

A Review of Popular Science Books for Public

SHI SHUNKE

China Science Writers' Association, China

E-mail: shishunke@aliyun.com

Each year, China produces a large number of science books, of which a considerable part is labeled as 'popular science books'. In 2013, China Science Writers' Association invited a panel of experts, knowledgeable in this field to pick out the preferable ones for the ordinary public. After days of flipping through the pages of the tomes, they identified 106 titles from thousands of the targeted books that were published between 2000 and 2013. The selected books were later presented to the public as special recommendation. In promotion, various activities were organized to seize the public attention.

The books selected, are roughly divided into 5 categories *i.e.*, basic sciences, literary science, science for youth, science and health, and practical skills. Numbers of these 5 categories distribute as:

Table 1 — Books recommended for the public

	Basic Science	Literary Science	Science for youth	Science and health	Practical skills
Number of titles	35	31	28	5	7

Among them there are 21 translations and 3 science fictions.

In the basic sciences cluster, the books cover a broad range of disciplines as physics, chemistry, astronomy, climate change, life science, animals, technology and so on. Not all the books are on cutting-edge topics, but the writing won the judges and the words between the pages tell the readers many things about the world around us. Among these the books *Physics Changed the*

World; Cosmos and Man; the Saga of Genes; Retrospect of the Discoveries of Mankind; and On Caudiferous and Foliaceous Things are fairly popular and well received by the readers. A few well-known translated works are also included in this group, such as *A Brief History of Time* by Stephen Hawking, *A Short History of Nearly Everything* by Bill Bryson, and *Hope for Animals and Their World* by Jane Goodall.

In the literary science cluster, the writing style changed its tone. While setting science as the background, most authors in this group tried to take the readers into the lives of scientists, telling stories about their commitment in their scientific pursuit. Legends and biographical accounts unroll colorful pictures of native scientific heroes. The readers could approach those figures with scientific nimbus over their heads in a much easier and familiar way.

There is an *Ode to the Scientists of the Republic* written in thousands of versified lines, and science fictions that are loved by many stand foremost revealing the potentiality of the Chinese writers in this kind of literary style. This cluster of books in fact lays emphasis on the human side of science or the combination of the two, which has been strongly encouraged by domestic critics. The third cluster is specially intended for young people, particularly for kids in primary schools and teenagers. Facts, stories, explorations and scientific tests are main courses prepared for them.

An imposing feature of these books is their splendid layout of pictures, attractive, eye-pleasing and most of the time softening the tiredness of reading. Wonders and fun are brought to the children, such as the *Wonders of the Science Museum*, *Pulling an Elephant into an Ant Hole*, *Wildlife Anecdotes*, etc. Quite some imported books are included because of their beauty. There is the 'Childcraft: How & Why Library' by World Book Inc., the 'Magic School Bus' by Joanna Cole and Bruce Degen, and the 'Horrible Science' by Nick Arnold.

The Chinese publishers are learning a lot from their partners beyond the boundaries and the science books for the children have a pretty good market. In the category of science and health, the panel experts only selected 5 titles to recommend for the

public. Health is a hot topic in present day China. People are entering into an age of longer life than ever before as the living conditions and health care system get improved day by day. How to keep in good health, how to prevent diseases and how to grow old turn up to be common concerns of the ordinary people, especially the elders.

In bookstores, one could find all sorts of books on the shelves talking about issues in this regard, and parallel TV shows and radio broadcastings are quite normal for audiences. But the panel experts were very cautious when making decisions in identifying their preferences for the sake of the consumers. Of the bunch selected, two sets of books in series account for an array of practical and useful knowledge about prevention of diseases. Another one tries to clear up the misunderstandings of food additives, which are almost unavoidable at the tables in people's daily life.

Though people today have become much knowledgeable about diseases, they tend to be growing equally oversensitive about their health and often fail to take correct decisions when in need. To help people develop reasonable judgment when coming into health problems, a book entitled '*Making Friends with a Doctor*' is favorably recommended. The last cluster contains books devoted for practical and applicable skills. Seven books were included and most of them are on farming skills.

China is a country of large population and about half of them live in rural areas. Individual farmers across the country own only small pieces of land to grow crops and they are in a craving need for advanced agricultural technology that may give high yields out of their lands.

The market is ever demanding, and many publishers invest heavily on producing books prepared specially for farmers and these books usually hit a very high circulation with hundreds of thousands of copies in sale. In this group, '*Illustrated Advanced Agricultural Technology*' and the '*Detection and Control of Pest Disease in Crops*' are in long series with varied topics of practical skills. Cultivation is just one part of rural life. A book in the same category informs the rural residents how to make use

of marsh gas for energy. Another one provides useful knowledge and skills for farmers in maintaining their daily life in terms of preserving vegetables and fruits, product processing, brewing, transportation as well as maintenance of household appliances. For migrant workers seeking chances in the cities, only one book is included. It specializes on the must-know-safety of migrant workers working on the construction cities.

In China, science writing, or rather popular science writing is bathing in the glory of its high days at present. For quite a long time the government has encouraged scientists and writers to write books and people to read their writings, and taken many measures to stimulate the development of the trade.

More and more publishers began to show interest and enthusiasm in producing such books. The output of the genre increased steadily each year, while the circulation seems approaching its saturating point, wandering at a steady level recently. According to the statistics of the Ministry of Science and Technology, popular science books produced for the ordinary public witnessed a boost during the last decade.

Table 2 — Titles and circulations between 2004 and 2011

Year	2004	2006	2008	2009	2010	2011
Titles	2523	3162	3888	6787	7043	7695
Circulations	18889846	49223043	45389228	68685266	65200633	56956548

There are also some awards for the writers of popular science books. The most notable one is the award of 'Best Popular Science Writings' operated by China Science Writers' Association, which is conducted every two years. Not long ago the Ministry of Science and Technology also set an annual award for science books. In the government-run Science and Technology Progress Prize, popular science books are given a special place. There are still some other awards open to popular science books.

To judge and evaluate the above assemblage of books, organizers created a set of criteria as the yardstick of the merits of the books. They believe a good popular science book should in the first place be true to science, that is, it must be

scientifically correct and precise. Any fault observed in this regard will cause the book to lose the chance of winning the award. Next on the list was emphasis on the ideological value of the book. While disseminating scientific knowledge, the writer should be clear and explicit in sharing positive scientific worldview with the readers.

Apart from these, a book has to be interesting and attractive, as science writing may easily leave a reader with an impression of dryness and tiresomeness. To be attractive, a science book should be free of unexplained technical terms and least complex narrative. Too many jargons and formulas may spoil the taste and hold people back from reading on. Besides these a few other specifications may be taken into account, but these criteria are essential and applied quite often when a popular science book is judged.

It should be noted that, 106 books selected last year did not include every outstanding popular science book available in the Chinese book market. Many exceptionally well written volumes were not counted deliberately for the reason that they had already gained popularity. The collection, however, reflects in some sense the status and quality of Chinese popular science books in its most recent history. Comparing with similar older publications improvement and progress is obvious.

A radical shift in Chinese popular science writing can be observed in recent times, it combines science with humanism. Thanks to the criticism voiced for long, popular science writers began to turn their eyes toward the literary value of the genre. Writers have struggled and explored hard trying to marry science with humanism. Due to the persistence in the pursuit, increasingly, books appear to be far more appealing, knowledge sharing and cover diverse cultures. Books like *Chasing Stars: The Legends of Astronomy, History, 'Art and Religion'*; *'Fictional Aspiration: The Fantastic Exploration of the World Unknown'* and *'No Science, No Civilization'* are good examples of such publications.

The authors are telling stories about science, which they have woven in humanistic fabrics, and thus the narrative becomes captivating. Here, science no longer is treated as being

dull and tedious. It is not an isolated island in the sea of culture but is a part of it. Progress is also discernible in addition to the transformation of writing style.

To produce a popular science book under present circumstances, more efforts and patience are required. Both writers and publishers usually have to work closely in collaboration and spend plenty of time on a new book, as if they are dealing with an art object. As one can see in the collection, the language through editing becomes more fluent and entertaining than it was in the past.

Chromatic pictures and photos are used as illustrations to facilitate the reading. The layout of the pages becomes more luxurious than before, leaving space blank with excessive margins. This is especially true of the books for children. The purpose of the improvement intends not only to catch up with the trend in the trade of book publishing around the world, but to expand the market by reaching out to more readers.

Though China is making progress in science writing, there is still much room for improvement. The book produced under the tag 'popular science', in China, are essentially those which deal with mature, beyond dispute and scientifically-proved-correct knowledge, and the language used must be tailored to a certain degree of simplicity.

Bearing this benchmark in mind, writers incline to emphasize too much on the maturity, precision and simplicity. Reading the books mentioned above, even though they qualify to be 'must read', hardly refrain from a faint sense of deficiency. Yes, all these books try to be informative, but you seldom have the experience that the writer is sharing his or her personal view, feeling or passion with you.

Chinese writers are sharing knowledge but not their insight, the deep understanding of the world they have gained through their own experience and exploration. You can be fascinated at the wonders they render before your eyes, but you might learn little beyond the facts. The philosophical wisdom they possess that may lift you higher up in understanding the world, is rarely communicated.

One more thing seems absent is the craft of story-telling. Notwithstanding a few good writings, a lot of popular science books are written in a language that shifts between the two extremes of awkward writing skills. Such books are either written within a rigid constraint and taste much like textbooks, or are reduced to a low content level for securing simplicity. Writing science in a popular way requires skills and all the writers do not have command over the language. There is lack of capability of rhetoric description and mastery over power of expressions among the authors.

Though writers and editors have been working hard to change the situation, it seems they still have a long distance to cover. Another thing now is in vogue that should not escape our notice. Pictures or illustrations are becoming an indispensable element for Chinese popular science books. The reason is at least two fold — on one hand, pictures are reading aid, especially for those people with low literacy, and on the other, it saves time in explaining a situation or phenomenon.

As modern life accelerates the rhythm of the people's movement, they have lesser and lesser time to read. So, science books aided with plenty of pictures are welcomed. But science books are not necessarily picture books, or it is not necessary, at least for each book, to be so.

Writing popular science book requires deep knowledge of science, however, it is an art, which cannot be circumscribed within a set of rules and instead hard canons could lead to loss of the real charm of writing or reading a science book. To understand science, you have to spend some time. Science itself is not an easy thing, not always fun, and to read it you have to get prepared and face the difficulty.