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Introduction

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if a man could succeed ... in kindling a light in nature – a light which should in its very rising touch and illuminate all the border-regions that confine upon the circle of our present knowledge; and so spreading further and further should presently disclose and bring into sight all that is hidden and secret in the world, – that man should be the benefactor indeed of the human race, – the propagator of man's empire over the universe, the champion of liberty, the conqueror and subduer of necessities.¹

Francis Bacon produced his final draft of the *New Atlantis* around the years 1624/5.² He was then nearing the end of his life and had printed the majority of the (often incomplete) works for which he is most renowned – *The Advancement of Learning* (1605); nearly all of his *Essays* (1597, 1612, 1625); and *The Great Instauration* and *Novum Organum* (1620). The *New Atlantis* itself was written in semi-exile, when Bacon was physically weak and focusing on intellectual pursuits. By this stage in his career Bacon had been ousted from the centre of power after admitting to accepting bribes while at the height of public office as Lord Chancellor and Viscount of St Alban.³

This sense of marginality has an important application both to the text and the context of the *New Atlantis* which extends beyond its relation to Bacon's own career. Standing at the threshold of early modern thought, Bacon's text operates at the interstices of its contemporary culture and does indeed signal a desire to 'illuminate all the border-regions that confine upon the circle of our present knowledge'. The essays in this volume show

how the *New Atlantis* negotiates a variety of contexts – literary, philosophical, political, religious and social – in order to achieve this. It frequently draws on traditional modes of understanding so as to provide fresh perspectives upon them, revising and often challenging expectations.

The ‘in between’ quality of the text is apparent in its very form. It has often been regarded as an apotheosis of the ideas outlined in Bacon’s works on natural philosophy, projecting an advanced society in which ‘science’ is awarded central status and is subsidised by the state.⁴ However, the *New Atlantis* is also a ‘fable’ and Bacon’s first entry into fictional writing. It draws on, mixes and reworks a range of genres, most particularly, as Paul Salzman points out in Chapter 2, the utopian fantasy and the travel narrative. It implicitly alludes to, rethinks and questions the societies represented in both Plato’s *Republic*, *Timaeus* and *Critias* and More’s *Utopia* (1516).⁵

Despite such fictional richness, however, the text is often thought to be incomplete. This is primarily the result of the Preface to the *New Atlantis* by William Rawley, Bacon’s secretary and editor, which suggests that Bacon’s original intention was ‘to have composed a frame of Laws, or the best state or mould of a commonwealth’,⁶ and that, as Rawley notes at the end, ‘The rest was not perfected’ (488). However, some critics consider the *New Atlantis*’s apparent fragmentariness to be part of its overall design:⁷ its identity lies between part and whole. Significantly in this regard, Bacon’s fable is appended to the much larger work of natural history, *Sylva Sylvarum*, which comprises a compendium of hundreds of experiments both conducted by Bacon and ones about which he had read (see Chapters 2, 3 and 5 of this volume). Though this work relates to the core of Bacon’s fictional narrative – the functions, operations and instruments of Salomon’s House, the scientific institution that lies at the heart of New Atlantis – it also in some senses overshadows it through its length and basis in practical science.

However, as this volume demonstrates, the scientific enterprise of the *New Atlantis* is only one aspect of the work. Rather, Bacon’s fable stands on the cusp between the fictional and factual, the visionary and practical, utopia and utility, unknown and known. It unsettles a whole range of areas central to Bacon’s

contemporary culture, from 'science' to censorship, gender to Judaism. Moreover, the text's provisionality provides much of its resonance, allowing it to speak beyond the limits of its own time and to continue to intrigue and challenge its readers. As a number of the following essays reveal, the complex repositioning of the reader throughout the narrative is key to the ambivalent interpretations the text arouses and opens it up to a range of possible meanings. In order to have a sense of these subtle manoeuvres, it is necessary to explore the intricacies of Bacon's fable in some detail.

I

The narrative begins with a standard literary device. Lost in a remote part of the Pacific Ocean, a European crew arrive at the unknown, reclusive island of New Atlantis, or Bensalem, '(for so they call it in their language)' (463). The narrator, a crew member, describes how they are greeted with a scroll in different languages inscribed with the sign of the cross. Before disembarking they must affirm their adherence to the Christian faith; they are then placed in 'the Strangers' House' (459) where they are treated humanely and their sick are cured. At the end of their quarantine period the visitors' movements are still restricted and they later learn that there are 'laws of secrecy' governing travellers and that strangers are rarely permitted entry into Bensalem (463). They also find Bensalem to be an orderly, hierarchical and largely patriarchal society whose inhabitants profess to be happy and contented.

The Governor of the Strangers' House, who is 'a Christian priest' (462), offers the mariners his services and invites a group of them to ask him questions. They request to know how New Atlantis converted to Christianity and are told that it was brought about by 'a true Miracle' (464), which was confirmed by one of the Fellows of Salomon's House.

In response to further enquiry, the governor explains why Bensalem knows and yet is unknown to the rest of the world. Relating Bensalem's ancient history, he describes how the island lost contact with the outside world following a 'deluge or inundation' of great Atlantis, a form of 'Divine Revenge' wrought on

the Americas for attempting to invade New Atlantis (468). The island's knowing but unknown position was consolidated, however, by their lawgiver, King Solamona, who 'reigned in this island, about nineteen hundred years ago' (469). It was he who introduced the current immigration legislation by ordaining 'the interdicts and prohibitions ... touching entrance of strangers' (470). This he did because he wished to avoid the 'commixture of manners' such exchanges would bring (470).

It is at this point that the governor introduces the first detailed reference to Salomon's House, or, as it is also called, the College of the Six Days' Works, which was established by King Solamona and stands as 'the noblest foundation (as we think) that ever was upon the earth; and the lanthorn of this kingdom' (471). The description acts as a preliminary to the governor's explanation of Solamona's laws restricting travel abroad with the exception 'That every twelve years there should be set forth out of this kingdom two ships, appointed to several voyages' by three Fellows of Salomon's House (471). The explorers must remain *incognito*, their mission being to obtain, not material goods, but knowledge, or '*Light*' (472).

After this account the mariners are allowed free access to Bensalem. Two of the crew are invited to the Feast of the Family, a semi-religious celebration of lineage and fertility which pays homage to any man with thirty descendants over the age of three, and whose rituals are described in detail. The narrator then introduces his acquaintance with Joabin, a Jew, and outlines Bensalem's toleration of Jewish people, while noting that 'they are of a far differing disposition from the Jews in other parts' (475–6). Joabin continues the subject of familial relations by explaining Bensalem's marriage and sexual customs.

A messenger, however, interrupts and we learn that one of the Fathers of Salomon's House is to visit, none of them having been seen for a dozen years. There follows a description of the lavish ceremony that accompanies the Father's arrival, after which the Father meets the mariners and chooses to have 'private conference' with the narrator (479). It is in this discourse that the Father discloses 'the true state of Salomon's House', identifying 'the End of our Foundation', its 'preparations and instruments', 'the several employments and functions whereto our fellows are

assigned. And ... the ordinances and rites which we observe' (480), concluding by permitting the narrator to publish what he has related 'for the good of other nations' (488). Appended to the end of the *New Atlantis* is a '*Magnalia Naturae*', a list of Salomon's House's discoveries.

As Davis shows, this narrative comprises two key sections: the first part concerns New Atlantis's relation to the outside world, the second its internal workings.⁸ Both parts may be divided into two again: the arrival of Christianity and Bensalem's immigration and foreign policies; the familial and marriage customs of the island and the operations of Salomon's House. The form of the narrative, then, signals the borderland relations between the external and internal, each stage recounting a seemingly gradual movement from outside interests, narrated to a group of strangers, to what appears to be the core of New Atlantis, discussed in 'private conference' (479). At the same time, the crew shift from being offshore, to quarantine, to gradually gaining more freedom of movement and, in turn, more access to the inner workings of Bensalem (for a detailed account of the narrative structure see Chapter 8 of this volume).

There are, however, other aspects to the narrative structure. Each section bears a parallel relation to the whole, fragmentary text. Both stages, while seemingly self-contained, include an interruption within the discourse: the governor is called away when describing the miracle; Joabin's discussion is broken off by a messenger's arrival.⁹ This gives the impression that each section is in some sense incomplete and that, though the mariners (and the reader) are allowed some access to the island, they remain positioned as outsiders, never quite penetrating its heartland.

II

This troubled relationship between part and whole, outside and inside, is a key feature of the text and can be identified further within the texture of the *New Atlantis*. The island lies at the edge of the rest of the world, 'beyond both the old world and the new' (461), in a place which is 'utterly unknown' (457). Its apparently enlightened society resides 'in the midst of the greatest wilderness of waters' and is covered by 'thick cloud' in a land 'full of boscaje'

(457). New Atlantis presents a self-contained world within the world which is both part and whole, willing to undertake, but not reliant on, its espionage expeditions. Bensalem society exhibits features that lie between the familiar and the strange;¹⁰ they are in some sense recognisable without necessarily being explicable to its European visitors. For example, the 'reverend man' who receives them wears a turban 'not so huge as the Turkish turbans' (458), but reverses expectations by at once manifesting New Atlantis's Christianity.

By contrast, the mariners and their manners do not seem unfamiliar to the Bensalemites who, on the crew's arrival, greet them 'in so civil a fashion, as if it had been not to wonder at us but to welcome us' (460). They understand the visitors' gesture of offering them material gifts in exchange for their kindness, even though they civilly refuse to participate in this social custom.

Furthermore, Bensalemite society seems continually to signal the incompleteness of the culture from which the travellers come, and, by contrast, to have a 'more than' quality when the narrator describes details of food and clothing. The drink of grain they are given is like ale 'but more clear' (461); the reverend man's gown is 'of a kind of water chamolet', but 'far more glossy than ours' (458). This later points to the deficiencies of European culture more broadly. During his description of the utilities of Salomon's House, the Father punctuates his statements with references to what is lacking or fragmentary in European knowledge: "'We have also divers mechanical arts, which you have not ... We have also precious stones of all kinds ... to you unknown ... We have also engine-houses ... There we imitate and practise to make swifter motions than any you have'" (484–5). Repeatedly he thus points to the deficiencies of European culture.

Yet Bensalem looks to the past in order to provide its European visitors with a vision of the future. While we learn about its importation of knowledge and development of experiments, this apparently progressive society seems strangely static.¹¹ It is locked in the ancient laws and traditions established by King Solamona, whose values are enshrined in the Old Testament discourse of Solomon's wisdom.¹² However, as elsewhere in the text, this link with the familiar is only partial, for Salomon's House, though named after the Hebrew King, 'famous with you, and no

stranger to us' (471), is designed for a primarily utilitarian, scientific purpose, not a specifically sacred one. The major changes that occur take place within the travellers whose thresholds of understanding are reframed by their encounter with New Atlantis.

Bensalemite society itself remains largely free from the interference of external agents. In this regard, the rhetoric of addition noted above is simultaneously one of negation. Joabin, for example, defines the 'chaste' sexual and marriage customs of New Atlantis in reference to their exclusion of European malpractices. Just as Bensalem is unpenetrated by the contaminating influences of outside forces in other areas, so it is 'free from all pollution or foulness' in this one. As 'the virgin of the world' it is innocent without being ignorant (476). While New Atlantis apparently pushes forward the frontiers of European understanding, its integrity is founded on a tight and containing grip of border control.

Indeed, Bensalemite society contains all kinds of boundaries and exclusion zones, from its laws on travel to the secrecy surrounding the practices of Salomon's House (see Chapter 9 of this volume). These separate what might be regarded as its inner and outer communities. Bensalem as a whole is characterised as knowing but unknown, observing but unobserved, something which one of the crew members identifies with 'a condition and propriety of divine powers and beings' (466). Most citizens, though, lie outside the inner sanctum of Salomon's House, reaping the countless material benefits it brings without having access to its processes of production. From its god-like position, Salomon's House stands as both 'the very eye of this kingdom' and its source of light, or 'lanthorn' (464, 471), surveying and sustaining the island. Yet, in spite of its apparent centrality, it also lies on the edge of Bensalemite society: the Fathers of the House are rarely seen, the information they divulge is sketchy, their activities are carefully self-regulated and safeguarded from the public arena, unknown to all but a select few. In this sense, Salomon's House is at one remove from the society to which it is integral. The collaborative task of its members to achieve a complete understanding through 'the enlarging of the bounds of Human Empire, to the effecting of all things possible' (480)

excludes the majority of Bensalem's citizens, let alone the rest of humanity.¹³

When investigating the inner workings of Bensalemite society more broadly Salomon's House is not the only area in which information is fragmentary. There is a sense of incompleteness about what is disclosed, especially, as numerous commentators have noted, concerning Bensalem's underlying power structures (see Chapter 4 of this volume).¹⁴ The relationship between the activities of Salomon's House and the political and economic arrangements of Bensalem are not imparted; the monarch is mentioned (474), but remains unnamed and does not appear; we hear of 'the state' without learning about its form. As Innes argues, 'We see the effects of government but not the mechanics, the agents but not the authority'.¹⁵ Some things are revealed to the mariners, but not others. Indeed, we are made continually aware of different levels of knowing in operation throughout the narrative, from the members of Salomon's House, to 'the state', which is not told everything about the scientists' activities (486), to Bensalem's citizens and finally to the strangers, who 'knoweth least' at the outset (463), and whose understanding still remains patchy at the end.

These gradations of knowledge are also apparent when examining the perspective through which events are conveyed. Information is delivered, of course, through the focus of one of the mariners, who is at first identified closely with his crew companions. The first word in the narrative is 'We', representing an integrated group united by their borderland position: they are 'between death and life' (461), hope and despair, drifting in a sea of confusion as they lose control over the direction of their ship. They become, it seems, objects of the natural elements and the controlling force of God's hand.

In their first encounters with Bensalemite society the crew continue to form a collective position, now defined by their identity as 'strangers', not least through their literal physical location on the island. They invariably respond as a group to their experiences of the Bensalemite people and customs. Initially, they are 'much perplexed' (458), both fearful for their lives and yet touched by the Christian charity and 'parent-like usage' they receive from their hosts (462). When the narrator addresses the

crew to advise them 'to behave ourselves', he finds that they are all in agreement, 'Our company with one voice thanked me for my good admonition' (462).

Shortly, however, the mariners are broken up into different types of knowers. The Governor of the Strangers' House speaks only 'with some few of us: whereupon six of us only stayed' to have their questions answered (462); two of the crew alone are invited to the Feast of the Family. By the time the narrator meets Joabin and learns about Bensalem's marriage customs, the pronoun 'we' that dominates the first part of the narrative gives way to 'I'. The narrator's discussions with the Father of Salomon's House are still more intimate. They take place 'in a fair chamber' in 'private conference', where, after instruction, he has been selected by one of the mariners to hear 'the greatest jewel' of information the Father has chosen to 'impart unto thee' (479–80). By the end of the meeting the narrator has surely become a special knower with the implication that he has indeed been taken 'into their bosom' (472), fast transforming from being a stranger to becoming a member of Bensalemite society.

However, this impression of the privileged disclosure of exclusive Bensalemite knowledge mutates to one of general, inclusive understanding when the Father concludes by giving the narrator 'leave to publish' this relation 'for the good of other nations' (488). Presumably the text before us signals the narrator's attempts to do just this. The insider information he has apparently received has indeed been disseminated outside the clandestine boundaries of Bensalem, as well as beyond the limits of individual knowledge. Precisely why the Father permits the narrator to do this, however, given that Salomon's House lies at the heart of Bensalem's codes of secrecy, remains unclear.

III

At this point we may wish to consider how the *New Atlantis* positions its reader. Initially, there is a sense of inclusion with the mariners as a result of being party to 'so strange things so probably told' (472). Like the crew, we begin in the position of strangers, our viewpoint and understanding gradually identified with the narrator's as we gain more privileged access to the inner

workings of New Atlantis. Or so it seems. The cryptic, elliptical quality of the text is actually unsettling, and works counter to the journey of discovery we appear to undertake. The reader is kept on the borderland of the text, allowed only partial entry into the world it constructs. But this, in turn, seems to ask us to look beyond and in between what is spoken and unspoken, and to investigate the boundaries of what we are told.

One striking feature of the narrator's discourse is its lack of data about Bensalem's natural environment. While the study of the natural world lies at the heart of Salomon's House, and we learn that the 'rare fertility of soil' enables Bensalem to be self-sufficient (469), the narrator says virtually nothing about the type of terrain, vegetation, animal life or climate of New Atlantis. This may, of course, signal his physical restriction within Bensalem's city limits. Much of the information he recounts is imparted indoors, but such omissions seem strange nonetheless.

Instead, the narrator focuses his attention on cultural matters. The highly precise recording of time, food, dress, ritual, ceremony and the use of number and colour within Bensalem's customs is especially notable.¹⁶ Some of the particulars the narrator relates contain an obvious symbolic value. For example, the significance of number often seems to carry a Biblical resonance which ties in with the references that underscore the entire narrative, signalling the Christian basis of Bensalemite society. The number three, which may refer to the trinity, is central to its customs, while the 'College of the Six Days' Works' alludes to the six days of Creation described in Genesis, and is a number that recurs in a whole range of Bensalemite practices. The mariners arrive at the Strangers' House at six o'clock, where they are attended to by six people and are initially licensed to stay for six weeks, and it is after six days that the narrator's sense of time, which has been very precise up to that point, begins to become hazy. The reader, along with the narrator, comes to grasp certain key Bensalemite habits: we quickly learn that they do not take material payment in return for their hospitality; we soon discover that the Bensalemite gesture of putting 'their arms a little abroad' is a sign of welcome (460).

However, while such specific detail provides the narrator's account with a sense of authenticity, it is not necessarily

accompanied with understanding. Information seems full, but is in fact fragmentary. Many of the details recorded by the narrator remain enigmatic, or at least ambiguous. The attention paid to the colours of the attire of the various Bensalemite officials, and also discrepancies in their headgear and hair arrangements, imply significance of status, but in what specific ways they do so remain obscure. Similarly, the precision given to number throughout the narrator's account suggests that there is, for example, a possible relationship between the twelve-year intervals of the scientists' missions abroad and the visit of one of the Fathers of Salomon's House after a dozen years to the city where the travellers reside. But this, too, is not made clear. Such intricate details demand interpretation, belying transparency.

In spite of these (and many more) unexplained particulars, the narrator nonetheless shapes much of what he sees and hears. Indeed, it is precisely a sense of mystery that informs his reading of Bensalemite customs and causes him 'to think there was somewhat supernatural in this island; but yet rather as angelical than magical' (466). Unveiling the secrets of Bensalem is like revealing divine provenance: it cannot be completely contained or known because it lies on the borders of human understanding. The narrator gives the emphatically Christian foundation of Bensalemite society an extra dimension: to him and his companions it appears as a kind of paradise. For example, on receiving Bensalemite hospitality at the Strangers' House, 'It seemed to us that we had before us a picture of our salvation in heaven' and that 'God surely is manifested in this land' (461–3). They hope that they 'may find grace in the eyes of this people', believing they have 'come into a land of angels' and a nation 'compounded of all goodness' (462–3, 472). The entire process of the crew's encounter with New Atlantis contains a Biblical register: they arrive out of a 'wilderness' and, after praying to God, are saved by 'a kind of miracle', whereby they are 'cast on land, as Jonas was out of the whale's belly'; their identities are transformed and renewed through the revelations of the island, which make them desire to stay in 'this happy and holy ground' and to 'forget all that was dear to us in our own countries' (457, 461, 463, 472).

Yet we are aware from the outset that the narrator's account of New Atlantis is partial: it arises in the first instance from relief

after great fear and physical danger.¹⁷ The point, however, is not so much whether the narrator is right or wrong in his interpretations, but that he presents events from a very particular perspective which is continually foregrounded for the reader. Information is delivered after which a gloss is frequently placed upon it, usually punctuated by phrases that underline the process of interpretation: 'it seemed to us', 'we thought', 'we found [it] wonderful strange', 'it was a thing we could not tell what to make of' (465–6). While noting that they are 'cloistered' in the Strangers' House, the narrator chooses to focus on the 'courtesy', 'piety and humanity' of their captors, and concerns himself with suppressing the 'vices and unworthiness' his companions may possibly possess when he suspects they are under the surveillance of the Bensalemite authorities (461). The narrator reports, but does not question, why thirteen of the previous visitors left Bensalem, nor the governor of the Stranger's House's ambiguous hypothesis that their accounts of New Atlantis would be taken 'but for a dream' in their native lands (470). Perhaps Bensalem is not quite as able to contain its societal boundaries as it appears.

In various ways, then, the reader is made aware of a gap between information and interpretation, and the narrator's viewpoint of events does not investigate fully all aspects of what he observes and is told. Indeed, the potential for the narrator to misread what he is shown is highlighted at the end of the narrative by the Father of Salomon's House, who decides not to recount the 'excellent works' of Bensalem's inventors, for 'in the right understanding of those descriptions you might easily err' (487).¹⁸

The very term 'descriptions' is worth attention, for in depicting the activities of Salomon's House, as in other aspects of Bensalemite society, the narrator relies primarily on discursive information for his understanding, rather than immediate observation or empirical evidence. For all the experimental, inductive method that Salomon's House seems to uphold in its quest for '*Light*', its activities are 'revealed' to the narrator in a largely conversational, rather than practical, form. Apart from the medicine and nourishment the mariners receive at the outset, they hardly experience the products of Salomon's House directly. Moreover, the Father of Salomon's House invites the narrator to turn what he tells him into further discourse by publishing what

he imparts, rather than transforming it into practical application or instrumental use.

While the narrator claims to have ‘continually ... met with many things right worthy of observation’ (472), throughout the text he relies on reported information, which is often filtered through a number of sources, so that he is at one or more removes from the events themselves. It is, for example, unclear as to whether he has first-hand experience of the Feast of the Family’s rituals. The invitation for ‘two of our company’ to attend the ceremony may or may not include the narrator (472). But whether or not he attends, he seems straightforwardly to accept what he observes or is told, defining the occasion simply as ‘A most natural, pious, and reverend custom’ (472) when it is presented primarily as a celebration of fertility. The only reporter whose judgement he questions is, significantly, Joabin’s, whose explanation of Bensalem’s origins the narrator dismisses as being ‘Jewish dreams’ (476). He nonetheless accepts Joabin’s account of Bensalem’s marriage customs and their superiority to those of Europe without ever witnessing them.

There is, though, another point to be made about the form in which the narrator acquires knowledge, and that is that it runs counter to the empirical, experimental, inductive approach Bacon promotes in his works on natural philosophy. For example, in affirming a new practical approach to learning, *The Advancement of Learning* argues that ‘the first distemper of learning’ is ‘when men study words and not matter ... for words are but the images of matter’,¹⁹ while in establishing its programme for the renewal of scientific study, *The Great Instauration* recommends ‘a true and lawful marriage between the empirical and the rational faculty’ and ‘a form of induction which shall analyse experience and take it to pieces, and by a due process of exclusion and rejection lead to an inevitable conclusion’.²⁰ The revelations of New Atlantis, however, do not seem to have taught the narrator to engage in these practices. He neither analyses nor interrogates the information he is given, but bases his knowledge largely on the words of others, rather than on a rigorous investigation of practical experience.

It is perhaps the central contradiction between the methods employed by the members of Salomon’s House and the way in

which the narrator disseminates information about Bensalem that makes the text so ambiguous and open-ended. It ensures that the reader remains active and alert, being encouraged to examine the different positions from which knowledge is presented, rather than simply accepting them. Indeed, the Father of Salomon's House's concluding request for the narrator to disclose his findings 'for the good of other nations' does not necessarily mean that they should be imitated and followed. Neither wholly inside nor outside the text we are invited to enter, the reader is placed in an interrogative position, prompted to investigate its hidden recesses and to venture beyond the limits of what we are told.

IV

Not surprisingly, the *New Atlantis's* contradictions, gaps and ambivalences have allowed it to be read for different meanings and different interests. The history of the text's reception makes this manifest. The *New Atlantis* was appended to all of the seventeenth-century volumes of *Sylva Sylvarum* and together they ran into more editions than any other of Bacon's works, being printed at least fifteen times during the course of the century, besides appearing in French and Latin.²¹ In particular, Bacon's imaginative concept of Bensalem was invoked in practical terms as a model for a collaborative, scientific research community across the political, religious and social spectrum. In the 1640s and early 1650s the puritan reformer Samuel Hartlib and his circle drew upon the utilitarian, utopian and religious register of the *New Atlantis* to provide an image of the 'redeeming power of science' and its capacity to produce 'earthly salvation'.²² Charles Webster notes that 'the medical reform tracts of the Puritan Revolution carried a marked imprint of the utopian ideals of *New Atlantis*'.²³ This was also apparent in works such as Gabriel Plattes' *Macaria* (1641), which coincided with the opening of the Long Parliament and advocated 'a Colledge of experience' that would support 'the health or wealth of men', and Gerard Winstanley's *Law of Freedom* (1652), which proposed that its communes' citizens should reap the rewards of experimental philosophy.²⁴

Writing in 1657 from a different political perspective, the royalist Walter Charleton identified the more socially conservative

London College of Physicians (whose founder members were mainly Royal Physicians) as 'Solomon's House in reality'²⁵ when, in being threatened by political events, they 'deliberately consolidated themselves as a self-conscious community of Baconian experimentalists'.²⁶ Most famously, though, Salomon's House is connected to the more fully fledged institutionalisation of natural philosophy with the founding of the Royal Society in 1660. Joseph Glanvill's dedication in *Scepsis Scientifica* (1665) makes this link direct, echoing the discourse of the *New Atlantis* in promoting 'the *Empire of Man over Nature*' and regarding Salomon's House as 'a Prophetick Scheam of the ROYAL SOCIETY'.²⁷ In establishing such a connection, however, Pérez-Ramos notes that royalist historians, like Thomas Sprat, were keen to disguise the achievements of Republican Baconianism 'so that experimental science could be made politically unobjectionable',²⁸ while Hunter and Wood highlight the Royal Society's 'rival strategies based on differing intellectual outlooks',²⁹ which bear an ironic relationship to the image of homogeneity, harmony and like-mindedness of the fellows of Salomon's House.³⁰ Nonetheless, the sanctioning of a collective scientific community by the State through royal charter, and the Royal Society's aims to compile comprehensive data on the works of nature and art, and to develop practical and experimental knowledge for the benefit of mankind, are broadly akin to the goals of Salomon's House. Indeed, the workability of Bensalemite society is stressed throughout the period. For example, John Evelyn writes to the Earl of Clarendon, 'There is certainly nothing more expedient than ... to set upon a Design no way beneath that of ... *Solomons House*; which, however lofty, and to appearance *Romantic*, has yet in it nothing of Impossible to be effected'.³¹ Multhauf signals the still broader appeal of the *New Atlantis*'s influence in suggesting that 'From the 1660s it was widely held in France and Germany, as well as England, that Bacon was the fountainhead of inspiration of the scientific society'.³²

However, the *New Atlantis* was also employed for more eclectic and idiosyncratic purposes during the seventeenth century. In 1660 R. H., most likely Robert Hooke, produced a continuation of the *New Atlantis*, 'Wherein is set forth a Platform of Monarchical Government. With a pleasant intermixture of divers

rare Inventions, and wholsom Customs, fit to be introduced into all Kingdoms, States, and Common-Wealths'. Preceded by a eulogy by George Herbert, this work highlights the public benefits of Bensalem's material comforts and specifies New Atlantis's 'Frame of Laws', supposedly omitted from Bacon's work.³³ In 1676 another 'Continuation of the *New Atlantis*' appeared with Glanvill's 'Anti-fanatical Religion and Free Philosophy'.³⁴ More curiously still, in the 1650s Thomas Bushell, a mineralogist and alleged disciple of Bacon, planned to construct a 'foundation or building, which is designed for the execution of my Lord Verulam's *New Atlantis*' in Lambeth Marsh and later to build 'Solomon's House in all its dimensions' in the city of Wells so as to gain publicity and potential patronage for his mining exploits.³⁵

During the centuries that followed, such specific references to and uses of the *New Atlantis* decreased, though the ideas behind the scientific community represented in Bacon's fable and elsewhere in his work continued in various shapes and forms. The French *philosophes* of the Enlightenment highlight the social and humanitarian function of scientific knowledge in Bacon's writings,³⁶ and his ideas were implicitly regarded as being central to the Encyclopedists' focus on the mechanical arts, practical science and classificatory schemes.³⁷ Immanuel Kant dedicated his *Critique of Pure Reason* (1781) to Bacon and refers to the 'fresh vigour' 'wise Bacon' gave to the seventeenth century's 'new direction' of 'physical studies' in the preface to the second edition of that text,³⁸ while in the next century Karl Marx praised 'the celebration of work and technical skill' in the *New Atlantis*.³⁹ However, in the latter part of the nineteenth century Bacon's work was discredited for what was perceived as its failure to combine hypotheses with its inductive approach. In this respect, the influence of Baconian methods on scientific innovators, such as Newton, was questioned, and from this period the significance of Bacon's contribution to modern science was challenged.⁴⁰

The extent to which the *New Atlantis* (and Bacon's work more generally) represents the claims of social progress based on a seminal form of modern science has also occupied twentieth-century critics. Writing in 1949, Farrington regards the *New Atlantis* as representing 'Bacon's fullest and clearest expression of his ideal of organized scientific research' in enabling 'the marriage

between natural philosophy and industrial production'.⁴¹ For Rossi, too, in the next decade, it is Bacon's identification of the scientific community's form and function within society that is most significant in establishing an ideal of scientific progress, for it projects 'an awareness of the social importance of scientific research, an amelioration of the conditions of human existence, and organised scientific collaboration'.⁴² Some twenty years later, in describing the activities of Salomon's House's fellows, Vickers goes so far as to suggest that 'The world of the *New Atlantis* is no fantasy, but the world of modern science and technology' in which 'All is done to make human life easier to bear, and enjoy'.⁴³

More recently, Zagorin presents the *New Atlantis* as 'an imaginary picture of an ideal or an advanced society', highlighting once again its humanity, benevolence and the philanthropic aims of Salomon's House.⁴⁴ However, Zagorin also comments on how Bensalem's secrecy signals a 'lingering allegiance to the principle of esotericism'.⁴⁵ Moreover, far from indicating a tension between religion and science, the *New Atlantis* depicts a society in which science 'almost resembles a religious vocation' and may reverse the consequences of original sin.⁴⁶ Similarly, albeit in a more complex fashion, Briggs suggests that Bensalem's 'science grows from archaic roots and modern prophecy'.⁴⁷

Nor are these the only areas in which the *New Atlantis* is regarded as adopting traditional value systems in order to promote its vision of an advanced society. Zagorin points out that the sketchy details about Bensalem's political organisation indicate that it is founded on a carefully graded hierarchical system not unlike those existing in seventeenth-century Europe.⁴⁸ Where Zagorin suggests that Bensalem presents 'an aristocracy of intellect',⁴⁹ though, Achinstein argues that its hierarchical foundation is built on more traditional pro-genitive, patrilineal lines. In this reading succession and inheritance, celebrated at the Feast of the Family, provide both a metaphor for and means of deradicalising progress.⁵⁰ However, while Box, too, identifies the *New Atlantis*'s reconciliation of 'a conservative and Christian social order with ... a progressive and sceptical science', he suggests that this is the result of its 'generally apolitical character', where 'the fruits of science and technology have made political rule superfluous'.⁵¹ In this sense, the fable does not engage with the

pressing, historically specific concerns with advancement outlined in Bacon's philosophical work, nor with the contradictions they imply between scientific progress and social stability, but rather takes on a curiously timeless quality.⁵² By contrast, Innes and Renaker suggest that the *New Atlantis* is a peculiarly modern text, both critics highlighting the way in which science predates and marginalises Christianity.⁵³

Recent criticism has often tended to question the benevolent and ideal nature of the society presented in the *New Atlantis*. Feminist readings have frequently focused on the exploitative aspects of Salomon's House's activities, presenting its technological proficiency as signalling the dominion of a masculine society of knowers over feminine nature, the object of enquiry, and treating Bacon's work more generally as representing a new set of discursive practices that attempt to naturalise the relationship between knowledge and power (see Chapter 8 of this volume).⁵⁴ Other readings have highlighted what are regarded as being the colonialist ideology underscoring the Bensalemites' activities. Whitney, for example, presents Bacon's fable as 'a political allegory' offering 'a vision of science linked inseparably to external and even internal colonialism'. It demonstrates, he argues, 'a prospective model' of 'a British colony planted among aliens' whose 'covert form of colonization', figured in the Merchants' of Light espionage expeditions, 'is also an apt analogy for an ideally exploitative class relationship between scientists and the artisans and mechanics whose inventive skills and useful devices Bacon would harness'.⁵⁵

Other critics, too, identify the problematics of the internal workings of New Atlantan society from a range of viewpoints informed by post-modernist theories. In exploring Bensalem's sexual customs, Bruce argues that the *New Atlantis* presents a case for eugenics, for Bensalemites seek to eradicate physical desire in favour of producing healthy children who will further the progress of 'an objective state of scientific perfection'.⁵⁶ Weinberger approaches the tricky area of desire from a slightly different perspective. He points out the implicitly dark undertones which underscore the description of Bensalem's erotic practices (as well as other areas of society), noting that without confronting the problems of political life, Bensalem's science and

Christianity, for all their surface beneficence, cannot be safeguards against excessive desire, erotic or otherwise.⁵⁷ Similarly, for Innes it is the hidden, undisclosed nature of Bensalem's politics that belies New Atlantis's apparent benevolence and piety. Behind the scenes, Innes suggests, lurks 'an unknown knower', whose function may simply be one of control rather than virtue, and whose mechanisms produce not so much spiritually enlightened as totally submissive, well-regulated citizens who, in exchange for their docility, reap the thoroughly earthly rewards of bodily comfort, preservation and security.⁵⁸ Box, too, pays attention to the somewhat sinister compliance of Bensalem's inhabitants. Far from demonstrating a lively, dynamic community of science, New Atlantis's affluence and plenty produces a society that remains 'content but inert, healthy perhaps, but passive', where desire does not form a threat and is replaced by complacency. Indeed, 'There are no life sciences in Bensalem,' he argues, 'because there is no life.'⁵⁹ Also concentrating on the double-edged features of the text, Faulkner regards the *New Atlantis* as a specifically rhetorical work, which, in seeking to provide a persuasive case for its 'seminal vision of progressive society' 'exaggerates the goods to come', while concealing 'the repulsive features (such as dangerous inventions, pervasive control, and the overthrow of European faith, morals, and monarchy)'.⁶⁰ Once again, the utopian register merges with a dystopian one.

In their various ways, the above readings foreground the complex texture, ambiguities and resonant silences of the *New Atlantis*. They signal a text which is both generically hybrid and mixed in terms of its modes of thought. Residing on the borderline between Renaissance and early modern ideas, its vision of progress is tentative. In turn, the perspectives of post-modernity encourage a revaluation of the *New Atlantis's* provisional projection of the future.

V

This volume is informed by and develops recent critical reassessments of Bacon's work. The essays reflect a concern to locate the *New Atlantis* in reference to Bacon's oeuvre specifically, and to the broader cultural and historical context in which it

intervenes. The range of disciplinary approaches provided by the volume underlines the variety of particular contexts pertinent to our understanding of this work. Most of the readings here mediate their discussions about such contextual details through reference to contemporary theoretical debates. However, they also reveal how the *New Atlantis* moves beyond its own specific context to complicate and raise questions about theory, so as to form an ongoing dialogue with current critical ideas.

The first three essays of this volume show how the *New Atlantis* represents more than a clear-cut model of an ideal society, highlighting instead the important complexities of its form. Paul Salzman's opening essay examines the significance of the *New Atlantis*'s uses of literary forms and also its relation to *Sylva Sylvarum*. Exploring its interaction with and impact on the emergence of a range of narrative genres during the period, Salzman argues that the *New Atlantis* provides a particularly striking example of narrative hybridity, shifting between utopian vision, travel narrative and genres designed for political and social commentary. In turn, the *New Atlantis* is fundamentally linked to *Sylva Sylvarum*, for together these works form 'an intersecting genre', combining 'natural history/fable, treatise/fiction, which readers were encouraged to see as inseparable'.

Sarah Hutton's essay is also concerned with the *New Atlantis*'s form and the importance of its appendage to *Sylva Sylvarum*. However, Hutton focuses on the rhetorical features of the text, arguing that these have been underestimated in most interpretations of the *New Atlantis*. Locating her reading in the context of Bacon's assertions on the nature and function of language, she challenges the received view that Bacon's fable is merely 'a blueprint' for his scientific programme. Instead, she treats the *New Atlantis* as 'a carefully crafted' piece of persuasion 'designed to engage the involvement' of its contemporary audience 'in the grand project for which *Sylva Sylvarum* lays the ground'.

David Colclough considers the importance of the concept of reading and the reader's position in the *New Atlantis* in further detail, particularly with regard to the political and ethical concerns which Salzman signals in his essay. Colclough contends that the pragmatic aims of the text are expressed less through a transparent representation of a model society (the details of

whose moral and political aspects are notably absent) than through the demonstration of a model of reading and thought as 'it might be practised.' The type of reading and thought the *New Atlantis* recommends, Colclough suggests, are directly related to Bacon's ideas about the reform of knowledge and are characterised by a process of 're-use and re-appropriation', where past knowledge is 'deployed to new ends'. In addition, the text offers a set of reading practices with which they themselves may engage, ones which are 'open and exploratory' and that revise the expectations with which the reader enters the text. Colclough's argument complements those of Claire Jowitt and Kate Aughterson in this respect, for their essays also highlight the text's inversion of narrative expectations and standard modes of thought, showing how it thus provides an implicit critique of contemporary European customs and norms.

Whereas the first three essays focus on extra-scientific concerns, Richard Serjeantson's essay closely examines the nature of the 'science' represented in the *New Atlantis*. Locating Bacon's work in its specific historical context, Serjeantson finds that Bensalem's scientific interests are not as advanced as they are often thought to be. Rather, they have much in common with the contemporary preoccupations of what Serjeantson terms 'natural knowledge', while also being linked to Bacon's own methodological writing. In a way that converges with Colclough's argument, Serjeantson shows, however, that traditional modes of knowledge are given different possibilities by being placed in the imaginative form of Bacon's fable and the new institutional context of Salomon's House it represents.

Jerry Weinberger's, Claire Jowitt's and Kate Aughterson's essays highlight, in their different ways, the allegorical and rich allusive register of the *New Atlantis*. Like Serjeantson, Weinberger is interested in the role of religion in reference to New Atlantan science. In contrast to Serjeantson, however, Weinberger argues that Bensalem represents a thoroughly technological society, whose project for the mastery of nature places religion's function in an ambiguous position. In particular, Weinberger explores Bacon's account of miracles, so central to the text, providing a very different view of the implicit ethics and politics underlying *New Atlantis* from Colclough's. Placing his discussion in close

reference to Bacon's other writings on morality, Weinberger's investigations lead him to consider the ways in which 'the *New Atlantis* suggests the problem, as much as the promise, of technology.'

Claire Jowitt relates the politics of the *New Atlantis* more directly to the immediate context of Jacobean England, exploring in particular its implicit messages about colonial expansion and Jewish toleration. At a specific level, Jowitt suggests that Bacon's text provides a covert critique of James I's domestic and foreign policies, which is closely connected to Bacon's relation to the Court at the time of writing. However, she goes on to show that in its equivocal attitude towards the effects of travel and ambiguous representation of Joabin the *New Atlantis* also reproduces some of the social and political contradictions existing in Bacon's own cultural context.

Ambivalence and contradiction also underscore Kate Aughterson's and Simon Wortham's readings of the *New Atlantis*. Aughterson's essay provides an analysis of the complex formulation of gender in Bacon's text, arguing against the tendency of feminist criticism to view Bacon as the founding father of a thoroughly masculinised science. Instead, she shows how concepts of sexual difference and gender in the *New Atlantis* are connected to the 're-visioning' across a range of areas that takes place in the text. By closely analysing its rhetoric, metaphors and allusions, Aughterson argues that Bacon's fable questions clear-cut sexual hierarchies and articulates a version of scientific endeavour and its relation to nature that is both more equitable and ambiguously gendered than is generally acknowledged.

Like Aughterson, Simon Wortham suggests that the *New Atlantis* troubles straightforward binary oppositions. Where Aughterson's essay problematises feminist readings concerning the repressive features of Bacon's sexual politics, Wortham challenges the tendency of some Renaissance Studies critics to treat the politics of censorship in purely negative terms. In particular, Wortham examines the silences and interruptions so central to the *New Atlantis*, investigating the highly ambiguous quality of the concealment upon which Bensalem's knowledge rests and its refusal to be a simple counterpart to what is present, visible and known. Operating 'in a space between pre-modern and modern

types of legitimisation', Wortham contends that 'Bensalem's secrecy does not constitute a form of institutionalised repression, but rather enacts a kind of "productive" censorship.'

From their disparate perspectives, all of the essays in the volume stress the open-ended and in-between quality of the *New Atlantis*. They show how it unsettles categories and troubles clear-cut identification, allowing the text to be read for a variety of purposes and range of possibilities, which pass beyond the 'border-region' of its own particular context, enabling it to participate in contemporary discussions as well as to generate new ones.

Notes

- 1 Francis Bacon, Proem to *Of the Interpretation of Nature* (*De Interpretatione Naturae*), *The Works of Francis Bacon*, ed. James Spedding, Robert Leslie Ellis and Douglas Denon Heath, 14 vols (London, Longman, 1857–74), vol. X, p. 84.
- 2 Most critics agree that the *New Atlantis* was written at around this date (see Brian Vickers (ed.), *Francis Bacon: A Critical Edition of the Major Works* (Oxford, Oxford University Press, 1996), pp. 786–7). However, some suggest that an initial draft exists from as early as 1614 (see Ian Box, *The Social Thought of Francis Bacon: Studies in the History of Philosophy*, vol. 10 (Lewiston, The Edwin Mellen Press, 1989), p. 126). J. C. Davis follows Joseph Anthony Mazzeo (*Renaissance and Revolution: The Remaking of European Thought* (London, Pantheon Books, 1965), p. 221) in arguing 'that Bacon first drafted the work in the period 1614–17 and revised it for publication in, or about, 1623' (*Utopia and the Ideal Society: A Study of English Utopian Writing 1516–1700* (Cambridge, Cambridge University Press, 1981), p. 122). The initial appearance of the *New Atlantis* is also a moot point. Some commentators suggest that it first came out in 1626. This volume follows the British Library Catalogue in proposing a publication date of 1627.
- 3 For a recent authoritative account of Bacon's life see Lisa Jardine and Alan Stewart, *Hostage to Fortune: The Troubled Life of Francis Bacon* (London, Victor Gollancz, 1998).
- 4 Vickers, for example, suggests that 'this work sums up a lifetime's concern with the reformation of natural philosophy' (*Francis Bacon*, p. 787), while John E. Leary establishes more general links between the *New Atlantis* and Bacon's other writings, especially its conception 'of scientific inquiry as a collective, collaborative, and social enterprise' (*Francis Bacon and the Politics of Science* (Ames, Iowa State University Press, 1994), pp. 231–8, 258). Bacon's own attempts to gain patronage from James I for a scientific institute were unsuccessful (see Perez Zagorin, *Francis Bacon* (Princeton, NJ, Princeton University Press, 1998), p. 124).

- 5 See Jerry Weinberger, *Science, Faith, and Politics: Francis Bacon and the Utopian Roots of the Modern Age* (Ithaca and London, Cornell University Press, 1985), pp. 28, 32–4; and Howard B. White, *Peace Among the Willows: The Political Philosophy of Francis Bacon* (The Hague, Martinus Nijhoff, 1968), pp. 112–34. Plato's *Timaeus* and *Critias* provide the first description of the ideal, mythical society of Atlantis before it was destroyed in a natural disaster. For a comparative account of More's *Utopia* and the *New Atlantis* see Susan Bruce, 'Virgins of the world and feasts of the family: sex and the social order in two renaissance utopias', in Neil Rhodes (ed.), *English Renaissance Prose: History, Language and Politics* (Tempe, MRTS, 1997), pp. 125–46.
- 6 Vickers (ed.), *Francis Bacon*, p. 785. All further references to the *New Atlantis* come from this edition and are given in parentheses in the text.
- 7 See, for example, Jerry Weinberger's 'Introduction' to his edition of Francis Bacon, which suggests that 'the *New Atlantis* may only appear to be incomplete and thus impossible to grasp in its entirety' because of Bacon's view that political science is "'secret and retired'" and 'can be discerned only with difficulty' (*New Atlantis and The Great Instauration* (Wheeling, Illinois, Harlan Davidson, 1980, revised edn 1989), pp. xii–xiii). Writing from a different perspective, Davis argues that Bacon's failure to believe in human perfectibility means that he is unable to present a complete and unambiguous vision of a utopian society (*Utopia*, pp. 106–37 and esp. pp. 118ff.). Robert K. Faulkner, by contrast, regards the *New Atlantis*'s 'apparent incompleteness' as being 'a literary device' which enables Bacon to 'conclude with an exhortation to world-wide scientific enlightenment' (*Francis Bacon and the Project of Progress* (Maryland, Rowman and Littlefield, 1993), p. 234).
- 8 *Utopia*, pp. 106–18.
- 9 Amy Boesky describes the *New Atlantis* as 'a collection of broken or incomplete prose kinds – aphorisms, dialogues, experiments, fables' ('Bacon's *New Atlantis* and the laboratory of prose', in Elizabeth Fowler and Roland Greene (eds), *The Project of Prose in Early Modern Europe and the New World* (Cambridge, Cambridge University Press, 1997), p. 143).
- 10 See *ibid.*, pp. 147–8 and also Chapter 8 of this volume.
- 11 Box points out the 'ahistoric quality' of Bensalemite society, which appears to exist 'in a seemingly timeless present' without appearing to be 'oriented to the future' (*The Social Thought*, p. 128). Box links this temporal quality to the relative inactivity of Bensalem's citizens, who seem to want for nothing and so do not need to work for a better future (pp. 129–33).
- 12 See Sharon Achinstein, 'How to be a progressive without looking like one: history and knowledge in Bacon's *New Atlantis*', *CLIO*, 17:3 (Spring 1988), 249–64. Achinstein argues that Bacon locates his ideas in this traditional Biblical source in order to de-radicalise them, 'relying on a myth of the past for his scheme of historical progress' (p. 257). See also Chapter 4 of this volume which provides a different reading of Bacon's use of past texts.
- 13 See Box, who argues that instead of presenting 'an authentic community of science', Bensalemite society is 'divided between those who know and

- those who don't' (*The Social Thought*, p. 147). Box also rightly notes that Bensalem's 'idea that knowledge must be kept secret is at odds with Bacon's scientific programme' where 'the co-operative aspect of inquiry imposes an important democratic aspect on the instauration' (pp. 133–4).
- 14 See Weinberger, 'Introduction' to *New Atlantis*, pp. xiii–xxxiii and note 6 above. See also Davis, *Utopia*, pp. 117–37; David C. Innes, 'Bacon's *New Atlantis*: the Christian hope and the modern hope', *Interpretation*, 22:1 (Autumn 1994), 3–37; Leary, *Francis Bacon*, p. 256; Weinberger, *Science, Faith, and Politics*, 32–5. Leary departs from the other critics listed in this note in choosing not to read the *New Atlantis*'s silences as being filled with extra meaning. Instead, he suggests that the text 'conforms to what we already know of [Bacon's] views on organised science' (pp. 231, 256–8). Faulkner suggests that in spite of its 'secretive handling of matters of government', the politics of the *New Atlantis* is more comprehensive than is often acknowledged (*Francis Bacon*, pp. 234–5 and Chapter 11).
 - 15 See Innes, 'Bacon's *New Atlantis*', p. 13. See also Faulkner, *Francis Bacon*, pp. 245–9.
 - 16 See White, *Peace*, for a detailed analysis of the significance of number and colour in the *New Atlantis* (Chapter 10).
 - 17 See Innes, who takes the unreliability of the narrator and his companions even further, suggesting that 'They mistake provision of necessities and comforts for kindness, and they mistake kindness for godliness' ('Bacon's *New Atlantis*', p. 8).
 - 18 Susan Bruce also notes the discrepancy between the narrator's and reader's perspectives in her introduction to S. Bruce (ed.), *Three Early Modern Utopias: Utopia, New Atlantis, The Isle of Pines* (Oxford and New York, Oxford University Press, 1999), pp. xxxiv–v.
 - 19 Vickers (ed.), *Francis Bacon*, p. 139.
 - 20 Weinberger (ed.), 'Introduction' to *New Atlantis*, pp. 15, 23.
 - 21 R. W. Gibson, *Francis Bacon: A Bibliography of his Works and of Baconiana to the Year 1750* (Oxford, The Scrivener Press, 1950), pp. xv, 147–58, 184–7. See also Vickers (ed.), *Francis Bacon*, p. 789.
 - 22 Antonio Pérez-Ramos, 'Bacon's legacy', in Markku Peltonen (ed.), *The Cambridge Companion to Bacon* (Cambridge, Cambridge University Press, 1996), p. 315. See also Rose-Mary Sargent, 'Bacon as an advocate for cooperative scientific research', in the same volume, pp. 164–5. Stephen Clucas importantly notes that, while Bacon's ideas are significant to the Hartlib circle, their sources of influence are more disparate than is generally acknowledged ('In search of "The True Logick": methodological eclecticism among the "Baconian reformers"', in Mark Greengrass, Michael Leslie and Timothy Raylor (eds), *Samuel Hartlib and Universal Reformation: Studies in Intellectual Communication* (Cambridge, Cambridge University Press, 1994), pp. 51–74).
 - 23 Charles Webster, *The Great Instauration: Science, Medicine and Reform 1626–1660* (London, Duckworth and Co., 1975), p. 250.

- 24 *Ibid.*, pp. 48, 368.
- 25 Cited in *ibid.*, p. 315.
- 26 Theodore M. Brown, 'The rise of Baconianism in seventeenth-century England', in *Studia Copernicana: Science and History: Studies in Honor of Edward Rosen* (Warsaw, the Polish Academy of Science Press, 1978), pp. 516, 509.
- 27 Cited in Vickers (ed.), *Francis Bacon*, p. 789. See also Gibson, *Francis Bacon*, p. 261.
- 28 Pérez-Ramos, 'Bacon's legacy', p. 315.
- 29 Michel Hunter and Paul B. Wood, 'Towards Solomon's House: rival strategies for reforming the early Royal Society', *History of Science*, xxiv (1986), 49–108, p. 50.
- 30 Box significantly notes, however, that the *New Atlantis's* orderly, peaceful and contented society runs counter to the concept of a dynamic, active community of science so central to Bacon's other works, especially his *Essays* (*The Social Thought*, pp. 128–44).
- 31 Cited in Richard Foster Jones, *Ancients and Moderns: A Study of the Rise of the Scientific Movement in Seventeenth-Century England* (2nd edn, St Louis, Washington University Studies, 1961), p. 317, n. 86.
- 32 Robert P. Multhauf, 'Copernicus and Bacon as renovators of science', in *Studia Copernicana*, p. 492. It is important to acknowledge, however, that some scientific societies, most notably Rome's *Accademia dei Lincei* (1603), were established before the *New Atlantis* appeared (Vickers (ed.), *Francis Bacon*, p. 785).
- 33 Jones, *Ancients and Moderns*, p. 319, n. 103, p. 174. See also Gibson, *Francis Bacon*, p. 263.
- 34 Gibson, *Francis Bacon*, p. 260.
- 35 Cited in Webster, *The Great Instauration*, p. 366. The above cases are also noted by Vickers (ed.), *Francis Bacon*, p. 788.
- 36 See Pérez-Ramos, 'Bacon's legacy', pp. 320–1.
- 37 See Anthony Quinton, *Francis Bacon* (Oxford, Oxford University Press, 1980), pp. 19, 79–80, and Paolo Rossi, 'Baconianism', in Philip P. Wiener (ed.), *Dictionary of the History of Ideas*, vol. 1 (New York, Scribner, 1968–74), pp. 177–8. Rossi rightly shows how this represents a very partial reading of Bacon (p. 177), while Pérez-Ramos, 'Bacon's legacy', suggests that specific reference to Bacon's work is vague in Encyclopedists' writings (pp. 320–1).
- 38 Immanuel Kant, *Critique of Pure Reason*, ed. Vasilis Politis (London, Everyman, J. M. Dent, 1993), p. 13.
- 39 See Rossi, 'Baconianism', p. 179.
- 40 See Pérez-Ramos, 'Bacon's legacy', pp. 324–7; Quinton, *Francis Bacon*, p. 80 and Rossi, 'Baconianism', p. 178.
- 41 Benjamin Farrington, *Francis Bacon: Philosopher of Industrial Science* (1949, rpt. London, Macmillan, 1973), pp. 16–17.

- 42 Paolo Rossi, *Francis Bacon: From Magic to Science* (1957), trans. Sacha Rabinovitch (London, Routledge and Paul Kegan, 1968), p. xiii.
- 43 Brian Vickers, *Francis Bacon* (Harlow, Longman, 1978), pp. 28–9.
- 44 Zagorin, *Francis Bacon*, pp. 170, 173.
- 45 *Ibid.*, p. 44. Cf. Weinberger, who suggests that this feature of the *New Atlantis* retains ‘the ancients’ “enigmatical method” found in classical utopianism (*Science, Faith, and Politics*, p. 35). See also Box, *The Social Thought*, pp. 134–5.
- 46 Zagorin, *Francis Bacon*, pp. 173, 45.
- 47 John Channing Briggs, ‘Bacon’s science and religion’, in Peltonen (ed.), *The Cambridge Companion*, p. 192.
- 48 Zagorin, *Francis Bacon*, p. 225.
- 49 *Ibid.*
- 50 Achinstein, ‘How to be a progressive’, pp. 249–64. See also Leary, who emphasises the way in which ceremony is used throughout the narrative to support the social order (*Francis Bacon*, pp. 238–47).
- 51 Box, *The Social Thought*, pp. 125, 127. Weinberger also notes that Salomon’s House ‘seems to have no place for the study of politics’ so that ‘neither the scientific elite nor the political establishment can claim comprehensive wisdom about policy and government’ (‘Introduction’ to *New Atlantis*, pp. xxx–i).
- 52 Box, *The Social Thought*, pp. 128–9.
- 53 Innes, ‘Bacon’s *New Atlantis*’, pp. 3–37 and David Renaker, ‘A miracle of engineering: the conversion of Bensalem in Francis Bacon’s *New Atlantis*’, *Studies in Philology*, 87:2 (Spring 1990), 181–93. See also Briggs, ‘Bacon’s science’, p. 193 and Weinberger (ed.), ‘Introduction’ to *New Atlantis*, pp. xviii–ix.
- 54 See, for example, Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco, Harper and Row, 1980), pp. 180–90.
- 55 Charles C. Whitney, ‘Merchants of light: science as colonization in the *New Atlantis*’, in William A. Sessions (ed.), *Francis Bacon’s Legacy of Texts: ‘The Art of Discovery Grows with Discovery’* (New York, AMS Press, 1990), pp. 256–7. See also Boesky, who also indicates the close alliance between Bacon’s scientific and imperial goals, but shows how his fable complicates a straightforward colonialist reading by inverting the conventional relationship between the European explorers and the native island they discover (‘Bacon’s *New Atlantis*’, pp. 138–53).
- 56 Bruce, ‘Virgins of the world’, p. 146 and pp. 139–46.
- 57 Weinberger (ed.), ‘Introduction’ to *New Atlantis*, pp. xiii–xxxiii.
- 58 Innes, ‘Bacon’s *New Atlantis*’, p. 13 and pp. 3–37. See also Faulkner, *Francis Bacon*, pp. 248–9.
- 59 Box, *The Social Thought*, pp. 143, 158.
- 60 Faulkner, *Francis Bacon*, pp. 229, 244, 230, and Chapter 11.