

## **Dr. Golem – How to think about medicine**

*H. Collins; T. Pinch*

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*Michelangelo Trigueiro*

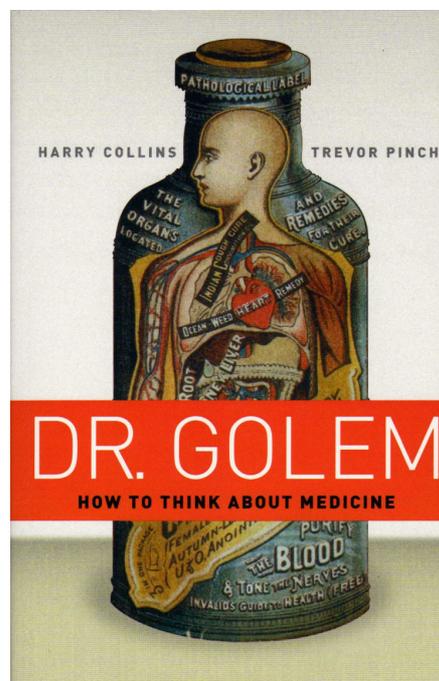
Department of Sociology, University of Brasília, Brasília, DF, Brazil  
michelangelo@unb.br

*Christiana Freitas*

Department of Sociology, University of Brasília, Brasília, DF, Brazil  
chfreitas@yahoo.com

The book *Dr. Golem: How to Think about Medicine*, written by Harry Collins and Trevor Pinch, is the third of a series that provides a thought-provoking and highly relevant examination of medicine and its possibilities, limits and challenges. The work begins by presenting a conflict that permeates its subsequent pages: medicine is at once a science and a source of immediate pain relief and a form of obtaining comfort during periods of suffering. These two characteristics frequently collide. There are various dimensions to this tension, urgency being the most significant. Medicine develops slowly, searching for advances over the long-term, while as a ‘source of relief’ it needs to produce practical results over a very short time span. The tension generated by these two characteristics unfolds into others, expressed in contemporary everyday practices: a tension that can be perceived between the interests of the individual versus those of the collective, between short-term decision making and the decisions that must be left for the long-term.

Despite the contemporary pertinence of the discussion raised in the book and its relevance to the institutions that deal with the problem of human health, we disagree that its target is primarily rich societies, as claimed on page 16: “That recognized, we have chosen to address people like ourselves – the rich inhabitants of the developed world.” In so doing, the authors fail to highlight one of the central problems of contemporary medicine, which concerns precisely the desired



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universalization and democratization of access to its main benefits. Moreover, since the text is very often evidently concerned to contrast conventional forms of treatment with those developed and used independently of the dominant academic and institutional circles by indigenous communities or by people without traditional medical training, it is strange that the so-called peripheral or poor countries could not have been 'fitted' into the work.

Taking the viewpoint of one of the most controversial debates in the Sociology of Science today, the book seeks to argue in favour of the idea that medical practices are constituted, like others, in social practices subject to human free will and constructed within wide-ranging networks of negotiations and extremely diverse conflicts. This controversy arises within the so-called 'Constructivist' tradition (Latour & Woolgar 1997; Knorr-Cetina 1981, 1982; Latour 1983, 1990, 1992, 2000; Latour & Strum 1986; Callon 1987, 1988, 1989, for example), which aims to overcome limitations present in the classical approaches to the Sociology of Science. For these authors, scientific facts are social constructions and must be examined 'symmetrically' or 'neutrally;' in other words, scientific facts should not be judged to be either more rational or less rational than other social facts. In this sense, there is no hierarchy between science and other forms of knowledge: all are human realizations that make sense within their own social contexts, which share the same logical and linguistic universe. On this point, the work has the merit of providing important empirical evidence in a socially important field, medicine, which end up reinforcing the aforementioned theses.

The book is divided into eight chapters, which, though independent, retain the main guiding thread of the constructivist argument by presenting symmetrically the middle-term horizon of the established tradition of medicine and the immediate interests of anyone with an illness or close to someone who is sick, who frequently turn to their own resources and knowledge or those accumulated in their individual histories without following the canons of 'big science.' The results of this analysis should be considered relevant not only by those reading the book from the viewpoint of the Sociology of Science but also by anyone directly involved in medicine, very often adverse to considering possibilities in this field that go beyond those established by conventional medical practices. Considering, as the authors demonstrate, that curing is not simply a physiological phenomenon but also strongly influenced by a psychological component, the book sends a clear message to the more traditional sectors of medicine that the patient's historical and cultural context must be included in the processes of diagnosis and treatment. It is worth recalling the analysis pursued by Callon (1987) – albeit examining an object very different to the present book – of the construction of the electric car in 1970s France, where he refers to the 'sociologist engineers' who had to take into account in their projects variables and aspects typically considered by sociological approaches, such as market trends, cultural preferences and consumer profiles.

The call to revise paradigms and highly reified practices and to explore other viewpoints beyond the disciplinary field is a valuable element of the book, reinforcing the argument in support of constructivist theses. Furthermore, the work presents a series of case studies that, taken in isolation, comprise a valid contribution to a deeper study of the relation between doctors and patients, not only for doctors themselves but the many individuals who work in other fields of knowledge such as the social sciences, history and psychology. The discussion developed over the course of the book also highlights the pertinence of examining legitimization in scientific-technological activity (Trigueiro 2000), demonstrating that much more is at stake than curing an illness, namely the person's right to decide on their own life, in the last instance – a sovereignty very often challenged by modern medical practice.

In highly schematic terms, the book *Dr. Golem: How to Think about Medicine* presents two central themes. The first relates to the tension between the individual and the collective. This conflict is carefully explored in the first chapter on the Hole in the Heart of Medicine: The Placebo Effect. The same theme is resumed at the end of the book in chapters 7 and 8 on AIDS and vaccination, respectively. The book's second core theme concerns the various forms of interacting with medicine.

The Placebo Effect, discussed in chapter 1, is present in every kind of trial in the medical field, representing a form of relieving pain through the administration of medicines that present no direct effect on human physiology. These are false drugs introduced as treatments that very often "cure just as effectively as real drugs." The expression 'body-mind interaction' is frequently used to explain the cures achieved with false drugs, but medicine has advanced little beyond this explanation. The conflict between medical legitimacy and common sense knowledge remains and is observable in various medical cases and areas. Chapter 7, on patients with AIDS, entitled 'The AIDS Activists,' demonstrates the effects that need, the fear of death and immediatism can have on the development of medical science. It is interesting to note the first central theme in chapter 7: the activists involved with AIDS subvert medical logic. They continually acquire new information about the disease, frequently influencing the directions taken by research in the area and transforming the way in which clinical trials are conducted. This means that an increasingly larger number of individuals, not necessarily *qualified* by the medical profession, are slowly acquiring a significant level of knowledge in the medical area.

Chapters 2 and 6, entitled 'Faking it for Real' and 'Defying Death,' respectively, also explore the tension between the individual and the collective. In chapter 2, the authors describe the success of 'bogus doctors' in the treatment of diseases. As observed with the placebo effect, medication does not always cure a health problem by itself. In other words, the relations between doctor and patient are extended to incorporate other individuals or groups as part of the process of deciding on appro-

appropriate medications and treatments. Less unilateral and more plural relations are observed. The relations now being transformed through patients' use of the internet represent, the authors suggest, a specific type of interaction: *interactional expertise*, where the patient's level of knowledge concerning the topic – or the disease they possess – is significantly high, enabling complex forms of interaction and allowing the patient access to a wider range of possibilities for making decisions.

Chapter 3, 'Faking it for Real,' explores the tensions between the authority of the medicine establishment and social participation, revealing the current context to be an environment of transformations in the relations established between doctors and patients, questioning the authority accumulated by doctors over decades and redefining what constitutes quality treatment for patients. Today we can observe a continual negotiation between doctor and patient where the patient is able to obtain a wide range of information that can allow a deeper and less submissive interaction with the 'body of expertise.'

Chapter 4, 'Alternative Medicine: The Cases of Vitamin C and Cancer,' describes an alternative treatment for cancer. In examining the topic, the authors demonstrate the range of choices open to patients at the moment of deciding which treatment to adopt. One of them is the 'choice between specialists.' Traditional Western medicine is faced today with both the existing solutions and a variety of alternatives. Individuals do not always choose an operation, preferring, for example, an Eastern form of treatment based on acupuncture. Nothing says that the choice of the latter will not work out. The success of a form of treatment ceases being anchored inevitably in the scientific truth of the medicine legitimized in the West by courses and 'qualifications.'

Another form of interaction between doctor and patient, described in chapter 5, 'Yuppie Flu, Fibromyalgia, and Other Contested Diseases,' is what the authors define as 'trying to become a scientist.' This type occurs when individuals combine to affirm the existence of a disease still not formally recognized by the medical establishment. This is what happened with fibromyalgia and other diseases. Generally these disturbances are identified by a set of symptoms that characterize a new syndrome in which the causes of the disease remain officially unknown: very often the disease is not represented by a stable set of symptoms that always emerge in all patients. The existence of a real disease may be questioned, as in the case of fibromyalgia (defined as a disease that causes excessive tiredness, depression and strong pains throughout the body). Are these symptoms merely signs of serious cases of fatigue and stress? The most interesting aspect, though, involves observing the organization of individuals and groups towards finding solutions for their health problems, rather than waiting passively for the medical profession to develop a cure. This marks a shift from a form of interaction defined as 'trying to become a scientist' to another interaction based on the 'speciality that contributes' (or the 'contributing speciality').

Chapter 6, 'Defying Death,' deals with issues related to 'bogus doctors.' In this section of the book, the authors demonstrate the various forms encountered for resolving the tension between the qualified doctor and the bogus doctor. One of the forms involves offering training and licensing to paramedics and lay people who know the basic principles of medicine, such as first aid. The training given to lay people, qualifying them to act in a specific area of medicine, ensures that the legitimacy of the field and its professional workers is perpetuated.

Chapter 8, 'Vaccination and Parents' Rights: Measles, Mumps, Rubella (MMR), and Pertussis,' again discusses the constant tensions between the individual and the collective. The vaccine can be seen to be both an individual and collective benefit. It can help collective causes and/or individual interests. Given to everyone, it eradicates the diseases associated with it. This is what happened in the case of chickenpox. The vaccine can be seen as a benefit intended for the collective, enabling its well-being and development. However, if it has the potential to cause some risk or harm to the health of the vaccinated person, even though it represents a social benefit, it can simultaneously be seen to conflict with individual interests.

A fundamental characteristic of the contemporary world permeates practically all the discussions in the book: uncertainty. Whether in the case of the placebo effect, in questions relating to the efficacy of some drugs, or in the debates on new diseases very often identified by 'lay scientists,' uncertainty is always present. Uncertainty concerning the future of medicine, uncertainty concerning the future in general. As the authors point out, even medicine's standards of excellence are really a celebration of what medical science does not know concerning the causal chains within the human body (p. 15). Even so, medicine continues to fulfil its objectives, despite being pervaded by constant tensions: it performs its role as a field that offers immediate relief for pain and an area of research that works towards the development of theoretical and practical frameworks that provide solutions over the long-term. Could these uncertainties, leading people to search for solutions to their problems not always those offered by the official medical establishment, undermine the sources of legitimacy of this area of knowledge? How to approach the new bases for social acceptability, not only of medicine, but of specialized knowledge, in an increasingly democratized and integrated world? How do standardized processes and local forms of cultural manifestations increasingly collide? On these and other issues, *Dr. Golem: How to Think about Medicine* provides an opportune and valuable book towards understanding the relations established between society and the development of medicine in today's world.

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