

Natural History (X)

自然史

第 10 卷

GEORGES-LOUIS LECLERC, COMTE DE BUFFON

TRANSLATED BY

JAMES SMITH BARR



HIGHER EDUCATION PRESS

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内容简介

布封是18世纪法国著名的博物学家和作家。他坚持以唯物主义的思想看待地球与生物的起源和发展，被誉为“和大自然一样伟大的天才”。《自然史》是一部博物志，书中以大量的科学观察为基础，从唯物主义的角度对自然界的各种现象做了详细的描述。书中提到的“物种可变”和“进化”的思想对当时的社会具有积极的启蒙作用，也对后来达尔文提出“物种起源”与“进化论”产生了深远影响。

《自然史》原著为法文，共44卷。本版为英国学者James Smith Barr在1797—1807年翻译出版的10卷册，是原著中最精华的部分，主要包括地球的理论、动物史、人类史、家畜驯养史，并简单介绍了矿物和植物等内容。本书可供生物学、生态学、地质学等专业的高校师生和相关科研人员以及博物爱好者阅读。

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万物皆有道 自然最奇妙

—— 写于《自然史》发行时 (代序)

在已探知的星球中,唯地球有人类。人类社会和自然界构成了这颗星球的整个世界。人类来源于自然,依赖于自然,不断地探索自然,了解自己从何而来,向何而去?为什么在这万物共生的自然界中脱颖而出,成为这个世界的主宰?又怎样与这个世界大家庭和睦相处,适应客观发展?……只有了解过去,才能更好地认识现在;懂得了过去和现在,才能主动地面对未来。历史是最好的教科书,在《地球简史》《人类简史》《时间简史》等纷纷面世的当代,人们不由地把目光又投向 260 多年前就诞生了的《自然史》,这部洋洋数百万字的旷世巨著,开辟了科学史作的先河,它从行星到地球,从空气到海洋,从动物到人类,……天、地、生、人,无所不包,海、陆、空,面面俱到,是一部记述自然的百科全书。

书中全面论述了地球理论和地球历史,展现了风、火、水、潮、雷、震(地震)、光、热等各种自然现象;对人和生物的论述更是生动形象,丰富多彩。从生命的起源、器官的发育、青春期的特点,到机能的退化,直至死亡,把人类生息繁衍的过程讲得有声有色。对生物,特别是动物的描绘投下了重重笔墨,占据了大量篇幅,天上飞的,地上长的,野生的,驯养的,食肉的,食草的,大到熊、马,小至鼠、兔,畜、禽、鸟、兽,花、草、树、木,样样俱全,活灵活现,既有理性,又有情趣,好像无论哪种野性的动物都可以成为人类的宠物和朋友。法国著名思想家卢梭是这样评价的:“布封以异常平静而又悠然自得的语言歌颂了自然界中所有的重要物品,呈现出造物者的尊严与灵性。他具有那个世纪最美的文笔。”

万物皆有道,自然最奇妙。几乎所有涉及自然的事物都可以从《自然史》汲取营养,得到启示。读这类名著,既能增长知识,丰富阅历,又能赏心悦目,

闲情逸致。即使历史已过去了几百年, 社会发生了巨变, 也未失去这部历史巨著的价值和魅力。这就是一部不朽之作的历史地位。布封在书中提出“物种可变”和“进化”的思想, 被生物进化论创始人达尔文称为“以现代科学眼光对待这个问题的第一人”。

哲语说, 文如其人。《自然史》的作者布封, 全名乔治·路易·勒克莱尔·布封 (Georges-Louis Leclerc, Comte de Buffon, 1707—1788), 如同他的不朽著作一样, 也有一部不寻常的经历。他生于法国, 自幼喜好自然科学, 特别是数学。1728 年法律专业毕业后, 又学了两年医学。20 岁时就先于牛顿发现了二项式定理; 26 岁成为法兰西科学院机械部的助理研究员, 翻译并出版了英国博物学者海尔斯的著作《植物生理与空气分析》和牛顿的《微积分术》; 1739 年, 32 岁的他转为法兰西科学院数学部的副研究员, 并被任命为“巴黎皇家植物园及御书房”的总管; 1753 年成为法兰西科学院院士。他用 40 年的时间写出了长达 36 卷的《自然史》, 后又由他的学生整理出版了 8 卷, 共 44 卷。此书一出版, 就轰动了欧洲的学术界, 各国很快有了译本。1777 年, 法国政府给布封建了一座铜像, 上面写着: “献给和大自然一样伟大的天才。”这是对布封的崇高评价。

《自然史》原著为法文, 这里出版的是英国学者 James Smith Barr 在 1797—1807 年翻译的英文版 10 卷册, 选取的是原著中最精华的部分。发行这样的英文版高级作品、高级读物, 就像外文书籍、外文刊物一样, 自然面对的也是高水平的读者和馆藏者, 希望他们既可以接近原汁原味地欣赏原著, 感受自然的魅力, 受到自然科学和文学艺术的熏陶, 同时又能自然而然地提高英文素养和写作水平。在广大知识分子外语水平普遍提高的今天, 这样的科学传播形式也许会受到越来越多读者的青睐。

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2017 年 6 月 25 日



Georges-Louis Leclerc, Comte de Buffon (1707—1788)

布封 (Georges-Louis Leclerc, Comte de Buffon, 1707—1788), 18 世纪法国著名的博物学家和作家。他坚持以唯物主义的思想看待地球与生物的起源和发展, 被誉为“和大自然一样伟大的天才”。

布封出生于法国蒙巴尔城的一个律师家庭, 自幼接受教会教育, 对自然科学始终有着浓厚的兴趣。1730 年, 大学毕业的布封结识了年轻的金斯顿公爵, 两人一起游历了法国南部、瑞士和意大利, 并在这位公爵的家庭教师的影响下开始研究博物学。1733 年, 布封进入法兰西科学院担任助理研究员, 1739 年, 成为巴黎皇家植物园园长, 1753 年, 当选为法兰西科学院院士。布封毕生从事博物学研究, 花费 40 年心血著成《自然史》这部煌煌巨著。《自然史》共 44 卷, 是一部博物志, 包括了地球史、人类史、动物史和矿物史等, 堪称百科全书式的巨著。书中提到的“物种可变”和“进化”的思想对当时的社会具有积极的启蒙作用, 也对后来达尔文提出“物种起源”与“进化论”产生了深远影响, 布封也因此被达尔文称为“以现代科学眼光对待这个问题的第一人”。

Barr's Buffon.

Buffon's Natural History.

CONTAINING
A THEORY OF THE EARTH,
A GENERAL
HISTORY OF MAN,
OF THE BRUTE CREATION, AND OF
VEGETABLES, MINERALS,
&c. &c.

FROM THE FRENCH.
WITH NOTES BY THE TRANSLATOR.
IN TEN VOLUMES.
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BUFFON'S NATURAL HISTORY.

OF THE DEGENERATION OF ANIMALS..

THE deer-kind whose horns are a sort of wood, and of a solid texture, although ruminating, and internally formed like those whose horns are hollow and porous, seem to form a separate family, in which the elk is the trunk, and the rein-deer, stag, axis, fallow-deer, and roe-buck, are the lesser and collateral branches; for there are only six species of animals whose heads are armed with branched horns that fall off and are renewed every year. Independently of this generic character, they resemble each other still more in formation and natural habitude; we should, therefore, sooner expect mules from the stag or fallow-deer, joined with the rein-deer or the axis, than from a union of the stag with the cow.

We might be still better authorised to regard all the different kinds of sheep and goats as composing but one family, since they produce together mules, which immediately, and in the first generation, ascend to the species of sheep. We might even add to this numerous family of sheep and goats those of the gazelles and bubalus, which are not less in number. The muflon, the wild goat, the chamois, the antelope, the bubalus, the condoma, &c. seem to be the principal trunks of this genus, which contains more than thirty different species, and the others are only accessory branches which have retained the principal characters of the stocks from which they issued; but which, at the same time, have prodigiously varied by the influence of the climate, the difference of the food, and by the state of slavery to which man has reduced most animals.

The dog, the wolf, the fox, the jackal, and the isatis, form another genus, the different species of which resemble each other so strongly, especially in their internal conformation, and in the organs of generation, that it is difficult to conceive why they do not intermix. From the experiments which I made to form a union of the dog with the wolf and fox, the repugnance to copulate seemed to proceed from the wolf and fox rather than from the dog, that is, from the wild animal and not from the tame; for those bitches which I put to the trial would readily have permitted the wolf and fox, whereas the females of the two latter would never suffer the approaches of the dog. The domestic state seems to render animals less faithful to their species: It gives them also a greater degree of heat and fecundity, for the bitch generally produces twice a year, while the females of the wolf and fox litter only once; and it is to be presumed, that those dogs which have been left in desert countries, and which have so greatly multiplied in the island of Juan Fernandes, and in the mountains of St. Domingo, &c. produce only once a year, like the wolf and the fox. This circumstance, if it were proved to be the fact, would fully establish the unity of genus in these three animals, which resemble each other in conformation so strongly as to oblige us to attribute their repugnance to some external circumstances.

The dog seems to be the intermediate species between the fox and the wolf. The ancients have stated, that the dog, in some countries, and under particular circumstances, engenders with the wolf and fox. I was desirous of verifying this assertion, and although I did not succeed in the trials I made, yet we must not conclude that it is impossible, for my experiments were with captive animals; and it is known that in some species captivity alone is sufficient to extinguish desire, and to give them a repugnance to copulation, even with their own kind; consequently they would still more refuse to unite with individuals of another species: but I am persuaded, that when in a state of freedom, and deprived of his own female, the dog would unite with the wolf and fox, particularly if he had become wild, lost his domestic cast, and approached the manner and natural habits of these animals. The fox and wolf, however, never unite, though they live in the same climate and country, but support their species pure and unmixed; we must, therefore, suppose a more ancient degeneration than history has recorded, if they ever belonged to one species; it was for this reason I asserted that the dog was an intermediate species between the fox and

wolf; and his species is also common, since it can unite with both; and if any thing could shew that they all three originally sprang from the same stock, it is this common affinity between the dog, the fox, and the wolf, and which seems to bring their species nearer than all the conformities in their figures and organization. To reduce the fox and wolf, therefore, into one species, we must return to a state of nature very ancient indeed; but in their present condition, we must look upon the wolf and fox as the chief trunks in the genus of the five animals. The dog, the jackal, and the isatis, are only lateral branches placed between the two first; the jackal participates of the dog and wolf, and the isatis of the jackal and fox. From a great number of testimonies it appears that the jackal and the dog engender easily together; and it is observable, from the description and history of the isatis, that it almost entirely resembles the fox in its form and temperament, that they are equally found in cold countries, but that, at the same time, it inclines to the jackal in its disposition, continual barking, clamorous voice, and the habit of always going in packs.

The shepherd's dog, which I have considered as the original stock of every other dog, is, at the same time, that which approaches nearest in figure to the fox. He is of the same size, and, like the fox, he has erect ears, a pointed muzzle, and a strait trailing tail. He also approaches the fox in voice, sagacity, and instinct. The dog, therefore, may originally have been the issue of the fox, if not in a direct, at least in a collateral line. The dog, which Aristotle calls *canis-laconicus*, and which he affirms to have proceeded from an union of the fox and dog, might, possibly, be the same as the shepherd's dog, or, at least, it has more relation to him than to any other dog. We might, therefore, be inclined to imagine, that the epithet *laconicus*, left uninterpreted by Aristotle, was only given to this dog because he was found in Laconia, a province of Greece; and of which Lacedæmon was the capital; but if we attentively consider the origin of this *laconic* dog we shall perceive that the breed was not confined to the country of Laconia, alone but must have been found in every country where there were foxes; and this induces me to presume, that the epithet *laconicus* might possibly have been used by Aristotle in a moral sense, to express the brevity and acuteness of his voice, because he did not bark like other dogs, but had a shorter and shriller note, like that of the fox. Now our shepherd's dog is that to which we can justly apply this term of *laconic*, for of all dogs his

voice is the sharpest and most rarely employed. Besides, the characters which Aristotle gives to his *laconic* dog agree with those of the shepherd's dog, and perfectly persuade me they are the same.

The genus of cruel and rapacious animals is one of the most numerous and most diversified; evils here, as in other cases, seem to be produced under every shape, and to assume various natures; the lion and the tiger, being detached species, rank in the first line; all the others, as the panther, the ounce, the leopard, the lynx, the caracal, the jaguar, the cougar, the ocelot, the serval, the margai, and the cat, compose only one cruel family, whose different branches are more or less extended and diversified according to the difference of climate. All these animals resemble each other in natural dispositions, although they are very different with respect to size and figure. They all have sparkling eyes, short muzzles, and sharp, crooked, and retractile claws. They are all destructive, ferocious, and untameable. The cat, which is the last and the least species, although reduced to slavery, continues its ferocity, and is no less perfidious. The wild cat has preserved the character of the family, and is as cruel and mischievous as any of his larger kindred. They are all equally carnivorous, and enemies to other animals. Man, with all his art and power, has not been able to annihilate them: fire, steel, poison, pits, and every method has been used against them without attaining that point. As the individuals are very prolific, and the species numerous, the efforts of man have been limited to keeping them at a distance, and confining them in the deserts, whence they never sally without spreading terror, and making great depredations. A single tiger issuing from the forest is sufficient to alarm a multitude of people, and oblige them to take up arms. What then would be the consequence if these sanguinary animals came in numbers, like wolves or jackals, to commit their depredations? Nature has given this instinct to timid animals, but fortunately denied it to the bold tribes; they go singly, and depend upon their courage and strength for their safety and support. Aristotle observed, and justly remarked, that of all animals furnished with talons not any of them are sociable, or go together in troops.* This observation, which was then confined to four or five species only, being all that were known in his time, is extended and verified over ten or twelve

* Nullum animal cui unguis adunci, gregatile esse perpendimus. Arist. Hist. Anim. Lib. i. Cap. 1.