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‘THE MILLER OF HUNTINGDON’: FRANCIS BACON – STATESMAN AND PHILOSOPHER¹

I

Francis Bacon was a politician and statesman for most of his life. He received an education designed to train him for an active life and sat in the House of Commons for the first time at the tender age of 20. He considered himself first a *bonus civis* – which amounted to being ‘a good and true servant to the Queen’ – and only after a *bonus vir*, that is an honest man.² Up to the time of his unexpected fall in 1621, Bacon was actively involved in high politics at the courts of Elizabeth I and James I, rising ultimately to become a Lord Keeper of the Great Seal 1617 (as his father had been) and being granted the title of Lord Chancellor the next year. After his fall in 1621, he never abandoned hope of a political comeback. A month after his impeachment he was already planning to offer instruction in politics,³ and

his *History of Henry VII*, written in 1621 and published in March 1622, was partly intended to show his abilities as a counselor. At the same time he planned to ask the king to employ him again ‘publicly upon the stage,’ and, in 1624, he declared himself ready to travel to the Continent to negotiate a league with France.⁴

Bacon’s pursuits in natural philosophy were hardly less long-standing. According to his literary secretary and first biographer, William Rawley, Bacon ‘fell into the dislike of the philosophy of Aristotle; not for the worthlessness of the author ... but for the unfruitfulness of the way’ as early as when he was a student in Cambridge (from the age of 12 to 14).⁵ This used to be taken as a sign of Bacon’s precocity in natural philosophy, but recent commentators have often dismissed it as more or less pure fabrication. But if there is something in it, it more probably referred to the impact of a humanist culture on Bacon and the attendant dislike of scholasticism than to any more specific philosophical criticism of prevalent natural philosophy.

Nevertheless, from the early 1590s, when Bacon was around 30, we have the first proper evidence that he had grand schemes of philosophical reform in mind. In 1592 he wrote in his famous letter to his uncle, Lord Burghley, that

I confess that 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 verborities, the other with blind experiments and auricular [i.e. hearsay] 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. This, whether it be curiosity, or vain glory, or nature, or (if one take it favourably) *philanthropia*, is so fixed in my mind as it cannot be removed.⁶

At approximately the same time, on two different occasions, Bacon spoke about his philosophical schemes, noting that ‘all the philosophy of nature which is now received, is either the philosophy of the Grecians, or that other of the alchemists.’ Whereas the former, he went on, ‘hath the foundation in words, in ostentation, in confutation, in sects, in auditories, in schools, in disputations,’ the alchemists had theirs ‘in imposture, in auricular traditions, and obscurity.’⁷

These briefly expressed opinions sketched many of Bacon's central philosophical themes. He argued against the barrenness of scholastic philosophy (the Greeks, or Aristotle alone, stood for it) and against the preposterous claims of alchemy. He promised to form a new method, which would replace both exploded schools, and produce not just words but works. He expressed confidence that, once this method was applied, it would enable men to make new discoveries that would benefit humankind. Moreover, knowledge, he insisted, was 'the worthiest power,' thus making already in the early 1590s his novel link between science and power – that science could become an operative action.

By the first decade of the seventeenth century Bacon examined many of these themes in much greater detail in several natural philosophical tracts and treatises. In 1605 he published *The advancement of learning*, which was his first published philosophical work (and incidentally the only one which he published in English; all the other were in Latin, which is an indication of the international scope of his project). *The advancement of learning* was not so much an account of Bacon's methodological principles, but rather an eloquent defence of the importance of learning and a general survey of the contemporary state of knowledge, pointing out deficiencies in contemporary knowledge and supplying Bacon's broad suggestions for the ways of improvement.

At the same time Bacon composed various tracts and treatises on natural philosophy, which were only published after his death. In these he developed his notions of an operative natural philosophy (or science) and his proposed new method which would bring it about.

Although in the 1610s Bacon was heavily involved in politics he carried on his philosophical pursuits, so much so that at the pinnacle of his political career in late 1620, he also published his most important philosophical treatise the *Novum organum* (i.e. the *New Organon*) – together with the preliminary material of his whole philosophy – the *Instauratio magna* (i.e. *The great instauration*). It offered a comprehensive plan 'to commence a total reconstruction of sciences, arts, and all human knowledge.'⁸ The ultimate aim of this reconstruction was nothing less than 'to enlarge the bounds of Reason and to endow man's estate with new value.'⁹

After his fall in 1621 Bacon had much more time for his literary and philosophical projects and during the remaining five years of his life he made haste and published, among other things, several natural histories, an expanded version of *The advancement of learning* in Latin and wrote several other philosophical pieces, including his utopia – the *New Atlantis*.

II

The purpose of this summary sketch of Bacon’s life is to highlight the well-known fact that throughout his life Bacon pursued both a political and philosophical career. At the same time as he wrote famous and celebrated works on natural philosophy he was also a principal figure in contemporary politics. The first one to comment on this fact was Bacon himself. Every time he indulged in a piece of autobiographical comment he thought it worth his while to emphasise this fact. When he wrote to his uncle, Lord Burghley, in 1592 Bacon distinguished between his ‘contemplative ends’ (i.e. his philosophical pursuits) and his ‘civil ends’ (i.e. his political career).¹⁰ Approximately ten years later he pointed out that ‘I was fitted better for the contemplation of truth, than for other things’; yet, ‘by birth and education I was directed to civil affairs.’¹¹ And towards the end of his life he confessed that ‘my *Instauration* ... is the work that in mine own judgment ... I do most esteem,’ but also hastened to add that ‘I cannot altogether desert the civil person that I have borne.’¹²

How are we to relate these two pursuits? Of course, we can merely wonder how Bacon had enough time for both his philosophical investigations and his active political career. But it is easy to see that the problem is more serious and complicated than that. In its most provocative formulation the question can be posed as follows: Are we producing several Francis Bacons or is there a way in which different aspects of his career can be integrated to each other?

Clearly, this is an absolutely central question in any biographical study of Bacon, and it has often been asked, at least if the titles of several recent studies of Bacon are anything to go by. The titles of these studies include for instance: *Science, faith, and politics* or *The making of the instauration: science, politics and law in the career of Francis*

Bacon or Francis Bacon, the State, and the reform of natural philosophy or Francis Bacon: history, politics and science or even simply Francis Bacon and the politics of science.

It almost goes without saying that answers to this central question of Bacon scholarship have varied enormously. Sometimes it has been argued that a strict separation of these two pursuits yields us the most truthful picture of Bacon, and sometimes it has been insisted that the integration of them as closely together as possible is the most fruitful way of examining his life and career and gaining an understanding of his philosophy.

Traditionally, Bacon's two careers were kept quite separate. Thus in the standard edition of Bacon's collected works, published by the great Victorian Bacon scholar, James Spedding, Bacon's philosophical works are firmly separated from his occasional papers, which mostly concerned his political career. Moreover, several scholars detected a fundamental gap between Bacon's lifelong attachment to the monarch and the attendant inclination towards absolutism on the one hand and the democratic notions of his scientific schemes on the other.

The most usual way of solving the dilemma between science and politics in earlier scholarship was to regard Bacon's philosophical pursuits as more important and to examine therefore their impact on his political career and thought. For Spedding, Bacon sought political power merely as a means to promote his great philosophical enterprise.¹³ According to another scholar, Bacon was 'the first scientist to enter politics ... primarily for scientific ends.'¹⁴ Bacon's writings about politics were merely attempts to apply his new scientific methods into a new area.¹⁵

More recent commentators have, however, detected a completely different kind of interconnectedness of Bacon the philosopher and Bacon the politician.¹⁶ They have put much more emphasis on Bacon's political career and have examined its impact on his natural philosophy. This has meant first of all that the democratic character of Baconian science has been questioned. It has been pointed out that 'the ideas which underlay his political and scientific schemes' were strikingly similar. According to one recent commentator, Bacon 'stood squarely for a view of science which emphasized its closed, nonpublic character' and that 'his vision of science was elitist and hierarchical.'

Such arguments rest on the assumption that ‘Bacon’s political outlook formed an important key to his whole approach to science and that much of what he did – or at least intended to do – in the scientific realm amounted to the application of political analysis, political wisdom, and political solutions to the predicament of scientific inquiry.’¹⁷

But while in such an account Bacon’s philosophical plans are to a large extent shaped and conditioned by his political experience, they (i.e. his philosophical plans) still assume a central place in his thought and career. It is the separation between political and scientific ideas in Bacon’s thought which is questioned in this analysis, not the primacy of science.

Nonetheless, it is precisely this central assumption of the primacy of science which has been increasingly questioned by recent commentators. They have argued not only that Bacon’s ideas were shaped by his education and his career as a politician, but also that politics was always more important for him. His philosophical plans, in other words, served purely political aims. Perhaps the most forceful argument to this effect has been put forward by Julian Martin in his book *Francis Bacon, the state, and the reform of natural philosophy* (Cambridge 1992). Martin insists ‘that Bacon’s legal and political career was crucial in the creation of his natural philosophy and that his natural philosophy cannot be separated from his political ambitions.’ Bacon’s passion and his great project was a political one – to create what Martin calls ‘an imperial state’ or ‘an imperial monarchy’ or ‘an imperial Britain’. Natural philosophy was geared to serve this purely political end. As Martin puts it, ‘Bacon’s natural philosophy was a subordinate part of this programme and cannot be understood adequately in isolation from it. His was a natural philosophy made appropriate to a centralising monarchy.’¹⁸

This interpretation has been widely accepted. Thus Graham Rees has recently declared that ‘it is the imperial vision, the vision of Great Britain as an efficient, centralized, prosperous and expansionist monarchy’ which provides ‘a single grand design that unifies Bacon’s writings.’¹⁹ The idea that Bacon’s entire natural philosophical project was serving purely political end of his vision of the imperial state has quickly become a commonplace regurgitated in many textbooks. Steven Shapin accepts it in his recent textbook, *The scientific revolu-*

tion, pointing out that Bacon made ‘a joint case for the reform of learning and the expansion of state power.’²⁰ Another recent textbook also maintains that, for Bacon, ‘natural philosophy should be capable of providing support for the imperial state.’²¹

III

In the rest of this paper, I would like to take a fresh look into Bacon’s career and thought. I shall argue that whilst there are some similarities between his political career and his writings in natural philosophy, the differences between them are much more striking. Despite many recent claims to the contrary, Bacon’s natural philosophy and political career and thought were not, therefore, parts of the same project. At the end of the paper, I shall propose that, instead of trying to solve these differences and contradictions, we should rather endeavour to study Bacon’s natural and political philosophy in the context into which they were meant as interventions.

If we now turn to Bacon’s writings the first thing to note is that the degree to which his political career and thought on the one hand and his writings in natural philosophy on the other had similarities is indeed striking. When, at the beginning of the 1590s, Bacon quite suddenly broached the topic of natural philosophy, he did this in a political context. In his famous letter to Lord Burghley in 1592 he was above all preoccupied in searching for a place in politics. He expressed a youthful determination to serve the queen, not as a soldier, nor a statesman, but as a philosopher. He suggested that if he were granted political office, he would use this to supervise a large-scale reform of natural philosophy.²² ‘I do easily see,’ Bacon wrote to Lord Burghley, ‘that place of any reasonable countenance doth bring commandment of more wits than of a man’s own.’²³ Not only were Bacon’s philosophical ambitions expressed in his suit for political office; natural philosophy, he claimed, could serve the queen. Moreover, Bacon also implied that natural philosophy must be better administered.

An important part of this administration of natural philosophy was the search for patronage, which of course linked Baconian natu-

ral philosophy with politics. In his contribution to a Christmas Revels in 1594-95, Bacon had a counsellor to a prince, advising the study of philosophy, to commend the erection of a ‘general library,’ ‘a spacious, wonderful garden,’ ‘a goodly huge cabinet’ (i.e. a museum) for displaying ‘whatsoever the hand of man by exquisite art and engine hath made’ as well as a ‘still-house’ (i.e. laboratory) ‘furnished with mills, instruments, furnaces, and vessels, as may be a palace fit for a philosopher’s stone.’²⁴

Throughout his career Bacon emphasised the importance of political support for the advancement of learning and was seeking for patronage. In 1605 he dedicated his first published philosophical work, *The advancement of learning*, to the King James I. He pointed out that old universities should be reformed and new universities and research institutions should be founded and that they must be better equipped. Proper laboratories and libraries were necessary and salaries should be commensurate to the importance of the scientist’s work, for this would be the only way to attract the best qualified people to science.²⁵ All this should be funded by the public since it was the public at large which would benefit from the fruits of science.²⁶

When Bacon published his *magnum opus* – the *Instauratio magna* – in 1620 he appealed for a collective natural history project (i.e. a collection of natural phenomena which would serve as the basis on which the new science was to be built). This project, he deemed, was a political project because only the king had sufficient resources to accomplish it. ‘A collection of history natural and experimental,’ Bacon wrote, ‘such as I conceive it and as it ought to be, is a great, I may say a royal work, and of much labour and expense.’²⁷ And lest the king missed the message, Bacon again dedicated the volume to the king, making a request to the royal reader in the epistle dedicatory; he sincerely hoped that James I would launch ‘the collecting and perfecting of a Natural and Experimental History, true and severe ... such as philosophy may be built upon.’²⁸

Underlying these ideas was a more general conviction that natural philosophy must not be seen so much as part of the contemplative life than the *vita activa*. Knowledge was not primarily contemplative *episteme* but rather a discovery of the unknown and thus part of the practical, active life. In one of his writings from the early 1590s Bacon called knowledge as ‘the worthiest power.’ He wrote

Is this but a view only of delight, and not of discovery? of contentment, and not of benefit? Shall he not as well discern the riches of nature's warehouse, as the beauty of her shop? Is truth ever barren? Shall he not be able thereby to produce worthy effects, and to endow the life of man with infinite new commodities?²⁹

But if the ultimate aim of knowledge was not 'delight' and 'contentment' but rather 'discovery' and 'benefit,' 'to produce worthy effects' and 'to endow the life of man with infinite new commodities,' then, surely, as Bacon went on, 'the sovereignty of man lieth hid in knowledge.'³⁰ 'The last or furthest end of knowledge,' he insisted in *The advancement of learning*, is nothing but 'the benefit and use of men'. Similarly, he wrote in the *Instauratio magna* that 'the true ends of knowledge' are 'the benefits and use of life, as well as 'human utility and power.'³¹

Apart from the fact that Bacon expressed such convictions for the first time in a political context there is another and much more important way in which they were closely linked with his political career and thought. If he emphasised the values of *vita activa* in natural philosophy, equally so did he in the world of politics. In his political writings Bacon always stressed the centrality of a virtuous active life. 'Men are born,' he wrote, 'not to cram in their fortunes, but to exercise their virtues'. This meant, he went on, a 'dedication of yourself to the public.'³² Bacon was convinced that it was an obvious indication of self-love that a man wanted to avoid appearing 'in public' or engaging 'in civil business' and to live a 'solitary and private life.'³³

Given Bacon's strong commitment to the ideals of a virtuous civic life, it is hardly surprising that in his political writings he set great store by those who were engaged in this mode of life. The best way to win honour and praise, since they were nothing but 'the reflexion of virtue' was to embrace virtue itself. The promotion of the common good brought such an everlasting glory to a man that he could claim to have 'the character of the Deity.' The proper goal for a man's life was therefore to perform 'great and lofty services to the commonwealth' and to seek 'immortality by merit and renown.'³⁴

Bacon's entire account of moral philosophy in *The advancement of learning* was based on the assumption that the virtuous active life was invariably preferable to a private contemplative life. Virtue, he

declared, consisted of ‘the actions and exercises whereof do chiefly embrace and concern society.’³⁵ *Vita activa* was thus a central notion for Bacon which genuinely links his philosophical and political theories and pursuits.

IV

Yet, although the degree to which Bacon’s natural philosophical project on the one hand and his political career and thought on the other seemed to converge is striking, the glaring differences between them are even much more striking.

Bacon always made a clear distinction between his pursuits in natural philosophy and his career in politics. When, towards the end of his life, he took stock of his life, he made a clear separation between his writings in natural philosophy and his life as a ‘civil person.’³⁶ He was, he said, naturally fitted for a contemplative life but had been born ‘into the business of active life.’³⁷ At the same time, he disparaged the importance of philosophy in politics. Philosophers lacked any practical experience, so that their writings about politics ‘are as the stars, which give little light because they are so high.’³⁸

Moreover, in all his search for patronage, Bacon never promised any short-sighted economic or military gains in return. When he failed in his numerous attempts to win patronage, it would have been tempting indeed, had he had such a vision of science serving the purely political ends of state power as many recent commentators have claimed he had, to make a frank declaration to this effect. But we do not find such a declaration.³⁹ If Bacon had conceived science as merely serving an imperial state, then, surely, it would have made sense to say so when, at the pinnacle of his political career, he dedicated the *Instauratio magna* to the king. Yet, far from doing so, he only apologised for the precious time of a statesman spent on a project, which did not have any political relevance. The only way Bacon endeavoured to defend and justify writing a philosophical treatise was in purely philosophical terms: ‘Your Majesty may perhaps accuse me of larceny, having stolen from your affairs so much

time as was required for this work.' The effort, Bacon insisted, would make James's reign 'famous to posterity' by 'the kindling of this new light in the darkness of philosophy'. 'The regeneration and restoration of the sciences,' he concluded, was highly apposite 'to the times of the wisest and most learned of kings.'⁴⁰

Although such a defence was a far cry from those alleged imperial visions, it was close to Bacon's more general pleas for his natural philosophical project. He always emphasised that a reformed science would serve and bring benefits for the whole of humankind. He thus distinguished three kinds of ambition: first, the extension of one's own power, which he deemed 'vulgar and degenerate'; second, the extension of the power of one's own country, which had 'more dignity, though no less covetousness'; third, the extension of 'the power and dominion of the human race itself over the universe,' which was the noblest pursuit.⁴¹ Needless to say, it was the third (the extension of the power of humankind over the universe) rather than the second ambition (the power of one's own country) which Bacon linked with science. In the preface of the *Instauratio magna* Bacon proclaimed that 'the cause' of his 'haste' to publish a part of an unfinished project 'was not ambition for himself, but solicitude for the work; that in case of his death there might remain some outline and project of that which he had conceived, and some evidence likewise of his honest mind and inclination towards the benefit of the human race.'⁴²

Closely linked with this emphasis on the benefits of the whole humankind was the fact that Bacon always conceived the cooperation, which was a highly important and necessary part of the new science, in international, rather than national, terms. 'Nor is mine a trumpet,' said Bacon, 'which summons and excites men to cut each other to pieces with mutual contradictions, or to quarrel and fight with one another; but rather to make peace between themselves, and turning with united forces against the Nature of Things, to storm and occupy her castles and strongholds, and extend the bounds of human empire.'⁴³ The aim was thus the enlargement of power, but not the power of a state but that of all humankind. It is not surprising therefore to find Bacon proposing systematic cooperation between European universities. According to him, learning would make tremendous strides 'if there were more intelligence mutual between

the universities of Europe than now there is.’ This was so simply because scientific knowledge knows no political boundaries. ‘We see,’ Bacon went on, ‘there may be many orders and foundations, which though they be divided under several sovereignties and territories, yet they take themselves to have a kind of contract, fraternity, and correspondence one with the other.’⁴⁴

V

The differences between Bacon’s natural philosophy and his political thought are most glaring, however, when we turn to consider his imperial vision of the true greatness of states. As we have seen, many recent commentators have claimed that Bacon’s project for a new science formed an integral part of his vision of a great state. Bacon, of course, composed several treatises on civic greatness or the true greatness of states, so much so, in fact, that it is a central theme in his political philosophy. But I find it difficult to link these treatises with Bacon’s natural philosophical project. He never mentioned natural philosophy in these treatises on civic greatness. More importantly, the kind of life and the kind of qualities Bacon proposed in his writings on the greatness of states mark a sharp contrast with the qualities and values inherent in the promotion of natural philosophy.

Since Bacon conceived science as a co-operative, international enterprise discarding political boundaries, it required universal peace. In *The advancement of learning* he argued that one of the reasons why his own times were so conducive to learning was ‘the present disposition of these times at this instant to peace.’⁴⁵ Two years later in 1607 he expressed the same firm belief that his own age would witness the advancement of learning, since ‘the balance of power’ in Europe would maintain peace which ‘is fair weather for the sciences to flourish.’⁴⁶ In the famous letter sent with a part of the *Instauratio magna* to his friend Toby Matthew Bacon described himself: ‘Myself am like the miller of Huntingdon, that was wont to pray for peace amongst the willows; for while the winds blew, the wind-mills wrought, and the water-mill was less customed. So I see that controversies of religion must hinder the advancement of sciences.’⁴⁷

When Bacon spoke or wrote about civic greatness – or the true greatness of states, as he called it, he always argued that the most important quality of a truly great state was ‘the valour and military disposition of the people.’ ‘Above all, for Empire and Greatnesse,’ he wrote, ‘it importeth most; That a Nation doe professe Armes, as their principall Honour, Study, and Occupation.’ He summarised his entire argument by emphasising that ‘no nation, which doth not directly professe Armes, may looke to have Greatnesse fall into their Mouths.’⁴⁸

While civic greatness demanded a warlike disposition and consequently also wars, science made its advancement only in peace. ‘Nor is mine a trumpet,’ said Bacon in his call for the co-operative advancement of science, which I have already quoted but which is worth repeating, ‘which summons and excites men to cut each other to pieces with mutual contradictions, or to quarrel and fight with one another; but rather to make peace between themselves, and turning with united forces against the Nature of Things, to storm and occupy her castle and strongholds, and extend the bounds of human empire.’⁴⁹ Whilst revealing the similitudes between the pursuit of the advancement of science and the quest for civic greatness, this passage shows the irreconcilable gap between their methods. The chief aim of both enterprises was the enlargement of power, and the former (the advancement of learning) could be expressed in the military terms of the latter (civic greatness). But these analogies failed to bridge the gap between the acquisition of an empire through warfare and the new science through permanent peace. Science was an international pursuit, progressing only in universal peace. The quest for civic greatness was its diametrical opposite; it was a purely national undertaking demanding not only a warlike disposition, but continuous wars.

A central argument for the alleged connection between Bacon’s natural philosophy and his political thought has been the claim that his idea of civic greatness constitutes an essential part of the voyage to his utopia – *New Atlantis*. It has been claimed that the society described in Bacon’s utopia not merely represents the ideal society of his scientific writings but is also the embodiment of his ‘vision of an imperial monarchy sustained by natural philosophy,’ as Julian Martin puts it.⁵⁰

Nevertheless, the values and qualities emphasised in the *New Atlantis* stand in complete contrast to those lying at the heart of civic greatness. There are several glaring differences between *New Atlantis* and a truly great state, but shortage of time allows me to touch on only the most crucial one. The society of *New Atlantis* is practically completely devoid of the chief ingredient of civic greatness – war. Only one war-like incident is mentioned in the history of *New Atlantis*, but even then the enemies had been enforced ‘to render themselves without striking a stroke.’⁵¹ The society of *New Atlantis* was organized as a self-contained unit which had as little as possible to do with other countries – indeed it was described as being of ‘solitary situation,’ ‘divided by vast and unknown seas’ from the rest of the world. Little wonder the society of *New Atlantis* rarely admitted strangers to the island.⁵² This society, governed both by internal and external peace and tranquillity, is in marked contrast with the state which aimed at civic greatness. The crucial quality of the latter was military spirit and warlike disposition and to accomplish its desired end it had to wage continuous wars. Moreover, whereas *New Atlantis* was of ‘solitary situation,’ a truly great state, in Bacon’s scheme of things, had to be ‘seated in no extreme angle, but commodiously in the midst of many regions’ or ‘in the very heart of the world.’ And whereas *New Atlantis* rarely admitted strangers, it was one of Bacon’s most crucial arguments that those states which had been fit for empire, had been liberal in granting naturalization.⁵³ Thus *New Atlantis*’s exclusion of itself from the rest of the world into peaceful perpetual existence is hardly compatible with the state which searched for civic greatness by martial enterprises.

But nor was the science of *New Atlantis* merely serving the interests of the state. The core of Bacon’s utopia was formed by his exposition of Salomon’s House – the scientific research institute which ultimately accounted for the success of the whole society. Far from obediently serving political power, the scientists of Salomon’s House kept for themselves the ultimate decision ‘which of the inventions and experiences which we have discovered shall be published, and which not: and take all an oath of secrecy, for the concealing of those which we think fit to keep secret: though some of those we do reveal sometimes to the state, and some not.’⁵⁴ This was emphatically not a scientific community merely serving the interests of a state, ‘imperializing’ or otherwise.

VI

Where does all this lead us? There is little doubt that Bacon's natural philosophy and his political outlook had several important similarities. But there is no question that there were also many wide discrepancies between them. Should we therefore return to the idea of several Francis Bacons? I think the answer is 'no.' Bacon's natural philosophy and his writings on civic greatness were not parts of the same project, but perhaps forming such a great project was not his aim in the first place.

As an intellectual historian, my primary interest lies not in Bacon as the author of a single and coherent life-long project or a unified philosophy which embraced every single aspect of his writings. Instead, I see him above all as a contributor to series of central philosophical and intellectual debates within early modern culture. Bacon has traditionally been depicted as a great philosopher who without forerunners created modern science in general and its inductive method in particular. Such an account often carried with it the idea that Bacon's texts are independent of their restricted historical context; they are classic texts making sense on their own and having a transhistorical audience. As one commentator put it, 'Bacon need not be studied in the terms of some narrow historical context, because he gives an account of our modern history's nature'.

Paradoxically, the recent account of Bacon's single imperial project which embraced both his natural philosophy and his legal and political careers and writings yields a strikingly similar picture. Such an approach, as Julian Martin acknowledges, is 'rigorously local in its attentions'. 'Its premise is', he goes on, 'that the origin and nature of Bacon's natural philosophy can be explained satisfactorily only with careful attention to *his* context' (i.e. his career and writings). There is, in other words, no need to look beyond Bacon himself.

Such an approach, whether in its traditional or more recent attire, strikes me as a particularly unhelpful approach to gaining an insight in what Bacon was *doing* in writing his treatises on natural or political philosophy. Rather than connecting them merely with himself we should try to contextualise them also with his times. Such an approach strikes me as a more helpful one precisely because it would

enable us to interpret Bacon as a participant in ongoing debates and thus perhaps to historically identify his arguments in and contributions to them.

I should like to conclude by giving very briefly a single example of what I have in mind. Consider the example of Bacon’s notion of an operative science. This absolutely central notion of his natural philosophy, as I have argued, was closely linked with the conception of the *vita activa* which Bacon embraced in his political writings and career throughout his life. This is of course an interesting conclusion. But it is of much greater significance to endeavour to connect Bacon’s notion of an operative science with his times rather than simply with himself. For such an attempt would make it possible for us to see to what extent Bacon was perhaps criticising certain prevalent conceptions and endorsing others – in brief what he was doing in putting forward this particular notion. By studying this context we would be in a position to see that he was reacting against the entire tradition of Aristotelian natural philosophy where theoretical sciences were strictly separated from practical or productive disciplines. In the Aristotelian tradition the scientist was merely organising an already existing world; he was thus a mere spectator who took no part in forming or changing it. Science was a closed system built on necessary knowledge and the scientists only arranged this formally perfect system. An art as operation rather than knowledge had nothing to do within this system.

With his notion of an operative science – that science was not so much a contemplative *episteme* as a discovery of the unknown and the part of the practical, active life – Bacon was nothing less than challenging this dominant view of natural philosophy. By focussing only on Bacon himself and assuming that the nature of his natural philosophy can be explained satisfactorily with careful attention only to himself we would completely deprive ourselves from such an interpretation. There is no prospect of understanding Bacon’s natural or political philosophy and thus the full range of his versatile thought historically unless we study them in the context into which they were meant as interventions – in the context of early modern discussions about natural and moral sciences.

Notes

- ¹ This is a slightly revised version of the inaugural Francis Bacon Foundation Lecture which I gave at the Huntington Library, San Marino, California in January 2001 I should like to thank both the Francis Bacon Foundation and the Huntington Library for this invitation. My thanks also to Robert C. Ritchie for looking after me with characteristic generosity.
- ² *The works of Francis Bacon*, eds. James Spedding et al. (14 vols., London, 1857-74), XI, pp. 132, 190-1.
- ³ *The works*, XIV, p. 285.
- ⁴ *The works*, XIV, pp. 349, 443-4.
- ⁵ *The works*, I, p. 2.
- ⁶ *The works*, VIII, p. 109.
- ⁷ Brian Vickers ed., *Francis Bacon* (Oxford, 1996), p. 35.
- ⁸ *The works*, IV, p. 8.
- ⁹ *The works*, XIV, pp. 119-20.
- ¹⁰ *The works*, VIII, pp. 108-9.
- ¹¹ *The works*, III, pp. 518-19.
- ¹² *The works*, XIV, p. 373; VII, 13-14.
- ¹³ *The works*, VIII, p. 107.
- ¹⁴ J G. Crowther, *Francis Bacon: the first statesman of science* (London, 1960), p. 16.
- ¹⁵ Ronald S. Crane, 'The realtion of Bacon's *Essays* to his program for the advancement of learning,' in *Schelling anniversary papers* (New York, 1923), pp. 87-105.
- ¹⁶ See eg. Lisa Jardine & Alan Stewart, *Hostage to fortune: the troubled life of Francis Bacon 1561-1626* (London, 1998), p. 19; Lisa Jardine, 'Introduction,' in Francis Bacon, *The new organon*, (ed.) Lisa Jardine (Cambridge, 2000), pp. xxv-xxviii.
- ¹⁷ Leary, *Francis Bacon*, pp. 11-12; see also p. 20.
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