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# BOOK REVIEWS, NOTES AND COMMENTS

Edited by **Federica Napolitani Cheyne** 



## LA SALUTE DISUGUALE La sfida di un mondo ingiusto

Michael Marmot.
Roma: II Pensiero Scientifico
Editore; 2016.
233 p.
ISBN 978-88-490-0565-3.
€ 32.00.

[The health gap: The challenge of an unequal world]

Michael Marmot's book the *Health gap: The challenge* of an unequal world, first published in Great Britain in 2015, was recently translated in Italian by a team of researchers coordinated by Giuseppe Traversa and Simona Giampaoli from the Italian National Institute of Health (*La salute disuguale – La sfida di un mondo ingiusto*, Il Pensiero Scientifico, 2016).

Michael Marmot's research activity is devoted to explain why and how social injustice can negatively affect our health. The evidence he provides shows that dramatic differences in health are not a simple matter of rich and poor; poverty alone doesn't drive ill health, but inequality does. In every country, people at relative social disadvantage suffer health harms and shorter lives. Within countries, the higher the social status of individuals, the better their health. Most importantly, Sir Michael Marmot also offers the recipe for change to improve social justice. The book contains a "political" interpretation of the inequality, claiming the rate of illness of a society as a consequence of its operation.

A key word present all over the book is "gradient": a health gradient acts on the whole society at different levels. Not only people with lower socio-economic status have worse health outcomes than other people, but health outcomes become worse – gradually – starting from the highest level (around 1% of the population) and descending. Yes, we all are part of the social gradient in health; also the upper and the middle classes are not immune.

The exposure to different socioeconomic factors (positive and negative) since the childhood will then give rise to cumulative effects on health during the adulthood. The collected data clearly show that social conditions influencing parenting affect children's ability to reach their potential; the more deprived the family, the worst the scores on cognitive, social and behavioural development of the children. Furthermore, maternal depression is more frequent among the poor, leading to less reading, encouragement and social interaction at the detriment of the infant mind.

The area of residence itself is taken as a source of health inequality. Researchers taking subway rides (from more affluent to deprived areas) in various cities, show how life expectancy drops a year for each stop. A boy living in the poorest part of Westminster (London) or Glasgow can expect to live 20 years less than a boy living in the richest part. A health gradient persists even more within neighborhood micro-areas.

Education, employment and sufficient income are other potential sources of inequality where the health gradient acts. Of "couple households" that were below the minimum income standard in 2013, only 19% had no one working whereas the remaining 81% of households with low income had at least one adult working. Jobs that combine high demand and much effort with little reward, increase our risk of heart disease and mental illness.

Unemployment has been linked with an increased risk of a premature death. There would be about 202000 fewer premature deaths each year if everyone in Britain had the low level of mortality of those with university education (which was less than 10% of the population when the people dying today were of student age). That is about 500 deaths a day.

Mental health seems to be strongly implicated in social disadvantages. A study compared mortality in Glasgow with that in Liverpool and Manchester. The causes of death with the biggest relative excess in Glasgow were drug-related poisonings, alcohol-associated deaths, suicide, and other external causes of death. These are all psychosocial in origin.

The Health Gap shows that we know what to do to make inequalities smaller. There is convincing evidence for a radical change to improve levels of health for individuals and indeed society, tearing down identified sources of societal imbalance. Empowerment is the key to reducing health inequality and thereby improving the health of everyone. It is crucial creating the conditions for people to have control over their lives, to have the power to live as they want. Yes, but how?

A strong agreement is reached on providing "good quality" public education, especially during child-hood, and employment policies which can guarantee sufficient income. In developed countries minimum standard includes food, clothes and shelter: it is about having what you need in order to enjoy the opportunities and choices necessary to participate in society. Of course, the role and the presence of a robust social security (e.g. the NHS) are taken for granted.

Marmot's book overcomes old societal division into two classes – the rich and the poor – and paves the way for a levelled up society. This implies that interventions suggested to correct inequalities should not concentrate only on the population living in a worse condition, but they must be extended proportionally to the whole population strata on the basis of a degree of disadvantage (*Proportionate universalism*).

Considering the themes together with the evidence-based intervention proposed, it becomes natural that a "call for action" enters into the political domain. Good to know that the European Commission also asked Marmot to review social determinants and health inequalities in the EU. The review shows that all member states have social and economic inequalities as well as social gradients in health, but the magnitude varies.

For example, average life expectancy is lower in the countries of central and eastern Europe than in Sweden, Italy, and Norway. In other words, we must add to our concern health inequalities between countries as well as those within countries. Moreover, the gradient is steeper in the east than in the west. Evidence from across Europe shows that countries that spend more generously on benefits have better health and narrower health inequalities. Interestingly, countries with larger benefits also have better employment conditions.

The 1998 Nobel Prize in Economics Amartya Sen stated that: "Michael Marmot's path-breaking work on the social determinants of health has made all of us rethink healthcare and social medicine. This is a lesson of tremendous practical importance to the world".

Francesco Trotta
Dipartimento di Epidemiologia, Servizio Sanitario
Regionale-Lazio, Rome, Italy
f.trotta@deplazio.it
Francesca Menniti-Ippolito
Istituto Superiore di Sanità, Rome, Italy
francesca.menniti@iss.it

OLTRE GLI STEREOTIPI
DI GENERE
VERSO NUOVE RELAZIONI
DI DIAGNOSI E CURA
Quaderno a uso
dei professionisti sanitari
Fulvia Signani
Ferrara: Assessorato alle
Pari Opportunità del
Comune di Ferrara; 2016.

[Beyond gender stereotypes]

In the last few years, we have been witnessing a surge of studies and policies aimed at incorporating "gender" as an important variable in medicine and, ultimately, in society. Gender analysis is not novel: researchers, especially epidemiologists, have long being considering data that uncover differences in gender roles, needs, activities and opportunities.

While the importance of gender was emphasized on the wave of the feminist movement, it is now recognized that it has important implications in the medical field, both for women and for men. More in detail, while "sex" refers to chromosomal complement, reproductive organs or specific hormones related to sexual reproduction, "gender" refers to sociocultural norms, expectations, and practices ascribed to males and females. Gendered factors, such as women's propensity to take multiple pharmaceuticals simultaneously, compared with men, and their greater likelihood to see medical doctors, play a well-documented role in sex differences in health outcomes. A gender-specific medicine has indeed, as objective, the study of the biological and sociocultural differences between men and women and to understand the influence on health and disease. For example, both men and women with acute coronary syndrome often present with chest pain but their descriptions of that specific pain and associated symptoms may differ, which demonstrates sex differences in the pathophysiology of this syndrome and gender variations in reporting. Both variables must be considered in research as well as in medical education and practice.

Gendered innovations are currently a "work in progress" in biomedicine: incorporating gender as a main concept in research and practice, in addition to race, ethnicity and age, should ultimately lead to a reduction in discrimination and stigma. It is in this highly innovative context that the publication Oltre gli stereotipi di genere (Beyond gender stereotypes) can be placed. It mainly aims at expanding the debate on gender medicine, adding important elements such as "gender-identity" and "sexual orientation" and it aims to be a reference for all those practitioners and health professionals that are involved in patient care, intended as "caring" and not just "taking care", and thus interested in creating a relationship with the subject, considered as a unique entity, with biological and psychological needs.

In the opening pages the booklet starts citing article 21.1 of the EU Charter of Fundamental Rights which states that: "Any discrimination based on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation shall be prohibited". We are now well aware that gender cannot be considered alone, but as a construct that interacts with race, ethnicity and other social stratifications, including sexual orientation, often resulting in unequal benefits among various social groups, and between women and men. This publication does a nice job to clarify basic notions, such as sex, gender, sexual orientation, sexual and gender identity, with specific reference to when and how these concepts can inform medical practice: it is only through knowledge that we can avoid discriminations and enforce equal rights for everybody. The relationship between patients and health professionals, especially at critical life stages, such as those when each one's sexual identity is built, can, in fact, have enduring consequences on the individual's mental and physical wellbeing. In this context it is crucial that physicians and health professionals receive a specific education allowing them to manage cultural, religious, social, gender, sex and sexual-orientation-related differences. In addition, it is emphasized that a specific knowledge on the issues faced by *e.g.* individuals and families made up of people of the same sex, as well as their specific rights, should be part of the basic competences of healthcare providers.

It is important to underline that negative attitudes present in a community can seriously compromise the well being of individuals that are discriminated against. This can ultimately result in the fear to explicitly declare one's own sexual orientation, potentially leading to a phenomenon of self-exclusion from health services, with reduced access to preventive care and with an inflated use of emergency medical services. Individuals who exclude themselves from the more traditional medical paths make use of self-medication, exploiting web resources or asking for advice through pharmacies, friends and non-specialized journals, ultimately receiving a less effective care. Failure to disclose one's own sexual orientation and sexual identity can result in a greater difficulty communicating effectively a medical condition with health personnel, leading to less appropriate health care. Ultimately, the most disturbing aspect in the relationship between the physician and the patient relies in the ambiguity and the unspoken. The last section of the booklet offers some important advice on the most appropriate behaviour health professionals should put in place to take into consideration genderrelated issues and effective means to overcome communication barriers.

This novel approach to medicine is perfectly in line with the new concept of "precision medicine" which aims at highlighting differences between men and women able to influence health or disease. The study of gender, and its many different implications related to sexual orientation, has as its purpose the appropriateness both of prevention and diagnosis in all those common diseases, characterized by important differences not only in the incidence but also in symptoms, prognosis and response to treatment. Increased patient attention can reorient health interventions, help building new genderoriented education and direct future research. This can be especially important in the case of the study of health determinants that depend on lifestyles such as alcohol, smoking, physical activity, diet and body weight as they reflect individual choices, influenced by the socio-economic and environmental context. Ultimately, adding a gender dimension in health can ameliorate effectiveness and efficiency of the healthcare system and reduce stigma and discrimination for the benefit of society as a whole.

> Francesca Cirulli Istituto Superiore di Sanità, Rome, Italy francesca.cirulli@iss.it



### LA SANITÀ PUBBLICA ITALIANA NEGLI ANNI A CAVALLO DELLA PRIMA GUERRA MONDIALE

Gianfranco Donelli, Valeria Di Carlo. Roma: Armando Editore; 2016. 560 p. ISBN 978-88-6992-049-3. € 35.00.

[Public health in Italy in the years before, during and after the First World War]

The book consists of three substantial chapters, which could actually represent each one a monograph of its own. The first is about the public health conditions in the Kingdom of Italy, in the years preceding the war; the second about the activities of military and civilian health institutions during the conflict; the third about the restructuring of International health organizations. The authors devote specific attention to the impact of this evolution in different national contexts, and to the role of Italy, not to mention the tragic event of the so-called "Spanish" flu epidemic. "In a few months – writes in his introduction Giorgio Cosmacini – it reaped among the nations, weakened by three years of deprivation, with a death toll of 600 000 victims, a number almost equal to that of the victims exacted in Italy by the war that just ended". The "Spanish" flu remained deeply rooted in the popular memory of at least three successive generations.

Cosmacini also reminds the reader that the war of 1914-1918, that historians have qualified as the First "World War", marked "a before and after in the relationship between war and medicine. It is recognized, from this point of view, as an important historical caesura". One would like to add, not only for medicine. "Industrialization and economic mobilization are the coordinates – continues Cosmacini – within which is inscribed the concept of 'total war', extending to most areas of the planet, in an early globalization process".

The authors start their narrative from the organization of public health in the Giolitti years, with forays into Crispi age and in the post-unification years. They recall the successes of the Italian health legislation and organization in considerably reducing the gap between Italy and the major European countries in terms of mortality and morbidity, and bring out the main lines of action pursued by health policy and by the administration mandated to implement it, as well as the critical issues and operational difficulties.

At this stage, hygiene and social medicine issues are in the foreground. These are tightly woven to nutrition and food supply problems and the fight against infectious diseases. They also connect to the birth of the earlier Italian pharmaceutical companies, and to the research and development of more effective therapeutic and prophylactic resources for diseases of greater social impact: tuberculosis, malaria, venereal diseases,

particularly syphilis, hookworm (a pathology especially relevant in such work environments as the excavation of galleries and tunnels, and in mines).

Health institutions, and the people working within them, are committed to controlling the quality of water and food, attempting to intervene on the distribution of both, as well as against food fraud; to studying chronic food shortage, critically affecting the living conditions of the poorer urban and rural classes; to developing technical measures and legislation to improve the public health. The authors reconstruct their work, their efforts and their debates, in a way that gets the reader's attention, and gives him a lot to think about those classes, at that time the majority of the Italian population, whose historical memory can usually hardly arrive at "piercing" through the pages of history books.

The second part of the volume focuses on public health problems during the war, with regard to both the army and the civilian population. The reading of contemporary documentation and literature gives a vivid idea of the terrible conditions of life in the trenches, and of the measure of the effort put in place by the collaboration between military and civilian health authorities. It also tells the generally unknown history of the help given by the American Red Cross and the Rockefeller Foundation to the Italian counterparts, already at the earlier stages of the war. This laid the foundation of a relationship that would offer to Italy, in the years between the two world wars, extraordinary opportunities for the improvement of its health services, especially in the fight against malaria.

Some unexpected effects of mass vaccinations and food rations in the army had great importance for the advancement of scientific knowledge and the improvement of public health in the years after the conflict. As an example, army vaccinations increased in male population the immunity to some diseases that were previously important causes of death: a statistical study of Giorgio Mortara, published in 1925 and widely quoted, shows a dramatic reduction in male mortality in comparison with women (in wartime!), lasting beyond 1920. In addition, experience and statistics favoured a considerable improvement in the preparation and the use of sera and vaccines.

The difficult situation of food supply, a real concern for Italy and allies, led to important results in the scientific study of nutrition, and in the search for substitutes that could replace traditional foods. As an example, the war encouraged researchers to address the problem of chronic malnutrition in large sections of the Italian population, and of excessive consumption of proteins in the upper classes, favouring a scientific approach to the improvement of eating habits. It is at this time that in the Allied countries (Britain, France and Italy) begins the production of new foods: margarine, soymilk, as well as the so-called "war bread" made by mixing wheat flour with flours from other grains, such as corn, barley, rice and oats, in addition to chocolate and coffee substitutes, which were specialties of the Italian food industry.

The third part of the book, finally, deals with the history of international cooperation in public health. Together with agriculture, this is a field where an open

contact was maintained not only between former allies. but also between former enemies. This way the foundation was laid of the future World Health Organization. In this, the major American philanthropies, such as the International Health Board of the Rockefeller Foundation, played a key role. Donelli and Di Carlo offer a detailed reconstruction of these events, which is one of the many reasons of interest, and certainly not the least, of this book. By actively involving in international health cooperation, Italy was able to seize also in this field the opportunities offered by the unprecedented international projection of US technical and scientific organizations, which were laying the foundations, as early as the end of World War I, for the American scientific leadership that would become definitely apparent after WW II.

> Giovanni Paoloni Sapienza Università di Roma, Rome, Italy giovanni.paoloni@uniroma1.it



AMMINISTRAZIONE
PUBBLICA:
DALL'EGOISMO
ALLA COMPETIZIONE
Manuale per una
sopravvivenza operosa
Fabrizio Tuzi.
Soveria Mannelli (CZ):
Rubettino Editore; 2016.
174 p.
ISBN 9788849845587.
€ 12,00.

[Public administration: from selfishness to competition]

The author, Fabrizio Tuzi, is a presently "senior technologist" at the Institute for the Study of Regionalism, Federalism and Self-Government of National Research Council of Italy (CNR). His research focuses on public administration (PA) issues, including civil servants assessment and manager-employee relationships as well as federalism/state and local government. He has held various management positions with CNR. He was, also, General Manager at CNR (2009-2012) and at Italian Space Agency (2013-2014).

The general concept behind this book is to describe, from the authorial personal experience working in PA, the various attitudes and behaviours, existing in varying degrees among different bureaucratic realities, which result in operational inefficiency.

Bureaucracy is the administrative system governing any large institution and arises in all professions: the military, university education, health care, police, judicial system, public security, etc. Within public services, the term "bureaucracy" has become synonymous with processes and systems that are unnecessarily burdensome. However, regulation and oversight are essential to good governance and accountability, and the availability of information about service quality and outcomes is vital to enabling choice and engaging and empowering service users.

Therefore, anyone interested in the functioning of PA departments should or could be interested in this book. This is the case especially, but not only, of organizations funded with public monies, where the budget is appropriated on a yearly lump sum basis. The author selected a few illustrative anecdotes, which, although analyzed from a particular point of view, are of general interest and cover a wide scope of issues, which almost anyone can relate to. So, reading this book is useful in order to understand why bureaucracy in several cases becomes excessive and undue and how to tackle such a burdensome attitude. The Author hopes to glean some insights proposing a set of general guidelines, a "survival guide", if you will, for both those who work in a research laboratory, in a ministry department as well as in a hospital, those who depend on its services (the so-called "stakeholders"). Here Tuzi intends the word "survival" in the sense of flourishing in the midst of daily challenges rather than merely "muddling through".

This book starting from the theory of Public Choice by James Buchanan and Gordon Tullock (J. Buchanan was an American economist known for his work on public choice theory (included in his most famous work "The Calculus of Consent: Logical Foundations of Constitutional Democracy", 1962, written in collaboration with Gordon Tullock, for which he received the Nobel Prize in 1986), analyzes the current recent past state of Italian bureaucracy, while suggesting a practical pathway towards "good administration". Following the Public Choice approach, the author confronts issues not always sufficiently considered in PA studies, including the self-interest of the civil servant and his/her ethical behaviour, the indifferent attitude of government officials in addressing citizen needs, the failure to use a cost-benefit approach to decision making, the importance of choosing an appropriate State organizational model (i.e. centralization vs. decentralization), and how to make self-interest compatible with public good in order to achieve better public services.

In the United States, where one of us (EA) has been working in Palo Alto and Seattle at different times between 1986 and 1993, the allocution "lost in (in)action" was overused in all cases when bureaucratic steps overpassed time lapses considered excessively long by the average scientist.

The basic idea is that PA consists of an assembly of individuals (civil servants) each pursuing his/her own interest, any of which is likely to conflict with the collective interest not rarely therefore producing strong and painful "social attrition". Moreover, the interests of these public officials often contrasts with those of politicians, who continue to draft new legislation, demanding civil servants meet additional requirements – many of which civil servants, understandably, don't care for due

to the fact that they are often too abstract, and, thus, virtually impossible to attain. Above all, the self-interest of politicians and public employees does not necessarily coincide with that of the citizens.

In recent years in Italy we have witnessed an impressive sequence of new legislation regarding the reorganization of PA, without considering the actual practicalities of its implementation. The author is clear: rules are necessary and must be followed, yet it is naïve to believe that the simple act of passing new legislation is sufficient to solve the vast, complex problem of efficiency and effectiveness within PA actions. Recently, a statement of Piercamillo Davigo (President of the Italian Association of Magistrates, Consiglio Superiore della Magistratura) on this issue was revealing: ".. in the past years we have written many regulations on public procurement, each with increasingly strict standards, however, the effect has been to discourage legitimate businesses rather than those who break the law...". The book consistently pushes politicians to shift their focus from the constant "wordsmithing" of legislative content toward meaningfully providing for their implementation.

According to this book, in recent years, Italy has also witnessed continuous pressure associated with the back and forth movement from political and economic decentralization to re-centralization within the centralized Italian state and regions. These swings call of cause, not all the perspectives illustrated in this nice and challenging book can be shared yet it fairly contributes to the contemporary debate at national and sovra-national levels. Have frustrated the reinforcement of suitable multilevel governance, and, consequently, the operations of the different departments of PA have been adversely affected. The political and economic functioning of a country depends on the consistency with which its institutions have been created "sculptured" and continuously re-shaped. The term "institutional complementarity" means that the institutions do not work well when compartmentalized, rather, their performance (good or bad) depends on their ability to cooperate in a coordinated way. It isn't possible to assess and rectify the quality of PA performance without taking into consideration the context in which it operates, which requires the consideration of other institutional factors, such as the role of the regions and local authorities within the national political system, the territorial organization of the central government, etc.

Over the last few years (Tuzi notices), we have seen the attempted implementation of numerous layers of disorganized processes, none of which have been completed. These include, fiscal federalism, spending review, the institution of standard costs, the regulation of public services, etc. Before tackling new programs within PA, politicians and bureaucrats must agree upon a definite target to move eventually toward in concert. For example, we have to define whether it is more effective that all public goods and services are supplied to the citizens by local authorities rather than central government. He argues that we should also decide to introduce elements of competition by introducing suitable norms of centralized control.

In conclusion, we must move from logic of emergen-

cy and political opportunity in a real system-based approach that, starting with a cost-benefit analysis, should aim at improving the public goods and services provided to citizens. The author proposes introducing competition into public institutions, such as comparing the behaviors of the different PA departments operating in the same field, in order to measure their efficiency and effectiveness, not in an absolute way but with reference to the "best-performing". This is the so-called "yardistick competition".

Another key theme of the book is the individual assessment of the civil servants, considered by Italian politicians as one of the possible solution for improving the efficiency and effectiveness of the PA, whereas other countries are going in opposite direction. General Electric (GS)'s case is a classic example. In 1981, GE first introduced the so-called "ranked and yanked" method of employee evaluation. Now GE – along with most of America's biggest companies - is changing its strategy because these individual employee assessments have not produced the hoped effect of improving company performance. They are moving toward a novel and original approach based on team building and the promotion of cooperative dynamics within groups. Referring to the theory of cooperative games, the author suggests to adopt consistent criteria of civil servant assessment that highlights the impact of the team rather than the individual performance when assessing PA departments. To achieve such a goal, incentives must be introduced based upon rules of equity where benefits are shared among employees in accordance with their attitude towards teamwork, following David Gauthier's theory of cooperative games.

The main suggestions emerging from this book are the following:

to politicians: that should consider abandoning their current cycle of attempting to improve PA through additional legislation and, instead, turn their focus to the implementation of the rules that already exist; at the same time, they should move beyond the paradigm of individual evaluation, because civil servants don't work in a vacuum, but rather as a team;

to civil servants: that should consider the motivating power of self-interest by managing their departments in ways that make the interests of civil servants compatible with the collective interest. Additionally, rather than burying their noses in the *minutia* of formal requirements, they should remember that the goal is always that of providing higher quality services to citizens, as such their management approach should be result-driven. They have to follow the spirit of the law rather than the letter of the law.

Finally, if for achieving a better PA, one should follow, according to Tuzi, Gordon Tullock's advice: The problem is to design an apparatus that leads bureaucrats in their own interest to serve the interests of the rest of us in the same way the baker is led by his own interest to serve the needs of the tailor."

Stella Falsini and Enrico Alleva Istituto Superiore di Sanità, Rome, Italy enrico.alleva@iss.it



### GALENO NUOVI SCRITTI AUTOBIOGRAFICI

Introduzione, traduzione e commento di Mario Vegetti. Roma: Carocci editore; 2013. 303 p. ISBN 978-88-430-6765-7. € 19.00.

[Galen new autobiographical writings]

In our present, explosive Third Millennium, in the general chaotic context in which "modern & modernised" biomedicine proceeds, it may be quite useful to scrutinize ancient and/or very old text-books and notes: it is in fact from an accurate analysis of our European socio-cultural roots that we can possibly interpret our present times and foresee our incoming future. Especially, we do believe, when epochal strategically steps and sociocultural choices need to be effectively faced by a composite variety of national and/or international stakeholders.

Galen is one of the fathers of our contemporary biomedicine. He was defined "first among physicians, unique among philosophers". Detractors called him *logiatros*, "doctor in words" or "theoretical physician".

His dispute and reasoning in the "Contro Lykos", the attack to Ippocrates himself (p. 193) or the term "major" instead that meaning "most violent" more in the sense "enhanced". What is a major burden or a major disease today? And which is the present and post scale of values, of ethical entities, but also, increasingly, socio-economical priorities? For sure for many of us the point about texts on Arguments in disfavour of "empirical physicians" (around p. 125) sounds of lacerating contemporaneity

The prestigious and sophisticated author, Mario Vegetti, emeritus professor of history of ancient philosophy at Pavia University, collected, selected, partially translated, consistent parts of the original Greek texts reported in contemporary Hellenic alphabet. He really arranged an exhaustive and complete collection of the most meaningful reasoning and reflections by Galen.

A special issue regards the beginning of pharmacology as a distinct discipline. What is reported on page 105 really represents an historical step. In fact it is through anatomical observations, that the action on separated systems becomes defined targets for any single chemical remediation.

Probably the most important part of this rather unique book is represented by Vegetti's introduction (which is a long essay), signed by one of the most brilliant Italian intellectuals. Each of the unlisted four sub-chapters, under the general title "In defence of the ancient rationality" deserves special mention: Galen's

project, the paragraph "Galen as an exception, his peculiar biography" (in-between being philosopher and an Hippocratic doctor), the very well written: "The philosophical coordinators" and "Galen's project to refund medicine". Finally "The destiny of Galen's project" concludes such a dense dissertation.

The most relevant part, however, regards the nomenclature of Galen's writings, here usefully reported with most of their ancient-Greek original propositions. This important book deserves at least an English translation, for its potential relevance for contemporary biomedicine.

> Giulia Montebovi and Enrico Alleva Istituto Superiore di Sanità, Rome, Italy enrico.alleva@iss.it



#### VITA DA CAVALLI

Maria Franchini, Marthe Kiley-Worthington. Rosia di Sovicille (SI): Equitare Ed; 2013. 159 p. ISBN 978-88-88266-94-7. € 16,50.

[Life as a horse]

Zooanthropology emerged as a discipline studying relationships between humans and animals. In practice, it is limited to vertebrates and in particular to mammals and a few bird taxonomic groups, such as *Corvidae* and *Psittaciformes* (parrots). However some zooanthropological issues may be also envisioned in reptiles [1].

This journal regularly reviews books on bioethics of animal experimentation, a major issue in contemporary biomedicine [2-4]. Another delicate and critical point, however, regards zooanthropological relationships between man and farm animals [5], these latters often profoundly affecting animal welfare and therefore resulting in impaired reproductive success or neonatal death, in turn reducing economic revenues.

The horse indeed represents a special case [6], since its domestication resulted in a major co-evolutionary "jump" of the human populations exploiting such an important resource in terms of mobility and transportation, along with relevant yet less unique uses for their meat, milk, and coats.

The history of the relationship between men and horses has very ancient roots and equines can be considered the animals which most influenced the evolutive story of humanity. They have always been used by humans and domesticated for many purposes, like transport and war; horse riding has now become a common sport activity.

The main theme of this little book is the question: do we have the right to use equines? Maria Franchini (a translator and journalist) here tried to analyze this issue, on the bases of the studies of Marthe Kiley-Worthington, an expert of equine behaviour who has been focusing her research on horse behaviour for a long period, mainly dealing with ethical and management aspects.

According to her views, it is of primary importance to understand the fundamental needs of equines, not only the physical, but also the emotional and mental ones, which are all deeply analyzed in this book, putting the accent on their "intelligence" (cognitive sophistication), their way to communicate and the delicate concept of animal awareness. This remains a subtle and yet unsolved problem in zooanthropology as well as, more in general, in veterinary and ethological disciplines. In fact, "sensient" or aware animals need to be treated accordingly by humans.

The book clearly states that an even rudimentary knowledge of these elements is unavoidable to get to the heart of the question, if the use of horses causes the animals to suffer and if it is therefore "morally correct". Too often the debate about "duties" of humans towards animals has not been correctly faced by horse owners and other horse users and exploiters, without really considering the effects of domestication. Equines are endowed by sophisticated memory performances, a by a complex emotional reaction. This allows them to establish personalized relationships with their riders and to learn from them very quickly, a fact that, in case of incorrect management may cause behavioural problems to the animal. It is therefore fundamental for anyone involved with horses to understand their species-specific characteristics [7].

In some way, this book can represent a good help, it is not just a theoretical essay, but somehow a real practical guide which explains how to ensure a dignified life to horses in captivity, from weaning, training, life in stable, to retirement. Some parts seem indeed original. If we can measure distress in equines, can we also measure happiness or joy? Can we learn how to really manage a wellness condition in a horse? Authors describe the role of people getting in contact with equines, like the trainer, the veterinarian or the groom, discussing their involvement in horse welfare.

The main question that comes first to mind reading this book is: what is the condition for a correct relationship between persons and equines? Authors write "Symbiosis is the relationship in which both partners benefit one from another, the only way we can justify the work we ask them to do and the joy we get from them".

Overall, this is a summary book of a volume of general interest for equine handlers not so far available in Italian. Some aspects reveal a biased conception of horse "uniqueness", al least in terms of experimental approaches still lacking in the ethological literature. However, it raises some original questions about anthropocentric mainstream attitudes that can be usefully corrected. Horse behaviour may in fact represent

a lively subject for new research lines aimed at jointly understanding mechanisms and processes regulating their fixed or non-fixed action patterns and ameliorating their delicate emotional welfare.

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Adele Tuozzi Sapienza Università di Roma, Rome, Italy

Enrico Alleva Istituto Superiore di Sanità, Rome, Italy enrico.alleva@iss.it