

F·培根(Francis Bacon, 1561--1626)论自然哲学和自然历史

古今植物学大讲

Lectures on Neobotany & Palaeobotany

植物演化生物学讲座-10

Lectures on Evolutionary Biology of Plants (10)

植物形态解剖学: Neo & Paleo-植物学 (10)

结构植物学: Neo & Paleo-植物学(10)

Morphology & Anatomy: Neobotany+Paleobotany(No.10)

Structure Botany: Neobotany+Paleobotany(No.10)

弗朗西斯·培根(Francis Bacon, 1561--1626)论自然哲学和自然历史

Francis Bacon (1561--1626): On natural philosophy and natural history

<http://blog.sciencenet.cn/blog-225931-1010133.html>

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♠1 弗朗西斯·培根(Francis Bacon, 1561--1626)论自然哲学和自然历史

人类的科学研究归根到底属于思想活动及斗争。就现代植物和化石植物的科学研究而言，它们的最根本任务是认识自然和理解自然。

在中世纪的欧洲，思想的禁锢大大阻碍了科学研究和人文艺术的发展和创新。但是，在中世纪末期，也就是在 14 世纪意大利率先掀起了文艺复兴运动，开启了一场深刻的思想与文化解放运动，从而有力地推动了现代科学和艺术的全面兴起。

弗朗西斯·培根(Francis Bacon, 1561--1626)是英国文艺复兴时期的思想家和哲学家。也许我们可以很安全地说，F·培根在人类思想史上属于承前启后的一位哲人。他倡导以质疑态度、通过观察和实验、运用归纳法认识

世界。毫无疑问，F·培根的哲学思想和科学思维对现代自然科学的发展产生了巨大推动作用。

Fig.1. Francis Bacon (1561--1626)

Cited from https://en.wikipedia.org/wiki/Francis_Bacon

F·培根一生著述很多，有些著作是在他 1626 年去世之后出版的。关于自然哲学和自然历史的论述，参见：

- *The Advancement and Proficiency of Learning Divine and Human* (1605) [George William Kitchin (1827--1912), 1860. F. Bacon. *Advancement of Learning*. Translated by G.W.K., London]
- *Instauratio Magna* ('Great Instauration', 1620)
- *Novum Organum Scientiarum* ('New Method', 1620) [Kitchin, G.W., 1855. F. Bacon. *The Novum Organon*. Translated by G.W.K., Oxford (2 volumes)]
- *Historia Naturalis* ('Natural History', 1622)
- *Introduction to six Natural Histories* (1622)
- ***Sylva Sylvarum, or Natural History (1627)*** [*Sylva sylvarum; or, A natural history, in ten centuries. Whereunto is newly added the History natural and experimental of life and death, or of the prolongation of life*]

英国皇家学会院士、卓越的植物形态解剖学家 Agnes Roberston Arber FRS (1879--1960)在其晚年的重要著作《植物形态的自然哲学》(*The Natural Philosophy of Plant Form*)参考和评述了 F·培根的一些相关著作。植物形态学

的发展肇始于古希腊的“亚里斯多德学派”(Aristotelian School)。F·培根在《自然历史》(*Sylva Sylvarum*)谈到古希腊学者有关植物和动物的相关性问题的。

F·培根在 1620 年发表的《新工具》(*The Novum Organon*)指出--在他生活的时代，自然历史研究几乎没有任何数量信息 [...Nil debitis modis exquisitum, nil verificatum, nil numeratum, nil appensum, nil dimensum in Naturali Historia reperitur]。F·培根的思想对博物学家们深入开展自然历史研究具有指导意义。

ϕ2 Brief life chorology of Sir Francis Bacon (1561--1626)

--1561: Francis Bacon was born in London; [Father: Sir Nicholas Bacon (1510--1579); Mother: Anne Cooke (1527 or 1528--1610)]

--Received early education at home because of poor health;

--1573: Entered Trinity College of Cambridge University together with Anthony Bacon (1558--1601); They studied under Archbishop of Canterbury John Whitgift (c. 1530--1604);

--1576: Entered Gray's Inn with his brother Anthony;

--1576—1579: Travelled to France, Italy, Spain, etc.;

--1579: Returned to England because of the sudden death of his father;

--1582: Appointed as an outer barrister at Gray's Inn;

--1584: Took a seat in parliament for Dorset;

- 1586: Took a seat in parliament for Taunton; Became a bencher or Master of the Bench;
- 1587: Elected reader (originally a senior barrister);
- 1588: Became an MP for Liverpool;
- 1597: Became an MP for Ipswich;
- 1591: Became confidential advisor to the earl of Essex;
- 1593: Became an MP for Middlesex;
- 1597: Published essays;
- 1601: Became an MP for Ipswich;
- 1603: Queen Elizabeth died and was succeeded by James I in whose service Bacon flourished greatly;
- 1604: Married Alice Barnham, Viscountess St Albans (1592--1650), appointed King's Counsel and became an MP for Ipswich;
- 1607: Named Solicitor General;
- 1608: Appointed Clerk of the Star Chamber;
- 1613: Appointed Attorney General;
- 1614: Became an MP for Cambridge University;
- 1616: Made a member of the Privy Council;
- 1617: Appointed as the temporary Regent of England; appointed Lord Keeper of the Royal Seal (his father's former office);
- 1618: Made Lord Chancellor;
- 1620: Published *Novum Organum*;
- 1621: Charged of corruption, sentenced and fined;
- 1623: Published *De Augmentis Scientiarum*;

--1624: Published *Apothegms*;

--1626: Died of pneumonia in Middlesex, England.

Qigao Sun (孙启高):

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Francis Bacon (1561--1626): On natural philosophy and natural history

October 21, 2016

相关阅读:

Francis Bacon (1561--1626), a English philosopher, statesman, jurist, orator and writer

https://en.wikipedia.org/wiki/Francis_Bacon

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古今植物学大讲堂(第一部分) Lectures on Neobotany Palaeobotany (Part I)

| 古植物学的故事-Story of Palaeobotany Ser ...|

<http://blog.sciencenet.cn/home.php?mod=space&uid=225931&do=blog&classid=135844&view=me&from=space>

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古植物学的故事 305 期[总第 306 期]

Story of Palaeobotany Series (No.305) [The 306th issue in total]

Palaeobotany Safari to Africa 非洲撒哈拉大沙漠的古植物学

Palaeobotanical studies in the Sahara deserts

<http://blog.sciencenet.cn/blog-225931-866441.html>

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古植物学的故事 500 期[总第 501 期]

Story of Paleobotany Series (No.500) [The 501st issue in total]

The Epic of Palaeobotany-500

The founder of modern genetics Gregor Johann Mendel (1822--1884) and his botany teacher--

Austrian palaeobotanist Franz Joseph Andreas Nicolaus Unger (1800--1870)

遗传学先驱孟德尔及其植物学老师--奥地利古植物学家 Franz Joseph Andreas Nicolaus

Unger (1800--1870)

题记 --“你把旌旗赐给敬畏你的人，可以为真理扬起来。”引自《圣经》诗篇(60:4)

Psalm 60:4 --Thou hast given a banner to them that fear thee, that it may be displayed because of the truth. Selah (King James Version); quia factus es spes mea turris fortitudinis a facie inimici (The Latin Vulgate w/ Apocrypha)

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古今植物学大讲堂(第二部分) **Lectures on Neobotany Palaeobotany (Part II)**

Structure: Neobotany & Paleobotany

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植物演化生物学讲座-8

Lecture on Evolutionary Biology of Plants (8)

植物形态解剖学: Neo & Paleo-植物学 (8)

结构植物学: Neo & Paleo-植物学(8)

Morphology & Anatomy: Neobotany+Paleobotany(No.8)

Structure Botany: Neobotany+Paleobotany(No.8)

文艺复兴时期的植物学家(1)Andrea Cesalpino (1519--1603)

<http://blog.sciencenet.cn/blog-225931-970614.html>

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古今植物学大讲堂(第三部分) **Lectures on Neobotany Palaeobotany (Part III)**

Plants-Environ-Civilizations

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Plants·Environments·Civilizations(000)

植物·环境·文明(000)

Preface

<http://blog.sciencenet.cn/blog-225931-961451.html>

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Plants·Environments·Civilizations(001)

植物·环境·文明(001)

国际植物科学共同体: 兼看美国和中国之比较

The communities of international botanical sciences with a comparison of China and USA

<http://blog.sciencenet.cn/blog-225931-961666.html>

2016-3-10 01:08

植物·环境·文明(002)

Plants·Environments·Civilizations (002)

走进非洲: 纳米比亚的女人、孩子和植物

Women, kids and plants of Namibia in SW Africa

<http://blog.sciencenet.cn/blog-225931-973827.html>

2016-4-30 09:30

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Appendix: A complete hronological bibliography of Francis Bacon.

https://en.wikipedia.org/wiki/Francis_Bacon_bibliography

Prior to 1625:

Notes on the State of Christendom (1582)

Letter of Advice to the Queen (1585–6)

An Advertisement Touching the Controversies of the Church of England (1586–9)

Dumb shows in the Misfortunes of Arthur (1587–8)

A Conference of Pleasure: In Praise of Knowledge, In Praise of Fortitude, In Praise of Love, In Praise of Truth (1592)

Certain Observations made upon a Libel (1592)

Temporis Partus Maximus ('The Greatest Birth of Time'; 1593)

A True Report of the Detestable Treason intended by Dr Roderigo Lopez (1594)

The Device of the Indian Prince : Squire, Hermit, Soldier, Statesman (1594)

Gray's Inn Christmas/New Year Revels: The High and Mighty Prince Henry, Prince of Purpoole (1594–5; see [Gesta Grayorum](#))

The Honourable Order of the Knights of the Helmet (1595; see [Gesta Grayorum](#))

The Sussex Speech (1595)

Maxims of the Law (1596)

[Essays](#) (1st ed., 1597)

The Colours of Good and Evil (1597)

Meditationes Sacrae (1597)

Declaration of the Practices and Treasons attempted and Committed by the late Earl of Essex (1601)

Valerius Terminus of the Interpretation of Nature (1603)

A Brief Discourse touching the Happy Union of the Kingdoms of England and Scotland (1603)

Cogitationes de Natura Rerum ('Thoughts on the Nature of Things', 1604)

Apologie concerning the late Earl of Essex (1604)

Certain Considerations touching the better pacification and Edification of the Church of England (1604)

[The Advancement and Proficiency of Learning Divine and Human](#) (1605)

Temporis Masculus Partus ('The Masculine Birth of Time', 1605)

Filium Labyrinthi sive Formula Inquisitionis (1606)

In Felicem Memoriam Elizabethae ('In Happy Memory of Queen Elizabeth', (1606)

Cogitata et Visa de Interpretatione Naturae ('Thoughts and Conclusions on the Interpretation of Nature', 1607)

Redargutio Philosophiarum ('The Refutation of Philosophies') (1608)

The Plantation of Ireland (1608–9)

De Sapientia Veterum ('Wisdom of the Ancients', 1609)

Descriptio Globi Intellectualis ('A Description of the Intellectual Globe') (1612)

Thema Coeli ('Theory of the Heavens', 1612)

Essays (2nd edition – 38 essays, 1612)

Charge... touching Duels (1614)

The Masque of Flowers (performed by Gray's Inn before the King at Whitehall to honour the marriage of the Earl of Somerset to Frances Howard, Countess of Essex, 1614)

Instauratio Magna ('Great Instauration', 1620)

Novum Organum Scientiarum ('New Method', 1620)

Historia Naturalis ('Natural History', 1622)

Introduction to six Natural Histories (1622)

Historia Ventorum ('History of Winds', 1622)

History of the Reign of King Henry VII (1622)

Abcedarium Naturae (1622)

De Augmentis Scientiarum (1623)

Historia Vitae et Mortis ('History of Life and Death', 1623)

Historia Densi et Rari ('History of Density and Rarity', 1623)

Historia Gravis et Levis ('History of Gravity and Levity', 1623)

History of the Sympathy and Antipathy of Things (1623)

History of Sulphur, Salt and Mercury (1623)

A Discourse of a War with Spain (1623)

An Advertisement touching an Holy War (1623)

A Digest of the Laws of England (1623)

Cogitationes de Natura Rerum ('Thoughts on the Nature of Things', 1624)

De Fluxu et Refluxu Maris ('Of the Ebb and Flow of the Sea', 1624)

Essays, or Counsels Civil and Moral (3rd/final edition – 58 essays, 1625)

Apothegms New and Old (1625)

Translation of Certain Psalms into English Verse (1625)

Revision of De Sapientia Veterum ('Wisdom of the Ancients', 1625)

Inquisitio de Magnete ('Enquiries into Magnetism', 1625)

Topica Inquisitionis de Luce et Lumine ('Topical Inquisitions into Light and Luminosity', 1625)

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Posthumous works:

New Atlantis (1627)

***Sylva Sylvarum, or Natural History* (1627)** [*Sylva sylvarum*; or, A natural history, in ten centuries. Whereunto is newly added the History natural and experimental of life and death, or of the prolongation of life]

Certain Miscellany Works (1629)

Use of the Law (1629)

Elements of the Common Laws (1629)

Operum Moraliū et Civilium (1638)

Dialogum de Bello Sacro (1638)

Cases of Treason (1641)

Confession of Faith (1641)

Speech concerning Naturalisation (1641)

Office of Constables (1641)

Discourse concerning Church Affairs (1641)

An Essay of a King (1642)

The Learned Reading of Sir Francis Bacon (to Gray's Inn) (1642)

Ordinances (1642)

Relation of the Poisoning of Overbury (1651)

Scripta in Naturali et Universali Philosophia (1653)

Scala Intellectus sive Filum Labyrinthi (1653)

Prodromi sive Anticipationes Philosophiae Secundae (1653)

Cogitationes de Natura Rerum (1653)

De Fluxu et Refluxu Maris (1653)

The Mirror of State and Eloquence (1656)

Opuscula Varia Posthuma, Philosophica, Civilia et Theologia (1658)

Letter of Advice to the Duke of Buckingham (1661)

Charge given for the Verge (1662)

Baconiana, Or Certain Genuine Remains Of Sr. Francis Bacon (1679)

Abcedarium Naturae, or a Metaphysical piece (1679)

Letters and Remains (1734)

Promus (1861)

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