An Examination of the Philosophy of Bacon

WHEREIN DIFFERENT QUESTIONS OF RATIONAL PHILOSOPHY ARE TREATED

Joseph de Maistre

TRANSLATED AND EDITED BY RICHARD A. LEBRUN

An Examination of the Philosophy of Bacon

An Examination of the Philosophy of Bacon is one of Joseph de Maistre's most original and important works. Probably best known for his defence of throne and altar and for his critique of the political and religious thought of the Enlightenment, Maistre also addressed more fundamental philosophical issues. His critique of Bacon is a vigorous attack on the materialism and scientism that he judged characterized the thought of the French philosophes. Although often neglected, this work is crucial for an understanding of Maistre's epistemology, which formed the philosophical basis for his critique of modern science as well as for his criticisms of other aspects of Enlightenment thought. Given Maistre's stature in the history of conservative thought, his critique of Bacon remains significant for what it tells us about Maistre's own thought, for what it reveals about attitudes towards science in his time, and for its relevance for issues that remain under debate today.The work is also a showcase for Maistre's polemical skills and his powerful prose style.

This volume provides an annotated translation of Maistre's complete text, an Introduction that places the work in the context of Maistre's life and offers a critical exposition and assessment of his criticisms of Bacon, Biographical Notes on persons cited or mentioned by Maistre, and a Bibliography.

Richard Lebrun is a professor in the Department of History, St. Paul's College, University of Manitoba.

This page intentionally left blank

An Examination of the Philosophy of Bacon

Wherein Different Questions of Rational Philosophy Are Treated

JOSEPH DE MAISTRE

Translated and edited by
RICHARD A. LEBRUN

McGill-Queen's University Press
Montreal & Kingston • London • Buffalo

McGill-Queen's University Press 1998
ISBN 0-7735-1727-8

Legal deposit first quarter 1998
Bibliothèque nationale du Québec

Printed in the United States of America on acid-free paper

This book has been published with the help of a grant from the Humanities and Social Science Federation of Canada, using funds provided by the Social Sciences and Humanities Research Council of Canada.

Canadian Cataloguing in Publication Data

Maistre, Joseph, comte de, 1753-1821
An Examination of the Philosophy of Bacon:
wherein different questions of rational philosophy are treated

Translation of: Un Examen de la philosophie de Bacon.
Includes bibliographical references and index.
ISBN 0-7735-1727-8

1. Maistre, Joseph, comte de, 1753-1821. Examen de la philosophie de Bacon. 2. Bacon, Francis, 1561-1626 – Criticism and interpretation. 3. Bacon, Francis, 1561-1626 – Contributions in philosophy of science. 4. Maistre, Joseph, comte de, 1753-1821 – Contributions in philosophy. I. Lebrun, Richard A. (Richard Allen), 1931- II. Title.

B1198.M3513 1998 192 C95-900876-X

Contents

Preface

No book of this kind could be completed without the support, cooperation, and assistance of a number of people, and I am most pleased to acknowledge the assistance of all those who assisted in the preparation of this volume. In the first instance, I continue to be extremely grateful to Count Jacques de Maistre for his cooperation in a microfilm project a number of years ago. That project gave me access to Joseph de Maistre's manuscript of *L'Examen de la philosophie de Bacon*; without this access it would have been impossible to produce a critical translation of this work. I also want to acknowledge the support and assistance of fellow "Maistrian" Professor Jean-Louis Darcel of the Université de Savoie in Chambéry for his moral support, for his help in identifying some particularly elusive references, and for his hospitality and good advice during a pleasant visit to Chambéry in the autumn of 1995. I owe a special debt as well to Dr. Jean-Yves Pranchère of Paris for verifying a number of difficult references for me. I am also grateful to Dr Larry Hurtado of the University of Edinburgh for his assistance in trying to identify one of Maistre's references to a supposed Pauline saying.

I am most pleased to acknowledge and thank colleagues who read and critiqued drafts of my translation, Dr William R. Everdell of Saint Ann's School in Brooklyn Heights, New York, and Dr George Knysh of St Paul's College (University of Manitoba). These same colleagues, as well as Dr Owen Bradley, University of Tennessee (Knoxville), Dr Graeme Garrard of the University of Wales (Cardiff), and Dr Jean-Yves Pranchère, also provided comments on drafts of my Introduction. Their encouragement, corrections, and suggested revisions are reflected on almost every page of this book.

Assistance with identifying and translating citations in Greek and Latin was provided by Dr Henry Hardy of Wolfson College, Oxford University, and University of Manitoba colleagues Dr Edmund G.

Berry, Professor Emeritus, and Dr Rory Egan, both of the Department of Classics. University of Manitoba colleague Mrs Christina Povoledo of the Department of French and Spanish, who assisted with some Italian passages, also deserves recognition. Where published translations have been used, these have been acknowledged in the notes.

Finally, I want to thank the University of Manitoba for Administrative and Research Leaves that provided the necessary time to bring this project to completion.

Responsibility for the interpretation and for the remaining errors and faults is, of course, my own.

Introduction

Joseph de Maistre's *Examination of the Philosophy of Bacon* is of interest for a number of reasons. In the broad context of early nineteenth-century intellectual history, Maistre's critique of empiricism can be seen as part of a wider defence of Christian spiritualism against modern scientific materialism. Sharing something of the perspective of Chateaubriand's Romanticism as well as the spiritualism of Maine de Biran and Royer-Collard, Maistre's work exemplifies a turning away from the materialism and empiricism of the Encyclopedists and the Ideologues and a return to religious and spiritual values. Since Bacon had been touted by the philosophes as the first spokesman for modern science and the father of its inductive method, he was perhaps a logical target for an offensive against the Enlightenment, but Maistre was the only conservative writer of the time to undertake a detailed critique of the English thinker.

By the time he turned his attention to Bacon, Maistre had already won a reputation as a defender of throne and altar. In his *Considerations on France* of 1797 he had spelled out what he perceived to be the deleterious social and political consequences of eighteenth-century thought. In other well known works – the *Essay of the Generative Principle of Political Constitutions and other Human Institutions* (1814), *On the Pope* (1819) and *St. Petersburg Dialogues* (1821) – Maistre would broaden his attack on the Enlightenment and develop his distinctive defence of traditional Catholic beliefs. However the *Examen* has its own special interest as the work that contains Maistre's most detailed critique of Bacon and eighteenth-century scientism.

Though perhaps not as well known as some of Maistre's other works, the importance of the *Examen* has long been recognized, at least in France. On its publication in 1836, Augustin Bonnetty remarked that "it would perhaps be necessary to go back to Pascal's *Lettres provinciales* to find a more severe, more mocking, more pointed critique."[1]

More recently, it has been described it as "one of Maistre's most original and most neglected works,"[2] one that is essential for an understanding of Maistre's epistemology, which in turn provided Maistre with the foundations for his political thought as well as for his critique of modern science and the thought of the Enlightenment.[3] Given its importance in the corpus of Maistre's works, what is surprising is that the *Examination* has never before been translated into English.[4]

The work is significant as well as an example of Maistre's powerful prose style. Sainte-Beuve, probably nineteenth-century France's most distinguished literary critic, thought that Maistre's chapters in the *Examination* "on *final causes* and on *the union of religion and science* contained ... certainly some of the finest pages that have ever been written in a human language."[5] The *Examination* is noteworthy too as a showcase of Maistre's polemical skills.[6]

At the same time it must be acknowledged that the *Examination* has always been of more interest to Maistre's admirers than to Bacon scholars. Whatever the validity of Maistre's critique (and, as we shall see, he certainly raised issues of continuing importance), the fact is that his critique has been generally ignored by those who have studied Bacon and his role in the history of science. Whether or not this neglect has been unfortunate or blameworthy, given Maistre's stature in the history of conservative thought, his critique of Bacon remains significant for what it tells about Maistre's own thought, about attitudes towards science in his time, and for its relevance for issues that remain under debate today.

It also must be acknowledged that it is not easy to reach a fair assessment of Joseph de Maistre's critique of Francis Bacon. Both Bacon and Maistre have been subject to sharply divergent interpretations.[7] Both have been charged with subordinating the search for truth to personal and political considerations. Both dealt with issues (such as the nature of science and its relation to society generally and to political and religious authority) that remain very controversial.[8] Both were masters of rhetoric, highly proficient in the lawyer's trade of persuasive argument. Most of Bacon's writings were either in English or have been translated into English. If English-speaking readers are to judge between them, it seems only fair that Maistre's case should also be available in English.

In short, there seems reason enough to provide an English version of Maistre's *Examination of the Philosophy of Bacon*.

In this introduction, I will try to place the work in the context of Maistre's life and other writings, explore his reasons for attacking Bacon, outline the main features of Maistre's epistemology, note the

differences between his "first" and "second" critiques of Bacon, trace the main features of his attack in the *Examination*, review some assessments of the effectiveness and validity of his criticisms, and consider as well the relevance of Maistre's ideas today.

Joseph de Maistre himself was amused by the rather incongruous spectacle of two men of state struggling over philosophical questions. In a letter written at the time he was working on the Bacon book, he told a friend: "I don't know how I found myself led to mortal combat with the late Chancellor Bacon. We *boxed* like two Fleet Street *toughs*, and if he pulled some of my hair, I'm also sure his wig is no longer in place."[9] Nevertheless, the quarrel with Bacon was no joking matter and no accident, since it involved fundamental issues that had concerned Maistre most of his life.

There is little in Maistre's background, education, and early career that would lead anyone to predict his challenge to Bacon's stature as a philosopher of science.[10] Born in 1753, the son of a distinguished magistrate in Chambéry, the capital of Savoy, then a province of the Kingdom of Piedmont-Sardinia, Maistre received a conventional classical education from the Jesuits and from the local royal *collège* before going on to Turin for his legal training. He followed in his father's footsteps, becoming in turn a magistrate of the Senate of Savoy, a provincial high court that functioned as the equivalent of a French parlement. Promoted to the rank of Senator just on the eve of the French Revolution, he might well have continued in a conventional legal career if a French Revolutionary army had not invaded his homeland in September 1792. Maistre was unusual among the native-born magistrates of the Senate of Savoy in that he alone refused to live under the Revolutionary regime. He fled, first to Piedmont, and then to Lausanne, where he began a new career as a counter-revolutionary propagandist.

In retrospect, there are facets of Maistre's early career that might be considered straws in the wind. We now know that by 1792 he had put together one of the largest and most scholarly private libraries in pre-Revolutionary Savoy.[11] He owned works by most of the important authors of the Enlightenment, including Bacon, Galileo, John Locke, Descartes, Newton, G.J. s'Gravesande, Montesquieu, Voltaire, Helvétius, Condillac, Mably, and Adam Smith, editions of Bayle's *Dictionnaire historique et critique* and Diderot's *Encyclopédie*, a 180-volume collection of the *Mémoires de l'Académie Royale des Sciences et des Arts*, and a 230-volume collection of the *Journal Encyclopédique* (from the 1760's through 1791).[12] It is true that Maistre had to abandon most of this first library when he fled Savoy in 1792, but we know that he built up a second library from that date on, a library that

included editions of Descartes, Leibniz, Mirabeau, Newton, and Voltaire.[13] We also know, from his private notebooks, that in addition to judicial work in these years he was reading widely in both classical and modern authors.[14] In 1784, when Joseph's younger brother Xavier and some other young gentlemen in Chambéry began organizing a project to launch Savoy's first hot-air balloon (in emulation of the Montgolfier brothers who made the first successful flight at Annonay in France the previous summer), it was Joseph who was sent to Geneva to consult the celebrated physicist Benedict de Saussure on the technical details. He was also drafted to write the "Prospectus" to enlist subscribers to finance the project, which succeeded with a twenty-minute ascent in May 1784.[15] From Maistre's diaries we know as well that while in exile in Lausanne in 1793 he found time to take lessons in "experimental physics."[16] In short, Maistre had been a magistrate in the tradition of Montesquieu, with an intelligent and scholarly interest in most aspects of contemporary culture. As will be apparent to any reader of his mature works, including the *Examination of the Philosophy of Bacon* with its citations and references to an impressive number of figures in the history of science, Maistre became one of the most many-sided and best read men of his generation.[17]

Another manifestation of Joseph de Maistre's broad interests was his involvement in Freemasonry during most of the years of his judicial career in Savoy. It was often the case, apparently, that in the eighteenth century Masonic lodges were active in the promotion of scientific learning.[18] The lodges to which Maistre belonged, however, seem to have been characterized by esoteric and mystic impulses rather than Newtonian science.[19] Maistre may have learned how to use the Masonic rhetoric that spoke of the deity as an "Eternal Geometer,"[20] for example, but when the opportunity arose in 1782 for him to express his own ideas on the nature and goals of Freemasonry, what he proposed was a scheme to use the network of lodges to work behind the scenes for the reunification of the Christian churches.[21] Maistre's Masonic adventure confirms his openness to certain fashionable features of Enlightenment culture, but it would be difficult to establish any link between these activities and his knowledge of contemporary science. On the other hand, Maistre's attraction to the esoteric currents of thought he encountered in Masonic circles suggests that defence of the possibility of arcane or occult knowledge may have been one motivating factor in his epistemological theorizing and his critique of scientism.[22]

In any case, we have evidence that well before the French Revolution confirmed Joseph de Maistre in his opposition to the main currents of Enlightenment thought, he had already been disquieted by

the potentially adverse effects of the natural sciences.[23] As early as his 1782 unpublished memoir on Freemasonry, he had criticized those "supposedly wise men" who, "ridiculously proud of some childish discoveries, discourse on fixed air, vaporize the diamond, teach planets how long they must last, swoon over a little petrifaction or the proboscis of an insect, etc., but take care not to condescend to asking themselves once in their lives what they are and what is their place in the universe."[24] In his *Considerations on France* of 1797, the work that established his reputation as a defender of throne and altar, Maistre claimed that "too many French scholars [*savants*] were the principal authors of Revolution, too many approved and gave their support."[25]

In his next important work, the *Essay on the Generative Principle of Political Constitutions and other Human Institutions* (written in 1809 in St Petersburg where he was serving as the Sardinian ambassador to the court of the Russian tsar but not published until 1814), Maistre sounded a sharp warning about the dangers of science, claiming that "if we do not return to the old maxims, if the guidance of education is not returned to the priests, and if science is not uniformly relegated to a subordinate rank, incalculable evils await us. We shall become brutalized by science, and that is the worst sort of brutality."[26]

These works, however, contained no specific attacks on Bacon or his philosophy. We know that Maistre had long admired Bacon's *Essays*, which he described in his *St Petersburg Dialogues* (otherwise so critical of Bacon) as containing "more solid, practical, and positive true knowledge than can, in my opinion, be found in any other book of this kind."[27] In one of Maistre's early notebooks we find extracts from "Of Judicature," one of Bacon's *Essays*, with Maistre's French translation on opposite pages.[28] Maistre's own *Discours sur la caractère extérieur du Magistrat*, an oration delivered to the Senate of Savoy in 1782, had been on one of the themes of Bacon's essay, i.e., that the magistrate must not only be just, but his external appearance and actions should bespeak dignity and incorruptibility.[29] Maistre seems, too, to have agreed with Bacon's approach to interpreting the myths and fables of antiquity. In a 1798 notebook entry, Maistre excerpted from William Robertson's *Historical Disquisition Concerning the Knowledge which the Ancients had of India* (Basel 1792) a passage that denigrated Greek mythology as the product of a period of anarchy, violence, and immorality, and then added his own reflection on the passage: "Greek mythology is full of intelligence, and even wisdom, which is very extraordinary. It contains a crowd of allegories, charming or sublime. It could not have been invented by barbarians. That some vulgarity may have been mixed in proves nothing. See Bacon's Wisdom of the Ancients."[30] In his *Essay on the Generative*

Principle (1809), Maistre suggests that a fable can be something "much truer than ancient history for those who are ready to understand it,"[31] a proposition that clearly accords with Bacon's approach. In any case, it is curious and probably significant that Bacon's *Wisdom of the Ancients* is never cited in Maistre's *Examination of the Philosophy of Bacon*.[32]

On reflection, we can think of a number of reasons why Joseph de Maistre might have been expected to be relatively sympathetic to Francis Bacon. Both were trained in the law, both were staunch royalists and opposed to political or social innovations, both were highly sensitive to any infringement on the sovereignty of the monarch, and both feared the disruptive effects of private interpretation of the Scriptures and "sectaries" who defied established religious authority.[33] They differed in language, nationality, and religion, of course, but Maistre was something of an Anglophile who had taken the trouble to teach himself a reading knowledge of English while still a young magistrate.[34] He clearly respected (and often cited) other Protestant English writers such as Ralph Cudworth, Robert Boyle, Robert Black, and Isaac Newton. If Maistre turned on Bacon, it had to be for more substantive reasons than difference of religion or nationality.

The first evidence we have that Joseph de Maistre was thinking of giving Bacon special attention occurs in his notebooks. In a manuscript notebook labelled *Philosophie D* there is a substantial section headed "Notes on Bacon to be used for an examination of his philosophy," which is dated St Petersburg, 1806. On the very first page of these notes, Maistre cites Article 6 of Bacon's *Filum Labyrinthi sive Formula inquisitionis* (which, despite the Latin title, was written in English). Maistre's reflections on the passage reveal some of his deepest convictions, suggest the relationship of these concerns to Bacon, and explain as well, perhaps, his failure to publish his critique during his lifetime.

Article 6 explains Bacon's principal thought: "For since the Christian faith, the greatest number of wits have been employed, and the greatest helps and rewards have been converted upon divinity. And before time likewise, the greatest part of the studies of philosophers was consumed in moral philosophy, which was as the heathen divinity."[35]

This is what really distressed him, and this is what pleases our century so much. With all his intelligence, he ignored the following fundamental truths:

1. All nations begin with theology, and are founded on theology.

2. The more its institutions are theological, the stronger the nation. Rome, Sparta, etc.

3. All sciences spring from theology, and everywhere theologians found sciences. Egyptian priests. Etruscan brahmins. Fathers of the Church. St Thomas. St Bernard. The twelfth-century Bacon. Alexis de Spina [Alessandro della Spina], Dominican, who died at Pisa in 1313. Cardinal Nicolas of Cusa, who died in 1414. Purbarch [Peurbach]. Regiomontanus and finally Copernicus. Bacon himself says that no one occupied themselves entirely with science *except perchance some monk in a cloister*. Ibid. § 6.

4. The more theology is perfect, the more it is fertile. This is why Christian nations have surpassed all others in the sciences, and why the Indians and the Chinese, with their *so much* and *too much* praised wisdom, will never catch up with us. Copernicus, Kepler, Descartes, and Newton are the immediate productions of the Gospel; I say the immediate productions.

5. The more theology will be cultivated, honoured, and dominant, the more (all else being equal) human science will be perfect.

The development of these truths would produce a large book; but why would it be necessary to prove them? They are clear in themselves; to see them, it is only necessary to open one's eyes. They flow from the most evident principles. Metaphysics demonstrates them, history proclaims them. Sometimes I am tempted to cry out FILII HOMINUM USQUEQUO GRAVI CORDE?[36] But I am afraid that Condillac's disciples and even his schoolchildren will treat me only as a *priest*; I do not want to expose myself.[37]

Maistre had already developed the theme of the relationship between theology (or religion) and lasting institutions in his *Considerations on France*,[38] and it would be the central theme of his *Essay on the Generative Principle of Political Constitutions and other Human Institutions*. Extending the notion of the foundational and civilizing role of religion from politics to the sciences was probably natural enough.

Maistre's reluctance to expose himself may account for the fact that it is only in the works published after his death in February 1821, *The St Petersburg Dialogues* (1821) and *An Examination of the Philosophy of Bacon* (1836), that his criticisms of Bacon and what he represented were expressed in any detail. We can speculate that his caution may be explained by his awareness of the achievements of contemporary science and by his appreciation of the seriousness of the philosophical and religious problems involved. In a letter written towards the end of his life, Maistre warned a clerical friend who was thinking of writing a work of apologetics:

Be very careful ... of the objection taken from science. It is a very delicate point ... this is a subject about which I have meditated a great deal. Science is a plant that we must abandon to its natural growth ... To be learned is not everything; it is necessary to be as learned as necessary, and when necessary,

and as much as necessary. The fire that gives life to man, the fire that warms him when he is cold, and the fire that burns him when he falls into it, is not at all the same thing in its results, and yet it is always *fire*.[39]

The delicacy of the issues involved is a point that Maistre stressed in the long last note of the *St Petersburg Dialogues*. There, after reflecting at length on various theoretical, mathematical, and observational issues concerning astronomy and geomorphology, he breaks off with the following unfinished remark:

> In closing, let us observe that several parts of science, notably those in question at the moment, rest on infinitely delicate observations, and that all delicate observation requires a delicate conscience. The most rigorous probity is the premier quality of every observer ...[40]

This note also suggests Maistre's focus on moral issues. As we will see, Maistre's critique of Bacon centers on what he perceives to be the dangerous moral implications of Bacon's philosophy.

Maistre's "first" attack on Bacon occurs in the *St Petersburg Dialogues*. Although the *Dialogues* were written first (during the years from 1809 to 1813), with the *Examination of the Philosophy of Bacon* following in the years from 1814 to 1816, it is probably a mistake to try to trace any substantive development in his critique in the intervening years.[41] It is true that in the *Dialogues* Maistre gives the impression that he is seeing and judging Bacon through his eighteenth-century disciples rather than from a detailed study of Bacon's own writings. He says that "there is a sure rule for judging books just as there is for judging men: it is enough to know *by whom they are loved and by whom they are hated*." Maistre uses Bacon to illustrate the rule: "As soon as you see a book made popular by the encyclopedists, translated by an atheist, and unstintingly praised by the past century's flood of philosophers, you can be sure, without further examination, that its philosophy is false and dangerous, at least in its general foundations."[42] However, as we have already seen, we now know that it was in 1806 that Maistre began his "special and thorough study of that strange philosophy" (as he put it in a letter to Louis de Bonald).[43] If the attack in the *Dialogues* lacks the long quotations from various Latin, English, and French editions of Bacon that are a feature of the *Examination*, as well as the much sharper tone of the second critique, it must be for stylistic or strategic reasons.[44] Maistre was almost ready to publish the *St Petersburg Dialogues* when he died; we simply don't know if he ever intended the *Examination of the Philosophy of Bacon* to see the light of day.

In any case, the context of Maistre's attack on Bacon in the *Dialogues* is an epistemological discussion, which in turn is part of a broader discussion of the utility of prayer. The latter topic is obviously one of the major themes of the *St Petersburg Dialogues*, which are subtitled "Conversations on the Temporal Government of Providence." The efficacy of prayer as a "secondary cause" depends, of course, on the existence of a transcendent God, and Maistre's epistemological discussion aims at demonstrating the possibility of knowing and interacting with a reality that transcends the visible material world. Since much of the force of the argument against Bacon (in both the *Dialogues* and in the *Examination*) rests on this epistemological theory, it appears essential to provide at least a brief explanation Maistre's position as it appears in the *Dialogues*.

It must be appreciated, of course, that Maistre was not a systematic or "professional" philosopher; nowhere did he offer a systematic exposition of his epistemological ideas. His views were elaborated and enunciated in reaction to the theories of John Locke, which Maistre judged to be absolutely destructive of traditional morality.[45] In Maistre's view, to maintain, as Locke did, that all ideas come to us from our senses, was to "materialize the origin of our ideas,"[46] and unleash materialism. In effect, Maistre's concerns went much deeper than technical epistemological questions. Insofar as materialism implied fatalism, questions of liberty and freedom of the will were inevitably involved. Maistre equated the defence of innate ideas with the defence of the spirituality and immortality of the soul, the existence of God, and Christian morality and religion.

In opposition to Locke's sensationalism, Maistre adhered to a theory of innate ideas by which he explained both the process and the capabilities of human knowledge. By innate ideas Maistre meant those "original notions common to all men, without which they would not be men, and which are in consequence accessible, or rather natural, to all minds."[47] In contrast to Locke, Maistre denies that sense experience can be the formal cause of knowledge. For Maistre the important thing about the learning process is that human beings react to sense experience in a way that is determined by the innate ideas or first principles that are proper to human nature. He insists that "all rational doctrine is founded on antecedent knowledge ... [and that] syllogism and induction always proceed from principles posed as already known."[48] Maistre argues that if one refuses to admit innate ideas, "no proof is any longer possible, because there are no longer principles from which it can be derived."[49] For Maistre, "the essence of principles is that they are anterior, evident, non-derived, indemonstrable, and *causes* in relation to the conclusion."[50] In a statement that

embodies the argument he will use against Bacon, Maistre maintains that "All the sciences communicate with one another by these common principles."[51]

Maistre liked to illustrate his argument by likening innate ideas in humans to instinct in animals. In a notebook entry dating from about 1805, he uses the phrase "innate capacities" to capture what he has in mind, and remarks: "My dog sees my two legs just as I see them myself; but neither one nor the other of us sees *twoness*.[52] In a more elaborate development of the same analogy in the *St Petersburg Dialogues*, Maistre argues that a dog accompanying his master to an execution sees the same events as his master, but equipped only with instinct, is unable to comprehend the significance of the events. "Ideas of morality, sovereignty, crime, justice, public force, etc., attached to this sad spectacle mean nothing to it. All the symbols of these ideas surround it, touch it, press in on in it so to speak, but without avail, since no symbol can have meaning unless the idea it represents pre-exists."[53] In a similar way, as human beings, "we can ourselves no doubt be *surrounded, touched, and pressed upon* by the action and agents of a superior order of which we have no knowledge other than that which pertains to our actual situation."[54] However, according to Maistre, this is a profound difference between the two situations. "*Your dog does not know that he does not know*, and you, intelligent man, you know it. What a sublime privilege this intimation is."[55] Awareness of the true dimensions of human knowledge should, according to Maistre, lead man to acknowledge that the visible world is only a part of reality: "I make a very great use of this intimation in all my inquiries about *causes*. I have read millions of witticisms about the ignorance of the ancients *who saw spirits everywhere*: it seems to me that we are much more foolish in never seeing them anywhere. They never stop talking about *physical causes*, but what is a physical cause?"[56]

All the talk about physical causes, of course, is what Maistre blames on Bacon. The notion of a physical, or material, cause, Maistre regarded as a "NON-SENSE, even a contradiction in terms."[57] He could not see how matter, which the physics of his time thought of as essentially inert (as in Newtonian laws of motion), could be the true cause or origin of anything. Yet this "chimerical" idea, Maistre charges in the *Dialogues*, was just what Bacon proposed, and what has misled the crowd who followed him. Having assumed that all the forces acting in the universe are material, Bacon had sought to find a common or original cause in the material world by imposing one cause upon another. However Bacon was mistaken, Maistre contended, in his ideas of nature and "the science that must explain it."[58] "How can they be

so blind as to seek causes in *nature* when nature itself is an effect?"[59] Scientific discovery, he argues, "consists solely in the uncovering of unknown facts or relating unexplained phenomena to already known primary effects that we take for causes." "The discovery of facts" he continues, "has nothing in common with that of causes."[60] However, it was Bacon's treatment of final causes that upset Maistre most.

Bacon, he charged, dared to maintain that inquiry into final causes was harmful to true science. For Maistre, this was an error as glaring as it was deadly, and contagious as well. Using all his energy to attract men to the physical sciences, Bacon had left them with a distaste for all other kinds of knowledge. Seemingly inspired by a "mechanistic rancour" against all spiritual ideas, Bacon had turned men against Plato and towards Democritus, relegated metaphysics and natural theology to the realm of positive theology, and disposed of theology by confining it to the church, "forbidding it to come out."[61]

These were serious charges, of course, but compared to the violence of Maistre's attack in the *Examination*, the criticisms levelled against Bacon in the *St Petersburg Dialogues* seem relatively passionless. Bacon was mistaken, his ideas were chimerical, those who followed him were misled, and the consequences have been unfortunate. In the *Dialogues*, however, there is no attack on Bacon's personal morality. Maistre castigates Bacon's eighteenth-century disciples for having loved and praised him for his worst qualities (i.e., his "materialism"), while refusing "to acknowledge what was good and even excellent in him."[62] In the *Dialogues*, Maistre was concerned to refute the "materialism" and "practical atheism" of the eighteenth century. Maistre thought that the eighteenth century had "made Bacon its god,"[63] and concluded that "*time has come* when all the idols must fall."[64]

Bringing down the idol meant attacking Bacon's reputation as well as his ideas. Voltaire may have called Bacon the "father of experimental philosophy,"[65] but Maistre thought it "a very great error to believe that he influenced the progress of science."[66] "All the true founders of science preceded him or were ignorant of him." Bacon was, at best "a barometer who announced good weather, and because he announced it, was thought to have made it."[67]

In the *Dialogues*, then, Maistre denigrated Bacon's reputation, but his treatment remained reasonably balanced. In contrast, in the *Examination of the Philosophy of Bacon*, Maistre mounts a focussed, sustained offensive designed to demolish Bacon's reputation as an innovator in scientific method, demonstrate the childishness of his scientific views, and prove the consequences of his philosophy destructive of true philosophy and religion.

Perhaps the most novel and remarkable feature of Maistre's critique in the *Examination* is its thoroughly negative character. He simply refuses to give Bacon any credit whatsoever for constructive innovation in scientific method or any contributions to scientific knowledge. This is a judgement that flatly contradicted the general opinion of Maistre's own time. Maistre exaggerates a bit in claiming that his century had made Bacon its god, but it is nevertheless true that he had been widely praised and rarely criticized. Even the Jesuit *Journal de Trevoux* had praised Bacon's "profound books," his "just and reasoned induction," and his "great genius and knowledge."[68] There had been some authors who had criticized Bacon on one point or another (and Maistre carefully collected and used every such criticism he could find), but Maistre's total condemnation seems unprecedented. He was fully aware of the novelty of his wholesale attack and he expected that his book would "astonish" even such a like-minded spirit as his fellow conservative, Bonald.[69]

Part of the explanation for all the uncritical praise of Bacon, Maistre suggested (perhaps as a polemical tactic), was that "Voltaire, as well as most of Bacon's panegyrists had not read him." At best, they may have opened Bacon's books and "gone through them by chance."[70] Relying on his reputation, they had attributed to Bacon knowledge that he did not have.[71] Maistre depicted his own task as largely one of exposure, of simply showing the reader what Bacon had said and what he really meant. "As soon as one understands him," Maistre claimed, "one sees that he knew nothing."[72] Demonstration of Bacon's ignorance is thus a major theme and polemical device in Maistre's critique. As evidence of this ignorance, Maistre cites Bacon's excessively pessimistic view of seventeenth-century science, his opposition to the great scientific achievements of his own time (such as Copernican astronomy), his invectives against the syllogism, and his exaggerated claims for the originality and worth of his "new instrument" (as Maistre derisively translated *Novum Organum*).[73] Maistre charges as well that all Bacon's pretentious talk about "legitimate induction," method of exclusion, and his recommendations as to the proper method of conducting experiments only show that Bacon was not a scientist, and that he knew nothing about how scientific discoveries were actually made. Going to great lengths to expose Bacon's views on such diverse topics as astronomy, the tides, motion, natural history, optics, and meteorology, Maistre pillories his beliefs as a shameful collection of extravagant nonsense.[74]

In the light of recent attempts to blame Bacon's "knowledge is power" program for our contemporary ecological crisis, Maistre's judgement of the Baconian vision of the practical possibilities of

science merits particular attention. Maistre did take note of the list of practical benefits Bacon hoped to derive from science, but only to ridicule the list as "false and impossible."[75] Reproducing Bacon's English text in a long footnote, Maistre poked fun at Bacon's ideas by providing an ironical translation in his text. Bacon's vision for "the prolongation of life," becomes "make a man live three or four centuries."[76] Bacon's talk about the "making of new species" and "transplanting of one species into another" is ridiculed as sheer foolishness. To Bacon's suggestion that science should invent new "instruments of destruction, of war and poison," Maistre's sarcastic comment is "always QUOAD *usus humanos* [for the use of man]."[77] When Bacon expresses his hope for "greater pleasures of the senses," Maistre asks "Ah! Mr. Chancellor, what are you thinking about?"[78] Nevertheless, even though he scorned Bacon's particular ideas about the benefits that might be expected from science, Maistre's own ideas about the utility of science are not that different. His "true maxims" about man and science picture man using his powers, perfecting them by exercise, and "turning the forces of nature to his profit."[79] We may conclude that his quarrel was not with Bacon's program of using science for the amelioration of the human condition, but with the philosophical assumptions Maistre judged to underlie Bacon's vision of science. The focus of Maistre's concern remains the "materialism" and "atheism" of eighteenth-century philosophy, with over half the *Examination* devoted to exposing and denouncing Bacon's alleged contributions to the errors of eighteenth-century thought.

Maistre's most fundamental and most often repeated complaint about Bacon is that "he is at the same time ridiculous and dangerous for having called this science [physics] THE TRUTH, as if there were no other."[80] To summarize the argument and state it in modern language, Maistre's accusation is this: Bacon reduces all science to physics, both methodologically, by assuming that the method of physics is the only method of discovering truth, and materially, by assuming that all truth is essentially the truth of physics – its propositions and data.[81] It must be stressed, however, that Maistre's attack on Baconian science was not an attack on science itself. Although Maistre did not use the terms "empiricism" and "scientism," it is clear that what he found unacceptable were the assumptions that all our knowledge is derived from sensation and experience (i.e., empiricism) and that all philosophical problems could be resolved by science (i.e., scientism).[82]

The argument for the ridiculousness of Bacon's philosophy is based on the epistemological theory Maistre had enunciated in the *St Petersburg Dialogues*. The very possibility of science, according to Maistre's theory, depends on the innate ideas that are common to all

human minds. Without such first principles of human knowledge, Maistre argued, experiments would be useless because there would be no basis for judging their validity.[83] Against the notion that physics alone is real, Maistre maintains that "all the sciences, without distinction, have their *reality* in the intelligence that possesses them."[84]

Basing himself in part on his own epistemological theory, Maistre challenged the credibility of Bacon's theory of induction. Maistre's criticisms of Bacon's ideas on "induction," the syllogism, and Bacon's claim that his method of "legitimate induction" constitutes a "new instrument" for discovery are elaborated in the first four chapters of the *Examination*. Since Bacon's account is far from clear and since commentators still have not reached agreement on the substance or worth of Bacon's concept of induction, it is not surprising that Maistre was not entirely successful in his description and critique of Bacon's views.

As Amédée de Margerie pointed out in his preface to the 1884 edition of the *Examination*, by using the phrase *novum organum* Bacon was not claiming to give man a new faculty (like a *new limb*, as Maistre suggested), but only a new method of using his existing faculties.[85] Bacon may have been guilty of pretension in trying to appropriate the title of Aristotle's treatises on logic, but not of folly. Maistre's complaint about Bacon's use of the word *form* to designate essence also seems unjust; such usage had ample precedent in the Aristotelian and scholastic traditions.[86]

Although Maistre accuses Bacon of misunderstanding the nature of both induction and syllogism and of confusing the two, it must be acknowledged that Maistre's own contention that induction is nothing more than a special kind of syllogism is less than helpful.[87] We can also observe that no one has adopted Maistre's proposal to employ the "old dialectic" in the new sciences.

Maistre was on sounder ground in criticizing Bacon's "method of exclusion," which prescribed systematic elimination of false theories as the proper method of achieving progress in science. Maistre argued that nothing was "more absurd ... nothing more contrary to the development of the human mind and to the progress of the sciences."[88] As Maistre pointed out, Bacon's approach would appear to rule out "conjecture," or what we would call intuition and hypotheses.[89]

Maistre is also on firm ground when he charges that Bacon "battled against a shadow" in trying "to prove the uselessness of the syllogism in experimental physics."[90] As Maistre rightly points out, citing a long list of astronomers, mathematicians, chemists, mechanics, and naturalists who had preceded Bacon, "it was never a question of the syllogism

in any book written on the sciences of observation."[91] Maistre has good reasons as well for doubting the possibility of inventing a sure-fire "method of invention" and for stressing the role of genius in discovery and invention.

As historians of the philosophy and methodology of science have insisted, the "problem of induction" has been and remains one of the most intractable issues relating to the actual practice of science.[92] Despite the prescriptions of Bacon, of other philosophers of science, and of some practising scientists themselves, working scientists have generally paid little attention to strict rules of inductive method.[93] If one conceives of the "arch of knowledge" as having two legs, one an inductive leg that involves the process of proceeding from observation of particulars to more general conclusions, and the other a deductive leg that involves proceeding from known or established principles or laws back down to specific applications, theorists have always found it much more difficult to account for what goes on in the inductive process than to describe the logical process by which specific "truths" are deduced from accepted premises.[94] Bacon's proposed methodology of "legitimate induction" scarcely resolved the problem, nor did Maistre. Even so, raising doubts about the effectiveness of Baconian induction might be counted an effective polemical technique for getting a hearing for his case against Bacon's philosophy.

Bacon's philosophy is not only ridiculous, Maistre argues, "it is eminently dangerous and tends directly to the degradation of man."[95] It is dangerous because the inevitable consequence of the radical reduction of all science to physics must be the promotion of materialism and atheism. If physics is the only true science, all others are reduced to mere opinion.[96] Maistre pointedly asks what happens to religion, mathematics, astronomy, literature and the fine arts?[97] More important still, he complains, metaphysics "loses the place and functions that it had occupied up to him."[98] In the past, metaphysics had meant natural theology, but for Bacon it appears to be not much more than a kind of generalized natural science that, as Maistre read Bacon, "looks for nothing outside nature."[99]

Maistre was highly suspicious of what he interpreted to be a scheme to relegate the traditional subject matter of metaphysics to the realm of positive theology. Bacon might have talked about giving "to faith that which belongs to faith," but the consequence of his system was, in Maistre's view, to "degrade reason by rendering it, so to say, foreign to God."[100] Bacon's system was a threat to revealed religion as well, Maistre argued, because "as soon as you separate reason from faith, revelation not being able to be proved, proves nothing."[101]

Of the logical consequences of Bacon's philosophy, Maistre would admit no doubts. On the question of Bacon's intentions, he had to acknowledge that the evidence was contradictory. It was a "great problem" to know how it is possible that the writings where one finds so many sad proofs of "antichristian incredulity," "fundamental impiety" and "veritable materialism," could also present "enough religious traces to have furnished the admirable Abbé Emery the subject of his interesting book entitled: *Christianisme de Bacon.*"[102] Maistre suggested that Bacon may have been a hypocrite, and he certainly thought that Bacon was confused, as were his disciples and interpreters. In the end, Maistre concludes that there is a very simple way to judge men, "which is to see by whom they are loved and praised."[103] By this criterion, "it will always be an indelible stigma for Bacon" that the atheists, materialists, and enemies of Christianity in the eighteenth century all professed to be his disciples.[104]

These are the main lines of the case against Bacon that readers will find in Maistre's *Examination of the Philosophy of Bacon.* No doubt judgements will vary as to the effectiveness and validity of Maistre's critique. As already indicated, there are certainly weaknesses and lacunae in Maistre's case. However if Maistre missed the mark on some issues (such as Bacon's treatment of induction) and indulged in overkill on others (such as providing a superabundance of instances of Bacon's "ignorance"), he still managed a respectable number of hits. Some Maistre scholars have even insisted on the originality and priority of some of Maistre's criticisms and of his contributions to the philosophy of science; others, it must be admitted, have been less impressed.

Frederick Holdsworth, who was the first scholar to undertake a careful study of Maistre's relationship with things English, agreed with a contemporary reviewer who suggested that Maistre's book would "serve as a counter-weight to the too general enthusiasm of imprudent admiration."[105] He also cited with approval another scholar who judged that "Maistre anticipated the verdict coldly reached after him by a number of scholars and historians of philosophy."[106] In particular, Holdsworth pointed out that Maistre was one of the first of Bacon's critics to perceive that he had not really understood Aristotle's teachings on either the syllogism or induction. He also suggested that, to the extent the so-called Baconian method was nothing more than the essentially inductive approach men had always used to go from knowledge of particulars to more general principles, Maistre had not exaggerated in declaring that Bacon had not really invented a new method.[107] Holdsworth concluded that it was Joseph de Maistre who in his *Examination of the Philosophy of Bacon* and in the *St Petersburg*

Dialogues described for the first time many of the principles on which modern scientific method is based.[108] Citing such notables as Emile Meyerson, Arthur Eddington, and Alfred North Whitehead, Holdsworth pointed out Maistre's anticipations of their ideas on such matters as the nature of causal explanation, the inevitable human-centeredness of all scientific understanding, the role of intuition in scientific discovery, and the inescapability of metaphysical considerations.[109]

Larry A. Siedentop, in his 1966 Oxford D. Phil. thesis, was even more positive about Maistre's achievement. He concluded that Maistre reached "important and original conclusions about scientific method – conclusions which have since been accepted by the philosophy of science."[110] In particular, he suggested that Maistre was perhaps the first philosopher "to insist that scientific explanation involves the making and testing of hypotheses ... that it is a hypothetical-deductive method."[111] He also highlighted Maistre's understanding that hypotheses are the result of intuition and "not themselves the result of any method which can be described or codified."[112] Siedentop argued that Maistre was more sophisticated about scientific method than the philosophes – even Hume:

> Maistre's argument that natural causes or laws are hypothetical relations provided by the mind to account for observed (and also unobserved) regularities, is an important advance on Hume's argument that such relations are *induced* in the mind by experience or constant conjunction – that they are merely expectations. Maistre argues that hypotheses are positive *contributions* of the mind which make explanation possible, and that hypotheses are made by intuition rather than by following a set of rules. Such conclusions were bold and novel at the beginning of the 19th century.[113]

Siedentop contends as well that Maistre's epistemological achievement is central to his contributions to social and political thought. He writes:

> His criticism of Bacon's induction, his careful distinction between experimentally verified knowledge and knowledge of human practices, and, finally, his contention that a dangerous epistemological confusion underlies much modern social and political thought – these are among his most original ideas. It is knowledge of science and its effect on philosophy that takes Maistre beyond the theories of Vico and Burke.[114]

More recently, Owen Bradley, in his 1992 Cornell University Ph.D. thesis, has suggested that "Maistre's critique of Enlightenment notions of science is significant in its own right as a highly modern approach to the history of science."[115] In particular, he finds Maistre's assessment of both the productivity and limits of medieval thought to be "remarkably modern."[116] Maistre was "equally modern," according

to Bradley, in his "appreciation of the contribution of alchemy to the history of science."[117] He also suggests that "Maistre was among the first, if not the first, to acknowledge the influence of numerology and neo-platonism" in Kepler's philosophy.[118] Bradley asserts that Maistre's philosophy "resembles in almost uncanny manner recent ideas on the thematic origins of science or even the Kantian thesis of the priority of the analysis of the subject to any understanding of the rational reconstruction of objective reality."[119] In more general terms, Bradley concludes that it is Maistre's whole approach, his "traditionalism," that leads him to emphasize the long-term cultural, intellectual, and symbolic sources of science as against specific factors such as induction.[120] In his view Maistre anticipates the recent *history* of science rather than recent philosophy of science.[121]

The most recent scholar to examine Maistre's critique of science, Jean-Yves Pranchère, focuses on Maistre's philosophy of science and concludes that it does not contain anything new or innovative. In his 1996 doctoral thesis, Pranchère argues that Maistre's contention that science is impossible without the supposition of innate ideas confuses the problem of innate ideas with the problem of induction.[122] In effect, Pranchère maintains, Maistre's argument against Baconian empiricism was fine as far as it went, but it did not go far enough:

> In contenting himself with showing that experiment supposes antecedent ideas and therefore, in the end, innate ideas, Maistre supposes resolution of the problem that is in fact the most decisive and the most difficult: that of the *truth* of these innate ideas. To put it in other terms, Maistre does not distinguish the *logical* problem of the conditions of the validity of knowledge, a problem that carries along with it the *transcendental* question of the conditions of the validity of a priori knowledge itself, and, on the other hand, the *psychological* or empirical question of the origin of ideas, which is the problem of innateness properly speaking.[123]

The second question, which Maistre resolved with his theory of innate ideas, contemporary biology would characterize as a matter of genetic programming. The difficulty, as Pranchère would have it, is that "innateness thus understood is not *by definition* a source of reliable truth."[124] As for the first question, for Maistre to demonstrate the objectivity of innate ideas:

> it would have been necessary for Maistre to demonstrate that – and especially *how* – innate ideas were the *conditions of possibility* of experience, understood in the sense of scientific objectivity – it would have required in conclusion nothing less than Kant's transcendental philosophy.[125]

Put another way, Maistre, whose knowledge of Kant appears to have been sketchy and mostly second-hand, failed to appreciate the Kantian revolution in epistemology. In Pranchère's judgment, then, if Maistre's views sometimes appear to anticipate certain modern thinkers (or put it the other way, if certain modern thinkers appear to echo some of Maistre's ideas) it is because these thinkers are really "anti-moderns" who are trying to reactivate traditional ideas dating from Descartes or earlier, and who refuse to acknowledge that Kant radically transformed the terms of epistemological debate.[126]

Perhaps it is well to keep in mind that Pranchère's discipline is philosophy, while Bradley's is history. Bradley finds that what is forward-looking in Maistre are his *historical* claims about the development of science rather than his epistemology. Pranchère, with philosophical rigour, draws a sharp line between pre-Kantian and post-Kantian epistemological discussion, and on this basis concludes that Maistre is pre-modern and reactionary. Historians may stress the former considerations, philosophers the second, yet maybe one of the things that makes Maistre so fascinating is the way his thought challenges dualisms that are too easily taken for granted.

While it almost impossible to name Bacon scholars who have taken much account of Joseph de Maistre's criticisms of Bacon or of Maistre's contribution to the history of science, it is easy enough to find some who have made similar criticisms of Francis Bacon and his philosophy.

Bacon's arrogance in denigrating almost all previous and contemporary thinkers, for example, has often been noted, as has his mania for classification and his often pretentious and even silly nomenclature. Most historians of science have agreed that Bacon had little influence on the actual course of science, and that, at most, his propaganda in favour of the natural sciences may have helped popularize the scientific enterprise.[127]

Recent Bacon scholarship would also seem to sustain Maistre's charges with respect to the essential "materialism" of Bacon's natural philosophy. Even when Bacon wrote of "spirits" he was, as Maistre suspected and modern scholars have demonstrated, theorizing about matter, a "pneumatic" matter perhaps that was invisible and weightless, but matter nonetheless.[128] How Bacon reconciled his materialism with his profession of orthodox Christianity is a different issue.

If Maistre declined to take such professions of Christian belief at face value and to insist that Bacon's philosophy endangered other important human values (including religion), others have shared his scepticism. James C. Morrison, for example, in reflecting on some of the "problematical implications of Bacon's thought," judges that "the

real motive behind Bacon's elevation of faith beyond reason and philosophy ... is not so much to protect religion as to encourage science."[129] Morrison also points out that the Christian origin of Bacon's concept of charity "should not ... hide its equally obvious *inversion*, for Bacon's charity does not refer to the soul and the possibility of its heavenly salvation but to the body and its earthly needs and sufferings."[130]

Maistre has been no less singular in insisting that Bacon was trying to redefine the traditional understanding of metaphysics. J.M.O. Wheatley, for example, observed that Bacon's concept "is unlike metaphysics as anyone else has meant the term."[131] It is scientific, rather than "philosophical" or "metascientific." It is "concerned only with nonhuman nature," and it is "a thoroughly empirical and inductive undertaking, being in effect the most advanced ... part of physics itself."[132] In effect, as Maistre discerned, it has nothing to say about the traditional inquiries into God and being itself, nor of the relationship between natural physical laws and the moral behaviour of human beings.

Bacon, an experienced politician who knew his Machiavelli as well as anyone in his time, was certainly not unaware of the baser aspects of human nature. Yet he appears to have been curiously blind to the possible dangers of his program "to establish and extend the power and dominion of the human race itself over the universe."[133] Bacon concludes his reflections on "the excellency of the end in view" in the *New Organon* with the following remarks:

> Lastly, if the debasement of arts and sciences to purposes of wickedness, luxury, and the life, be made a ground of objection, let no one be moved thereby. For the same may be said of all earthly goods... Only let the human race recover that right over nature which belongs to it by divine bequest, and let power be given it; the exercise thereof will be governed by sound reason and true religion."[134]

Neither Maistre, who had serious doubts about the soundness of Bacon's reason as well as about his commitment to "true religion," nor some of Bacon's more recent critics, are willing to accept these assurances at face value.[135] Morrison, for example, wonders if Bacon knew or suspected "that the pursuit of the goal and dream of Solomon's House – 'the enlarging of the bounds of Human Empire, to the effecting of all things possible' – would lead to the brink of *nihilism* – 'everything is permitted'?"[136]

Despite the research and reflection that scholars have devoted to Maistre's critique of Bacon and his role in intellectual and cultural history, clearly puzzles remain. For example, one interesting issue that

is still unresolved is why Maistre put so much blame on Bacon (and Locke) for the direction of eighteenth-century thought, while passing over the roles of other writers and other factors. In particular, one wonders why he practically ignored the Cartesian contribution to mechanist and materialist views.[137] We know that Maistre owned a number of Descartes's works; we can observe that in his published works, Maistre usually treated Descartes with great deference.[138] On the other hand, he seldom cited Descartes first hand, and an examination of Maistre's notebooks reveals no evidence that he ever undertook detailed study of Descartes's writings. At the same time we know that Maistre did take extensive notes on Malebranche's *De la recherche de la vérité*.[139] These notes suggest that Maistre had a good understanding of the relationship between Descartes and Malebranche, and they reveal as well that in the privacy of his notebooks Maistre could be quite critical of Descartes. For example, citing a passage in which Malebranche writes enthusiastically about how Descartes "explained in a clear, evident, and often demonstrative way, by the sole distinct ideas of extent, shape, and movement, the principal effects of nature," Maistre comments dryly that "not one of these *clear, evident,* and *demonstrative* explanations remains; and if he had not left us other monuments to his genius, he would pass for a novelist."[140]

When considering Maistre's relationship to Descartes, there are obviously a number of circumstances to be taken into account. Modern scholarship may place Descartes at the origins of modernity and stress the contribution of the "material" side of Cartesian dualism to the development of eighteenth-century materialism, but it appears that for Maistre, as for Bossuet and Malebranche, Descartes was an undoubtedly Catholic thinker.[141] Whether or not Maistre derived his own concept of innate ideas from Descartes (perhaps through Malebranche), he was happy to cite Descartes among the "authorities" who opposed "the sensible origin of ideas."[142] Maistre certainly accorded Descartes high status as a great mathematician and scientist - in pointed contrast to Bacon. Still, there are probably other factors that would have to be taken into account to explain Maistre's understanding of Descartes and his place in intellectual and cultural history.

One could also explore the difference in Maistre's attitudes towards Antoine Lasalle, Bacon's translator, and Jean-André de Luc, Bacon's interpreter. Maistre was much more critical of de Luc, a professed Christian, than of Lasalle, a professed philosophe. The difference in attitude may well be related to Maistre's often expressed preference for "declared enemies" (who are honest about their position)[143] over more dangerous "dissembling enemies" (such as Protestants and Jansenists) who, in Maistre's view, destroy Christianity from with-

in.[144] As numerous notes in the *Examination* testify, Maistre clearly appreciated Lasalle's critical attitude towards the author he was translating.

It would be interesting as well to explore the reasons why Maistre failed to criticize aspects of Bacon's thought that have drawn the fire of more recent critics. For example, Maistre practically ignores Bacon's *New Atlantis*, and raises no objections to Bacon's proposal to place scientific research in the hands of a bureaucratic institution under centralized control. Perhaps Bacon's ideas here were congenial to Maistre's own preferences for authoritarian and hierarchical institutions, but there may be other considerations as well.

Given Maistre's education and experience in the law, one might wonder too about his failure to comment on Bacon's endeavours as a legal reformer. As Daniel R. Coquillette has shown, Bacon's achievements in this area were considerable.[145] In particular, as Coquilette points out, in *De Augmentis* Bacon "specifically introduced the idea of a science of law, patterned on the methods of investigating natural science."[146] Maistre was certainly aware of Bacon's professional involvement in the law; he pointedly refers to him as the Chancellor,[147] contests his pretensions to "legislate" scientific method,[148] and makes the point that "In reading Bacon's works we see that the Bar furnished several expressions for his philosophic cant."[149] And yet Maistre does not seem to have thought of challenging Bacon's ideas in an area in which he himself could certainly have claimed expertise.

In short, there is ample room for more research on Joseph de Maistre and his place in the history of modern culture. One can hope that providing an English translation of the *Examination of the Philosophy of Bacon* will stimulate Maistrian scholarship.

Whatever our attitudes towards the specific institutions and ideologies Maistre sought to defend, perhaps we can still appreciate his critique of Bacon as a contribution to the cause that he himself described as that of "good sense, morality, and human dignity."[150] In opposing those who would give "science a kind of monopoly and who absolutely will not have anyone know *more* or *other* than themselves,"[151] Maistre enlisted in a battle that still continues today. Herbert Marcuse's critique of inhumane technological rationality in *One Dimensional Man*,[152] Jacques Ellul's doubts about *The Technological Society*,[153] Charles A. Reich's outcry against the "machine-rationality of the Corporate State,"[154] as well as Theodore Roszak's protests against technocratic manipulation and the "scientization of culture,"[155] might all be considered in the same tradition. Like Maistre, these twentieth-century "prophets" protest the threatening ascendancy of scientific technique and materialism over other, more

humane values. Roszak, for example, echoes Maistre's position in a remarkable way. He believes that we must recognize that "the reality to which scientists address themselves" is but "one segment of a far broader spectrum."[156] Roszak too feels that while scientists "obviously have earned a place in human culture, that place is not at the top."[157]

Bacon's reputation owed a great deal to timing, as Maistre delighted in pointing out. Maistre himself was not so fortunate in his attack on Bacon. The generation that succeeded the French Revolution was readier to accept Maistre's critique of Enlightenment political theory than his warnings about Baconian science. The Revolution had demonstrated just how dangerous the new political ideas could be. The nineteenth century would be the heyday of positivism and belief in progress through science.[158] It is only now, in the closing years of the twentieth century, that the really frightening potentialities of Baconian science are becoming all too clear. As we writhe under the threats of nuclear annihilation, uncontrolled genetic engineering, and ecological disaster, perhaps Maistre's warnings against the exclusive cultivation of the natural sciences, as well as his pleas for the precedence of what he called the moral and spiritual sciences, can finally receive a fair hearing.[159]

NOTES TO THE INTRODUCTION

1 *Annales de Philosophie Chrétiennes*, Vol. 13, no. 73 (31 July 1836). Interestingly, Maistre's example seems to have been influential in Bonnetty's decision to found his journal. The purpose announced in his first issue was "to defend Religion through science [and] to initiate Christians to that knowledge of which this century is so proud." (Ibid., 1 (July 1830): 2.) See Louis Foucher, *La Philosophie catholique en France au XIX^e siecle avant la Renaissance thomiste et dans son rapport avec elle (1800–1880)* (Paris 1955), 65.

2 Larry A. Siedentop, "The Limits of the Enlightenment: A Study of Conservative Political and Social Thought in Early Nineteenth-century France with Special Reference to Maine de Biran and Joseph de Maistre." Oxford University D. Phil. thesis, 1966, 344.

3 Ibid. See as well, Frederick Holdsworth, *Joseph de Maistre et L'Angleterre* (Paris: Champion 1935).

4 *The Works of Joseph de Maistre*, selected, translated and introduced by Jack Lively (New York & London: Macmillan 1965), contains excerpts from six of Maistre's major works, but nothing from the *Examination of the Philosophy of Bacon*. On the other hand, the work appears to have been popular in nineteenth-century France. An examination of the Bibliothèque

Nationale catalogue shows some sixteen editions of the work between 1836, when it was first published in a two-volume edition (Poussielque-Rusand, Paris, and Pelaqaud, Lesne et Crozet, Lyon), and 1884, when it was re-edited and published in the *Oeuvres complètes de Joseph de Maistre* (Lyon: Vitte et Perrussel 1884–86). See "A Note on the Text," lix–lxi below.

5 *Revue des Deux Mondes*, August 1843, 387.

6 See Margrit Finger, *Studien sur literarischen Technik Joseph de Maistres* (Marburg 1972), 334n127; Margrit Zobel-Finger, "Quod semper, quod ubique, quod ob omnibus ou L'art de fermer la bouche aux novateurs," in *Joseph de Maistre tra Illuminismo e Restaurazione* (Turin: Centro Studi Piemontesi 1975), 70–9; and Agnès Guilland, "La Rhétorique dans les *Soirées de Saint-Pétersbourg*: réfuter et convaincre," *Revue des études maistriennes*, 12 (1996): 77–302.

7 For a recent brief review of the long and continuing controversies that have swirled around Bacon, see Daniel R. Coquillette, *Francis Bacon* (Edinburgh: Edinburgh University Press 1992), vii–viii and 14–17. For Maistre, the primary division has been between friends and foes of the French Revolution. As early as 1852, an anonymous reviewer in the *Edinburgh Review* described the divergent interpretations: "By one party he has been reviled as the apologist of the headsman, the advocate of the Inquisition, the friend of the Jesuits, and the unscrupulous perverter of historic truth for his own controversial purposes; by the other he is extolled as an austere moralist reacting against the sentimentality and philosophism (to use his own word) of the age, a steadfast believer and an unshrinking upholder of all he believed, a loyal and devoted subject of a despoiled sovereign, an elegant scholar, a powerful logician, a disinterested statesman, and the unflinching advocate of a persecuted order, which reckoned among its members the friends and instructors of his youth." (Review of the 1851 edition of Maistre's *Lettres et Opuscules inédits*, *Edinburgh Review* 96 (October, 1852), 290.)

8 Margaret C. Jacob observes: "Perhaps no single area of human inquiry now provokes greater passion than does the cultural meaning of science. In the late twentieth century we approach its history, that is, the history of our culture, with the realization that we may have assimilated that which has become capable of destroying us." *The Cultural Meaning of the Scientific Revolution* (New York: Alfred A. Knopf 1988), 9.

9 Letter to the Count de Noailles, 6 November 1815. *Oeuvres complètes de Joseph de Maistre* (Lyon: Vitte et Perrussel 1884–86. Hereafter cited as *OC*.), 13:178.

10 For details on Maistre's life, see Richard A. Lebrun, *Joseph de Maistre: An Intellectual Militant* (Kingston and Montreal: McGill-Queen's University Press 1988).

11 See Jean-Louis Darcel, "Les Bibliothèques de Joseph de Maistre, 1768-1821," *Revue des études maistriennes* 9 (1985): 5–40. Translated as "Maistre's Libraries," in *Maistre Studies*, ed. by Richard A. Lebrun (Lanham, MD, New York, London: University Press of America 1988), 3–41.

12 Darcel, "Les Bibliothèques de Joseph de Maistre," 43–95. In addition to the big names, Maistre's library also included works such as Jean-Antoine Nollet's five-volume *Leçons de physique expérimentale* (Paris 1775). Nollet has been described as "probably the most important itinerant promoter of the new science ... on the Continent." Jacob, *The Cultural Meaning of the Scientific Revolution*, 200. One of Maistre's early notebooks contains excerpts from Nollet's work. (*Extraits G*, 257–66. Archives départementales de Savoie.)

13 Darcel, "Les Bibliothèques de Joseph de Maistre," 105–18.

14 See Richard A. Lebrun, "Maistre's Reading," in *Maistre Studies*, 42–64.

15 See Lebrun, *Joseph de Maistre*, 71.

16 *Les Carnets du comte Joseph de Maistre*, ed. by Xavier de Maistre (Lyon 1923), 34–5.

17 To illustrate this point, and to assist readers who may not be familiar with all the names, I have provided brief biographical notes on the persons cited or mentioned in Maistre's text. See below, xlvii–lviii.

18 See Jacob, *The Cultural Meaning of the Scientific Revolution*, 126–8, 186–7.

19 See the articles in the 1980 special issue of the *Revue des études maistriennes* (No. 5–6) devoted to the theme "Illuminisme et Franc-Maçonnerie."

20 *Considerations on France*. Translated and edited by Richard Lebrun (Cambridge: Cambridge University Press 1994), 3.

21 See Maistre's "Mémoire au duc de Brunswick" in *Ecrits maçonniques de Joseph de Maistre*, edited by Jean Rebotton (Geneva: Slatkine 1983), 75–120. This manuscript may never have been delivered to its addressee, and was first published in 1925.

22 See Richard Lebrun, "Joseph de Maistre, Cassandra of Science," *French Historical Studies* 6 (1969): 224–5.

23 For Maistre's general critique of science, see Aloysius Robert Caponigri, "Some Aspects of the Philosophy of Joseph de Maistre," University of Chicago Ph. D. thesis, 1942; Lebrun, "Joseph de Maistre, Cassandra of Science," 214–90; Larry A. Siedentop, "The Limits of the Enlightenment," 343–54; Owen Bradley, "Logics of Violence: The Social and Political Thought of Joseph de Maistre," Cornell University Ph.D. dissertation, 1992, 453–70; and Jean-Yves Pranchère, "L'Autorité contre les Lumières: la philosophie de Joseph de Maistre," doctoral thesis, philosophy, Université de Rouen, 1996, 444–63.

24 "Mémoire au duc de Brunswick," in *Ecrits maçonniques de Joseph de Maistre*, 106.

25 C.U.P. edition, 9–10. It is clear from the context that Maistre's reference to "*savants*" was to scientists primarily. In the text he mentioned "geometers and physicists," and his original manuscript named Sylvain Bailly, a well-known mathematician and astronomer, and Antoine-Laurent Lavoisier, a famous chemist and physicist; both were guillotined during the Terror. See *Considérations sur la France*, critical edition edited by Jean-Louis Darcel (Geneva: Slatkine 1980), 70na.

26 *On God and Society: Essay on the Generative Principle of Political Constitutions and other Human Institutions*, Edited by Elisha Griefer and translated with the assistance of Laurence M. Porter (Chicago: Henry Regnery 1967), 54.

27 *St Petersburg Dialogues*, translated and edited by Richard A. Lebrun (Montreal & Kingston: McGill-Queen's University Press 1993), 153nx.

28 *Extraits G*, 105–14. Archives départmentales de Savoie. Maistre indicates, in a marginal note dated 1809, that this was "one of my first English versions."

29 *OC*, 7:3–34.

30 *Mélanges B*, 562. Archives départementales de Savoie.

31 *On God and Society*, 43.

32 The only reference is to a comment by Bacon's translator, Antoine Lasalle. See below, 309n8.

33 On Bacon's conservatism, see Theodore K. Rabb, "Francis Bacon and the Reform of Society," in *Action and Conviction in Early Modern Europe*, edited by Theodore K. Rabb and Jerrald E. Sigel (Princeton: Princeton University Press 1969), 169–93. It must be acknowledged, however, that Maistre's monarchism had a somewhat different orientation than Bacon's. For Bacon, support for the contemporary English monarchy was a means to combat the power of the Catholic Church and the remnants of feudal institutions that impaired the efficiency of centralized government. (I owe this point to Jean-Yves Pranchère. Personal letter of 16 February 1996.) As a magistrate, Maistre (with his father) had worked with the Piedmontese monarchy to phase out remnants of the feudal property system in Savoy, but of course Maistre assumed compatibility between monarchy and Catholicism. Maistre's mature monarchism also appears to have implied restoring a theocratic character to the state.

34 See Jeannette and Jean Rebotton, "Joseph de Maistre à la découverte de l'anglais – ses premiers pas," *Revue des études maistriennes* 11 (1990), 27–43. Maistre's knowledge of English was soon quite proficient. His translation of the excerpts from Bacon's *Essays* (probably made within a year of his first effort) is described by the Rebottons as "a superb success" displaying "an in-depth understanding of the sense, extreme precision, vigour, elegance, [and was] a veritable feast for the mind." (Ibid., 40.)

35 I have cited Bacon's English. *The Works of Francis Bacon*, edited by James Spedding, Robert Leslie Ellis, and Douglas Denon Heath, 14 vols. (London 1857–74), 3:499. (Hereafter cited as Spedding.) Bacon's point, which he reiterated in a number of different passages, is perhaps clearer in the phraseology he uses in the *New Organon* (Bk. I, No. 79): "Now it is well known that after the Christian religion was received and grew strong, by far the greater number of the best wits applied themselves to theology ... among the Romans, the meditations and labours of philosophers were principally employed and consumed on moral philosophy, which to the Heathen was as theology to us." (Spedding, 4:78) Maistre cites this version in the *Examination*; see below, 158n4.

36 "O men, how long are you dull of heart?" Psalm 4:3 (Douay)

37 *Philosophie D*, 5–7. Archives départmentales de Savoie. See below, 520–1, for Maistre's later version of these same views.

38 See C.U.P. edition, 42–8.

39 Letter to Abbé Vaurin, 26 January 1818, *OC*, 14:123–4. It is noteworthy that the analogy of science as fire is one that Maistre used in his *Examination of the Philosophy of Bacon*. See below, 272.

40 *St Petersburg Dialogues*, 347.

41 Amédée de Margerie, in his Preface to the 1884 edition of the *Examen*, assumed such an evolution, and concluded that "Bacon better known, became for him Bacon less great and more dangerous." (*OC*, 6:ix). In my first attempt to assess Maistre's critique of Bacon, I followed that assessment. See Richard A. Lebrun, "Joseph de Maistre's Critique of Francis Bacon," in *Joseph de Maistre tra Illuminismo e Restaurazione*, 85. On the other hand, since the *Dialogues* were not published until after the author's death in 1821 and since Maistre continued to revise his manuscript between 1813 and his death, it is possible that his work on the *Examination* may be reflected in the final version of the *Dialogues*.

42 *St Petersburg Dialogues*, 191.

43 Maistre to Bonald, 10 July 1818, *OC*, 14:137.

44 Maistre was always ready to make a clear distinction between judgments he might make in his notebooks or in a letter to a trusted friend, and those he permitted himself to write and publish in his public persona. In a 1793 letter he freely acknowledged utilizing a distinctive style for public consumption: "You have seen that when I have spoken to the public, I have always taken a tone of approbation and confidence; in my opinion this is a duty and I have never violated it. Let us stick to this if you have faith in me; but as to private communication, let us beware those trenchant systems that make us regard as lepers those who have the misfortune not to think as we do." (Letter to Baron Vignet des Etoles, 9 December 1793, *OC*, 9:58.) The same dynamic is at work in the way Maistre utilizes authors in his book on Bacon. There he often cites Jean-André de Luc's *Précis de la Philosophie de Bacon* as evidence of Bacon's position or with respect to the implications of Bacon's position, and almost always does so without ever suggesting that de Luc may have misrepresented Bacon. (For one exception, see below, 193-n43.) However, in his manuscript notes on de Luc's *Précis* Maistre clearly recognizes and notes instances where de Luc exaggerates or misrepresents Bacon's views. In one instance, for example, he remarks: "Bacon would have covered this perfidious commentary with tears." (*Philosophie C*, 145. Archives départmentales de Savoie)

45 Jean-Yves Pranchère goes so far as to argue that Maistre "was less concerned with establishing a coherent epistemology than with establishing an ensemble of affirmations having the essential character of being contrary to empiricism, whose falsity and even immorality would thereby be established and denounced." "L'Autorité contres les Lumières," 491.

46 *St Petersburg Dialogues*, 59.

47 *St Petersburg Dialogues*, 234. In more technical language, Maistre "understands by the innate idea a radical cognitive disposition of the nature, implying both form and content, actual and potential, determining both the form according to which a nature is receptive cognitively to being and the range of being cognizable by a given nature." Caponigri, "Some Aspects of the Philosophy of Joseph de Maistre," 69.
48 Ibid., 183.
49 Ibid.
50 Ibid.
51 Ibid., 184.
52 *Philosophie C*, 514n31. Archives départmentales de Savoie. These remarks occur in the context of comments on an article in which an author in the *Edinburgh Review* suggested that the worthwhile part of Kant could be taken "as a commentary on the *innate susceptibilities* of Leibniz." Maistre used the same analogy in his *St Petersburg Dialogues*, but without the term "twoness." See p. 184.
53 *St Petersburg Dialogues*, 131.
54 Ibid., 133.
55 Ibid., 131.
56 Ibid., 133.
57 Ibid.
58 Ibid., 135.
59 Ibid
60 Ibid.
61 Ibid., 142.
62 Ibid.
63 Ibid.
64 Ibid., 144.
65 Letter 12, "On Chancellor Bacon," *Philosophical Letters on the English.*
66 *St Petersburg Dialogues*, 142.
67 Ibid.
68 *Journal de Trevoux*, 1 (1786): 181 and 325.
69 Maistre to Bonald, 10 July 1818, *OC*, 14:138.
70 See below, 314.
71 See below, 104.
72 Ibid. Maistre used a similar polemical technique in his critique of Rousseau. "The best way to refute this so-called philosopher is to analyse him and translate him into philosophical language; then we are surprised we have ever been able to give him a moment's attention." See *Against Rousseau: "On the State of Nature" and "On the Sovereignty of the People"* Translated and edited by Richard A. Lebrun (Montreal & Kingston: McGill-Queen's University Press 1996), 19.
73 See below, 5.
74 As Siedentop observes, "The pointing out of Bacon's many mistaken scientific views is the least interesting – and perhaps the most unfair – part of the *Examen*." "The Limits of the Enlightenment," 347n2.
75 See below, 145.

76 See below, 143.

77 Ibid. Margaret C. Jacob, in concluding her study of *The Cultural Meaning of the Scientific Revolution*, remarks:

> The history here described reveals that Western science at its foundation, as promoted by its most brilliant as well as its most ordinary exponents never questioned the usefulness of scientific knowledge for warmaking ... Indeed most texts that recommend science also propose its usefulness in improving the state's capacity to wage war more effectively, to destroy more efficiently. (251)

Maistre may have been unusual in his wariness about the prospect of applying science to military use. In a letter to the Count de Vallaise (his superior in the Piedmontese office of foreign affairs), 27 January 1817, Maistre describes a big military parade in St Petersburg, and adds the following reflections:

> ... in these great military spectacles, I am always beset and afflicted by two melancholy ideas.
>
> The first is that the military art is the only one whose improvement only serves to harm mankind in general without being able to serve any nation in particular. If there were no bombs, we would fight without bombs, if there were no cannons, we would fight without cannons; of what use are these improvements that immediately become general? Let us use existing methods since they exist, but let the devil take all inventors of new means of killing.
>
> My second reflection concerns the frightful increase in military forces in all of Europe. Henry IV ... had 30,000 men; a century later Peter the Great had no more. Catherine II had 80,000, her grandson has a million. So where are we being led? All tax revenues are being absorbed, all governments are going under." (*OC*, 14:23–4)

On Maistre's views on war in general, see Y. Madous, "Joseph de Maistre et la guerre," *Revue de Métaphysique et de Morale* 77 (1972): 20–55, and Richard A. Lebrun, "Joseph de Maistre's 'Philosophic' View of War," *Proceedings of the Annual Meeting of the Western Society for French History* 7 (1979): 43–52.

78 See below, 142n11.

79 See below, 54.

80 See below, 25. In a later note, Maistre remarks that "it is one of the secrets of *Bacon's philosophy* that only the physical is *real*." Ibid. 244n29. See as well, 42n18, 52n1 and 2, 157, 159, and 261.

81 See Caponigri, 13–15.

82 As Pranchère notes: "The Maistrian polemic against modern science is not a polemic against science properly speaking: it is a polemic against the (false) self-representation of modern science, which is to say that it is also a defence of science, understood in the truth of its essence, *against* the false interpretation of science propagated by modern philosophy ... It is empiricism that is modern, since it only recognizes as real the content of sensible experience and makes physical science the unique true knowledge" ("L'Autorité contre les Lumières," 450).

83 See below, 18.

84 See below, 244n29.

85 *OC*, 6:xvii.

86 Ibid., note 2.

87 One might wonder if Maistre's often repeated characterization of history as "experimental politics," (See *Considerations on France*, 32–3, 60, and 104, *On God and Society*, 42, and *Against Rousseau*, 120) is consistent with his criticism of induction. Maistre's approach to history, with its appeal to "facts," has similarities to a modern sociological (or even positivist) approach, but with a significant difference. For Maistre, history is the record of divine activity; it is to be studied as a kind of divine revelation, a record of God's will for man. On the ambiguities of Maistre's view of history, see Richard A. Lebrun, *Throne and Altar: The Political and Religious Thought of Joseph de Maistre* (Ottawa: University of Ottawa Press 1965), 77–82.

88 See below, 20.

89 Pranchère notes that Maistre here anticipates one of the debates of contemporary epistemology: "Bacon's 'method of exclusion' cannot help but evoke scientific method according to Karl Popper, who maintained that science progresses by refutations, in other words by the elimination of theories refuted by facts. Epistemological 'relativists' such as Feyerabend objected to Popper precisely because such a method would necessarily have led to the elimination of the Copernican theory, refuted in its own time on the grounds – among others – of the impossibility of observing the phases of Venus." "L'Autorité contre les Lumières," 454n50. As Pranchère notes, Bacon logically enough, according to his own method, rejected the Copernican theory. Maistre, on the other hand, was fully aware of the significance of the confirmation of the phases of Venus. See his letter to the Count d'Avaray, 24 July 1807, *OC*, 10:438.

90 See below, 25.

91 Ibid.

92 See, for example, David Oldroyd, *The Arch of Knowledge: An Introductory Study of the History of the Philosophy and Methodology of Science* (New York and London: Methuen 1986).

93 As Oldroyd concludes: "There is no certain and secure method which, if faithfully followed, will enable one to acquire certain and secure scientific knowledge. Ideas, hunches, hypotheses, can be drawn from any manner of sources, in no rigorously characteristic way, and yet science can progress all the better because of this 'anarchistic' component within its structure." Ibid., 365.

94 Ibid. See especially, 362–71.

95 See below, 19.

96 See below, 19 and 159.

97 See below, 52.

98 See below, 160.

99 Ibid.

100 See below, 167.

101 See below, 167.

102 See below, 300.

103 See below, 305.

104 See below, 306.

105 Holdsworth, 84–5, citing François Huet, "Le chancelier Bacon et Joseph de Maistre," *Nouvelles Archives, historiques, philosophiques et littéraires* (Ghent) 1 (1837): 71.
106 Holdsworth, 85, citing Gaston Sortais, *La philosophie moderne depuis Bacon jusqu'à Leibniz*, 2 vols., (Paris 1920–2), 1:459.
107 Holdsworth, 78–9.
108 Ibid., 90.
109 Ibid., 85–90.
110 "The Limits of the Enlightenment," 348.
111 Ibid., 348–9.
112 Ibid., 350.
113 Ibid, 348–51.
114 Ibid., 454.
115 "Logics of Violence," 453.
116 Ibid., 454.
117 Ibid., 455.
118 Ibid., 455–6. For Maistre's reflections on Kepler, see *St Petersburg Dialogues*, 298.
119 Bradley, 459–60.
120 This is Bradley's own summary of his findings on this issue. Personal letter of 19 February 1996.
121 Personal letter of 12 March 1996.
122 "L'Autorité contre les Lumières," 491–2.
123 Ibid.
124 Ibid.
125 Ibid.
126 Personal letter of 16 February 1996.
127 C.D. Broad offers a balanced assessment: "So far as I can see, the actual course which science has taken, even if it has been in accord with Bacon's principles and has led to results which he desired and anticipated, has been influenced little if at all by his writings. I suspect that the popularity of the opposite view is due to the magnificent advertisement which Bacon received from D'Alembert and the French Encyclopaedists, who found it convenient to march into battle under his ensign." *The Philosophy of Bacon* (New York 1976), 62.
128 See D.P. Walker, "Francis Bacon and *Spiritus*," in *Science, Medicine, and Society in the Renaissance*, edited by A.G. Debus (New York 1972) 121–30, Graham Rees, "Francis Bacon's Semi-Paracelsian Cosmology," *Ambix* 22 (July 1975): 81–101, and Graham Rees, "Atomism and 'Subtlety' in Francis Bacon's Philosophy," *Annals of Science* 37 (1980): 549–71.
129 James C. Morrison, "Philosophy and History in Bacon," *Journal of the History of Ideas* 38 (1977): 601–2.
130 Ibid.
131 J.M.O. Wheatley, "Bacon's Redefinition of Metaphysics," *The Personalist* 42 (1961), 491.