

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

NEW ATLANTIS

BACON

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

NEW ATLANTIS

BY

FRANCIS BACON

LORD VERULAM, VISCOUNT ST ALBAN

EDITED,

WITH AN EXCURSUS ON BACON'S GRAMMAR,

BY

G. C. MOORE SMITH, LITT.D.

HON. PH.D., LOUVAIN, PROFESSOR OF ENGLISH LANGUAGE AND
LITERATURE IN THE UNIVERSITY OF SHEFFIELD

CAMBRIDGE

AT THE UNIVERSITY PRESS

1919

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Published in the United States of America by Cambridge University Press, New York

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107663640

© Cambridge University Press 1900

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First edition 1900

First published 1900

Reprinted 1909, 1919

First paperback edition 2014

A catalogue record for this publication is available from the British Library

ISBN 978-1-107-66364-0 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter

[More information](#)

PREFACE.

THE text of the *New Atlantis* here given is that of the first edition, except that *u* and *v* have been differentiated according to modern usage, many passages in italic have been printed in Roman type, the text has been broken into a greater number of paragraphs, the punctuation has occasionally been modified, and one or two obvious printer's errors have been corrected. The headings to the pages are of course an addition.

It has unfortunately seemed necessary to omit one passage of Bacon's work as unsuitable for an edition which may be read in schools.

The Editor is bound to make special acknowledgment of the use he has made of the great edition of Bacon's *Works* and *Life and Letters* produced by Mr Spedding and his colleagues, of Dr Abbott's admirable *Francis Bacon*, and of Mr Jowett's translation of *Plato*.

His thanks are also due to Mr H. Yule Oldham, Lecturer in Geography in the University of Cambridge, for kindly assisting him in regard to some geographical points, and especially to his friend Mr Walter Worrall, Worcester College, Oxford, editor of Bacon's *Essays* in the *Temple Classics* series, for most carefully reading the proofs and contributing many valuable criticisms and suggestions.

Cambridge University Press
978-1-107-66364-0 - New Atlantis
Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter
[More information](#)

TABLE OF CONTENTS.

INTRODUCTION	PAGE
Date of the <i>New Atlantis</i>	vii
Connexion of the <i>New Atlantis</i> with Bacon's philosophical reform	x
Bacon's aim and art in the <i>New Atlantis</i>	xvii
The influence of the <i>New Atlantis</i>	xxv
Bacon's Grammar as exemplified in the <i>New Atlantis</i>	xxxiii
TEXT	I
NOTES	47
GLOSSARY	51
INDEX OF PROPER NAMES	71

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

DATE OF THE *NEW ATLANTIS*.

THE *New Atlantis* was not published till after the death of its author. Bacon died on 9 April, 1626, and in 1627 his literary executor Dr Rawley published this unfinished work at the end of the *Sylva Sylvarum*. When had it been written? To this question Dr Rawley in his life of Bacon (first published in 1657) gives us an approximate answer. He there gives a list of works composed by Bacon in those last five years of his life which succeeded his loss of the Chancellorship, 'which,' he says, 'I will enumerate (as near as I can) in the just order wherein they were written.' In this list *The Fable of the New Atlantis* is found some way after the *History of the Reign of Henry VII.*, and before the *De Augmentis*, published in the autumn of 1623, and the enlarged edition of the *Essays* (published 1625). Perhaps the order given by Rawley is not to be implicitly relied on¹, but within bounds his evidence

¹ Mr Spedding remarks (*Life* VII. 537) that if the *New Atlantis* was written before the *De Augmentis*, one would have expected to find some mention of it in Bacon's letter to Father Fulgentio (given in *Life* VII. 513). The date of that letter however is not certain: and according to Mr Spedding's own theory, the *New Atlantis* (1624) was written before the letter (1625), and if so, why not, as Rawley tells us, before the *De Augmentis*? Rawley also assigns to some date before the date of the *Sylva Sylvarum*, the translation into Latin of the *New Atlantis* 'for the benefit of other nations' and adds in the Latin version

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter

[More information](#)

viii

NEW ATLANTIS.

is to be accepted until it is disproved¹, and the date of the *New Atlantis* accordingly fixed somewhere within the years 1622—1624.

The title-page of the edition of 1627 was as follows:

SYLVA
SYLVARUM:
or
A Naturall Historie.

IN TEN CENTURIES

WRITTEN BY THE RIGHT
Honourable FRANCIS Lo. Verulam
Viscount S^t ALBAN

Published after y^e Author^s Death
by W Rawley D^r of Diu-
nity &c

LONDON

Anno) *Printed for W: Lee and are to be sould at* (1627
the Great Turkes head next to the Mytre
Tauerne in Fleetstreet

of his *Life* 'apud quos expeti audiverat.' Some time would be required for a foreign demand to spring up: so that this is another argument that the *New Atlantis* in its English form was written by 1623, and not, as Rawley's preface 'To the Reader' might be taken to imply, immediately before the *Sylva Sylvarum*.

¹ Dr S. R. Gardiner in his life of Bacon in the *Dictionary of National Biography* stated that the date of the work must be ascribed to an earlier period in Bacon's life, owing to its being mentioned more than once in a paper preserved in the British Museum, Harleian Charters iii D 14 (really 111 D 14) which he attributed to some date between 1614 and 1617. Dr Gardiner's view was accepted without

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

ix

The *New Atlantis* had this title-page of its own :NEW
ATLANTIS
A Worke vnfinished.Written by the Right Honourable, FRANCIS
Lord Verulam, Viscount St. Alban.

This was followed by Dr Rawley's preface

'To the Reader

'This Fable my Lord devised to the end that He might exhibite therein a Modell or Description of a Colledge instituted for the Interpreting of Nature and the Producing of Great and Marveilous Works for the Benefit of Men: under the name of Salomon's House, or the Colledge of the Six Dayes' Works. And even so farre his Lordship hath proceeded, as to finish that Part. Certainly, the Modell is more Vast, and High then can possibly be imitated in all things: Notwithstanding most Things therin are within Mens Power to effect. His Lordship thought also in this present Fable, to have composed a Frame of Lawes, or of the best State or Mould of a Common-wealth: But foreseeing it would be a long Worke, his Desire of Collecting the Naturall History diverted him, which he preferred many degrees before it.

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

W: RAWLEY.'

question by Dr Abbott in his book *Francis Bacon* (1885), p. 416. However in the *Athenæum* for 3 Feb. 1900, the present editor argued that the document in question was a forgery perpetrated by Thomas Bushell many years after Bacon's death and was therefore worthless as evidence, and in the *Athenæum* for 10 Feb. 1900, Dr Gardiner stated with great candour that he accepted this conclusion. Accordingly any attack on Dr Rawley's date on the ground of this Harleian paper may be considered to be now abandoned.

S. N. A.

b

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

x

NEW ATLANTIS.

CONNEXION OF THE *NEW ATLANTIS* WITH
BACON'S PHILOSOPHICAL REFORM.

Francis Bacon, then 12 years of age¹, entered Trinity College, Cambridge, in 1573, and (with an interval occasioned by a visitation of the plague) remained at Cambridge till Christmas, 1575, when he was all but 15². At this time the reigning philosophy at the University was still that of Aristotle, reduced by the schoolmen to a set of logical rules and barren dogmas. Even in those early years, as it would seem, Bacon found the Aristotelian philosophy, as he met it, unsatisfying. Dr Rawley tells us on Bacon's own authority that 'whilst he was commorant³ in the university, about sixteen years of age, he first fell into the dislike of the philosophy of Aristotle,' and this for its 'unfruitfulness,' 'being a philosophy only strong for disputations and contentions, but barren of the production of works for the benefit of the life of man.' Unless we disbelieve this statement, the boy-student then had already seized on the main idea of his teaching, viz. that the true end of intellectual training was not to split hairs in disputation, but to master the secrets of nature and wrest from her all that she could contribute to the comfort and adornment of human life. The study of Aristotle as then pursued did nothing to extend man's command over nature: it was therefore a false and delusive route, and another and more direct one must be found.

It is natural to ask how it was that a young man who so clearly realized the need for a new departure in philosophy was not content to make this his life's work, but instead became a barrister, a member of parliament and a suitor for office. Bacon accounts for his conduct in some lines written about 1603⁴, 'the only piece of autobiography,' as Mr Spedding says, 'in which he ever indulged.'

¹ Not 'in his twelfth year' as Dr Abbott says, p. 13.

² He was born 22 January, 1561.

³ 'A sojourner at the University.'

⁴ Entitled *De interpretatione naturæ proæmium* (Spedding, *Wks.* III. p. 518). I reproduce Dr Abbott's translation of the original Latin (*Francis Bacon*, p. 27).

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

INTRODUCTION.

xi

'Whereas I believed myself born for the service of mankind, and reckoned the care of the common weal to be among those duties that are of public right, open to all alike, even as the waters and the air, I therefore asked myself what could most advantage mankind, and for the performance of what tasks I seemed to be shaped by nature. But, when I searched, I found no work so meritorious as the discovery and development of the arts and inventions that tend to civilise the life of man....Above all, if any man could succeed—not in merely bringing to light some one particular invention, however useful—but in kindling in nature a luminary which would, at its first rising, shed some light on the present limits and borders of human discoveries, and which afterwards, as it rose still higher, would reveal and bring into clear view every nook and cranny of darkness, it seemed to me that such a discoverer would deserve to be called the true Extender of the Kingdom of Man over the universe, the Champion of human liberty, and the Exterminator of the necessities that now keep man in bondage. Moreover, I found in my own nature a special adaptation for the contemplation of truth. For I had a mind at once versatile enough for that most important object—I mean the recognition of similitudes—and at the same time sufficiently steady and concentrated for the observation of subtle shades of difference. I possessed a passion for research, a power of suspending judgment with patience, of meditating with pleasure, of assenting with caution, of correcting false impressions with readiness, and of arranging my thoughts with scrupulous pains. I had no hankering after novelty, no blind admiration for antiquity. Imposture in every shape I utterly detested. For all these reasons I considered that my nature and disposition had, as it were, a kind of kinship and connection with truth.

But my birth, my rearing and education, had all pointed, not towards philosophy, but towards politics: I had been, as it were, imbued in politics from childhood. And, as is not unfrequently the case with young men, I was sometimes shaken in my mind by [other men's] opinions. I also thought that my duty towards my country had special claims upon me, such as could not be urged by other duties of life. Lastly, I conceived the hope that, if I held some honourable office in the state, I might thus secure helps and supports to aid my labours, with a view to the accomplishment of my destined task. With these motives I applied myself to politics, and with all due modesty I also recommended myself to the favour of influential friends.'

b 2

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

He had not therefore—so he tells us—deserted philosophy for worldly advancement: he had sought advancement—partly because all his circumstances combined to drive him into politics, but partly also from the hope that if he held an honourable office in the state he would secure helps and supports towards the accomplishment of his destined task. And though he was thus drawn into those courses of self-seeking and obsequiousness which have left a stain on his name, it is also true that his great philosophical vocation was still ever before his eyes, and to philosophy he turned with unabated ardour in those last years when his worldly ambitions had been wrecked. And then, it seems to him that philosophy should have been his business all his life through, and he had misspent his talent ‘in things for which I was least fit, so as I may truly say, my soul hath been a stranger in the course of my pilgrimage¹.’

Dr Abbott² has well traced the course of Bacon's thoughts on philosophy as shown in some *Devices* or Interludes which he wrote for representation in the years 1592—5. In the first, *The Conference of Pleasure*, 1592, we again meet the assertion that philosophy should produce new discoveries and so enrich human life.

‘Is there but a view only of delight and not of discovery? Of contentment and not of benefit? Shall we not discern as well the riches of nature's warehouse as the beauty of her shop? Is truth barren? Shall we not thereby be able to produce worthy effects and to endow the life of man with infinite commodities?’

‘Printing, a gross invention; artillery, a thing not far out of the way; the needle, a thing partly known before; what a change have these three made in the world in these times, the one in the state of learning, the other in the state of war, the third in the state of treasure, commodities and navigation! And these were, as I say, but stumbled upon and lighted on by chance.’

¹ These words occur in *A prayer or psalm*, composed by Bacon at the time of his fall,—Mr Spedding says, certainly before 18 April, 1621.

² pp. 41—46.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xiii

How much more might be expected—so he infers—if men set themselves methodically to discover nature's hidden treasures!

In the second Device, the *Gesta Grayorum*, 1594, Bacon puts into the mouth of his 'Second Counsellor' a definite plan of work.

'I will commend to your Highness four principal works and monuments of yourself. First, the collecting of a most perfect and general library, wherein whatsoever the wit of man hath heretofore committed to books of worth, be they ancient or modern, printed or manuscript, European or of other parts, of one or other language, may be made contributory to your wisdom. Next, a spacious, wonderful garden, wherein whatsoever plant the sun of divers climates, out of the earth of divers moulds, either wild or by the culture of man, brought forth, may be, with that care that appertaineth to the good prospering thereof, set and cherished; this garden to be built about with rooms to stable in all rare beasts and to cage in all rare birds, with two lakes adjoining, the one of fresh water, the other of salt, for like variety of fishes. And so you may have in small compass a model of universal nature made private. The third, a goodly huge cabinet, wherein whatsoever the hand of man by exquisite art or engine hath made rare in stuff, form, or motion; whatsoever singularity, chance, and the shuffle of things hath produced; whatsoever nature hath wrought in things that want life and may be kept, shall be sorted and included. The fourth, such a still-house, so furnished with mills, instruments, furnaces, and vessels as may be a palace fit for a philosopher's stone. Thus, when your Excellency shall have added depth of knowledge to the fineness of [your] spirits and greatness of your power, then indeed shall you be a Trismegistus, and then, when all other miracles and wonders shall cease, by reason that you shall have discovered their natural causes, yourself shall be left the only miracle and wonder of the world.'

In the third, which is a vaguer eulogy of a life of study and contemplation, Dr Abbott sees the reflection of some mood in which Bacon wavered and was inclined to subordinate philosophy to a life of action. This reading of the piece may however be questioned.

Soon after the opening of the reign of James I. (1603),

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xiv

NEW ATLANTIS.

Bacon set about his English work, the *Advancement of Learning* (published 1605) which was intended to be, in Dean Church's words, 'a survey of the actual state of knowledge in his day, of its deficiencies and what was wanted to supply them.' 'He wanted to impress on his generation, as a very practical matter, all that knowledge might do in wise hands, all that knowledge had lost by the faults and errors of men and the misfortunes of time, all that knowledge might be pushed to in all directions by faithful and patient industry and well-planned methods for the elevation and benefit of man in his highest capacities as well as in his humblest¹.'

It was probably in 1607, that Bacon, then Solicitor General, stated in a Latin tract *Cogitata et Visa*², the method by which his 'new induction' was to proceed. I venture to give it in Dr Abbott's words³.

'As regards the practice of the new Art, we must (1) complete a refutation of the past; (2) having freed our minds from old theories, opinions, and common notions, we must approach particular phenomena afresh, without bias and with the innocent eye of a child; (3) we must accumulate a "forest" or store of particulars sufficient for our purposes, partly from natural history, partly (and principally) from experiments; (4) this store must be so tabulated and reduced to order that the Intellect may be able to act on it (for even the divine Word did not act on chaos without order); (5) from these tabulated Particulars we must ascend to general "comprehensions"; (6) here we must avoid the natural but dangerous temptation to pass at once to the highest "comprehensions," the so-called "principles." To these we must gradually ascend by a logical "ladder" beginning from the nearest "comprehensions"; (7) we must discover a form of Induction leading us to a general conclusion in such a way that we may actually demonstrate the impossibility of finding a contradictory instance; (8) no "comprehension" can be received and approved till it has given bail for itself by pointing out for us new particulars beyond and beside those from which it was itself deduced.'

¹ *Bacon* (English Men of Letters Series), p. 219.

² Spedding, *Works*, III. 617.

³ p. 363.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xv

Some private memoranda made by Bacon in July 1608¹, show him pondering on the desirability of (1st) a history of marvels, that is of nature erring or varying from her usual course, (2nd) a history of the observations and experiments of all mechanical arts. But how were such histories to be obtained? Not without 'command of wits and pens.' Could he get himself transferred to some office which would give it? Some office of authority, for instance, in some place devoted to learning? And so he adds the entry, 'Layeng² for a place to command wyttys and pennes. Westminster, Eton, Wynchester, spec[ially] Trinity College in Cambridg, St Jhons in Camb. Maudlin College in Oxford.' And then he frames in his mind a scheme for such a College of research as he proposed.

'Gyving pensions to 4 for search to compile the 2 Histories ut suprâ.

{ Foundac. of a college for Inventors . 2 Galeris wth statuas for
Inventors past and spaces or Bases for Inventors to come And
a Library and an Inginary.

Qu. of the Order and Discipline, to be mixt wth some poynts popular to invite many to contribute and joyne.

Qu. of the rules and p^rscripts of their studyes and inquiryes.

Allowance for travailing; Allowance for experim^{ta}. Intelligence and correspondence wth y^o universities abroad.

Qu. of the Maner and p^rscripts touching Secrecy, tradition, and publication.

Qu. of Remoooves and Expulsions in case wthin a tyme some Invention woorthy be not produced. And likewise qu. of the honors and Rewards for Inventions.

Vaults, fornaces, Tarraces for Insolacion; woork houses of all sorts.'

Here then we have already the plan for securing systematic investigation of the secrets of nature which 15 years later he recommended under the form of a parable in the *New Atlantis*.

In 1609 he anticipates the literary form of his *New Atlantis* by giving to a new exhortation a dramatic character. 'Bacon, conversing with a friend in Paris on his projects in Philosophy,

¹ Spedding's *Life and Letters of Bacon*, vol. IV. pp. 25, 66.

² i.e. scheming.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore

Frontmatter

[More information](#)

xvi

NEW ATLANTIS.

is supposed to receive from him an account of a recent conference of Parisian philosophers (having philosophic objects similar to his own) about fifty in number, of mature age and the highest character and position, prelates, noblemen, and others of eminence; to whom, after an interval of earnest expectation, there enters one of placid, and serene countenance (save that he wore the aspect of one who was always pitying¹) who, after taking his seat on the same level as his audience, without platform or pulpit, began an oration, intended to destroy the superstitious respect for authority. The piece is called *Redargutio Philosophiarum*, 'the Refutation of Philosophies.'

'Train yourselves,' cries the orator, 'to understand the real subtlety of *things* and you will learn to despise the fictitious and disputatious subtleties of *words*; and freeing yourselves from such follies, you will give yourselves to the task of facilitating (under the auspices of the divine Compassion) the lawful wedlock between the Mind and Nature. Be not like the empiric ant which merely collects; nor like the cobweb-weaving theorists who do but spin webs from their own intestines; but imitate the bees which both collect and fashion.

Against the "Naught beyond" of the ancients raise your cry of "More beyond." When they speak of "the not imitable thunderbolt," let us reply (not like the mad Salmoneus but in sober wisdom) that the thunderbolt is "imitable." Let the discovery of the new terrestrial world encourage you to expect the discovery of a new intellectual world, remembering the words of the prophet that "many shall run to and fro, and knowledge shall be multiplied²."

After long preparation Bacon, then Lord Chancellor, published in 1620 his *Novum Organum*, or 'New Instrument,' in

¹ In the original 'nisi quod oris compositio erat tanquam miserantis' (Spedding, *Works*, III. 559). Dr Abbott points out the resemblance of this expression to that applied in the *New Atlantis* (32. 14) to the Father of Solomon's House: who also was in a Chamber 'without any Degrees to the State' and 'caused' his auditor 'to sit downe beside him' (34. 6. 19). In both works Bacon is showing by a parable the love of man and the modesty which distinguish the true philosopher.

² Quoted from Dr Abbott, pp. 367—369.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xvii

which he gave an example of the application of his special Art of Interpretation. But Bacon was greater as a prophet of investigation than as an investigator, and his vaunted method has proved fruitless.

Perhaps, as Dr Abbott holds, it was a sense of disappointment with his logical method felt by himself which led him in his last years to turn to a mere collection of supposed facts of natural history—published posthumously (1627) as *Sylva Sylvarum*, a 'Collection of Collections.'

It was out of zeal to accomplish this work that, as Dr Rawley tells us, he left unfinished his *New Atlantis*.

BACON'S AIM AND ART IN THE *NEW ATLANTIS*.

In the *New Atlantis*, within the framework of a story, Bacon sketched such a College of Research as he had himself thought of trying to create years before, if he could become Master of some existing foundation in Cambridge or Oxford. And it is no dry sketch. Even in Bacon's formal treatises, as Dean Church has said, we are constantly coming on 'some bright touch of his incorrigible imaginativeness, ever ready to force itself in amid the driest details of his argument,' and here when he enshrines his teaching in a fiction, his imagination and command of rich and lofty language have full play.

In drawing the picture of his College and of the happy land which reaped the fruits of it, Bacon naturally had as his models previous imaginary pictures of Ideal States and Communities, beginning with Plato's *Republic*.

The actual name of Bacon's work carries us however to other dialogues of Plato, the *Timæus* and *Critias*. In the *Timæus* Socrates is informed of a tradition handed down from Solon that 9000 years previously, before the great deluge, Athens was the first of cities in war and was pre-eminent for the excellence of her laws, which were indeed the counterpart of those that had unwittingly been drawn in the *Republic*.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xviii

NEW ATLANTIS.

But the chief act of these ancient Athenians had been to defeat an invasion proceeding from the great island of Atlantis. All this Solon had been told by an Egyptian priest who spoke as follows :

‘Many great and wonderful deeds are recorded of your State in our histories. But one of them exceeds all the rest in greatness and valour. For these histories tell of a mighty power which was aggressing wantonly against the whole of Europe and Asia, and to which your city put an end. This power came forth out of the Atlantic Ocean, for in those days the Atlantic was navigable; and there was an island situated in front of the straits which you call the columns of Heracles; the island was larger than Libya and Asia put together, and was the way to other islands, and from the islands you might pass to the whole of the opposite continent which surrounded the true ocean; for this sea which is within the Straits of Heracles is only a harbour, having a narrow entrance, but that other is a real sea, and the surrounding land may be most truly called a continent. Now in this island of Atlantis there was a great and wonderful empire which had rule over the whole island and several others, as well as over parts of the continent, and, besides these, they subjected the parts of Libya within the columns of Heracles as far as Egypt, and of Europe as far as Tyrrhenia. The vast power thus gathered into one, endeavoured to subdue at one blow our country and yours and the whole of the land which was within the straits; and then, Solon, your country shone forth, in the excellence of her virtue and strength, among all mankind; for she was first in courage and military skill, and was the leader of the Hellenes. And when the rest fell off from her, being compelled to stand alone, after having undergone the very extremity of danger, she defeated and triumphed over the invaders, and preserved from slavery those who were not yet subjected, and freely liberated all the others who dwell within the limits of Heracles. But afterwards there occurred violent earthquakes and floods; and in a single day and night of rain all your warlike men in a body sank into the earth, and the island of Atlantis in like manner disappeared, and was sunk beneath the sea. And that is the reason why the sea in those parts is impassable and impenetrable, because there is such a quantity of shallow mud in the way; and this was caused by the subsidence of the island¹.

¹ Jowett's *Plato*, II. p. 521.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xix

It is however in the *Critias*¹, itself like Bacon's work incomplete, that we find the description of Atlantis referred to by Bacon (p. 17). There we learn that Poseidon (called by Bacon Neptune) fell in love with a maid Cleito who was of the aboriginal inhabitants of Atlantis: and to guard her 'inclosed the hill in which she dwelt all round, making alternate zones of sea and land...so that no man could get to the island, for ships and voyages were not as yet heard of.' The story goes on that the god had children and settled them on the island, the eldest being Atlas from whom the island and ocean were named. In time the sons of Atlas came to possess the wealthiest empire of the world. As for their Palace, 'they continued to ornament it in successive generations, every king surpassing the one who came before him to the utmost of his power until they made the building a marvel to behold for size and for beauty.' In the centre of the citadel was the temple of Poseidon, having a sort of barbaric splendour, adorned as it was with gold, silver, ivory and orichalcum, and having within it statues of gold. The area covered by the city was densely crowded with habitations, and the canal and the largest of the harbours were full of vessels and merchants coming from all parts.

Bacon was not the first to identify the newly-discovered continent of America with Plato's Atlantis. Francisco Lopes de Gomara had done so in his *Istoria de las Indias*² (published at Saragossa in 1552) and the passage appeared in English in Richard Eden's translation in 1555³:

'The Philosopher Plato wrytethe in his Dialoges of Timeus and Cricia, that in the owlde time there was in the sea Atlantike ouer agenst Affrica, an Ilande cauled Atlantide greater then Affrica and Asia: affirmyng that those landes are from thense continent and greate: And that the kynges of that Ilande gouerned a greate parte of Affrica and Europe. But that in a certeyne greate earthequake and tempest of rayne, this Iland soonke and the people were drowned:

¹ Called by Bacon in *Essay* xxxv., 'Atlanticus.' ² Fo 119.

³ Arber's *First three English Books on America*, p. 337. Cp. *Biblioteca de Autores Españoles*, xxii. pp. 291, 292.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xx

NEW ATLANTIS.

Also that there remayned so much mudde of the drownynge or synkyng of that Ilande, that that sea Atlantike coulde not bee sayled. Sum take this for a fable: and many for a trewe hystorie....But there is nowe no cause why wee shulde any longer doubte or dispute of the Iland Atlantide, forasmuch as the discouerynge and conquest of the west Indies do plainly declare what Plato hath written of the sayde landes. In Mexico also at this day they caul that water Atl by the halfe name of Atlant, as by a woorde remaynyng of the name of the Ilande that is not. Wee may lykewise say that the Indies are eyther the Ilande and firme lande of Plato or the remanent of the same.'

Gulielmus Postel in 1561 speaks of the new continent under the name Atlantis¹, and Ortelius² tells us that 'there are some, including Mercator, who believe that Plato under the name Atlantis described America.'

Bacon, in his playful identification of the new continent with the lost Atlantis, introduced a variation into the story of the Egyptian priest, according to which Atlantis instead of being destroyed by an earthquake was partially, but only partially, destroyed by a 'particular deluge or inundation,' some few wild inhabitants of the wood escaping the fate which befell the population generally. The country called *New Atlantis* was however not America, but an island lying between the Great Atlantis or America and China and Japan.

In this island, about 1900 years before the events of Bacon's story, flourished a king Solamona who 'had a large heart, inscrutable for good, and was wholly bent to make his kingdom and people happy.' This king, while devising laws to prevent strangers from visiting the island and to prevent the islanders generally from travelling abroad, at the same time endeavoured to secure the advantages of foreign intercourse without its drawbacks, by means of an institution called Salomon's House. This House, established for the 'study of the works and creatures of God,' i.e., as we should say, for scientific research, had as one

¹ *Cosmographicae disciplinae compendium*, Basileae, 1561.

² *Theatrum Orbis terrarum*, F° 2 (Antverp. 1570) and *Thesaurus geographicus* (Antv. 1587). These passages are collected by T. H. Martin, *Étude sur le Timée* (1841), p. 269, etc.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xxi

of its appointed means of gaining knowledge the sending out every twelve years of two 'missions' or companies of investigators to foreign countries. But besides this it had an army of men engaged at home in collecting natural facts from observation and experiment, and deducing inferences and higher and higher laws from the facts collected. And they were supplied with every kind of apparatus necessary to their several tasks.

The spirit that animated the whole was the love of man and the honouring of God. We are told that the Father of Salomon's House 'had an aspect as if he pitied Men.' Bacon would have us therefore look on the pursuit of knowledge as something like a religious service. In Dean Church's words¹, 'Doubtless it was one of Bacon's highest hopes that from the growth of true knowledge would follow in surprising ways the relief of man's estate: this, as an end, runs through all his yearning after a fuller and surer method of interpreting nature. The desire to be a great benefactor, the spirit of sympathy and pity for mankind, reign through this portion of his work—pity for confidence so greatly abused by the teachers of man, pity for ignorance which might be dispelled, pity for pain and misery which might be relieved.'

Salomon's House, with all its orderly schemes for promoting discovery and extending knowledge, was the creation of Bacon's own mind, the thought over which he had brooded since his youth². His description of the social institutions of the island owed something to idealists who had preceded him, especially perhaps to Sir Thomas More. Is there not an anticipation of Solamona's laws against strangers in what we read in the *Utopia* of the Polylerites?

¹ p. 206.

² It is possible that Bacon was partly inspired by the Academy of the Lincei of Rome, founded in 1603 for the common prosecution of researches in physical science and mathematics. In this connexion it is worth while to read the *Præscriptiones Lynceæ Academiæ* which, being published in 1624, may have come under Bacon's eyes. In 1616 Edmund Bolton proposed the foundation of an English Academy to be called 'King James his Academe or Temple of Honour.'

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xxii

NEW ATLANTIS.

‘Because they be farre from the sea, compassed and inclosed almoste rounde aboute with hyghe mountaines, and do content them selves with the fruites of their owne lande, which is of it selfe verye fertile and frutfull: for this cause neither they go to other countreys, nor other come to them. And accordynge to the olde custome of the land, they desire not to enlarge the boundes of their dominions: and those that they have by reason of the highe hilles be easely defended: and the tribute whiche they paye to their chiefe lord and kinge setteth them quite and free from warfare. Thus their life is commodious rather then gallante, and may better be called happie or welthy, then notable or famous. For they be not knowen as much as by name, I suppose, saving only to theyr next neighbours and borderes¹.’

And perhaps the coined names of the dignitaries in Bacon's ideal state, the Tirsan and the Taratan, were suggested by More's ‘syphograutes’ and ‘tranibores.’

One difference between Bacon and More is pointed out by Mr Jowett², ‘the external state which Bacon attributes to the governor of Solomon's House, whose dress he minutely describes, while to Sir Thomas More such external trappings appear simply ridiculous.’ The difference is characteristic of the importance attached by Bacon to state and splendour in human life, and generally of the more conservative and aristocratic tone of Bacon's mind as compared with More's. In the intellectual sphere Bacon was a reformer and an idealist, in the social and political sphere a conservative and conformist. Is not this the reason that the *New Atlantis* remains a fragment? Dr Rawley tells us:

‘His Lordship thought also in this present Fable, to have composed a Frame of Lawes, or of the best State or Mould of a Common-wealth: But foreseeing it would be a long Worke, his Desire of Collecting the Naturall History diverted him, which he preferred many degrees before it.’

The bold innovator in science was a timorous politician and wearily (or warily) dropped his pen before he had composed ‘a frame of laws or of the best state or mould of a Commonwealth.’

¹ Ed. Lumby, p. 40.² *Plato*, II. 162*.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xxiii

Enough however had been written to make the *New Atlantis* a notable work : notable for its power of firing later minds with a zeal for scientific research, notable for a grace of narrative, a Paul Veronese opulence of description and a grave and sustained enthusiasm which make it at least as famous in the history of literature as in that of science.

Bacon shows throughout the piece that he was a master of the artifices necessary to give a sense of reality to a fiction. How natural is the opening ! No introduction, no account of the persons spoken of : merely 'Wee sayled from Peru.' The narrator never tells us in what relation he stood to his fellow-voyagers. Yet it comes out incidentally¹, that he was in command. There is an insistence on little points of detail which forces on us a conviction of the truth of the experiences described. The parchment 'somewhat yellower than our parchment,' the seal of Cherubins' wings 'not spread but hanging downwards,' the exactness in regard to numbers, the *thirty-seven* years since the last arrival of strangers, the *thirteen* persons only that had chosen to return, the use of unknown terms such as *Taratan*, *Karan*, these are the touches of a masterhand of fiction.

Dr Abbott has well said :

'The earlier part of the fragment, describing the landing of certain voyagers on the before unknown island called New Atlantis and their first impressions of the natives, dwells in a very interesting way on the qualities which Bacon appears to have rated highest in every nation and perhaps to have regretted most as being absent from his own. The main characteristic of the Atlantic citizens is *orderliness*. They are orderly and seemly alike in their pleasures and in their tasks ; their enjoyments are sober, their splendour is tasteful ; a due division of labour and of the results of labour diffuses universal contentment ; they are humane, courteous, and systematically liberal to strangers. Special stress is laid on the incorruptibility of all officials, who accompany their rejection of gifts with the saying that they refuse to be "twice paid."

Bacon is always at his best in prayers, prefaces, thanksgivings, and dreamy descriptions of what he is intending to do. Moreover this

¹ p. 7. 31.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xxiv

NEW ATLANTIS.

dream was written, not in Latin, like the *Sapientia Veterum* and almost all the rest of Bacon's more important works, but in English, and in a very interesting style. An Oriental love of colour pervades the book; Hebrews and Hebrew words and Hebrew customs play a prominent part in it; and no language less dignified than Spanish is tolerated in its pages. Rich, majestic pomp; sage and solemn ceremonies; a recognition of degrees, ranks, and orders in the State as being appointed by God and necessary for the happiness of man; a religion that combines the charity and breadth of the New Testament with something of the more earthly and material thoughts and ritual of the Old; an exaltation of material wealth, comfort, and prosperity, as being the natural results of a devout pursuit of Science in an orderly and religious country—such are the salient features of this most interesting fragment. Bacon has put into it perhaps more of his own self, his tastes, his preferences, his ideals, than into any other of his writings¹.

And Mr Spedding, Bacon's most learned editor and biographer, writes of the *New Atlantis* with a similarly warm appreciation of its artistic charm²:

'To us, who can no longer hope for the fruits which Bacon expected, the *New Atlantis* is chiefly interesting as a record of his own feelings. Perhaps there is no single work of his which has so much of himself in it. The description of Solomon's House is the description of the vision in which he lived,—the vision not of an ideal world released from the natural conditions to which ours is subject, but of our own world as it might be made if we did our duty by it; of a state of things which he believed would one day be actually seen upon this earth such as it is by men such as we are; and the coming of which he believed that his own labours were sensibly hastening. The account of the manners and customs of the people of Bensalem is an account of his own taste in humanity; for a man's ideal, though not necessarily a description of what he is, is almost always an indication of what he would be; and in the sober piety, the serious cheerfulness, the tender and gracious courtesy, the open-handed hospitality, the fidelity in public and chastity in private life, the grave and graceful manners, the

¹ pp. 416, 417.

² Bacon's *Works*, III. pp. 122—124.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xxv

order, decency, and earnest industry, which prevail among these people, we recognise an image of himself made perfect,—of that condition of the human soul which he loved in others, and aspired towards in himself. Even the dresses, the household arrangements, the order of their feasts and solemnities, their very gestures of welcome and salutation, have an interest and significance independent of the fiction, as so many records of Bacon's personal taste in such matters. Nor ought the stories which the Governor of the House of Strangers tells about the state of navigation and population in the early post-diluvian ages, to be regarded merely as romances invented to vary and enrich the narrative, but rather as belonging to a class of serious speculations to which Bacon's mind was prone. As in his visions of the future, embodied in the achievements of Solomon's House, there is nothing which he did not conceive to be really practicable by the means which he supposes to be used; so in his speculations concerning the past, embodied in the traditions of Bensalem, I doubt whether there be any (setting aside, of course, the particular history of the fabulous island) which he did not believe to be historically probable.'

'Among the few works of fiction which Bacon attempted, the *New Atlantis* is much the most considerable; which gives an additional interest to it, and makes one the more regret that it was not finished according to the original design. Had it proceeded to the end in a manner worthy of the beginning, it would have stood, as a work of art, among the most perfect compositions of its kind.'

Macaulay says of the description of Solomon's House: 'there is not to be found in any human composition a passage more eminently distinguished by profound and serene wisdom.'

THE INFLUENCE OF THE *NEW ATLANTIS*.

When Bacon wrote the *New Atlantis*, had he the hope that the picture he there drew would move King James to found a Solomon's House in England?

If the date of the work, as there seems no reason to doubt, fell in the last three years of the king's reign, Bacon's hopes of an immediate answer to his wishes must have been small. The

S. N. A.

c

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xxvi

NEW ATLANTIS.

king had been twenty years on the English throne and much as he affected the character of a second Solomon he had shown little or no interest in the intellectual reformation urged by his Chancellor: nay, he was reputed to have said of the *Novum Organum* that it 'was like the peace of God which passeth all understanding.' The fact that Bacon left the work unfinished, and without even publishing the fragment turned his hand to other things, shows that he had no sanguine hopes of its producing any immediate result. And yet so naturally hopeful was Bacon's mind that it seems as if even when he wrote he had not altogether despaired of enlisting the king's support.

In the few words given to the description of the wise King Solomona one can hardly fail to see an intended resemblance to King James or rather to the character in which King James wished to be regarded. However, after all, the *New Atlantis* was not published till after James' death, and whether that king ever read it or not, neither he nor his more truly cultivated son ever made any effort to realise Bacon's great dream.

But if kings were not the nursing-fathers of a Solomon's House, did Bacon's words fall to the ground without effect? To this question the answer is certainly No, although the effect was to some extent of an indirect kind.

Bacon in the *New Atlantis* not only pleaded for the foundation of a College of Scientific Research, he indicated more or less the methods by which such research should be conducted and a number of points in which success was to be expected. Unfortunately his methods were generally impracticable and the results he looked for were often, if only he had had enough scientific knowledge to see it, in direct contradiction to natural laws.

There are indeed many points in which modern Science seems to fulfil Bacon's anticipations. Our scientific expeditions and consular reports serve the purpose of the 'missions' sent out from New Atlantis in enlightening us with regard to foreign countries. Our observatories take the place of the high towers for the study of atmospheric conditions. We concern ourselves much with the problem of applying the force

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xxvii

of waterfalls as a motive power. Where Bacon speaks of 'Chambers of Health wher we qualifie the Aire...for the cure of diverse Diseases' Mr Spedding tells us that the experiment has been tried and some relief has been obtained in cases of phthisis by the inhaling of oxygenated air. Some of the greatest results in modern medicine have been obtained by those experiments on animals both in the way of surgical operations and treatment by drugs which Bacon advocated in the *New Atlantis*. One result of such experiments mentioned by Bacon, the continuance of life 'though diverse Parts which you account Vitall be perished and taken forth' is a singular anticipation of the results of modern experiments on the brain. The development of new varieties in the animal and vegetable world by cross-breeding is now systematically pursued as Bacon recommended. Mr Spedding tells us that when Geoffroi St Hilaire was attacked for advocating the study of 'monstrosities,' he invoked the authority of Bacon. Telescopes, microscopes, microphones, speaking tubes, have been invented or improved according to the dreams of the philosopher. The imitating of smells is, as Mr Ellis points out, an achievement of modern chemistry: 'The oil of pine-apples and that of bitter almonds enable confectioners to imitate perfectly the scent and flavour of pine-apples and bitter almonds respectively and both...are got from very offensive substances.' One of Bacon's sentences suggests to us the Maxim gun. We can say of ourselves 'wee have some Degrees of Flying in the Ayre...wee have Shippes and Boates for going under Water...wee imitate also Motions of Living Creatures by Images of Men etc.' (which we call automata). We have not only an army of investigators in the different laboratories of Europe, we have learned societies which discuss and coordinate the results arrived at, and journals in which approved results are published. Our great inventors receive statues in public places with as fully recognized a right as our princes, soldiers and statesmen. Finally the results of scientific research—especially when they have a direct bearing on the general interests—are often published officially. One Government Department issues prognostications

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

xxviii

NEW ATLANTIS.

in regard to the weather, coming storms, etc.: another gives counsel as to necessary measures in time of plague to man or beast. In these many ways did Bacon forecast the course of scientific research, even though it can not be said that Bacon had himself developed the methods of modern investigation.

But beyond this, by the picture he drew in his Solomon's House of the pursuit of science by the orderly cooperation of a number of workers, he contributed vastly to modern achievements. He gave a model from which were built, in England the Royal Society, and in France the *Encyclopédie*.

Before we touch on these partial realizations of Bacon's idea, we will show how two men exerted themselves to keep it before the minds of his countrymen, in the age immediately following his death, Thomas Bushell and Abraham Cowley.

Thomas Bushell, who had been a servant in Bacon's household, was in the middle of the century a mining adventurer. In this capacity he made great use of the name of his old master, professing that Bacon had committed to him certain secrets in mining which were likely to produce fabulous wealth, and that it was his intention to spend this wealth, when acquired, on the realization of the plan of Solomon's House. In *Mr Bushell's Abridgement of the Lord Chancellor Bacon's Philosophical Theory in Mineral Prosecutions* (London, 1659), the author says, 'My humble petition to the Parliament prays no more than the concession and confirmation to me of all drowned and deserted Mineral works, whereon to try if that Lord's Philosophical Theory can give life to their dead condition, hoping thereby (if happily accomplished) to make his merit appear the more remarkable in the Structure of his Solomon's House modell'd out in his *New Atlantis*'... 'I intend to begin the foundation of that Philosophical fabrick (modell'd out in my Lord's *Atlantis*) by placing a select Society of...Philosophers in the City of Wells.' Once more in his *Minerall Overtures* Bushell writes: 'I protest...that if I could now command as much wealth as ever the Lydean Cræsus did possess, I would gladly adventure it all in perforating the barren Mountains to discover the vast Treasures which lie hid in their Rocky entrails

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter[More information](#)

INTRODUCTION.

xxix

for the good of this Nation and to leave after my debts paid a magnificent Monument in memory of my most deserving Master, by finishing his Solomon's House in all its dimensions and with the accommodations and endowments thereof according to his Lordship's own Heroick idea.' Bushell was a liar invoking his master's name for his own ends, and his character seems to have been gauged in his own day. Nothing came of his proposals.

Much more serious and interesting was *A Proposition for the Advancement of Learning* by Abraham Cowley (London, 1661). Cowley indeed thinks it necessary to protest 'we do not design this after the Model of *Solomon's House* in my Lord Bacon (which is a Project of Experiments that can never be Experimented) but propose it within such bounds of Expence as have often been exceeded by the Buildings of private Citizens.' But this protest seems nothing but a device to represent his scheme as a practical one. In spirit and in detail it is indeed designed after the model of Solomon's House, as a few extracts will show.

In his Preface Cowley speaks of

'the idle and pernicious opinion which had long possess the World that all things to be searcht in Nature, had been already found and discovered by the Ancients, and that it were a folly to travel about for that which others had before brought home to us. And the great Importer of all Truths, they took to be Aristotle, as if (as Macrobius speaks foolishly of Hippocrates) he could neither deceive nor be deceived, or as if there had been not only no Lies in him, but all Verities.

And therefore we see that for above a thousand years together nothing almost of Ornament or Advantage was added to the Uses of Humane Society, except only Guns and Printing, whereas since the Industry of Men has ventured to go abroad, out of Books and out of themselves, and to work among God's creatures, instead of Playing among their own, every Age has abounded with excellent Inventions and every year perhaps might do so, if a considerable number of select Persons were set apart, and well directed, and plentifully provided for the search of them.

Cambridge University Press

978-1-107-66364-0 - New Atlantis

Francis Bacon Edited with an Excursus on Bacon's Grammar, by G. C. Moore
Frontmatter

[More information](#)

xxx

NEW ATLANTIS.

For the supplying of which defect it is humbly proposed...that...a Philosophical Colledge may be erected, after this ensuing, or some other such Model.'

Cowley's plan of the house includes :

'A Gallery to walk in, adorned with the Pictures or Statues of all the Inventors of any thing useful to Humane Life : as Printing, Guns, *America* &c., and of late in Anatomy, the Circulation of the Blood, the Milky Veins, and such like discoveries in any Art, with Short Elogies under the Portraitsures.

An Anatomy Chamber...A Chamber for all manner of Druggs...A Mathematical Chamber...a Garden destin'd only to the tryal of all manner of Experiments concerning Plants, as their Melioration, Acceleration, Retardation, Conservation, Composition, Transmutation, Coloration...Receptacles for all sorts of Creatures which the Professors shall judge necessary for their more exact search into the Nature of Animals, and the improvement of their Uses to us...a very high Tower for observation of Celestial Bodies...very deep Vaults under ground for Experiments.'

He proposes that

'of the twenty Professors four be always travelling beyond Seas, and sixteen always Resident.

That the four Professors Itinerant be assigned to the four parts of the World, *Europe, Asia, Afrique and America*, there to reside three years at least and to give a constant account of all things that belong to the Learning, and especially Natural Experimental Philosophy of those parts.'

Cowley's scheme, as Sprat points out, had two drawbacks : it was very expensive, and it entailed on the Professors the duty of teaching a large school. It was never adopted ; and the Royal Society, which had modestly started into life in the meetings of a few learned men during the time of the Civil Wars, became the only realization of Bacon's design in England.

Professor Nichol writes¹ :

'It is admitted that the suggestion of the "College of Philosophy"

¹ *Francis Bacon, his life and philosophy* (Blackwood's Phil. Classics), 1889, vol. II. p. 236.