“Things Themselves”: Francis Bacon’s Epistemological Reform and the Maintenance of the State

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Summary: *This essay attempts to provide a specific cultural context for Francis Bacon’s project of natural philosophical reform. Documenting Bacon’s earliest understanding of the link between the nature and uses of natural philosophy and what he would call the “care of the commonwealth,” it moves from a consideration of Bacon’s vision of the promise and procedure of reform to his critique of what he saw as its primary obstacle. It concludes with an examination of the sociopolitical circumstances conditioning reform, with special attention to how the rhetoric of **political** reform becomes the same rhetoric he subsequently employs to champion the new epistemological imperatives.*

This knowledge, then, of making the government of the world a mirror for the government of a state, being a wisdom almost lost . . . I have thought good to make some proof.

(Bacon, *Letter to King James*, 1603)

In discussing the central epistemological concerns of the late-Renaissance in this influential study, *The Discourse of Modernism*, Timothy Reiss has written that “by Bacon’s time, two particular relationships had provoked a series of questions that needed urgent answers but to which no solutions were yet forthcoming: the relation between man and nature, and the relations between humans.”¹ It is important to recognize just how closely linked these two “relations” could be within the rapidly changing contexts of European culture in the sixteenth and seventeenth centuries. The new philosophies of nature were not merely politicized within distinctively scientific and scholarly

settings, important as they were. For the impact of new knowledge was felt within, and indeed actively assimilated into, broader cultural movements, where there emerged an increasing sensitivity both to analogical connections between the natural world and the world of human polity and to the social force that might be effected by the specific achievements of the new philosophies.²

As my epigraph suggests, Bacon was among that group of late-Renaissance reformers who not only recognized the link between these relations but actively sought to promote it as well. Believing that the condition of civil society was inseparable finally from the state of its learning, Bacon also believed that the advancement of Knowledge necessarily contributed to the improvement of the state as a whole. And, in marked contrast to many of his contemporaries, he would locate in natural philosophy one of the crucial elements for the successful reform of civil society.³ Moreover, as Reiss reminds us in this context, even as natural philosophy was to be made to serve the interests of civil society, Bacon would conceptualize his new natural philosophical method as modelled precisely on affairs of state. Reiss thus notes, for example, that the Baconian "concept of *experiment* . . . derived, not from some concept of human relations with nature, but from the domain of political affairs."⁴

As influential as his work has been, however, Reiss' very Foucauldian model of intellectual history, focused on broad (often vaguely formulated) notions of epistemic change and discursive formations, actually obscures the historical and cultural conditions which produced this new appreciation of the affinities between natural and civil philosophy.⁵ Among its other conceptual limitations, such a model — with its methodological effacement of the subject — can never clearly situate any writer's particular statements within cultural debates as these might have been actively conceptualized and addressed within some emergent public discourse.⁶ The remainder of this essay, then, will be concerned with providing what Reiss' work lacks: a more specific historical and cultural context for Bacon's project of reform. Moreover, it will seek to provide this context by documenting Bacon's earliest understanding of the link between the nature and uses of natural philosophy and what he would call the "care of the commonwealth" (*L*, III, 84). I shall start by examining Bacon's vision of the promise and procedure of epistemological reform (section I) and then move on to his critique of what he saw as its primary obstacle (section II). The essay will conclude with an examination of the sociopolitical circumstances conditioning reform (section III). As part of this focus, I shall pay particular attention to how the rhetoric of *political* reform — especially its

warnings against the dangers posed by what Bacon considered the misleading truth claims of certain forms of religious knowledge — becomes the same rhetoric he subsequently employs to champion the new epistemological imperatives.⁷

I

Bacon set out the initial outline of his program of reform in many of those obscure fragments originally intended to be included in his *Instauratio Magna*. In *Temporis Partus Masculus* (1602), for example, he recorded what seems an apt motto for his peculiar conceptualization of the means by which the advancement of human knowledge (and in particular of natural philosophy) might be secured: "On waxen tablets you cannot write anything new until you rub out the old. With the mind it is not so; there you cannot rub out the old till you have written in the new" (*F*, 72). Bacon's thought here is as difficult as it is intriguing, for the play of contrasting figures used to represent the activity of knowing leaves unclear the precise mechanisms of knowledge: where is "knowing" precisely situated in the figure and whence derives its "script"?

At its simplest level, Bacon's figuring of knowledge-as-writing is intended to revise the image of the mind as a passive receptacle of truth, a *tabula rasa* which operates as a kind of recording device on which knowledge of the world might simply be inscribed. Contra Plato, Bacon asserts that truth is not "the native inhabitant of the mind," and he later challenges the Platonic notion that "the human mind is impaired by long and close intercourse with experiments and particulars subject to sense and bound in matter" (*Temporis Partus Masculus*, *F*, 64). He insists rather that true knowledge must come from material reality itself: "the fountain . . . the facts of nature" (*Instauratio Magna*, *W*, IV, 16-17); from "submitting [the] mind to things" (*Novum Organum*, *W*, IV, 102); in short, from "things themselves" (*Instauratio Magna*, *W*, IV, 19). At the same time, Bacon warns that the human mind is not a simple mirror of nature, for "the primary notions of things which the mind readily and passively imbibes, stores up, and accumulates (and it is from them that all the rest flow) are false, confused, and overhastily abstracted from the facts" (*Instauratio Magna*, *W*, IV, 7). Knowledge of the natural world must come through the senses, but the senses deceive (IV, 26); hence "a direct, abrupt encounter with things themselves" would be futile (*Redargutio Philosophiarum*, *F*, 103). Earlier he had written that "the evidence drawn from things is like a mask cloaking reality and needs careful sifting." That sifting, he tells us, must come

from some "artificial disciple," without which the mind, "resting on Nature alone . . . must be unhesitatingly pronounced unequal to cope with the subtlety of things" (*Temporis Partus Masculus, Cogitata et Visa*, F, 66, 88).

In place of the *tabula rasa* Bacon offers the "artificial discipline" of the mind newly conceived as a writing system. Working between the distortions of sense-experience, on the one hand, and the fantasies of unregulated logic, on the other, Bacon's new "discipline" promises "to teach and instruct the understanding. . . , that it may in very truth dissect nature, and discover the virtues and actions of bodies, with their laws as determined in matter; so that this science flows not merely from the nature of the mind, but also from the nature of things" (*Novum Organum*, W, IV, 246). Bacon seeks such a realignment in a new organizational script of the mind capable of rendering thought as correspondent with the true nature of things. Through the "artifice" of methodical knowing (knowledge-as-writing), thought will come to function as a means, first, of reducing nature to its constitutive elements (to "things themselves" existing as a kind of natural alphabet, and, second, of organizing that alphabet into a language accessible to human reading and rewriting. The proper functioning of method promises, in short, to organize the world of nature — what Bacon terms the "volume of Creation" (*Natural and Experimental History*, W, V, 132) — as a language system. Within Bacon's project of epistemological reform, this systemization of the "true relation between the nature of things and the nature of the mind" (*Instauratio Magna*, W, IV, 27) is intended precisely to make legible, and so available to human interpretation and use, the truth which God has written into the "book" of nature.⁸

The mystical, religious overtones of Bacon's project, especially its vision of recapturing something akin to the original language of creation (the Adamic language), reveal his indebtedness to various traditions of occult philosophy (hermeticism, alchemy, Paracelsian medicine, cabbala) that continued to influence scientific thought even into the seventeenth century.⁹ Despite Bacon's authoritative status, therefore, many subsequent reformers both in England and on the continent — those whose scientific work struggled against the popularity of occult philosophies — had serious misgivings about his new method. The French monk, Marin Mersenne (whose intellectual community in Paris would eventually include Descartes, Gassendi, and Hobbes) was skeptical, for example, of Bacon's claim that method would enable the mind to see into the very essence of things. As he would write in 1625, the year before Bacon's death,

whatever phenomena we study in philosophy, it is pointless to think that we could penetrate the nature of bodies or whatever occurs inside them, for our senses, without which we cannot know anything, see only what is exterior, and no matter what we do, we shall never arrive at the point of making our intellect equal to the nature of things; that is why I think Bacon's design is impossible, and that his teaching will lead to nothing more than new experiences, which one can easily explain by ordinary philosophy.¹⁰

And as Mersenne rejected Baconian method, with its false hope of arriving at "things themselves," so he also opposed Bacon's belief in a natural philosophical language that might overcome the failure of ordinary language "to clarify things according to their true natures."¹¹ For Mersenne, in short, Bacon did not adequately establish the conventional nature of language in such a way as to resist the mystical, and mystifying, claims to knowledge still being put forth by hermeticists, adamicists, and cabalists.

In his important recent study, *The Material World*, Richard Kroll has convincingly argued that this attack on a knowledge of essences, of *things themselves*, was motivated by political concerns and attitudes as much as by scientific ones. For, both in England and in France, among the social groups most closely associated with occult philosophies were the religious extremists or "Enthusiasts" whose championing of secretive modes of knowing was seen to threaten the social order.¹² Despite Bacon's "inspirational" value to later reformers then (especially important to English thinkers who wanted to maintain the pretence of a purely English tradition¹³), Baconian method found few adherents because of its strange links with what was taken as an unsavory political discourse, a discourse that refused to ground social authority in the *public* functioning of knowledge. There is true historical irony in this failure of influence given Bacon's own interests in attacking the potentially dangerous "Enthusiasts" of his own day, English Puritans.¹⁴ Bacon levelled this attack in the interests of the centralized courtly-monarchical society he dutifully served and whose power he sought constantly to augment. Section III will examine Bacon's charges in more detail, but we first need to consider Bacon's rhetoric of reformed knowledge as it was directed against what he saw as misleading modes of knowing. We shall then return to the issue of the Puritans and resituate Bacon's vision of epistemological reform within the context of his understanding of their political threat, a threat posed, from Bacon's perspective at least, in the form of a rival conception of knowledge.

II

By claiming that his new method will enable the mind properly to read in the “volume of Creation” — God’s “second book” — Bacon insists that the success of his enterprise will both reveal a lawful (divinely given) order and give witness to its own place in that order. Bacon thus claims in *Novum Organum* that “in the true course of experience, and the carrying on and effecting of new works, the divine wisdom and order must be our pattern” (W, IV, 70-71). In Bacon’s reconstruction of this “divine pattern,” human reason had been originally designed as a kind of effective affinity of the natural world, the relationship underwritten precisely by paired acts of divine labor: “The first Creature of God, in the workes of the Dayes, was the Light of the Sense,” Bacon writes in the 1625 edition of the *Essays*, “the last, was the Light of Reason; . . . First he breathed Light, upon the Face, of the Matter or Chaos; Then he breathed Light, into the Face of Man” (“Of Truth,” E, 8).¹⁵ And in the mind’s effort to regain its Adamic dominion over the natural world, God’s own act of creation comes to function as a model of epistemological organizing and experimental practice. So he writes in *Novum Organum*:

[T]he true method of experience . . . first lights the candle, and then by means of the candle shows the way; commencing as it does with experience duly ordered and digested, not bungling or erratic, and from it educing axioms, and from established axioms again new experiments; even as it was not without order and method that the divine word operated on the created mass (W, IV, 81).

As Bacon elsewhere remarks of his program of reform: “Certainly [these things] are quite new; totally new in their kind: and yet they are copied from a very ancient model; even the world itself and the nature of things and of the mind” (*Instauratio Magna*, W, IV, 11).¹⁶

But precisely to the extent true knowledge of nature promises to restore the human realm to the divine order of creation, false knowledge poses an obstacle to such restoration, an obstacle that needs to be fully understood if it is to be overcome. Indeed, Bacon sees the primary effect of the Fall as the distortion of the divinely ordained bond between the mind and the world; in its place the mind has acquired perverse cognitive habits that base their claims to truth on unexamined grounds of epistemological authority. The initial stages of reform thus requires a recognition of these faulty grounds. Bacon’s famous discussion in *Novum Organum* of the “idols which beset men’s minds” (W, IV, 53-63) forms the basis of this special labor, though it is merely the most

memorable part of a detailed typology of false knowing whose mapping Bacon believes to be a prerequisite of the future success of the new method.

Not surprisingly, Bacon had come to recognize the malignant power of traditional cognitive habits well before he issued his definitive proclamation within the larger design of the *Instauratio Magna*. As early as *Temporis Partus Masculus*, for example, he condemns Plato as he who first "taught us to turn our mind's eye inward and grovel before our own blind and confused idols under the name of contemplative philosophy" (F, 64). Ironically, in Bacon's view at least, the chief effect of Plato's legacy has been the transforming of the workings of the mind into an instance of those very forms of false knowing — the Platonic *eidola* (image/idol) — that had been so vigorously condemned in the *Republic* and elsewhere. Developing his own epistemological critique in conjunction with the language of the Vulgate, in whose cadences his own writing is so steeped, Bacon equates Plato's mere shadows of reality with the false gods of the Bible (Septuagint's *eidola*; Vulgate's *idola*), thereby registering the perverted workings of human knowledge as a violation of God's first commandment. The Idols of the Mind, in short, constitute epistemological graven images, monuments to humankind's vain refusal to participate in its own redemptive promise.

In the *Advancement of Learning*, Bacon provides an even lengthier "dissection [of] those peccant humours (the principal of them) which have not only given impediment to the proficience of learning, but have given also occasion to the traducement thereof" (W, III, 295). Among his severest criticisms of the current condition of learning, he complains that truth-claims are too often grounded in mere words (later, the Idols of the Marketplace) or in the authority of human authors who have been set up as false gods (later, the Idols of the Theater). It is Aristotle rather than Plato who bears the brunt of these charges, and Bacon cannot help but notice that both scholastic philosophy and the newer hermetic philosophies of nature have made Aristotle their "dictator" (W, III, 285, 289-90). But even in the earlier *Temporis Partus Masculus* Aristotle-the-dictator comes in for heavy censure, for it was he, Bacon notes, who "fetch[ing] up his darksome idols" made "us slave to words" (F, 63). Moreover, it was in Aristotle's "bosom" that men "turned themselves away from the perambulation of the globe, and from the light of nature." Personifying the very idols that prevent the mind from using its light to decipher nature's, Aristotle is thus also emblemized as a living Pillars of Hercules, that ancient barrier to discovery "beyond which," Bacon would write in *Cogitata et Visa*, "progress is forbidden" (F, 76).¹⁷

Following in the restrictive footsteps of their ancient predecessors, modern philosophers were also guilty of a kind of presumption or self-idolatry whereby they turned the pursuit of true knowledge of the natural world into the proud speculation of the mind working "upon itself" (W, III, 285). "Another error," Bacon remarks in the *Advancement of Learning*,

hath proceeded from too great a reverence, and a kind of adoration of the mind and understanding of man; by means whereof men have withdrawn themselves too much from the contemplation of nature and the observations of experience, and have tumbled up and down in their own reason and conceits . . . [T]hey disdain to spell and so by degrees to read in the volume of God's works; and contrariwise by continual meditation and agitation of wit do urge and as it were invoke their own spirits to divine and give oracles unto themselves whereby they are deservedly deluded (W, III, 292).

Perverting the divinely ordained rapport between the mind and the world, such self-invocation, in Bacon's view, also marked the continuing workings of the archetypal human sin:

The real truth is that the obstacle to the course I propose lies not in its obscurity or its difficulty, but in human pride. Nature herself in great part, nay, in her best part, is despised by man. It is this pride that has brought men to such a pitch of madness that they prefer to commune with their own spirits rather than with the spirit of nature (*Redargutio Philosophiarum*, F, 120).

This madness constituted a moral and religious concern for Bacon because, as we noted earlier, the proper "reading" of nature (the "volume of Creation" or the "volume of God's works") was properly a redemptive activity. Moreover, to seek to replace the authority of creation with the bastard authority of the human mind was a direct violation of a divine command because, as he would later assert in the *Instauratio Magna*, "God forbid that we should give out a dream of our own imagination for a pattern of the world" (W, IV, 32-33).

Because of the close association within the Judaeo-Christian tradition between the urgings of pride and the sinful desire for a forbidden knowledge, Bacon must insist that the pursuit of knowledge of nature is not itself interdicted. He thus asserts in the *Advancement of Learning* that

it was not the pure knowledge of nature and universality, a knowledge by the light whereof man did give names unto other creatures in Paradise, as they were brought before him, according unto their properties, which gave occasion to the fall; but it was the proud knowledge of good and evil, with an intent in man to give law unto himself and to depend no more upon God's commandments, which was the form of the temptation (W, III, 264-65).

Within the context of redemptive natural knowledge, Adam's giving "law unto himself" — the sign of his refusal to submit to God's authority — is the functional equivalent of the moderns "invoking their own spirits" rather than the spirit of nature. For, like Adam, modern philosophers of nature have been unable to move beyond that "human pride which has ruined all by conferring the title sacred upon certain fleeting meditations instead of reserving it for the divine signature of things" (*F*, 133).¹⁸ The moderns' very repetition of Adam's own failed self-apotheosis is therefore but a later manifestation of the original loss of the epistemological relation between the mind and the world sanctioned by God's act of creation. In Bacon's view, moreover, the current state of natural philosophy not only re-enacts the original Fall but also, to the extent that it continues on its present course, dooms Adam's posterity to extend indefinitely the greatest of human catastrophes. So he laments in *Natural and Experimental History*:

[W]e copy the sin of our first parents while we suffer for it. . . [For we] will have it that all things *are* as in our folly we think they should be, not as seems fittest to Divine wisdom, or as they are found to be in fact; . . . we clearly impress the stamp of our own image on the creatures and works of God, instead of carefully examining and recognizing in them the stamp of the Creator himself. Wherefore our dominion over creatures is a second time forfeited (*W*, V, 132).

Giving laws rather than reading nature's, the mind turns from nature's legibility — where the divine authorization of knowledge is to be discovered — to assert its own authority.

Offering a specific ancient example of this perverse rejection of divine authority in *Redargutio Philosophiarum*, Bacon returns to the case of Aristotle, who becomes the grand emblem not only of ungodly self-idolatry but also of the power of temptation by which other minds are led astray:

There is a question that we should put to ourselves. Does the fact that Aristotle drew to himself both earlier and later ages prove him truly great? Oh, great without a doubt; but no greater than the greatest of impostors. For this is the prerogative of any imposture, and especial the Prince of imposture, the Anti-Christ. "I am come," says the Truth Himself, "in the name of my Father, and ye do not receive me; but if one cometh in his own name, him ye will receive." Do ye hear, sons? Christ says that he who comes in the name of the Father . . . will not be received; but he who, levelling and destroying all that went before, usurps authority to himself and comes in his own name, him men will follow. Now if any man in philosophy ever came in his own name, Aristotle is that man. He is his own authority throughout (*F*, 113).¹⁹

Laboring in the shadows of Aristotle's demonic self-authorizing, natural philosophy among the moderns is in a precarious position indeed. No longer subservient to a mere dictator, it finds itself established on the authority of the "greatest of impostors," a figure who stands at once for the Antichrist-tempter and the fallen Adam (he who gave "law unto himself"). By its double-edged vanity, at once proud in its claims of authority and empty in its promises, false knowledge merely perpetuates the mid's fallen condition by usurping an authority that, manifested as nature's laws, belongs finally to God. The workings of false knowledge throughout the history of philosophy have thereby produced the worst kind of perversion: the tempting of other knowers into the worship of idols — one's own mind or the illegitimate authority of human impostors — whose destructive legacy has rendered illegible the redemptive script of God's creation.

Bacon's constant insistence that the success of this interpretive endeavor will constitute a proper reading of divine laws defines true knowledge in terms of its adherence to authoritative conditions. Not surprisingly, given the social perspective from which he writes — a career devoted to solidifying and extending the centralizing governing power of the Tudor-Stuart monarchy — Bacon intends his readers to recognize in these conditions the very grounds of legitimate social authority as well. In this context, the Fall (a revolt from God in which man gave "laws unto himself") operates as both cause and emblem of the ruin of civil governance. Bacon's concern with the proper uses of knowledge, in short, even where those uses are conceived in terms of a vast providential design, cannot be divorced finally from the more secular concerns of the governance of civil polity.

In considering the rhetorical and ideological mechanisms by which Bacon intends to situate the new epistemological authority within the confines of courtly-monarchical authority, we need finally to examine how Bacon came to concern himself with the sociopolitical implications of knowledge in the first place. This examination will lead us to the very roots of Bacon's concern with the political implications of claims of epistemological authority and their connection to the redemptive claims of reform. We shall find these roots leading us back to the time before Bacon had even begun to formulate his project of natural philosophy and to a cultural struggle marked by what he understood as the illegitimate use of knowledge: the refusal to submit to the divine authority embodied in law. For Bacon in the late 1580s and early 1590s, the challenge of unlawful knowledge, threatening a disruption of traditional social order, is posed by Puritan reformers with ties both to a portion of the

gentry class increasingly hostile to the central courtly bureaucracy and to those promulgating the new hermetical philosophies of nature. It is to an examination of these issues that we now turn.

III

We have already noted some of the ways in which, for Bacon, the issue of epistemological authority constituted at once a religious (ethical) concern and a social one. Given the protracted development of Bacon's project of reform, it is not surprising that a recognition of the cultural conditions within which reform would function preceded his specific formulation of the corrective course of methodical knowing. For example, even in his fragmentary writings of the early 1600s on the need for a methodical approach to the study of nature, Bacon is still lamenting one of his central concerns from the late 1580s that "religious controversies have become a weariness of spirit." And he offers as an alternative to the political divisiveness of religious dissension and sectarianism the possibility that "men are perhaps more ready to contemplate the power, wisdom, and goodness of God in His works" (*Cogitata et Visa*, F, 95).²⁰ By the early 1600s, Bacon is formulating the terms of his project of reformed natural philosophy as a response, in part, to the political threat posed by the rival claims of epistemological authority put forth by English Puritans.

As we shall see in this final section, Bacon viewed the Puritans' own claims to offer the way to redeemed human polity as a vain, socially disruptive effort to substitute mere human authority for the divine authority inscribed in the laws of creation. Finding in such presumptuous assertions a modern analogue of Adam's own destructive pride — the desire to give laws to himself — Bacon represents his rivals as merely perpetuating the decadent epistemological conditions that led to the loss of Edenic dominion in the first place: that all too human "disdain," as he puts it in the *Advancement of Learning*, to learn "to spell and so by degrees to read in the volume of God's works" (W, III, 292). As Bacon begins to formulate the terms of his own project of reform, his attack on Puritan claims to authority becomes a positive model for his own claims: their very lack of humility before, and refusal to submit to, divine authority becomes an inverse image of the legitimacy of his own project. And the rhetoric of redemption functions as a way of attacking rival reformers whose own political interests conflict with his own, and with those of the Crown he seeks to further.

As Julian Martin has so richly documented, Bacon's association of the ideals of reform and the political implications of religious faith was in large

measure an inheritance from his father and the entire generation of counselors, administrators, diplomats who preceded him in service to the Tudor Crown.²¹ But by the time Francis Bacon embarked upon his own public career (he entered the House of Commons in 1581), he had his own experience to draw on in recognizing the threat of political upheaval posed by religious controversy. At Cambridge in the early 1570s, as a pupil of then Vice-Chancellor John Whitgift (later Archbishop of Canterbury), he had witnessed the heated debate between his tutor and the Puritan divine, Thomas Cartwright, over the matter of church government. Against the ecclesiastical settlement of the Anglican Church, Cartwright insisted that the presbyterian form of church government was the only kind sanctioned in sacred scripture. But within this straightforward, if still controversial, position on ecclesiastical reform lurked a more radical claim for the primacy of scripture in all human affairs. For, as Cartwright saw it, greater attention to scriptural matters called out for the more sweeping reorganization of "whatsoever things can fall into any part of man's life."²² He went so far as to venture the menacing position that even *civil* government should be subservient to ecclesiastical rule:

[C]ivil magistrates must govern . . . according to the rules of God prescribed in his word, and . . . as they are nourishes [nurses] so they be servants unto the church, and . . . remember to subject themselves unto the church, to submit their sceptres, to throw down their crowns, before the church, yea, as the prophet speaketh, to lick the dust of the feet of the church.²³

From the vantage of Crown loyalists, Cartwright gave voice to a potentially rebellious segment of the population whose refusal to accept the exigencies of human affairs put at risk all traditional fonts of cultural authority, not only episcopal supervision but also monarchical prerogative and legal precedent. And paired with the constant threat of Catholic intrigue against the Crown, the Puritans' aggressive campaign for reform — increasingly pursued through a direct contact with the people in the form of pamphlets — created an atmosphere of disquietude among the ruling elite along with the impression that a sinister political divisiveness was engulfing the nation.²⁴

Bacon left Cambridge in 1576 at the age of 16 and was sent to France with Sir Amias Paulet, ambassador to the French royal court, in whose service he remained until the death of his father in 1579.²⁵ The experience made a lasting impression, for it provided him with first-hand experience of the social costs of religious controversy. In later writing he continued to dwell on the state of French political order under siege during the religious wars of the 1570s.²⁶

With all this as background it is not surprising that upon his return to England he gradually turned away from the increasingly activist political agenda of the Puritan movement, and this despite both the encouragement of his mother and the allure of powerful patrons among the Puritan aristocrats. By the late 1580s, in fact, he was actively engaged in the Privy Council's efforts to interrogate dissenters (primarily in an attempt to ferret out Jesuit plotters against the Crown), and his security and propagandist work gradually enveloped the overly zealous among the Puritan sects as well.²⁷

Bacon's deep involvement in the highly charged issue of religious dissent was registered in various pieces of writing, from personal diatribe to official correspondence. In 1589, for example, writing on the edges of the Marprelate controversy in defense of episcopal settlement, he attacked religious sectarians on the grounds that their own claims of epistemological authority were tantamount to claims of political autonomy.²⁸ At the very outset of the tract (and despite his later criticism of the Puritans' own dependence on scripture), he sets the terms of the current social impasse — a struggle over rival claims of divine authority — in a gloss of a Biblical text:

Accordingly it was foretold by Christ, saying, *That in the latter times it should be said, Lo here, lo there is Christ*: which is to be understood, not as if the very person of Christ should be assumed and counterfeited, but his authority and preeminence (which is to be Truth itself) that should be challenged and pretended (*Advertisement Touching the Controversies of the Church of England*, L, I, 74).

Because "in knowledge they attribute unto themselves *light* and *perfection*," these pretenders have relinquished their ties to the larger Christian community and, "affect[ing] certain cognizes and differences," have sought instead "to correspond amongst themselves, and to be separated from others" (L, I, 90-91).²⁹ Bacon acknowledges that the battle being waged over authority and communal organization is as yet confined to the question of church government; he even balances his chastisement of the Puritans with an accusation that the Bishops' very defenders have too often exaggerated the political threat (L, I, 89-90). But he also sees signs of escalation of the struggle in "certain indiscreet and dangerous amplifications, as if the civil government itself of the estate had near lost the force of her sinews, and were ready to enter into some convulsion, all things being full of faction and disorder." And the larger warning that "this unreverent and violent impugning of the government of bishops [may] be a suspected forerunner of a more general contempt" (L, I, 78) functions as the tract's strongest appeal for reducing tensions.

Although in the *Advertisement*, Bacon has reasons for praising the Puritans' efforts at reform, by the following year he has abandoned his conciliatory mode and is citing specific examples of the dangers they pose to established civil authority. In a letter written on behalf of Francis Walsingham, he registers a whole list of complaints:

For the one part, which have been offensive to this state, . . . which named themselves Reformers, and we commonly call Puritans, . . . now of late years, when there issued from them a colony of those that affirmed the consent of the magistrate was not to be attended; when, under pretence of a concession to avoid slanders and imputations, they combined themselves by classes and subscriptions; when they descended into that vile and base means of defacing the government of the church by ridiculous pasquils; when they began to make many subjects in doubt to take an oath, which is one of the fundamental parts of justice in this land and in all places; when they began both to vaunt of the strength and number of their partisans and followers, and to use comminations that their cause would prevail though with uproar and violence; then it appeared to be no more zeal, no more conscience, but mere faction and division (*L*, I, 100-01).

The Puritan agitators, Bacon has earlier observed, appeal to the people on the basis of their claim of direct access to the divine authority lodged in the text of scripture. But, from Bacon's view, such an appeal merely seeks to replace the more established interpretive authority of the Church with the potentially anarchic primacy of private conscience.³⁰ Despite the fact that, as Patrick Collinson notes, the Puritan godly community was typically defined by its "radical estrangement" from the rest of society, and especially from what it dismissed as "the great unjust rude rabble," Bacon sees the Puritan course as "dangerous" because "very popular"; indeed, as he observes, the very structure of the Puritan community "open[s] the people a way to government" (*L*, I, 100).³¹ The mention of the "strength and number" of the Puritans' "partisans and followers" conjures up the image of a great popular uprising against the now ineffectual constraints of "the providence of God and the authority of the magistrate," a "consequence . . . prejudicial," he adds, "to the sovereignty of princes." The idea of granting concessions to the dissenters is therefore unthinkable because it merely feeds the popularity that already threatens the courtly-monarchical social order whose interests Bacon serves. Bacon's sympathy for some of the Puritans' goals thus turns quickly to repudiation, for his interest in social stability, with his commitment to the maintenance of traditional authority, leads him to reject their agenda as politically dangerous.

In much the same way as he will later criticize improper knowing in natural philosophy — and it is here, in this earlier context, that he first comes to an understanding and formulation of that problem — Bacon condemns the Puritan challenge to established, traditional social order, in both church and state, for its misleading claims to epistemological authority. In his attack on the anarchic subjectivism of the Puritans, he points especially to the way in which their claims depend on those forms of idolatry he will similarly cite as preventing the approach to a true knowledge of nature:

The church never wanteth a kind of persons which love *the salutation of Rabbi, master*; not in ceremony or compliment, but in an inward authority which they seek over men's minds, in drawing them to depend upon their opinion, and to *seek knowledge at their lips*. . . . Such spirits do light upon another sort of natures, which do adhere to them; . . . *stiff followers, and such as zeal marvellously for those whom they have chosen for their masters* (*An Advertisement Touching the Controversies of the Church of England*, L, I, 82).³²

Like the scholastic and hermetic philosophers he will later charge with perversely neglecting the authority of God's true works, the Puritan "masters" mistake their "opinions" for the truth of things, and so presumptuously believe those opinions to merit authority over the minds of others. And in his recognition that both master and follower seek truth in words before things, Bacon also anticipates his other central complaint against the decadent current state of learning, its inability to know the things of nature truly because of a constant quibbling over words. So he continues the passage just quoted:

This latter sort, for the most part, are men of young years and superficial understanding, carried away with partial respect of persons, or with the enticing appearance of goodly names and pretences [*F]ew follow the things themselves, more the names of things, and most the names of their masters.*

Earlier in the tract, Bacon finds it necessary to censure the usurpation of divine authority as figured in the Puritan master, a problem aggravated by the attempt to mask mere human authority behind a false humility:

[*B*]rother, if that which you set down as an assertion, you would deliver by way of advice, there were reverence due to your counsel, whereas faith is not due to your affirmation. St. Paul was content to speak thus, *Ego, non Dominus; I, and not the Lord: Et secundum consilium meum; according to my counsel*. But now men do too lightly say, *Non ego, sed Dominus; not I, but the Lord*; yea, and bind it with heavy denunciations of his judgments, to terrify the simple, which have not sufficiently understood out of Salomon, that *the causeless curse shall not come* (L, I, 75-76).

As we have seen, Bacon will later offer Aristotle as an emblem of the Antichrist precisely because he *refused* to come in the name of the Father (*Redargutio Philosophiarum*, F, 113). But the charge against the figure of the Puritan master is essentially the same. Like Aristotle, whom Bacon will describe as “levelling and destroying all that went before, [and so] usurp[ing] authority to himself,” the Puritan master, though claiming to come in the name of the Father, seeks to substitute his authority for God’s. The formulation of his critique suggests in fact that, as Bacon saw it, reliance on mere words and idolization of presumptuous authority figures were one and the same thing: it is the “goodly name” of the master himself — who like Aristotle comes in his own name — that blocks the approach of true knowing to “things themselves.”

In refusing the authority of “things themselves,” religious idolaters (and self-idolaters), like their counterparts in the realm of natural philosophy, presumptuously turn away from that which alone has been divinely authorized. Significantly, Bacon constantly suggests that this authority may be revealed not only in the words of scripture or in the works of nature but also in the lawful settlement of traditional society. In his condemnation of Aristotle, in fact, Bacon glosses the sanction of the “name of the Father” as “the name of antiquity,” the ancient authority of tradition (F, 113). In his earlier polemics against religious controversy he viewed the threat of Puritan presumption (with its substitution of the master’s authority for God’s) as undermining an ancient authority of its own, that tradition embodied in the established customs of church government and civil society.³³ In putting forth such a claim in defense of ecclesiastical settlement, for example, he censures the Puritans for forgetting that one must “take counsel of the providence of God, as well as of his word,” and he ventures that this providential ordering may even show itself in the creation and maintenance of human social order. Like the laws of nature he will later describe, human laws may themselves manifest the secret structure of God’s providential design, and since, also like nature’s, their divine sanction must be carefully explored under the guidance of proper authority, it is a dangerous practice to tamper uncritically with what may be the workings of God’s will.³⁴ Thus it is, Bacon notes, that “God forbid that lawful kingdoms should be tied to innovate and make alteration,” for “*he that bringeth in new things, resisteth the will of God revealed in the things themselves*” (L, I, 84-85). The very fact the institutions of English society are lawfully established warrants the belief that they manifest God’s authority, showing off its truth as the “things themselves.” Bacon suggests by this phrase that like the natural world, whose truths he will later claim must be similarly known, a

legitimately settled social order is a kind of divine work, whose true understanding is therefore subject to a proper reading in which God's authorizing laws may be discovered.³⁵ Bacon thus attacks the Puritans' claim to rebuild human society upon the foundation of God's Word exclusively because their efforts typically lose sight of the "things themselves" of legitimate social order in much the same way as the fantastical philosophers of nature lose sight of the "things themselves" of nature. The wanderings into intricate mazes of words, or the settling for the presumptuous posings of false authorities, only serve to prevent human society from properly contemplating the providential design revealed in the lawful structure of creation.

In developing his ideas in the direction of natural philosophy, Bacon gradually comes to his foundational claim that it is precisely the task of reformed learning to make available a productive knowledge of the divine laws that permeate and sustain the worlds both of nature and of human society, a knowledge that, at its highest level (*Philosophia Prima*), might be extended to the principles that connected the two. So he writes in a letter to the newly crowned James I in 1603 that "there is a great affinity between the rules of nature, and the rules of policy: the one being nothing else by an order in the government of the world, and the other in the government of an estate." He goes on to assert, moreover, that the ultimate goal of his project of reform is to make "the government of the world a mirror for the government of a state" (*L*, III, 90-92). A proper reading of divine authority inscribed in the united laws of nature and civil society is intended precisely to counter the destructive effects of pride that distort the redemptive possibilities of knowledge.

When Bacon came to write *Natural and Experimental History* in 1622, he would draw a figural relation between the two kinds of perverse effects produced by presumptuous misreadings of the true relationship between human and divine. Urging submission to the authority of God's works, he writes that full recovery of divine truth requires people

to approach with humility and veneration, to unroll the volume of Creation, to linger and meditate therein, and with minds washed clean from opinions to study it in purity and integrity. For this is that sound and language which went forth into all lands, and did not incur the confusion of Babel; this should men study to be perfect in, and becoming again like little children condescend to take the alphabet of it into their own hands, and spare no pains to search and unravel the interpretation thereof (*W*, V, 132-33).

Connecting the proper reading of the language of creation to the pre-Babelian monoglossia of human culture, Bacon suggests that the ruin of knowledge with

the loss of our Edenic condition and the destruction of human cultural harmony with the primal confusion of tongues are related events. Bacon had pointed to just this relation in 1609 in his allegoresis of the myth of Orpheus (*Wisdom of the Ancients*, W, VI, 720-22). There he lamented how the wondrous paired effects of Orpheus' lyre (universal philosophy) — the taming of the natural world and the establishment among men of a harmonious, disciplined social order — were subsequently drowned out by the "confusion" engendered by the "hoarse and hideous blast" of the horn of the Thracian women. At such a moment, the "building of houses, the founding of cities, the planting of fields and gardens with trees" gave way to perturbations and seditions and wars; amid the uproars of which, first the laws [would be] put to silence, and then men [would] return to the depraved conditions of their nature, and desolation [would be] seen in the fields and cities." In their ungodly presumption, the Puritan "masters" and the fantastical philosophers of nature appear as something of living analogues to the mythical Thracian women — those whose din destroyed Orpheus' charm — and as contemporary disciples of both the proud Adam and the vain builders of Babel. They thereby threaten to perpetuate the legacy of loss by creating only more "confusion" in both the language of nature and the language of human society.³⁶

The presumption of all the false prophets Bacon attacks — of Aristotle and the Puritan masters, as well as of the scholastic philosophers and the hermetic philosophers of nature — derives from the same source: claims of authority that only confuse the true redemptive relationship between the human world and the divine to be carried out through reformed knowledge. In 1607 Bacon would call such improper intermingling in the context of the study of nature a "disastrous confusion," an illegitimate "marriage between Theology and Natural Philosophy" (*F*, 78), and its perpetrators "impostors."³⁷ In 1597 he had found similar figures in the realms of religious settlement and civil society: "[I]t is with hypocrites and impostors . . . [that] they in the Church and towards the people set themselves on fire, and are carried as it were out of themselves, and becoming as men inspired with holy furies, they set heaven and earth together (*Meditationes Sacrae*, W, VII, 249-50).³⁸ Such "disastrous confusion" in the context of the religious dissent of the 1580s and 1590s portended the terrible, wanton destruction of civil wars, the reality of which Bacon had witnessed at first-hand in France in the late 1570s. It was an affliction he feared would all too soon be England's fate as well.

To "unroll the volume of Creation" and reconstruct its "alphabet," by contrast, was to restore humankind not only to its prelapsarian condition — to

the Adamic prerogative of dominion over nature — but also to a pre-Babelian social unity. Bacon's program is dedicated to this dual possibility, the fulfillment of which marked for him the true convergence of human and divine; indeed, it was the very sign of the working out of the Christian dispensation. For, as he would later write in *Novum Organum*, "the entrance into the kingdom of man, founded on the sciences, [is] not much other than the entrance into the kingdom of heaven, where none may enter except as a child" (W, IV, 69). "Becoming again like little children" in order to read nature's "alphabet," humankind becomes able to recover the moral innocence proffered by Christ as the way to salvation, an innocence that once belonged the unfallen Adam along with his power. The return to Adam's prelapsarian dominion within the larger context of the full promise of the Christian dispensation thus offers a redemptive possibility that, in Bacon's view, far surpasses both the Puritans' pursuit of the kingdom through the misleading, ultimately misused authority of God's Word and the hermeticists' fantastical claim to achieve a recuperative spiritual reunion with God through a mystical rapport with nature.³⁹ Overcoming such "confusion" was the epistemological, and ultimately the political, task Bacon would gradually assign to the new experimental philosophy, an enterprise in which no individual would seek for himself the "assumption of authority, . . . which might easily be done," he notes, "by one who sought to give lustre to his own name rather than light to other men's minds" (*Instauratio Magna*, W, IV, 19). Rather the work of reform promised the recognition of true divine authority, embodied in the works of creation and made legible by the "light" originally created as human reason and now restored by proper method.

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Notes

- * The following abbreviations will be used for citations from Bacon's texts:

W *The Works of Francis Bacon*, eds. James Spedding, Robert Leslie Ellis, and Douglas Denon Heath, 7 vols. (London: 1857-61).

L *The Life and Letters of Francis Bacon*, ed. James Spedding, 7 vols. (London: 1862-74).

F Benjamin Farrington, *The Philosophy of Francis Bacon* (Liverpool: 1964); contains translations of *Temporis Partus Masculus*, *Cogitata et Visa* and *Redargutio Philosophiarum*.

E *The Essayes or Counsels, Civill and Morall*, ed. Michael Kiernan (Cambridge, MA: 1985).

1. *The Discourse of Modernism* (Ithaca: Cornell University Press, 1982), p. 206.

2. For an insightful overview of these developments, see Julian Martin, "Natural Philosophy and its Public Concerns," in *Science, Culture and Popular Belief in the Renaissance*, eds. Stephen Pumfrey, Paolo L. Rossi, and Maurice Slawinski (Manchester: 1991), pp. 100-18. For discussion of some of the specific developments within seventeenth-century English culture, see Charles Webster, *The Great Instauration: Science, Medicine and Reform, 1626-1660* (London: 1975).
3. As early as 1592, in a courtly entertainment presented before the Queen, Bacon offered natural philosophy as the chief means of producing improvement in civic affairs: see *L*, I, 123-26. Over the course of his career, Bacon would gradually develop the ideal of productive knowing — founded on reformed natural philosophy — as a crucial part of his larger social reforms, promising to transform natural philosophers into humankind's greatest benefactors, founders of the conditions of new and harmonious kinds of social order: see, for example, *W*, III, 518-19; IV, 113, 372-73; *F*, 91-92.
4. *Discourse of Modernism*, p. 202. We note, for example, that Bacon's project is almost always described in metaphors and analogies drawn from commonplace political contexts (military, government, legal). On the one hand, nature's interpreters may be portrayed as figures of dominance, likened to legal scribes who "set down the laws themselves," to examiners of civil and canon laws (*W*, IV, 262-63), and even to conquering generals (*W*, IV, 23-25). On the other hand, they may appear as subjects or suitors of a higher authority: the compiling of the preliminary experimental history is to proceed "as if every particular were stated upon an oath," or "according to the practice of civil causes" in "Pleas or Suits granted by the divine favour" (*W*, IV, 261, 263); working under method they are to be "forced [into truth] . . . by severe laws and overruling authority" until "being thereby purged of fancies and vanities" they discover their intellects "subject and entirely submissive" (*W*, IV, 57, 20).
5. See *Discourse of Modernism*, ch. 1 for Reiss' discussion of his methodology; for Foucault's notion of "discursive formations," see, for example, *The Archaeology of Knowledge*, trans. A. M. Sheridan-Smith (New York: 1972), p. 74. For a similar critique of Reiss' interpretive model, see Ronald Levao, "Francis Bacon and the Mobility of Science," *Representations*, 40 (1992): 2-3.
6. For discussion of this issue of historical methodology, see Debora Shuger, *Habits of Thought in the English Renaissance: Religion, Politics, and the Dominant Culture* (Berkeley: 1990), pp. 1-6; and Annabel Patterson, *Reading Between the Lines* (Madison: 1993), pp. 7-10.
7. Julian Martin's fine study, *Francis Bacon, the State, and the Reform of Natural Philosophy* (Cambridge: 1992), provides an important ground for much of the following discussion. But where Professor Martin stresses the institutional mechanisms of Baconian reform, I stress the rhetoric employed by Bacon to champion the cause of reform.
8. For Bacon's commonplace notion of nature as God's "second book," see *W*, IV, 261; and VII, 252. Martin (*Francis Bacon*, chs. 4, 6) convincingly documents that this notion of epistemological reform (what I am calling knowledge-as-writing) derives in large measure from Bacon's deep engagement in the structure of the English legal system. For example, he typically portrays the natural world either as a system of laws (*leges Naturae*) or a kind of legal document whose "sections and clauses" need to be interpreted by trained inquirers (*W*, IV, 120, see also n. 15) or as a body of "lawful evidence" discovered in the course of

- methodical inquiry (tabulated in natural histories that are themselves analogous to official law reports). This issue is also discussed by Antonio Pérez-Ramos, *Francis Bacon's Idea of Science and the Maker's Knowledge Tradition* (Oxford: 1988), pp. 246 and *passim*.
9. For Bacon's approving allusions to the Adamic-language paradigm, see W, III, 222, 264-65; on his vision on the broader promise of Edenic restoration, see W, IV, 7, 13, 81; VII, 220-21; on his admiration for hermetic philosophers and for the "good" uses of magic, see F, 66-67, 71, 87, and W, IV, 366-67. For critical discussion of Bacon's indebtedness to occult philosophies of the late Renaissance, see Paolo L. Rossi, *Francis Bacon: From Magic to Science*, trans. Sacha Rabinowitz (Chicago: 1968), pp. 8-22.
 10. *La Verite des sciences*, quoted and translated in Hans Aarsleff, *From Locke to Saussure: Essays on the Study of Language and Intellectual History* (Minneapolis: 1982), pp. 12-13. Bacon provides a telling image of his desire to get beyond "ordinary philosophy" in this passage on the limits of astronomy as currently practiced: "Astronomy offers to the human intellect a victim like that which Prometheus offered in deceit to Jupiter. Prometheus, in place of the real ox, brought to the altar the hide of an ox of great size and beauty, stuffed with straw and leaves and twigs. In like manner astronomy presents only the exterior of the heavenly bodies . . . as it were the hide of the heavens; beautiful indeed and arranged into systems; but the interior . . . is wanting" (W, IV, 347-48).
 11. Peter Dear, *Mersenne and the Learning of the Schools* (Ithaca: 1988), p. 188.
 12. Richard Kroll, *The Material World: Literate Culture in the Restoration and Early Eighteenth Century* (Baltimore: 1991). According to Kroll, to reestablish its new agenda against this social threat, the formulators of what he terms "neoclassical discourse" hypothesized the private origin of knowledge as circumscribed, on the one hand, by its inability to know things in their essences — whether that meant "the essential constitution of matter, the ineffable mind of God, or the workings of individual conscience — and, on the other hand, by its residence in language, itself to be subjected to permanent social conditioning. These paired constraints rendered unacceptable epistemologically absolutist claims, especially those which sought to "arrogate to themselves the arbitrary privilege to manipulate and revise social forms" (pp. 70-71). Martin briefly summarizes the link forged in England in the 1580s and 1590s between Puritan "voluntary communities" and practitioners of "occult" philosophies: see *Francis Bacon*, pp. 55-60, and "Natural Philosophy," p. 107.
 13. Kroll, p. 144.
 14. There is one other irony: as Webster documents in *The Great Instauration*, from Bacon's death in 1626 to the Restoration in 1660 the strongest interest in Bacon's natural philosophical theories came from scientists who themselves had affiliations with Puritan social reformers.
 15. Bacon makes a careful distinction, one which grounds his whole theory of methodical knowing, between God's creation of the faculty of human knowledge (the "rational soul") and the rest of the created world ("nature"): "the substance of the soul in its creation," he writes, "was not extracted or produced out of the mass of heaven and earth, but was immediately inspired from God" (W, IV, 398). And in the division between these two creations lies the very possibility of knowledge of nature. God first creates "heaven and earth" and gives them "constant and everlasting laws, which we call *Nature*, which is nothing but the laws of creation"; but the creation of the "soul of man" is "not included in

Nature, that is, in the laws of heaven and earth" (W, VII, 220-21). From is special vantage as separate from the world it seeks to know, the mind can properly engage in the interpretation of nature, a process Bacon sees as the mind's "true and natural work" (W, IV, 115). On Bacon's notion of knowledge as dependent on establishing the proper epistemological "distance" between subject and object, see Reiss, pp. 24-27, 33-36, 201-225; and John Briggs, *Francis Bacon and the Rhetoric of Nature* (Cambridge, MA: 1989), pp. 156-59.

16. Bacon hopes through methodical knowing to restore the "commerce between the mind of man and the nature of things. . . to its perfect and original condition" (W, IV, 7).
17. Bacon would use the image of an English ship sailing beyond the Pillars of Hercules as the frontispiece to the *Instauratio Magna*; he notes in the "Plan of the Work," moreover, that "having coasted past the ancient arts, the next point is to equip the intellect for passing beyond" (W, IV, 23).
18. Bacon writes in the *Instauratio Magna* that the new project of reform is intended precisely to supplant "those authors who have usurped a kind of dictatorship in the sciences and taken upon them to lay down the law" (W, IV, 15-16). Just three paragraphs later he again counterpoises his project to Adam's "ambitious and proud desire of moral knowledge to judge of good and evil, to the end that man may revolt from God and give laws to himself" (IV, 20).
19. On Aristotle as the Antichrist, see also W, III, 352, 567; for Bacon's negative views on Aristotle more generally, see W, III, 365; IV, 59, 69, 88, 344-45, 357.
20. Bacon will later write in *De Augmentis Scientiarum* that he intends through reformed natural philosophy to "summon and excite men [not] 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, as far as God Almighty in his goodness may permit" (W, IV, 372).
21. *Francis Bacon*, pp. 6-7, 14-22, 66-71; see also Geoffrey Elton, *The Tudor Revolution in Government* (Cambridge: 1953), and Wallace MacCaffrey, *The Shaping of the Elizabethan Regime* (Princeton: 1968).
22. Cited in the *Works of John Whitgift*, ed. John Ayre, 3 vols. (Cambridge: 1851-53), vol. I, p. 190. For a summary of the Whitgift-Cartwright debate, see H. C. Porter, *Reformation and Reaction in Tudor Cambridge* (Hamden, CT: 1972), chs. 7-8.
23. *Ibid.*, vol. III, p. 189.
24. For discussion, see Patrick Collinson, *The Elizabethan Puritan Movement* (Berkeley: 1967), esp. chs. 5-6; on the Puritan exploitation of the new culture of print, see Collinson, "The Elizabethan Church and the New Religion," in *The Reign of Elizabeth I*, ed. Christopher Haigh (Athens, GA: 1985), pp. 169-94. On Bacon's sense of the threat posed to England by the Catholic powers of Spain and France, see W, VI, 313-17, and L, I, 177-197; and on his general fear of sectarian violence, see W, III, 519. This threat would lead Bacon in the 1625 edition of the *Essays* to list "Innovation in Religion" as the first of his "Causes and Motives of Seditions" ("Of Seditions and Troubles," E, 46). He writes in "Of

- Vicissitude of Things," moreover, that "the greatest *Vicissitude* of Things amongst *Men*, is the *Vicissitude* of *Sects*, and *Religions*. For those Orbs rule in Mens Minds most" (*E*, 173).
25. On Bacon's French experience, see Joel J. Epstein, *Francis Bacon: A Political Biography* (Athens, OH: 1977), ch. 1.
 26. See, for example, *W*, IV, 45; VI, 95; VII, 136; and *L*, I, 137, 168, 350-51; III, 144; for an insightful discussion of his continuing interest in French affairs, see Kenneth Alan Hovey, "'Mountaigny Saith Prettily': Bacon's French and the Essay," *Publications of the Modern Language Association*, 106 (1991): 71-82.
 27. See Martin, *Francis Bacon*, pp. 35-37, 50, 60-62, 71, 102-04. For the relation between Bacon's "intelligence" work and his new epistemological interests, see John Michael Archer, *Sovereignty and Intelligence: Spying and Court Culture in the English Renaissance* (Stanford: 1993), pp. 121-51; and Elizabeth Hanson, "Torture and Truth in Renaissance England," *Representations*, 34 (1991): 55-57.
 28. Against this view, as Martin aptly summarizes his position, Bacon "insisted that the truths of religion must be mediated by official experts, not dispensed by the self-appointed ('voluntaries,' as he called them scathingly)": "Natural Philosophy and its Public Concerns," p. 107.
 29. For discussion of the "voluntary" communities of the Puritans, see Patrick Collinson, *The Religion of Protestants: The Church in English Society, 1559-1625* (Oxford: 1982), ch. 6.
 30. On the radical political potential contained in the Puritan appeal to conscience, see Michael Walzer, *The Revolution of the Saints: A Study in the Origins of Radical Politics* (Cambridge, MA: 1965), pp. 57-60.
 31. Collinson, *Religion of Protestants*, pp. 268, 190.
 32. The issue of the Satanic pride of these "arch-heretics and false prophets and impostors" in religion, as well as of the power they have over the minds of others, is still a concern for Bacon as late as 1605: see *Advancement of Learning*, *W*, III, 316-17.
 33. For Bacon, as Martin notes, "any who asserted themselves to be their own master (*i.e.* 'voluntaries') could not discover. . . God's 'ordnances and decrees' for natural things," whether those "things" were the "rules of nature" or the "rules of policy" (*Francis Bacon*, pp. 149-50).
 34. Developing his earlier notion (set forth in a letter to James I in 1603) that "there is. . . a congruity between the principles Nature and Policy [or civil government]" (*L*, III, 91), Bacon writes two years later in the *Advancement of Learning* that the "reduction or correspondence of the principles and architectures of nature to the rules and policies of government. . . [are not] only similitudes, as men of narrow observation may conceive them to be, but the same footsteps of nature, treading or printing upon several subjects or matters" (*W*, III, 348-49).
 35. On Bacon's sense of the need to know and follow the "things themselves" of human polity as established by providence, see also *L*, I, 82; and on traditional social order as a divine work, see *W*, VII, 59-60, and *L*, III, 106-08.

36. The link maintained here between the state of nature and the human state as paired manifestations of divine authority leads Bacon to seek both "to harness firmly any voluntaries in natural knowledge and to secure the monarchical civil order from the corrosive, even 'popular,' political consequences of unmediated knowledge and unofficial knowledge-makers" (Martin, *Francis Bacon*, p. 173). For "the operation of the Idols," Martin adds ("the voluntary collections that the mind maketh of knowledge" [*W*, III, 244] serving politically dangerous "voluntary communities") threatened to "provoke sects and then instability in the state" (p. 149).
37. On Bacon's views on the relationship between religious faith and natural philosophy, see also *W*, III, 219-21, 267-68; IV, 21, 247-48, 342; V, 112.
38. In *Novum Organum*, Bacon explicitly equates "fantastic philosophy" and "heretical religion" as both arising from an "unwholesome mixture of things human and divine" (*W*, IV, 66). This itself constitutes a more straightforward rendering of his allegoresis of the myth of Prometheus in the *Wisdom of the Ancients*; there Bacon concludes his interpretation by noting that "men must soberly and modestly distinguish between divine and human, between the oracles of sense and of faith, unless they mean to have at once a heretical religion and a fabulous philosophy" *W*, VI, 753).
39. For Bacon's critique of the *Alchemists'* notion of man as a "microcosm," harmoniously corresponding to the natural world, see *W*, VI, 747, and *F*, 122-23.