



企鹅人文经典

论自然选择

On Natural Selection

[英] 查尔斯・达尔文

伟大的思想家用简洁的文字,带给人类最伟大的思想启迪; 我们用简单的方法,走近这些卓尔不群的人物, 聆听他们振聋发聩的声音。





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On Natural Selection

• 英汉对照 •

[英] 查尔斯・达尔文 著朱邦芊 译

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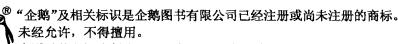
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观念

——《伟大的思想》代序

每隔一段时间,媒体就喜欢评选一次"影响世界的 X 个人"或者"改变历史的 X 项发明"。然而,在我看来,几乎所有人类史上最重大的变革,首先都是一种观念的变革。

我们今天之所以会关注气候的变暖与生物多样性的保存,是因为我们看待地球的方式变了,我们比以前更加意识到人在自然中的位置,也更加了解自然其实是一个动态的系统。放弃了人类可以主宰地球的世界观,这就意味着我们接受了一个观念的变化。同样地,我们不再相信男人一出生就该主宰女人,甚至也不再认为男女之别是不可动摇的本质区分,这也是观念的变化。如果说环保运动和女权运动有任何影响的话,那些影响一定就是从大脑开始的。也不要只看好事,20世纪最惨绝人寰的浩劫最初也只不过是一些小小的观念,危险的观念。比如说一位德国人,他相信人类的进化必以"次等种族"的灭绝为代价……

这套丛书不叫"伟大的巨著",是因为它们体积都不大,而且还有不少是抽取自某些名著的章节。

可它们却全是伟大的观念,例如达尔文的论天择,潘恩的

论常识,它们共同构成了人类的观念地图。从头看它们一遍,就 是检视文明所走过的道路,从深处理解我们今天变成这个样子的 原因。

也许你会发现其中有些陌生的名字,或者看起来没有那么"伟大"的篇章(譬如普鲁斯特追忆他的阅读时光),但你千万不要小看它们。因为真正重要、真正能够产生启蒙效果的观念往往具有跨界移动的能力,它会跨越时空,离开它原属的领域,在另一个世界产生意外的效果。就像马可·波罗在监狱里述说的异国图景,当时有谁料得到那些荒诞的故事会诱发出哥伦布的旅程呢?我也无法猜测,这套小书的读者里头会不会有下一个哥伦布,他将带着令人惊奇的观念航向自己的大海。

梁文道

《伟大的思想》中文版序

企鹅《伟大的思想》丛书于 2004 年开始出版。在英国,至今已付印 80 种,尚有 20 种计划出版。美国出版的丛书规模略小,德国的同类丛书规模更小一些。丛书销量已远远超过 200 万册,在全球很多人中间,尤其是学生当中,普及了哲学和政治学。中文版《伟大的思想》丛书的推出,迈出了新的一步,令人欢欣鼓舞。

推出这套丛书的目的是让读者再次与一些伟大的非小说类经典著作面对面地交流。太长时间以来,确定版本依据这样一个假设——读者在教室里学习这些著作,因此需要导读、详尽的注释、参考书目等。此类版本无疑非常有用,但我想,如果能够重建托马斯·潘恩《常识》或约翰·罗斯金《艺术与人生》初版时的环境,重新营造更具亲和力的氛围,那也是一件有意思的事。当时,读者除了原作者及其自身的理性思考外,没有其他参照。

这样做有一定的缺点:每个作者的话难免有难解或不可解之处,一些重要的背景知识会缺失。例如,读者对亨利·梭罗创作时的情况毫无头绪,也不了解该书得到的认可及其影响。不过这样做的优点也很明显。最突出的优点是,作者的初衷又一次变得重要起来——托马斯·潘恩的愤怒、查尔斯·达尔文的灵光、塞内加的隐逸。这些作家在那么多国家影响了那么多人的生活,其

影响不可估量,有的长达几个世纪,读他们书的乐趣罕有匹敌。 没有亚当·斯密或阿图尔·叔本华,难以想象我们今天的世界。 这些小书的创作年代已很久远,但其中的语言已彻底改变了我们 的政治学、经济学、智力生活、社会规划和宗教信仰。

《伟大的思想》丛书一直求新求变。地区不同,收录的作家也不同。在中国或美国,一些作家更受欢迎。英国《伟大的思想》收录的一些作家在其他地方则默默无闻。称其为"伟大的思想",我们亦慎之又慎。思想之伟大,在于其影响之深远,而不意味着这些思想是"好"的,实际上一些书可列入"坏思想"之列。丛书中很多作家受到同一丛书其他作家的很大影响,例如,马塞尔•普鲁斯特承认受约翰•罗斯金影响很大,米歇尔•德•蒙田也承认深受塞内加影响,但其他有些作家彼此憎恨,如果发现他们被收入同一丛书,一定会气愤难平。不过,读者可自行决定这些思想是否合理。我们衷心希望,您能在阅读这些杰作中得到乐趣。

《伟大的思想》出版者 西蒙•温德尔

Introduction to the Chinese Editions of Great Ideas

Penguin's Great Ideas series began publication in 2004. In the UK we now have 80 copies in print with plans to publish a further 20. A somewhat smaller list is published in the USA and a related, even smaller series in Germany. The books have sold now well over two million copies and have popularized philosophy and politics for many people around the world—particularly students. The launch of a Chinese Great Ideas series is an extremely exciting new development.

The intention behind the series was to allow readers to be once more face to face with some of the great non-fiction classics. For too long the editions of these books were created on the assumption that you were studying them in the classroom and that the student needed an introduction, extensive notes, a bibliography and so on. While this sort of edition is of course extremely useful, I thought it would be interesting to recreate a more intimate feeling—to recreate the atmosphere in which, for example, Thomas Paine's Common Sense or John Ruskin's On Art and Life was first published—where the reader has no other guide than the original author and his or her own common sense.

This method has its severe disadvantages—there will inevitably be statements made by each author which are either hard or impossible to understand, some important context might be missing. For example the reader has no clue as to the conditions under which Henry Thoreau was writing his book and the

reader cannot be aware of the book's reception or influence. The advantages however are very clear—most importantly the original intentions of the author become once more important. The sense of anger in Thomas Paine, of intellectual excitement in Charles Darwin, of resignation in Seneca—few things can be more thrilling than to read writers who have had such immeasurable influence on so many lives, sometimes for centuries, in many different countries. Our world would not make sense without Adam Smith or Arthur Schopenhauer—our politics, economics, intellectual lives, social planning, religious beliefs have all been fundamentally changed by the words in these little books, first written down long ago.

The Great Ideas series continues to change and evolve. In different parts of the world different writers would be included. In China or in the United States there are some writers who are liked much more than others. In the UK there are writers in the Great Ideas series who are ignored elsewhere. We have also been very careful to call the series Great Ideas—these ideas are great because they have been so enormously influential, but this does not mean that they are Good Ideas—indeed some of the books would probably qualify as Bad Ideas. Many of the writers in the series have been massively influenced by others in the series—for example Marcel Proust owned so much to John Ruskin, Michel de Montaigne to Seneca. But others hated each other and would be distressed to find themselves together in the same series! But readers can decide the validity of these ideas for themselves. We very much hope that you enjoy these remarkable books.

Simon Winder Publisher Great Ideas

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论自然选择

On Natural Selection



Struggle for Existence

Nothing is easier than to admit in words the truth of the universal struggle for life, or more difficult — at least I have found it so — than constantly to bear this conclusion in mind. Yet unless it be thoroughly *engrained*¹ in the mind, I am convinced that the whole economy of nature, with every fact on distribution, rarity, abundance, extinction, and variation, will be dimly seen or quite misunderstood. We behold the face of nature bright with gladness, we often see superabundance of food; we do not see, or we forget, that the birds which are idly singing round us mostly live on insects or seeds, and are thus constantly destroying life; or we forget how largely these *songsters*², or their eggs, or their nestlings, are destroyed by birds and *beasts of prey*³; we do not always bear in mind, that though food may be now superabundant, it is not so at all seasons of each *recurring*⁴ year.

I should premise5 that I use the term Struggle for Existence in a

生存竞争

Notes

- 1 engrained [in'greind] a. 根 深蒂固的
- 2 songster [ˈsɔŋstə]
 n. 鸣禽
- 3 beasts of prey 食 肉动物
- 4 recurring [ri'kə:riŋ] a. 循环 的
- 5 premise ['premis] ν. 预先提出: 作 **为…的前提**

没有什么事情比口头承认普遍生存竞争的 真理更为容易,或者说,没有什么事情比将此 结论时刻牢记在心更加困难——至少我是这样 想的。但除非这一结论已经在心中根深蒂固,否则,我相信,人们将会对整个自然法则以及 有关分布、珍稀、繁盛、灭绝与变异等一切事实认识模糊,或者在相当程度上产生误解。我们见到自然界欢欢喜喜的光明一面,我们时常看到食物极大丰富;我们没有看到,或者忘记了那些在我们周围悠闲鸣叫的鸟儿主要以昆虫或种籽为生,它们因此不断摧毁生命;或者我们忘记这些鸣禽或其蛋或雏鸟,是如何被食肉鸟类或兽类大量消灭;我们并不总是记得,尽管食物现在可能极大丰富,但年复一年的每一季节并不都是如此。

我应该预先说明: 我是在广义与比喻的意

large and metaphorical1 sense, including dependence of one being on another, and including (which is more important) not only the life of the individual, but success in leaving progeny². Two canine³ animals in a time of dearth4, may be truly said to struggle with each other which shall get food and live. But a plant on the edge of a desert is said to struggle for life against the drought, though more properly it should be said to be dependent on the moisture. A plant which annually produces a thousand seeds, of which on an average only one comes to maturity, may be more truly said to struggle with the plants of the same and other kinds which already clothe the ground. The *mistletoe*⁷ is dependent on the apple and a few other trees, but can only in a far-fetched sense be said to struggle with these trees, for if too many of these parasites grow on the same tree, it will languish¹⁰ and die. But several seedling mistletoes, growing close together on the same branch, may more truly be said to struggle with each other. As the mistletoe is disseminated11 by birds, its existence depends on birds; and it may metaphorically be said to struggle with other fruit-bearing plants, in order to tempt birds to devour12 and thus disseminate its seeds rather than those of other plants. In these several senses, which pass into each other, I use for convenience sake the general term of struggle for existence.

A struggle for existence *inevitably*¹³ follows from the high rate at which all organic beings tend to increase. Every being, which during its natural lifetime produces several eggs or seeds, must suffer destruction during some period of its life, and during some season or

Notes

- 1 metaphorical [,meta forikal] a. 比喻意义的; 隐喻的
- 2 progeny ['prodʒəni] n. 后 代,后裔
- 3 canine ['keinain] a. 犬科的
- 4 dearth [də:θ] n.饥荒; 不足
- 5 drought [draut] n. 干旱
- 6 moisture ['mɔistʃə] n. 水 分; 湿度
- 7 mistletoe ['misəltəu] n. 槲 寄生
- 8 far-fetched ['fo:'fetʃt] a. 牵强 附会的
- 9 parasite ['pærəsait] n. 寄 生虫
- 10 languish [ˈlæŋgwiʃ] ν. 枯萎
- 11 disseminate [di'semineit] v. 撤 播
- 12 devour [diˈvauə] ν 吞食
- 13 inevitably [in'evitəbli] ad. 不可避免地

义上使用"生存竞争"这个术语的,其中包括 一种生物对另一种生物的依存。而且,不仅包 括(这一点更加重要)个体的生命,也包括在 留下后代方面的成功。也许可以确切地说,两 只犬科动物在饥馑时刻彼此争斗, 以决定谁将 得到食物并且活下去。但是长在沙漠边缘的植 物,与其说是与干旱斗争以求存活,不如说是 依赖水分。我们也许可以更确切地说:每年结 成 1,000 颗种籽, 平均只有一颗种籽能够长成 的植物,是与已经长在地面上的同类或异类植 物进行竞争。檞寄生依赖苹果树和少数其他树 种而生存,但我们只能在牵强意义上说它与这 些树木竞争,因为如果同一棵树上生长了太多 的这些寄生生物,这棵树就将枯萎而死。但是 好几株檞寄生幼苗在同一根树枝上挤在一起生 长,更确切的说法或许是它们彼此竞争。 檞寄 生是靠鸟类传播种籽的,所以它的生存依赖于 鸟类: 为了引诱鸟类来吞食并传播它的而不是 其他植物的种籽, 也许我们可以比喻说, 檞寄 生与其他结果实的植物竞争。在这好几种彼此 相通的意义上,为方便起见,我使用了"生存 竞争"这个通用术语。

一切有机生物皆有高速繁殖的倾向,其后就必定继之以生存竞争。每一种生物在其自然 生命期间都生产好几个卵或种籽,在其生命中的某一时刻、某一季节或偶然的一年,必定遭 occasional year, otherwise, on the principle of **geometrical**¹ increase, its numbers would quickly become so **inordinately**² great that no country could support the product. Hence, as more individuals are produced than can possibly survive, there must in every case be a struggle for existence, either one individual with another of the same species, or with the individuals of distinct species, or with the physical conditions of life. It is the **doctrine**³ of Malthus applied with manifold force to the whole animal and vegetable kingdoms; for in this case there can be no artificial increase of food, and no **prudential**⁴ restraint from marriage. Although some species may be now increasing, more or less rapidly, in numbers, all cannot do so, for the world would not hold them.

There is no exception to the rule that every organic being naturally increases at so high a rate, that if not destroyed, the earth would soon be covered by the progeny of a single pair. Even **slow-breeding**⁵ man has doubled in twenty-five years, and at this rate, in a few thousand years, there would **literally**⁶ not be standing room for his progeny. Linnaeus has calculated that if an annual plant produced only two seeds—and there is no plant so unproductive as this—and their seedlings next year produced two, and so on, then in twenty years there would be a million plants. The elephant is **reckoned**⁷ to be the slowest breeder of all known animals, and I have

Notes

- 1 geometrical [.dʒi:ə'metrikəl] a. 儿何的
- 2 inordinately [in'o:dnitili] ad. 非 常地
- 3 doctrine ['dɔktrin]
 n. 学说; 主义;
 信条
- 4 prudential [pru(:)'denʃəl] a. 谨慎的
- 5 slow-breeding a. 繁殖缓慢的
- 6 literally ['litərəli] ad. 简直: 不夸张 地,确实地
- 7 reckon ['rekən] v. 认为

到摧毁。否则,根据几何增长的原理,这种生物的数目就可能异常地多,以至于无地可容。因此,由于产生出来的个体比可能存活下来的个体要多,任何情况下都必定有生存竞争,生物个体不是与同种的另一个体竞争,就是与异种的个体竞争,或是与生存的物质条件竞争。将繁殖力应用于整个动物与植物王国的正是马尔萨斯^① 的学说: 因为在这种情况下,既不能人为地增加食物,也不能谨慎地限制结合。某些物种当前可能或多或少地迅速增加数量,但是并非所有生物都能如此,因为那样这个世界可能就容不下它们了。

各种生物都以如此高的速度自然增加,如果不遭毁灭,地球就可能很快为一对生物的后代所覆盖,这条规则是毫无例外的。即使是繁殖缓慢的人类也会在 25 年之内增加一倍,按照这样的速度,几千年后,地球上可能实际上就没有立足之地了。林奈^② 曾经计算过: 如果某种一年生植物只结两粒种籽——没有任何植物的生产力会这样低下——而且第二年这两棵幼苗各结两粒种籽,以此类推,则 20 年后可能有 100 万株这样的植物。在所有已知的动物中,

① 托马斯·罗伯特·马尔萨斯,英国经济学家,著有《人口论》,认为人口的增长比食物供应的增长要快,除非对人口的增长采用道德的约束或战争、饥荒和瘟疫加以抑制,否则会导致不可避免的灾难后果。——译注

② 卡尔·冯·林奈,瑞典自然学者,现代生物学分类命名的 奠基人。