Epidemiologist David Michaels has published a gripping book entitled *Doubt is Their Product: How Industry’s Assault on Science Threatens Your Health*. The first part of the title is a direct reference to a cigarette executive’s remark that, “Doubt is our product since it is the best means of competing with the ‘body of fact’ that exists in the minds of the general public. It is also the means of establishing a controversy.” The author exposes how the industry has managed to turn the meaning of words upside-down, sanctifying its science as “sound science” and vilifying scientific community research as “junk science” to stave off policy decisions on risks for as long as possible.

Where does it come from, this industry love affair with scientific absolutes? And why the contrast between the rush to bring any innovation to market - including where no risk assessment has been done - and the demands for a full and detailed assessment of any initiative to protect health? David Michaels argues that the multinationals’ first attempts to further their causes through the promotion of “sound science” date back to before World War Two, the aim being to avoid government regulation of the carcinogens that workers were exposed to. But incidentally, to limit inconvenient lawsuits. The industry went on the front foot, giving the steer to asbestos research in the 1930s, and initiating a major development in industrial hygiene expertise ... which consistently downplayed the risks. The author shows how, around the same time, the dye industry engaged research programmes to avoid being forced to take effective prevention measures. Over the years, the scientists working for industry have continually honed their “sales pitch”.

The author reviews the practices of a money-driven science. In areas as diverse as tobacco, lead, synthetic dyes, Freon gas, some food additives, drugs and nuclear energy, we seem to be locked into a “groundhog day” scenario. Faced with initial data that indicate a significant health hazard, industry-funded scientists have consistently played down the dangers while playing up the limits of knowledge and the degree of uncertainty. One technique is to demand proof that the workers concerned had not also been exposed to other harmful substances.

This strategy of doubt lets industry go back on the offensive on two favourable fronts. The scientific community cannot but be receptive to arguments that point out the limitations of the methods used by available studies and propose endless new research to clarify the results and verify the uncertainties. The false positive idea of “sound science” which tells only settled truths goes in hand with tempting budgets and access to the industrial workforce as an inexhaustible supply of laboratory animals. It gives politicians all the ammunition they need whenever they decide to throw in the towel to a lobby. It simply notes the imperfection of scientific knowledge and does not seek to undermine economic activity by mere guesswork. The symbiosis between scientists working for industry and policy makers can be reinforced by the wholesale use of PR consultants and intervention by the court system, although the latter is more a US than European phenomenon.

A kind of meta-discipline of risk assessment - Europe would tend to talk of “Impact assessments” - has gradually imposed itself. It aims to put the inevitable element of uncertainty inherent to all scientific output to use in discrediting public policy measures. The criticisms grow shriller still where the risks relate to the least fortunate groups. This is what the author describes as the institutionalization of uncertainty. Sadly, it is an area in which the EU seems to be playing catch-up with Bush’s America.

The book ends on twelve recommendations, all targeted on promoting transparency, requiring a prior risk assessment before chemicals are placed on the market, and developing publicly-funded scientific expertise. There is also a concern that environmental protection should be more closely allied to workers’ health.

Written in language the lay reader can understand, and shot through with a burning desire to put scientific knowledge into the crucible of the social debate, this book will certainly be of wide interest outside the United States. It is of more than incidental interest that its author became the new director of OSHA - the US federal health and safety agency - in 2009. Hopefully, he will get the chance to put his ideas into practice.

— Laurent Vogel