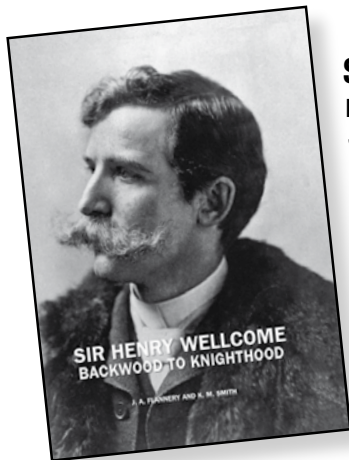


BOOK REVIEWS, NOTES AND COMMENTS

Edited by

Federica Napolitani Cheyne

SIR HENRY WELLCOME
Backwood to Knighthood
J.A. Flannery, K.M. Smith

Boston Spa, Leeds,
 UK: Boston Spa Media;
 2011. 183 p.
 ISBN 978 0 9565916 0 9
 £ 29.99.
www.bostonspamedia.com

This book tells the story of an extraordinary man, of his remarkable life and his passionate vision which led him to the founding of the UK's largest independent charity funding agency (and one of the biggest in the world) to improve human and animal health through biomedical research: The Wellcome Trust Foundation.

Born in 1853 in Wisconsin, to a family of pioneers, Henry Wellcome died in London at the age of eighty-three, Knight of the British Empire and one of the most influential and respected persons of his time. What led him from "backwood to knighthood"?

We will discover it through the beautifully illustrated pages of this work which contains hundreds of historic photographs covering a period of 160 years and selected from the vast archive of the Wellcome Collection. Photographs that everyone can fully appreciate and enjoy since they not only tell a pictorial history of the life of Henry Wellcome but because each of them is a surprisingly captivating window into the Victorian and Edwardian age.

Each chapter describes a period and an adventure in Henry Wellcome's life: his childhood in the Great Plains area of Native America ("The idyllic landscape into which the Wellcome family had migrated in 1861 was indeed as bountiful as Dr J.W.B. Wellcome had described (...). The "backwoods" surrounding the small towns provided the raw material for building and the soil was fertile for farming"); his studies and his pharmaceutical practice in New York which grew along with the development of the pharmaceutical industry; his research expedition to South America (Ecuador and Peru) "on the hurricane deck of a mule" from where he reported with great concern about the sustainability

of the Cinchona bark harvesting (Cinchona barks were used for the production of quinine) and with a keen eye on the medicinal uses of natural plants; his first experience as a businessman through the Burroughs Wellcome & Co partnership in pharmaceutical preparations (the company's participation in the International Medical and Sanitary Exhibitions in London 1881 and in the World's Colombian Exposition in Chicago 1893, which marked the 400th anniversary of the discovery of the New World, are also reported); his relations with the adventures of the famous explorers of those times "who would not leave base camp without a custom designed Burroughs Wellcome tabloid medicine kit" which served as an emergency first-aid kit (we can see photographs of the medicine chests and cases used in the British Antarctic expedition and in the first transatlantic flights).

In the Chapter "Empires and the Sudan" describing the company's pioneering work in the field of tropical medicine, we see how Wellcome's humanitarian attitude emerges from his meaningful work for the benefit of local populations in the fight against poverty and malaria. Archaeological and excavations projects in Sudan provided work for the natives (and also gave him the opportunity to create a remarkable collection of historical artifacts) while the Wellcome Bureau of Scientific Research worked on the enforcement of sanitation and antimalarial measures in the field of research, particularly with the work of Andrew Balfour (who will later become Director of the London School of Hygiene and Tropical Medicine, "Balfour of Khartum ... man of thousands friends" as in *BMJ* Obituary, 7 February 1931).

I prefer to leave the discovery of the last, most interesting chapters to those who decide to read this volume to satisfy their curiosity in the evolution of the Company, from its initial identity through the terrible years of the Great War, towards the new frontiers of science and finally to the Wellcome's Legacy and the Work of the Trust: "for the advancement of medical and scientific research to improve mankind's wellbeing" – as reported in Wellcome's will, read to Henry Dale (Nobel Prize in 1936) who will chair the Wellcome Trust for many years to come.

The Authors J.A. Flannery and K.M. Smith have managed to produce a vividly written book, enjoyable to read and to browse through with its high-quality historic colour photographs (some of which had never been published before) collected in an elegant hard cover edition (22.5 x 28.8 cm) and aimed at a wide audience of readers.

A book to keep in your bookshelf or library to remember one of those philanthropists of the last century who left behind them great institutions contributing to promote the well-being of humanity: Alfred Nobel established the Nobel Prizes, David Lubin founded the International Institute of Agriculture from which FAO was born, John D. Rockefeller founded the Rockefeller Foundation which financed the building of this same Istituto Superiore di Sanità from which this book review is published, just to name a few. Henry Wellcome is part of this remarkable list, like the others he believed it was necessary to “*Make no small plans for they have no power to stir in the blood of man* (Daniel Hudson Burnham, 1846-1912)” as quoted in the first chapter’s heading.

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**LA DIETA SI FA
CONTANDO I PASSI**
Eugenio del Toma

Roma: Il Pensiero Scientifico
Editore; 2011
194 p. 2. ed.
ISBN 978 88 490 0391 8
€ 16,00.
[Diet by counting steps]

Overweight and obesity represent a major health problem worldwide. According to the World Health Organization, in 2008 there were 1.5 billion adults, 20 and older, overweight, and of these, over 200 million men and nearly 300 million women were obese. As far as the pediatric population is concerned, nearly 43 million children under the age of five were overweight in 2010. These two conditions and their life-threatening complications can be prevented by means of a healthy life style, such as a balanced diet and an adequate physical activity.

In the present book, the author describes the evidence-based facts that drive the healthy life styles, offering easy solutions to follow a healthy diet and an effective physical activity, compatible with the tight schedule of nowadays-daily life. He deals with very practical aspects of the daily diet, such as the nutritional value of the fruit “to drink” as juices or soft drinks respect to the fruit “to eat” or the seasonal availability of fresh fruits and vegetable. The physical activity is also treated considering practical aspects, such as the daily number of paces to burn calories in excess or the preferable activity to loose weight. All the informa-

tion provided in the book are up-to-date and summarized and explained with simple tables and figures. The book is completed with appendixes about how to calculate the BMI and the waist circumference, some dietetic schemes and the sodium content of the different food, and finally the caloric expenditure of the physical activities.

Although the book is mainly addressed to the general public, it might represent an interesting reading for the health operator to better address habits and lifestyles of the patients.

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IL CONFINE SUPERABILE
Animali e qualità della vita
Gabriele Bono,
Barbara de Mori

Roma: Carocci Editore;
2011. 221 p.
ISBN: 9788843050352
€ 23,50.
[The crossable boundary.
Animals and quality of life]

Animals are ever more present in our lives. Over the last forty to fifty years human-animal relationship has changed dramatically increasing the need for a substantial revision of its ethical and legislative foundations. In particular, the growing number of pet animals present in our lives is engendering a new conscience of their needs and suffering. Such awareness also extends to livestock and to those animals used for research purposes and a growing body of ethological data, particularly in the field of animal cognition, are offering new insights for a prolific discussion on ethics and animal rights.

The authors are Gabriele Bono, Professor of Physiology and Veterinary Ethology and Barbara de Mori, Professor of Veterinary Bioethics at the University of Padova. The authors approach the topic from their different and complementary perspectives: a more scientific standpoint based on the first author’s deep knowledge of animal physiology and behavior, and a more historical approach, that reveals the profound competence of Barbara de Mori in presenting a critical analysis of the ethical issues implicated in our relationship with animals.

The boundary we should cross (as stated in the title) is the one which, so far, has divided humans from other animals, that is the fine line between our well being and their welfare. The assessment of the degree of welfare

in animals has been based, historically, on standardized measurements of functional and behavioral parameters, with an emphasis on protection and prevention of illness and suffering, and on the satisfaction of basic needs. Nowadays, the widely accepted notion that animals have the capacity to experience subjective states, such as pleasure and satisfaction, has made previous approaches outdated and has spurred researchers to develop more effective tools to understand and manage animal life under this new light.

The Introduction and Section I allow the authors to provide a complete and fascinating overview of the problem of animal suffering and animal exploitation, before reaching the core topic of the book. This has to do with the “translation” of the concept of quality of life (which refers to the subjective and individual dimension of well-being) from the human to the non human domain. With their penetrating and thought-provoking style, the authors track the evolving ideas on animal welfare, placing modern-day welfare issues within their historical framework and forcing the reader to confront the moral contradictions inherent in the treatment we reserve to different animals (some of them elevated to the status of social companions, others farmed for food production and excluded from moral concerns). Citing the most recent developments on our understanding of animal behavior and cognition, these pages focus on the hot topic debate of animal sentience, consciousness and personality, highlighting some intriguing issues that undermine the traditional distinction between human and non-human.

The authors exhort scientists, particularly ethologists and neuroscientists, to develop valid methods to assess, together with functional responses, animals’ subjective states, in order to characterize the level and quality of emotional satisfaction from the “animal point of view”. The refinement of our ability to read animal behavior will allow us to identify animals’ needs and preferences, with the aim to guarantee the fulfillment of their expectations.

In search for a theoretical approach to the problem of animal consciousness, the authors dedicate to these aspects Section II, a stimulating reading that continuously leads the readers to widen the borders of their ethical concerns, giving the animals an “intrinsic value”, without falling into the temptation of anthropomorphism. This and all other Sections are enriched by selected references which will allow the reader to further their knowledge on specific issues.

This well-written and updated book enters into the historical debate by covering the major topics related to animal welfare and the human-animal bond, thus providing an essential resource for students and researchers in animal and veterinary sciences and in all those interested in bioethical issues. Nonetheless, being so clear and easy to read, it could be a very fascinating reading for anyone interested in these topics.

In conclusion, this book represents an interesting contribution to the contemporary ethical debate, ultimately leading the reader to overcome the traditional

approach of animal welfare and to look at the more comprehensive concept of quality of (animal) life.

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IL MIRACOLO SCIPPATO
Le quattro occasioni mancate della scienza italiana negli anni sessanta

Marco Pivato
Roma: Donzelli; 2011.
197 p.
ISBN 978-88-6036-542-2.
€ 18,00.

[The stolen miracle. The four missed opportunities of the Italian science in the sixties]

This book tells clearly a painful Italian story on the basis of an extensive documentation; that is, it shows the ways and means by which a series of promising initiatives aimed at a research-based development of the country were stifled, resulting in a development without research and ending up in stagnation. This is a significant part of the history of our land which has for long produced many fertile brains, in great part bound, however, to bear fruit only after emigration; but still capable, even when stoically resisting in their native country, to achieve the highest level of scientific productivity, as shown by several national and international recent surveys.

The author illustrates the rise and fall of four important initiatives started after World War II and grown up in the fifties: (i) electronics and informatics in Adriano Olivetti’s firm, developed by the team conducted by the brilliant Italo-Chinese Mario Tchou (both died in 1960, Olivetti of a heart attack and Tchou in a crash of his car with a truck, suspected of not being an accident); (ii) the ENI (the Italian agency for oil and its derivatives) of Enrico Mattei, who died in a crash of his sabotaged airplane in 1962 (possible instigators, however, were so numerous that the case has not been solved in 50 years); (iii) the CNEN (Italian National Committee for Nuclear Energy) of Felice Ippolito, a nuisance to both the newborn ENEL (the Italian nationalized agency for electrical energy) and to the US monopoly of nuclear energy; and last but not least, (iv) the laboratories headed by the Nobel laureates Daniel Bovet and Ernst Boris Chain (including a large penicillin factory) in the ISS (Italian National Institute of Health) directed by Domenico Marotta, which

were a challenge to the interests of pharmaceutical companies.

These initiatives were viciously attacked and maimed by a coalition of interested parties so heterogeneous that Pivato, abiding by a well-known statistical rule of thumb – “an interaction is an interaction” – avoids to establish a hierarchy between the interacting negative forces: the short-sightedness not only of several politicians and administrators, but also of quite a few scientists of the traditional archaic lobbies as well as most entrepreneurs (even today, the low level of financing of Italian research is to a large extent due to the absenteeism of private firms); the interest of foreign parties to prevent a research-based development which could have allowed Italy to compete for one of the leading technical-scientific and economic positions; hence the preoccupation that the Italian left – the strongest one in Europe – could have exploited such a leadership in favour of the Soviet block; and so on and so forth.

Several of the factors just mentioned were represented in the role of Giuseppe Saragat, the politician who led the so-called “1947 split of Palazzo Barberini”, founding the Social-democrat party which weakened the socialist component of the left – an event notoriously agreeable to, and funded by, the US, at a time when the cold war started to be escalated. Leading the charge against Ippolito, Saragat declared that the creation of a nuclear industry in order to produce electrical energy, rather than for military purposes, with electricity as a secondary spin-off, would be tantamount “to building a sawmill exclusively to produce sawdust”. (Later on, as President of the Italian Republic, the man would give an indirect sign of repentance for his earlier conduct, granting pardon to Ippolito who was still in jail after a heavy sentence; see below).

The devil, as is well known, is in the details: and Pivato uses his extensive experience as a journalist to include in his fascinating account a host of horrendous details from a wide variety of different sources. The Olivetti firm, for example, working hard in several different and complementary areas – electronics, informatics, “architecture” and design of the products – had succeeded in creating the first user-friendly desktop personal computer, the “Programma 101”; and this, at a time when everybody – including the IBM technical directors and managers – was ridiculing any working hypothesis other than the further evolution of the large computer monsters, which were very costly and required a sophisticated mastering of complex programming languages. (In fact, the 101 was on the market about 10 years before Steve Job’s first desktop machine and had considerable success in many different countries, including the US). But when Olivetti met some financial trouble after Adriano’s death, due also to its mistakes, like the take-over of Underwood, everybody feigned to ignore some hard facts; e.g., (i) that at that time, success in the electronics-in-

formatics sector required huge injections of capital without short-term returns, and (ii) that the leading countries, particularly the US, provided such help to private firms mainly through their billionaire military and space orders. In Italy, viceversa, Olivetti was soon subjected to control by a task force made up mainly of its competitors for financial resources. For example, an influential member of the *ad hoc* committee, Vittorio Valletta – the Fiat manager for many years, at the time when the son of the founder was already dead and the great-grandchild Gianni Agnelli still too young and inexperienced to conduct the firm – after obtaining huge amounts of money both from Marshall plan funds and from the Italian treasury, stated that “electronics at Olivetti is a mole that must be extirpated”.

Ippolito’s case is a more intricate one. In fact, the man was a rather flamboyant character who did not hesitate to interweave the management short-cuts aimed at securing the survival of CNEN with those serving the promotion of his personal prestige (like the illegal use of CNEN *Campagnola’s* – the Fiat Jeeps – to add glamour to his holidays with the Cortina jet set). Perhaps more importantly, since that time the opinions on the validity of the nuclear approach to energy production have become more and more conflicting with each other; therefore, it is difficult to figure out what might have happened if Ippolito’s CNEN had not been so drastically penalized, and subsequently redirected under the new ENEA label (National Agency for Alternative Energies). But, the very way in which this affair was conducted still looks quite unpleasant after 50 years, including the judiciary manipulations which sent Ippolito to jail for a long time, until the aforementioned “gracious” gesture of one of his more ruthless persecutors.

Finally, the case of more direct interest to the institution which operates this journal, the Marotta-ISS case: a case marked by a series of vicious attacks. For example, Livio Zanetti wrote in the widely read center-left weekly “L’Espresso” that Marotta had tended much more his personal, rather than the Institute’s, reputation and fame; that the ISS was conceived to serve as Marotta’s “Marotteo” [*sic*]; that the man – a rare example of personal discretion and dignity – liked to wear “a tailcoat a bit too large... like that of certain South-American cocoa kings”. But the bitterest part of Pivato’s analysis is the one that shows the oecumenical character of the attacks on Marotta and the ISS. The political extreme right wing produced slanderous articles in the magazine “Il Borghese” (“The red [i.e., communist, soviet] Institute of Mrs. Filomena [Bovet’s wife and highly qualified coworker]”, and other similar ones); these were aimed at defaming the Bovet’s, who were prestigious and faithful supporters and friends of Marotta. On the opposite side, harsh criticisms to the Institute’s management procedures came from the Communist party, its daily “L’Unità” and its affiliated evening daily “Paese Sera”. The scope was

to damage the Christian-democrat party of which the Health secretary Angelo Raffaele Iervolino was an important leading member. In fact, in a preliminary inquiry Iervolino had acknowledged that something had gone wrong under Marotta's direction; however, but this had to be discounted, in the face of the absurd complexity of State regulations, which made it otherwise impossible to run a public research institution.

But what was wrong? Undoubtedly, Marotta made recourse to some administrative and financial alchemies in order to support research and other activities which could otherwise be stifled by the innumerable Catch 22's of the administrative laws and by-laws. But the first heavy sentence – later cancelled by the Court of Appeal – was a clear indicator of a firm intention to devalue and stop the work Marotta had been promoting for many years. A parallel conundrum is why did the action against Marotta start the year *after* he retired in 1961, and reached the courts only after two more years, in 1964. This was likely due *in primis* to the fact that his foes inside and outside the ISS expected that one of them would be nominated director. This did not happen, since the Government chose a powerful and competent academic with good

connections with the Christian-democrat party, the pharmaceutical chemist Giordano Giacomello; and Giacomello acted in a substantially competent and correct way, thereby not fulfilling the expectations that Marotta's heritage – particularly the laboratories headed by Bovet and Chain – would be torn to pieces in favour of other sectors. Not a long time afterwards, "evidence" was produced that the new director was also responsible for some formally illegal action, and subsequently indicted and convicted.

From this point on, the institute went through a long period of death throes; Bovet ran for a position in one of the smallest Italian universities, Chain took a chair at the Imperial College in London, and most other sectors also suffered because of the hostile climate which had been created. But here we must stop, since the later events and the recovery of ISS, which started after considerable turmoil resulting in an *ad hoc* 1973 law, and turned into robust growth after the 1978 National Health Service law, are not part of the book under review.

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