haue the more Glory in the Workemanship of them, and Men the more fruit in the vse of them,) did giue it also that second Name. But now to come to our present purpose. When the King had forbidden, to all his People, Nauigation into any Part, that was not vnder his Crowne, he made neuerthelesse this Ordinance; That euery twelue yeares ther should be set forth, out of this

Kingdome, two Ships, appointed to seuerall Voyages; That in either of these Shippes, ther should be a Mission of three of the Fellowes, or Brethren of Salomons House;

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whose Errand was onely to giue vs Knowledge of the Affaires and State of those Countries, to which they were designed; And especially of the Sciences, Arts, Manufactures, and Inuentions of all the World; And withall to bring vnto vs, Bookes, Instruments, and Patternes, in euery kinde: That the Ships, after they had landed the Brethren, should returne; And that the Brethren should stay abroad till the new Mission. These Ships are not otherwise fraught, then with Store of Victualls, and good Quantitie of Treasure to remaine with the Brethren, for the buying of such Things, and rewarding of such Persons, as they should thinke fit. Now for me to tell you, how the Vulgar sort of Marriners are contained from being discovered at Land; And how they that must be put on shore for any time, colour themselues vnder the Names of other Nations; And to what places these Voyages haue beene designed; And what places of Rendez-Vous are appointed for the new Missions; And the like Circumstances of the Practique; I may not doe it; Neither is it much to your desire. But thus you see, wee maintaine a Trade, not for Gold, Siluer, or Iewels; Nor for Silkes; Nor for Spices; Nor any other Commodity of Matter; But onely for GODS first Creature, which was Light: To haue Light (I say) of the Growth of all Parts of the World. And when hee had said this, he was silent; And so were wee all. For indeed wee were all astonished, to heare so strange things so probably told. And hee perceiuing, that wee were willing to say somewhat, but had it not ready, in great Courtesie tooke vs off, and descended to aske vs Questions of our Voyage and Fortunes, and in the end concluded, that we mought doe well, to thinke with our selues, what Time of stay wee would demand of the State; And bad vs not to scant our selues; For he would procure such time as wee desired. Wherevpon wee all rose vp, and presented our selues to kisse the skirt of his Tippet; But hee would not suffer vs; and so tooke his leaue. But when it came once amongst our People, that the State vsed to offer Conditions to Strangers, that would stay, wee had Worke enough to get any of our Men to looke to our Shipp; And

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to keepe them from going presently to the Gouvernour, to craue Conditions.

But with much adoe wee refrained them, till we mought agree what Course to take.

We took our selues now for free men, seeing ther was no danger of our vtter Perdition; And liued most ioyfully, going abroad, and seeing what was to be seen, in the Citty, and places adiacent, within our *Tedder*; And obtaining Acquaintance with many of the Citty, not of the meanest Quallity; At whose hands we found such Humanity, and such a Freedome and desire, to take Strangers, as it were, into their Bosome, as was enough to make vs forget all that was deare to vs, in our owne Countries: And continually we mett with many things, right worthy of Obseruation, & Relation: As indeed, if ther be a Mirrour in the World, worthy to hold Mens Eyes, it is that Countrey. One day there were two of our Company bidden to a *Feast* of the *Family*, as they call it. A most Naturall, Pious, & Reuerend Custome it is, shewing that Nation to be compounded of all Goodnes. This is the manner of it. It is granted to any Man, that shall liue to see thirty Persons, descended of his Body, aliue together, and all aboue 3. yeares old, to make this *Feast*, which is done at the Cost of the State. The *Father* of the *Family*, whom they call the *Tirsan*, two dayes before the *Feast*, taketh to him three of such Friends as he liketh to chuse; And is assisted also by the Gouvernour of the Citty, or Place, where the *Feast* is celebrated; And all the *Persons* of the *Family*, of both Sexes, are summoned to attend him. These two dayes the *Tirsan* sitteth in Consultation, concerning the good Estate of the *Family*. Ther, if ther be any Discord or sutes betweene any of the *Family*, they are compounded and appeased. Ther, if any of the *Family* bee Distressed or Decayed, order is taken for their Reliefe, and competent meanes to liue. Ther, if any bee subiect to vice, or take ill Courses, they are reprovued and Censured. So likewise, Direction is giuen touching Marriages, and the Courses of life, which any of them should take, with diuers other the like Orders and Aduices. The Gouvernour assisteth, to the end, to put in Execution, by his

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Publicke Authority, the Decrees and Orders of the *Tirsan*, if they should bee disobeyed; Though that seldome needeth; Such Reuerence and Obedience they giue, to the Order of Nature. The *Tirsan* doth also then, euer chuse one Man from amongst his Sonnes, to liue in House with him; Who is called, euer after, the *Sonne of the Vine*. The Reason will hereafter appeare. On the *Feast* day, the *Father* or *Tirsan* commeth forth after Diuine Seruice, into a large Roome, where the *Feast* is celebrated; Which Roome hath an Halfe-Pace at

the vpper end. Against the wall, in the middle of the half-pace, is a Chaire placed for him, with a Table and Carpet before it. Ouer the Chaire is a State, made Round or Ouall, and it is of Iuy; An Iuy somewhat whiter then ours, like the Leafe of a Siluer Aspe, but more shining; For it is greene all Winter. And the State is curiously wrought with Siluer and Silke of diuers Colours, broyding or binding in the Iuy; And is euer of the worke, of some of the Daughters of the Family; And vailed ouer at the Topp, with a fine Nett of Silke and Siluer. But the Substance of it, is true Iuy; whereof, after it is taken downe, the Friends of the Family, are desirous to haue some Leafe or Sprigg to keepe. The *Tirsan* commeth forth with all his Generation or Linage, the Males before him, and the Females following him; And if there be a Mother, from whose Body the whole Linage is descended, there is a Trauerse placed in a Loft aboue, on the right hand of the Chaire, with a priuy Dore, and a carued Window of Glasse, leaded with Gold and blew; Wher she sitteth, but is not seene. When the *Tirsan* is come forth, he sitteth downe in the Chaire; And all the Linage place themselues against the wall, both at his back, and vpon the Returne of the Half-pace, in Order of their yeares, without difference of Sexe, and stand vpon their Feete. When hee is sett, the Roome being alwaies full of Company, but well kept and without Disorder, after some pause, there commeth in from the lower ende of the Roome, a *Taratan*, (which is as much as an *Herald*;))

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And on either side of him two *young Lads*; Wherof one carrieth a Scrowle of their shining yellow Parchment; And the other a Cluster of Grapes of Gold, with a long Foote or Stalke. The *Herald*, and *Children*, are cloathed with Mantles of Sea-water greene Sattin; But the *Heralds* Mantle is streamed with Gold, and hath a Traine. Then the *Herald* with three Curtesies, or rather Inclinations, commeth vp as farre as the Halfe-pace; And ther first taketh into his Hand the Scrowle. This Scrowle is the *Kings Charter*, containing Guift of Reuenew, and many Priuiledges, Exemptions, and Points of Honour, granted to the *Father* of the *Family*; And it is euer stiled and directed; *To such an one, Our welbeloued Friend and Creditour*: Which is a Title proper onely to this Case. For they say, the King is Debter to no Man, but for Propagation of his Subiects, The Seale set to the *Kings Charter*, is the Kings Image, Imbossed or moulded in Gold; And though such *Charters* bee expedited of Course, and as of Right, yet they are varied by discretion, according to the Number and Dignitie of the *Family*. This *Charter* the *Herald* readeth aloud; And while it is

read, the *Father* or *Tirsan*, standeth vp, supported by two of his Sonnes, such as hee chooseth. Then the *Herald* mounteth the Half-Pace, and deliuereth the *Charter* into his Hand; And with that there is an Acclamation, by all that are present, in their Language, which is thus much; *Happy are the people of Bensalem*. Then the *Herald* taketh into his Hand from the other Child, the Cluster of Grapes, which is of Gold; Both the Stalke, and the Grapes. But the Grapes are daintely enamelled; And if the Males of the *Family* be the greater number, the Grapes are enamelled Purple, with a little Sunne sett on the Topp; If the Females, then they are enamelled into a greenish yellow, with a Crescent on the Topp. The Grapes are in number as many as there are Descendants of the *Family*. This Golden Cluster, the *Herald* deliuereth also to the *Tirsan*; Who presently deliuereth it ouer, to that Sonne, that hee had for-

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merly chosen, to bee in House with him: Who beareth it before his *Father*, as an Ensigne of Honour, when he goeth in publicke euer after; And is thereupon called *the Sonne of the Vine*. After this Ceremony ended, the *Father* or *Tirsan* retireth; And after some time commeth forth againe to Dinner, where he sitteth alone vnder the State, as before; And none of his Descendants sit with him, of what Degree or Dignitie soeuer, except he hap to be of *Salomons House*. Hee is serued onely by his owne Children, such as are Male; who performe vnto him all seruice of the Table vpon the knee; And the Women only stand about him, leaning against the wall. The Roome belowe the Halfe-pace, hath Tables on the sides for the Ghests that are bidden; Who are serued with great and comely order; And towards the end of Dinner (which in the greatest Feasts with them, lasteth neuer aboue an Houre and an halfe) there is an *Hymne* sung, varied according to the Inuention of him that composeth it; (for they haue excellent Poesie;) But the Subiect of it is, (alwayes,) the prayses of *Adam*, and *Noah*, and *Abraham*; Wherof the former two Peopled the World, and the last was the *Father* of the *Faithfull*: Concluding euer with a Thankesgiuing for the *Natiuitie* of our *Sauour*, in whose Birth, the Births of all are onely Blessed. Dinner being done, the *Tirsan* retireth againe; And hauing withdrawne himselfe alone into a place; where hee maketh some priuate Prayers, hee commeth forth the third time, to giue the Blessing; with all his Descendants, who stand about him, as at the first. Then he calleth them forth by one and by one, by name, as he pleaseth, though seldome the Order of Age bee inuerted. The person that is called, (the Table being before remoued,) kneeleth downe before the Chaire, and the *Father* layeth his Hand, vpon his

Head, or her Head, and giueth the Blessing in these Wordes; *Sonne of Bensalem, (or Daughter of Bensalem,) thy Father saith it; The Man by whom thou hast Breath and Life speaketh the word; The Blessing of the Euerlasting Father,*

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the Prince of Peace, and the Holy Doue, bee vpon thee, and make the dayes of thy Pilgrimage, good, and many. This he saith to euery of them; And that done, if there be any of his Sonnes, of eminent Meritt and Vertue, (so they be not aboue two,) hee calleth for them againe; And saith, laying his Arme ouer their shoulders, they standing; *Sonnes, it is well yee are borne, giue God the prayse, and perseuere to the end.* And withall deliuereth to either of them a Iewel, made in the Figure of an Eare of Wheat, which they euer after weare in the front of their Turban, or Hat. This done, they fall to Musick and dances, And other Recreations, after their manner, for the rest of the day. This is the full order of that *Feast.*

By that time, sixe or seuen Dayes were spent, I was fallen into straight Acquaintance, with a *Merchant* of that *Citty*, whose Name was *Ioabin* Hee was a *Iew* and *Circumcised*: For they haue some few Stirps of *Iewes*, yet remaining amongst them, whom they leaue to their owne Religion. Which they may the better doe, because they are of a farre differing Disposition from the *Iewes* in other Parts. For whereas they hate the *Name* of CHRIST; And haue a secret inbred Rancour against the People amongst whom they liue; These (contrariwise) giue vnto our SAVIOVR many high Attributes, and loue the *Nation* of *Bensalem*, extreamey. Surely this Man, of whom I speake, would euer acknowledge, that CHRIST was borne of a *Virgin*; And that hee was more then a Man; And hee would tell how GOD made him Ruler of the *Seraphims*, which guard his Throane; And they call him also the *Milken Way*, and the *Elijah* of the *Messiah*; And many other High Names; which though they be inferiour to his Diuine Maiestie, Yet they are farre from the Language of other *Iewes*. And for the Countrey of *Bensalem*, this Man would make no end of commending it; Being desirous by Tradition among the *Iewes* there, to haue it beleued, that the People thereof were of the Generations of *Abraham*, by another Sonne, whom they call *Nachoran*; And

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that *Moses* by a secret *Cabala* ordained the Lawes of *Bensalem* which they

now vse; And that when the Messiah should come, and sit in his Throne at *Hierusalem*, the King of *Bensalem*, should sit at his feete, whereas other Kings should keepe a great distance. But yet setting aside these *Iewish* Dreames, the Man was a wise Man, and learned, and of great Pollicy, and excellently seene in the Lawes and Customes of that Nation. Amongst other Discourses, one day, I told him, I was much affected with the Relation I had, from some of the Company, of their Custome, in holding the *Feast of the Family*; For that (me thought) I had neuer heard of a Solemnity, wherein Nature did so much preside. And because Propagation of Families, proceedeth from the Nuptiall Copulation, I desired to know of him, what Lawes and Customes they had concerning Marriage; And whether they kept Marriage well; And whether they were tyed to one Wife; For that wher Population is so much affected, and such as with them it seemed to be, ther is commonly Permission of *Plurality of Wiues*. To this he said; *You haue Reason for to commend that excellent Institution of the Feast of the Family. And indeed wee haue Experience, that those Families, that are partakers of the Blessing of that Feast, doe flourish and prosper euer after, in an extraordinary manner. But heare mee now, and I will tell you what I know. You shall vnderstand, that there is not vnder the Heauens, so chast a Nation, as this of Bensalem; Nor so free from all Pollution, or foulnesse. It is the Virgin of the World. I remember, I haue redd in one of your Europæan Bookes, of an holy Hermit amongst you, that desired to see the Spirit of Fornication, and there appeared to him, a little foule vgly Aethiope. But if he had desired to see the Spirit of Chastitie of Bensalem, it would haue appeared to him, in the likeness of a faire beautifull Cherubin. For there is nothing, amongst Mortall Men, more faire and admirable, then the Chast Mindes of this People. Know therefore, that with them ther are no Stewes, no dissolute Houses, no Curtisans, nor any thing of that kind. Nay they wonder (with detestation) at you in Europe, which*

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permit such things. They say ye haue put Marriage out of office: For Marriage is ordained a Remedy for vnlawfull Concupiscence; And Naturall Concupiscence seemeth as a spurr to Marriage. But when Men haue at hand a Remedy, more agreeable to their corrupt will, Marriage is almost expulsed. And therefore ther are with you seene infinite Men, that marry not, but chuse rather a libertine and impure single Life, then to be yoaked in Marriage; And many that doe marry, marry late, when the Prime and Strength of their Yeares is past. And when they doe marry, what is Marriage to them, but a very

Bargaine; Wherin is sought Alliance, or Portion, or Reputation, with some desire (almost indifferent) of Issue; And not the faithfull Nuptiall Vnion of Man and Wife, that was first instituted. Neither is it possible, that those that haue cast away so basely, so much of their Strength, should greatly esteeme Children, (being of the same Matter,) as Chast Men doe. So Likewise during Marriage is the Case much amended, as it ought to bee if those things were tolerated onely for necessitie? No, but they remaine still as a very Affront to Marriage. The Haunting of those dissolute places, or resort to Curtizans, are no more punished in Married Men, than in Batchellers. And the depraued Custome of change, and the Delight in Meretricious Embracements, (wher sinne is turned into Art,) maketh Marriage a dull thing, and a kinde of Imposition, or Taxe. They heare you defend these things, as done to auoyd greater Euills; As Aduoutries, Deflouring of Virgins, Vnnaturall lust, and the like. But they say, this is a preposterous Wisdome; And they call it Lot's offer, who to saue his Guests from abusing, Offered his Daughters: Nay, they say further, That ther is little gained in this; For that the same Vices and Appetites, doe still remayne and abound; Vnlawfull Lust being like a Furnace, that if you stopp the Flames altogether, it will quench; But if you giue it any vent, it will rage. As for Masculine Loue, they haue no touch of it; And yet ther are not, so faithfull and inuiolate Freindshipps, in the world againe, as are ther: And to speake generally; (as I said before,) I haue not read of any such Chastity, in any People, as theirs: And their vsuall saying is, That whosoeuer is vnchast cannot reuerence himselfe: And they say;

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That the Reuerence of a Mans selfe, is, next Religion, the chiefest Bridle of all Vices. And when hee had said this, the good *Iew* paused a little; Whereupon, I farr more willing to heare him speake on, than to speake my selfe; yet thinking it decent, that vpon his pause of Speech, I should not be altogether silent, said onely this; *That I would say to him, as the Widow of Sarepta said to Elias; that he was come to bring to Memory our Sinnes; And that I confesse the Righteousnesse of Bensalem, was greater then the Righteousnesse of Europe.* At which speech hee bowed his Head, and went on this manner. *They haue also many wise and excellent Lawes touching Marriage. They allow no Polygamy. They haue ordained that none doe intermarry or contract, vntill a Moneth bee past from their first Inter-viewe. Marriage without consent of Parents they doe not make void, but they mulct it in the Inheritours: For the Children of such Marriages, are not admitted to inherit, aboue a third Part of*

their Parents Inheritance. I haue read in a Booke of one of your Men, of a Faigned Common-wealth, wher the Married Couple are permitted, before they Contract, to see one another Naked. This they dislike: For they thinke it a Scorne, to giue a Refusall after so Familiar Knowledge: But because of many hidden Defects in Men and Womens Bodies, they haue a more ciuill Way: For they haue neare euery Towne, a Couple of Pooles, (which they call Adam and Eues Pooles,) wher it is permitted to one of the Friends of the Man, and another of the friends of the Woman, to see them seuerally both ¹³ Naked.

And as wee were thus in Conference, ther came one that seemed to be a Messenger, in a rich Huke, that spake with the Iew: Whereupon hee turned to mee, and said; *You will pardon mee, for I am commanded away in hast. The next Morning he came to me againe, ioyfull as it seemed, and said; There is word come to the Gouvernour of the Citty, that one of the Fathers of Salomons House, will be here this day Seuen-night: Wee haue seene none of them this Dozen Yeares. His Comming is in State; But the Cause of his coming is secret. I will prouide you, and your Fellowes, of a good*

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Standing, to see his Entry. I thanked him, and told him; *I was most glad of the Newes.* The Day being come he made his Entry. He was a *Man* of middle Stature, and Age, comely of Person, and had an Aspect as if he pittied Men. He was cloathed in a Roabe of fine black Cloath, with wide Sleeues, and a Cape. His vnder Garment was of excellent white Linnen, downe to the Foote, girt with a Girdle of the same; And a Sindon or Tippet of the same about his Neck. He had Gloues, that were curious, and sett with Stone; And Shoes of Peach-coloured Veluet. His Neck was bare to the Shoulders. His Hatt was like a Helmet, or *Spanish Montera*; And his Locks curled below it decently: They were of Colour browne. His Beard was cutt round, and of the same colour with his Haire, somewhat lighter. He was carried in a rich Chariott, without Wheelles, Litter-wise; With two Horses at either end, richly trapped in blew Veluet Embroydered; and two Footmen on each side in the like Attire. The Chariott was all of Cedar, gilt, and adorned with Crystall; Saue that the Fore-end had Pannells of Sapphires, set in Borders of Gold; And the Hinder end the like of Emeralds of the *Peru* Colour. Ther was also a Sunn of Gold, Radiant, vpon the Topp, in the Midst; And on the Topp before, a small *Cherub* of Gold, with Wings displayed. The Chariott was couered with Cloath of Gold tissued

¹³ Manually adjusted to *bathe*.

vpon Blew. He had before him fifty Attendants, young Men all, in white *Satten* loose Coates to the Mid Legg; And Stockins of white Silk; And Shoes of blew Veluet; And Hatts of blew Veluet; with fine Plumes of diuerse Colours, sett round like Hat-bands. Next before the Chariott, went two Men, bare headed, in Linnen Garments downe to the Foote, girt, and Shoes of blew Veluett; Who carried, the one a Crosier, the other a Pastorall Staffe like a Sheep-hooke: Neither of them of Metall, but the Crosier of Balme-wood, the Pastorall Staffe of Cedar. Horse-Men he had none, neither before, nor behinde his Chariott: As it seemeth to auoyd all Tumult and Trouble. Behinde

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his Chariott, went all the Officers and Principalls of the Companies of the Citty. He sate alone, vpon Cushions, of a kinde of excellent Plush, blew; And vnder his Foote curious Carpetts of Silk of diuerse Colours, like the Persian, but farr finer. He held vp his bare Hand, as he went, as blessing the People, but in Silence. The Street was wonderfully well kept; So that ther was neuer any Army had their Men stand in better Battell-Array, then the People stood. The Windowes likewise were not crouded, but eueryone stood in them, as if they had been placed. When the shew was past, the *Iew* said to me; *I shall not be able to attend you as I would, in regard of some charge the Citty hath lay'd vpon me, for the Entertaining of this Great Person.* Three dayes after the *Iew* came to me againe, and said; *Yee are happy Men; for the Father of Salomons House taketh knowledge of your Being here, and commanded me to tell you, that he will admitt all your Company to his presence, and haue priuate Conference with one of you, that ye shall choose: And for this hath appointed the next day after too Morrow. And because he meaneth to giue you his Blessing, he hath appointed it in the Forenoone.* We came at our Day, and Houre, and I was chosen by my Fellowes for the priuate Accessee. We found him in a faire Chamber, richly hanged, and carpetted vnder Foote, without any Degrees to the State. He was sett vpon a Low Throne richly adorned, and a rich Cloath of State ouer his Head, of blew Sattin Embroidered. He was alone, saue that he had two Pages of Honour, on either Hand one, finely attired in White. His Vnder Garments were the like that we saw him weare in the Chariott; but in stead of his Gowne, he had on him a Mantle with a Cape, of the same fine Black, fastned about him. When we came in, as we were taught, we bowed Lowe at our first Entrance; And when we were come neare his Chaire, he stood vp, holding forth his Hand vngloured, and in Posture of Blessing; And we euery one of vs stooped downe, and kissed the Hemme of

his Tippet. That done, the rest departed, and I remayned.

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Then hee warned the Pages forth of the Roome, and caused mee to sit downe beside him, and spake to me thus in the *Spanish Tongue*.

GOD blesse thee, my Sonne; I will giue thee the greatest Jewell I haue: For I will impart vnto thee, for the Loue of GOD and Men, a Relation of the true State of Salomons House. Sonne, to make you know the true state of Salomons House, I will keepe this order. First I will set forth vnto you the End of our Foundation. Secondly, the Preparations and Instruments we have for our VVorkes. Thirdly, the seuerall Employments and Functions wherto our Fellowes are assigned. And fourthly, the Ordinances and Rites which we obserue.

The End of our Foundation is the Knowledge of Causes, and Secrett Motions of Things; And the Enlarging of the bounds of Humane Empire, to the Effecting of all Things possible.

The Preparations and Instruments are these. We haue large and deepe Caues of seuerall Depths: The deepest are sunke 600. Fathome: And some of them are digged and made vnder great Hills and Mountaines: So that if you reckon together the Depth of the Hill, and the Depth of the Caue, they are (some of them) aboue three

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Miles deepe. For wee finde, that the Depth of a Hill, and the Depth of a Caue from the Flat, is the same Thing; Both remote alike, from the Sunn and Heauens Beames, and from the Open Aire. These

¹⁴ This is incorrect in the original, where it reads c2^f.

Caues we call the Lower Region; And wee vse them for all Coagulations, Indurations, Refrigerations, and Conseruations of Bodies. We vse them likewise for the Imitation of Naturall Mines; And the Producing also of New Artificiall Mettalls, by Compositions and Materialls which we vse, and lay ther for many yeares. Wee vse them also sometimes, (which may seeme strange,) for Curing of some Diseases, and for Prolongation of Life, in some Hermits that choose to liue ther, well accommodated of all things necessarie, and indeed liue very long; By whom also we learne many things.

We haue Burialls in seuerall Earths, wher we put diuerse Cements, as the Chineses doe their Porcellane. But we haue them in greater Varietie, and some of them more fine. We haue also great variety of Composts, and Soiles, for the Making of the Earth Fruitfull.

We haue High Towers; The Highest about halfe a Mile in Heigth; And some of them likewise set vpon High Mountaines: So that the Vantage of the Hill with the Tower, is in the highest of them three Miles at least. And these Places wee call the Vpper Region; Accounting the Aire betweene the High Places, and the

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Lowe, as a Middle Region. VVee vse these Towers, according to their seuerall Heights, and Situations, for Insolation, Refrigeration, Conseruation; And for the View of diuers Meteors; As VVindes, Raine, Snow, Haile; And some of the Fiery Meteors also. And vpon them, in some Places, are Dwellings of Hermits, whom wee visit sometimes, and instruct what to obserue.

We haue great Lakes, both Salt, and Fresh; wherof we haue vse for the Fish, and Fowle. We vse them also for Burialls of some Naturall Bodies: For we finde a Difference in Things buried in Earth, or in Aire below the Earth; and things buried in VWater. VVe

haue also Pooles, of which some doe straine Fresh VWater out of Salt; And others by Art doe turne Fresh VWater into Salt. VVe haue also some Rocks in the Midst of the Sea; And some Bayes vpon the Shore for some VWorks, wherin is required the Ayre and Vapour of the Sea. VVe haue likewise Violent Streames and Cataracts, which serue vs for many Motions: And likewise Engines for Multiplying and Enforcing of VVindes, to set also on going diuerse Motions.

VVe haue also a Number of Artificiall VVels, and Fountaines, made in Imitation of the Naturall Sources and Baths; As tinted vpon Vitrioll, Sulphur, Steele, Brasse, Lead, Nitre, and other Mineralls. And againe wee haue little

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VVells for Infusions of many Things, wher the VVaters take the Vertue quicker and better, then in Vessells, or Basins. And amongst them we haue a VWater, which wee call VWater of Paradise, being, by that we doe to it, made very Soueraigne for Health, and Prolongation of Life.

We haue also Great and Spacious Houses, wher we imitate and demonstrate Meteors; As Snow, Haile, Raine, some Artificiall Raines of Bodies, and not of VWater, Thunders, Lightnings; Also Generations of Bodies in Aire; As Froggs, Flies, and diuerse Others.

We haue also certaine Chambers, which wee call Chambers of Health, wher wee qualifie the Aire as we thinke good and proper for the Cure of diuerse Diseases, and Preservation of Health.

Wee haue also faire and large Baths, of seuerall Mixtures, for the Cure of Diseases, and the Restoring of Mans Body from Arefaction: And Others for the Confirming of it in Strength of Sinnewes, Vitall Parts, and the very Iuyce and Substance of the Body.

We haue also large and various Orchards, and Gardens; Wherin

we do not so much respect Beauty, as Variety of Ground and Soyle, proper for diuerse Trees, and Herbs: And some very spacious, wher Trees, and Berries are set, wherof we make diuerse Kinds of Drinks, besides the Vine-yards. In these wee practise likewise all Conclusions of Grafting, and Inoculating, as well of VVilde-Trees,

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as Fruit-Trees, which produceth many Effects. And we make (by Art) in the same Orchards, and Gardens, Trees and Flowers, to come earlier, or later, than their Seasons; And to come vp and beare more speedily then by their Naturall Course they doe. We make them also by Art greater much then their Nature; And their Fruit greater, and sweeter, and of differing Tast, Smell, Colour, and Figure, from their Nature. And many of them we so Order as they become of Medicinall Vse.

Wee haue also Meanes to make diuerse Plants, rise by Mixtures of Earths without Seedes; And likewise to make diuerse New Plants, differing from the Vulgar; and to make one Tree or Plant turne into another.

We haue also Parks, and Enclosures of all Sorts, of Beasts, and Birds; which wee vse not onely for View or Rarenesse, but likewise for Dissections, and Trialls; That therby we may take light, what may be wrought vpon the Body of Man. Wherin we finde many strange Effects; As Continuing Life in them, though diuerse Parts, which you acount Vitall, be perished, and taken forth; Resussitating of some that seeme Dead in Appearance; And the like. We try also all Poysons, and other Medicines vpon them, as well of Chyrurgery, as Phisicke. By Art likewise, we make them Greater, or Taller, then their Kinde is; And contrary-wise Dwarfe them and stay their Growth:

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Wee make them more Fruitfull, and Bearing then their Kind is; And contrary-wise Barren and not Generatiue. Also we make them differ in Colour, Shape, Actiuity, many wayes. We finde Meanes to make Commixtures and Copulations of diuerse Kindes; which haue produced many New Kindes, and them not Barren, as the generall Opinion is. We make a Number of Kindes, of Serpents, VVormes, Flies, Fishes, of Putrefaction; Wherof some are aduanced (in effect) to be Perfect Creatures, like Beastes or Birds; And haue Sexes, and doe Propagate. Neither doe we this by Chance, but wee know before hand, of what Matter and Commixture, what Kinde of those Creatures will arise.

Wee haue also Particular Pooles, wher we make Trialls vpon Fishes, as we haue said before of Beasts, and Birds.

Wee haue also Places for Breed and Generation of those Kindes of VVormes, and Flies, which are of Speciall Vse; Such as are with you your Silk-wormes, and Bees.

I will not hold you long with recounting of our Brew-Howses, Bake-Howses, and Kitchins, wher are made diuerse Drinks, Breads, and Meats, Rare, and of speciall Effects. VVines we haue of Grapes; And Drinkes of other Iuyce, of Fruits, of Graines, and of Rootes; And of Mixtures with Honey, Sugar, Manna, and Fruits dried, and decocted: Also of the Teares or VVoun-

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dings, of Trees; And of the Pulp of Canes. And these Drinkes are of seuerall Ages, some to the Age or Last of fourtie yeares. We haue Drinks also brewed with several Herbs, and Roots, and Spices; Yea with seuerall Fleshes, and White-Meates; Wherof some of the Drinkes are such, as they are in effect Meat and Drinke both: So that Diuerse, especially in Age, doe desire to liue with them, with little or no Meate, or Bread. And aboue all wee striue to haue

Drinks of Extreame Thin Parts, *to insinuate into the Body, and yet without all Biting, Sharpnesse, or Fretting; Insomuch as some of them, put vpon the Back of your Hand, will, with a little stay, passe through to the Palme, and yet taste Milde to the Mouth. Wee haue also VVaters, which we ripen in that fashion, as they become Nourishing; So that they are indeed excellent Drinke; And Many will vse no other. Breads we haue of seuerall Graines, Roots, and Kernells; Yea and some of Flesh, and Fish, Dryed; With diuerse kindes of Leauenings, and Seasonings: So that some doe extreamely moue Appetites; Some doe Nourish so, as diuerse doe liue of them, without any other Meate; Who liue very long. So for Meates, wee haue some of them so beaten, and made tender, and mortified, yet without all Corrupting, as a VVeake Heate of the Stomach will turne them into good Chylus; As well as a Strong Heate would Meate otherwise prepared. We haue*

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some Meates also, and Breads, and Drinks, which taken by Men, enable them to Fast long after; And some other, that vsed make the very Flesh of Mens Bodies, sensibly, more Hard and Tough; And their Strength farre greater, then otherwise it would bee.

Wee haue Dispensatories, or Shops of Medicines. Wherin you may easely thinke, if we haue such Variety of Plants, and Liuing Creatures, more then you haue in Europe, (for we know what you haue,) the Simples, Druggs, and Ingredients of Medicines, must likewise be in so much the greater Variety. Wee haue them likewise of diuerse Ages, and long Fermentations. And for their Preparations, wee haue not onely all Manner of Exquisite Distillations, and Separations, and especially by Gentle Heates, and Percolations through diuerse Strainers, yea and Substances; But also exact Formes of Composition, wherby they incorporate allmost, as they were Naturall Simples.

Wee haue also diuerse Mechanicall Arts, which you haue not; And Stuffes made by them; As Papers, Linnen, Silks, Tissues; dainty VVorks of Feathers of wonderfull Lustre; excellent Dies, and many others: And Shops likewise, as well for such as are not brought into Vulgar vse amongst vs, as for those that are. For you must know, that of the Things before recited, many of them are growne into vse throughout the Kingdome; But

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yet, if they did flow from our Inuention, wee haue of them also for Patternes and Principalls.

Wee haue also Fournaces of great Diuersities, and that keepe great Diuersitie of Heates: Fierce and Quicke; Strong and Constant; Soft and Milde; Blowne, Quiet, Dry, Moist; And the like. But aboue all we haue Heates, in Imitation of the Sunnes and Heauenly Bodies Heates, that passe diuerse Inequalities, and (as it were) Orbs, Progresses, and Returnes, wherby we produce admirable effects. Besides wee haue Heates of Dungs; and of Bellies and Mawes of Liuing Creatures, and of their Blouds, and Bodies; and of Hayes and Herbs layd vp moist; of Lime vnquenched; and such like. Instruments also which generate Heate onely by Motion. And further, Places for Strong Insolations; And againe Places vnder the Earth, which by Nature, or Art, yeeld Heate. These diuerse Heates wee vse, As the Nature of the Operation, which wee intend, requireth.

Wee haue also Perspectiue-Houses, wher wee make Demonstrations of all Lights, and Radiations: And of all Colours: And out of Things vncoloured and Transparent, wee can represent vnto you all seuerall Colours; Not in Raine-Bowes, (as it is in Gemms, and Prismes,) but of themselues Single. Wee represent also all Multiplications of Light, which wee carry to great Distance, and make so Sharp, as to discern small

Points *and* Lines. Also all Colourations of Light; All Delusions *and* Deceits of the Sight, in Figures, Magnitudes, Motions, Colours: All Demonstrations of Shadowes. Wee finde also diuerse Meanes yet vnknowne to you, of Producing of Light, originally, from diuerse Bodies. Wee procure meanes of Seeing Obiects a-farr off; As in the Heauen, *and* Remote Places: *And* represent Things Neare as A-farr off; *And* Things A-farr off as Neare; Making Faigned Distances. Wee haue also Helps for the Sight, farr aboue Spectacles *and* Glasses in vse. Wee haue also Glasses *and* Meanes, to see Small *and* Minute Bodies, perfectly *and* distinctly; As the Shapes *and* Colours of Small Flies *and* VVormes, Graines *and* Flawes in Gemmes which cannot otherwise be seen, Obseruations in Vrine & Bloud not otherwise to be seen. Wee make Artificiall Raine-Bowes, Halo's, *and* Circles about Light. Wee represent also all manner of Reflexions, Refractions, *and* Multiplications of Visuall Beames of Obiects.

Wee haue also Pretious Stones of all kindes, many of them of great Beauty, *and* to you vnknowne: Crystals likewise; *And* Glasses of diuerse kindes; *And* amongst them some of Mettals Vitrificated, *and* other Materialls, besides those of which you make Glasse. Also a Number of Fossiles, *and* Imperfect Mineralls, which you haue not. Likewise Loadstones of Prodigious Vertue: *And* other rare Stones, both Naturall, *and* Artificiall.

Wee haue also Sound-Houses, wher wee practise *and* demonstrate all Sounds, *and* their Generation. Wee haue Harmonies which you haue not, of Quarter-Sounds, *and* lesser Slides of Sounds. Diuerse Instruments of Musick likewise to you

vnknowne, some sweeter then any you haue; Together with Bells and Rings that are dainty and sweet. Wee represent Small Sounds as Great and Deepe; Likewise Great Sounds, Extenuate and Sharpe; Wee make diuerse Tremblings and VVarblings of Sounds, which in their Originall are Entire. Wee represent and imitate all Articulate Sounds and Letters, and the Voices and Notes of Beasts and Birds. Wee haue certaine Helps, which sett to the Eare doe further the Hearing greatly. Wee haue also diuerse Strange and Artificiall Eccho's, Reflecting the Voice many times, and as it were Tossing it: And some that giue back the Voice Lowder then it came, some Shriller, and some Deeper; Yea some rendring the Voice, Differing in the Letters or Articulate Sound, from that they receyue. Wee haue also meanes to conuey Sounds in Trunks and Pipes, in strange Lines, and Distances.

Wee haue also Perfume-Houses; wherwith we ioyne also Practises of Tast. VVe Multiply Smells, which may seeme strange. VVe Imitate Smells, making all Smells to breath out of other Mixtures then those that giue them. VVe make diuerse Imitations of Tast likewise, so that they

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will deceyue any Mans Tast. And in this House wee containe also a Confiture-House, wher wee make all Sweet-Meats, Dry and Moist; And diuerse pleasant VVines, Milks, Broaths, and Sallets, farr in greater variety, then you haue.

Wee haue also Engine-Houses, wher are prepared Engines and Instruments for all Sorts of Motions. Ther we imitate and practise to make Swifter Motions, then any you haue, either out of your Musketts, or any Engine that you haue: And to Make them, and Multiply them more Easily, and with Small Force, by VVheelles, and other Meanes: And to make them Stronger, and more Violent, then yours are; Exceeding your greatest Cannons, and Basilisks.

Wee represent also Ordnance and Instruments of VVarr, and Engines of all Kindes: And likewise New Mixtures and Compositions of Gun-Powder, VVilde-Fires burning in VVater, and Vnquenchable. Also Fire-workes of all Variety, both for Pleasure, and Vse. Wee imitate also Flights of Birds; Wee haue some Degrees of Flying in the Ayre. Wee haue Shipps and Boates for Going vnder VVater, and Brooking of Seas; Also Swimming-Girdles and Supporters. Wee haue diuers curious Clocks; And other like Motions of Returne: And some Perpetuall Motions. Wee imitate also Motions of Liuing Creatures, by Images, of Men, Beasts, Birds, Fishes, and Serpents. Wee haue also a

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great Number of other Various Motions, strange for Equality, Finenesse, and Subtilty.

Wee haue also a Mathematicall House, wher are represented all Instruments, as well of Geometry, as Astronomy, exquisitely made.

Wee haue also Houses of Deceits of the Senses; wher we represent all manner of Feates of Iugling, False Apparitions, Impostures, and Illusions; And their Fallaces. And surely you will easily beleeeue, that wee, that haue so many Things truely Naturall, which induce Admiration, could in a VVorld of Particulars deceiue the Senses, if we would disguise those Things, and labour to make them seeme more Miraculous. But wee doe hate all Impostures, and Lies: Insomuch as wee haue seuerely forbidden it to all our Fellowes, vnder paine of Ignominy and Fines, that they doe not shew any Naturall worke or Thing, Adorned or Swelling; but onely Pure as it is, and without all Affectation of Strangenesse.

These are (my Sonne) the Riches of Salomons House.

For the seuerall Employments and Offices of our Fellowes; Wee haue Twelue that Sayle into Forraine Countries, vnder the

Names of *other* Nations, (*for our owne wee conceale;*) *Who bring vs the Bookes, and Abstracts, and Patternes of Experiments of all other Parts.*

f4^v

These wee call Merchants of Light.

Wee haue Three that Collect the Experiments which are in all Bookes. These wee call Depredatours.

Wee haue Three that Collect the Experiments of all Mechanicall Arts; And also of Liberall Sciences; And also of Practises which are not Brought into Arts. These we call Mystery-Men.

Wee haue Three that try New Experiments, such as themselues thinke good. These wee call Pioners or Miners.

Wee haue Three that Drawe the Experiments of the Former Foure into Titles, and Tables, to giue the better light, for the drawing of Obseruations and Axiomes out of them. These wee call Compilers.

Wee haue Three that bend themselues, Looking into the Experiments of their Fellowes, and cast about how to draw out of them Things of Vse, and Practise for Mans life, and Knowledge, as well for VVorkes, as for Plaine Demonstration of Causes, Meanes of Naturall Diuinations, and the easie and cleare Discouery, of the Vertues and Parts of Bodies. These wee call Dowry-men or Benefactours.

Then after diuerse Meetings and Consults of our whole Number, to consider of the former Labours and Collections, wee haue Three that take care, out of them, to Direct New Experiments, of a

g1^r

Higher Light, more Penetrating into Nature then the Former. These

wee call Lamps.

Wee haue Three others: that doe Execute the Experiments so Directed, and Report them. These wee call Inoculatours.

Lastly, wee haue Three that raise the former Discoueries by Experiments, into Greater Obseruations, Axiomes, and Aphorismes. These wee call Interpreters of Nature.

Wee haue also, as you must thinke, Nouices and Apprentices, that the Succession of the former Employed Men doe not faile; Besides, a great Number of Seruants and Attendants, Men and Women. And this we doe also: We haue Consultations, which of the Inuentions and Experiences, which wee haue discovered, shall be Published, and which not: And take all an Oath of Secrecy, for the Concealing of those which wee thinke fitt to keepe Secrett: Though some of those we doe reueale sometimes to the State, and some not.

For our Ordinances and Rites: Wee haue two very Long, and Faire Galleries: In one of these wee place Patternes and Samples of all manner of the more Rare and Excellent Inuentions: In the other wee place the Statua's of all Principall Inuentours. There wee haue the Statua of your Columbus, that discovered the

g1^v

West-Indies: Also the Inuentour of Shipps: Your Monke that was the Inuentour of Ordnance, and of Gunpowder: The Inuentour of Musicke: The Inuentour of Letters: The Inuentour of Printing: The Inuentour of Obseruations of Astronomy: The Inuentour of Works in Mettall: The Inuentour of Glasse: The Inuentour of Silke of the Worme: The Inuentour of Vine: The Inuentour of Corne and Bread: The Inuentour of Sugars: And all these, by more certaine Tradition, then you haue. Then haue we diuerse Inuentours of our Owne, of Excellent Workes; Which since you haue not seene, it

were too long to make Descriptions of them; And besides, in the right Vnderstanding of those Descriptions, you might easily erre. For vpon euery Inuention of Valew, wee erect a Statua to the Inuentour, and giue him a Liberall and Honourable Reward. These Statua's are, some of Brasse; some of Marble and Touchstone; some of Cedar and other speciall VVoods guilt and adorned; some of Iron; some of Siluer; some of Gold.

Wee haue certaine Hymnes and Seruices, which wee say dayly, of Laud and Thanks to GOD, for his Marueillous VVorks: And Formes of Prayers, imploring his Aide and Blessing, for the Illumination of our Labours, and the Turning of them into Good and Holy Vses.

Lastly, wee haue Circuities or Visits, of diuers

g2^r

Principall Cities of the Kingdome; wher, as it commeth to passe, we doe publish such New Profitable Inuentions, as wee thinke good. And wee doe also declare Naturall Diuinations of Diseases, Plagues, Swarmes of Hurtfull Creatures, Scarcety, Tempests, Earthquakes, Great Inundations, Cometts, Temperature of the Yeare, and diuerse other Things; And wee giue Counsell thereupon, what the People shall doe, for the Preuention and Remedy of them.

And when Hee had sayd this, Hee stood vp: And I, as I had beene taught, kneeled downe, and He layd his Right Hand vpon my Head, and said; GOD Blesse thee, my Sonne; And G O D blesse this Relation, which I haue made. I giue thee leaue to Publish it; for the Good of other Nations; For wee here are in GODS Bosome, a Land vnknowne. And so hee left mee; Hauing assigned a Valew of about two Thousand Duckets, for a Bounty to mee and my Fellowes. For they giue great Largesses, where they come, vpon all occasions.

The rest was not Perfected.

12. The *Magnalia naturæ*, as published with *Sylva sylvarum* (1626/7)¹⁵

g3^r

MAGNALIA NATVR^E.
PRÆCIPVE QVOAD
VSVS HVMANOS.

The Prolongation of Life.

The Restitution of Youth in some Degree.

The Retardation of Age.

The Curing of Diseases counted Incurable.

The Mitigation of Paine.

More Easie and lesse Loathsome Purgings.

The Encreasing of Strength and Actiuity.

The Encreasing of Ability to suffer Torture or Paine.

The Altering of Complexions: And Fatnesse, and Leannesse.

The Altering of Statures.

The Altering of Features.

The Encreasing and Exalting of the Intellectuall Parts.

Versions of Bodies into other Bodies

Making of New Species.

Transplanting of one Species into another.

Instruments of Destruction, as of VVarre, and Poyson.

g3^v

Exhilaration of the Spirits, and Putting them in good Disposition.

Force of the Imagination, either vpon another Body, or vpon the Body it selfe.

Acceleration of Time in Maturations.

Acceleration of Time in Clarifications.

Acceleration of Putrefaction.

Acceleration of Decoction.

Acceleration of Germination.

Making Rich Composts for the Earth.

Impressions of the Aire, and Raising of Tempests.

¹⁵ NA, g3^r-g3^v; SEH, III, pp. 167-68.

Great Alteration; As in Induration, Emollition, &c.

Turning Crude and Watry Substances into Oily and Vnctious Substances.

Drawing of New Foodes out of Substances not now in Vse.

Making New Threds for Apparell; And New Stuffes; Such as are Paper, Glase, &c.

Naturall Diuinations.

Deceptions of the Senses.

Greater Pleasures of the Senses.

Artificiall Mineralls and Cements.

FINIS.

In the *New Atlantis* Pag. 28.lin.27. for *both* read *bath*. Pag.36.lin.6. for *procuced* read *produced*.

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