

about life and the gene becomes a material entity used for explanatory purposes. In this case, the molecular biology, from genetic theory, provides a "final explanation" for life, as Descartes craved.

Hitherto, Monteiro presents and discusses translations of physiological body to the body-information as it occurs in the laboratory. The author also shows how the molecular biology appears as owner of the absolute truth of the biology. Then, in chapter six he presents a discussion of the possible consequences of these processes. In other words, here are discussed political issues that are raised by the possibility to manipulate the body. The potential here is interpreted as a possible way of linking technology/body/policy arising from biotechnology. This issue becomes central, as a historical example of the most radical expression of a logic of life politicization.

In contrast to chapter six, chapter seven examines practices of recreating the body distinct from those offered by eugenics. The focus is on the manipulation of the living matter (the body) for aesthetic purposes. Bio-art appears here as a particular mobilization of the potential originated from advances in genetics. It dislocates laboratory practice in order to promote an ethical debate about the relationship between technology and life. Bio-art allows to create new ethical uses of technology and this ethic-aesthetic becomes a critical weapon against the possibility of a genetic determinism (author argues).

In the concluding chapter, Monteiro points out that biotechnology should not be banned, although it certainly has an eugenic potential that should be questioned. The author suggests that we should seek new and different machinic assemblages for biotechnologies, more consistent with our democratic ideals and able to preserve existing life forms.

When thinking about the possibility of reinvention of the body in a biotechnology age, many other questions arise and the book by Marko Monteiro presents numerous theoretical concerns and explanations. This is a dense and intense reading highly relevant for scholars interested in studying the body in its social relationship with new (bio)technologies. After its reading, new questions related to the body (and beyond) will arise.

* * *

Stefano Ossicini

L'universo è fatto di storie non solo di atomi. Breve storia delle truffe scientifiche [The Universe is Made of Stories, not Only of Atoms. A Brief History of Scientific Frauds]

Vicenza, Neri Pozza, 2012, pp. 286

Giuseppe Pellegrini *University of Padua*

Scientists' research activities have changed considerably since second world war. In addition to an exponential increase of researchers, there has been a significant growth of publications and magazines proposing contributions from various disciplines. Moreover, this growth is linked to the scientists' skills to communicate in an ever faster way, being able to propose results in advance not only to their own community but also to different media. This produces various effects.

The first effect regards a dissemination and availability of scientific news as never recorded in the past. Take for example the medical field, where users have now access to entire databases of biomedical research. These "fields of data" are increasingly used to understand where research is going to take place, to propose treatments and find possible solutions to diseases.

A second effect concerns the difficulty of holding a fast paced which does not allow journals and peer review systems to work out the necessary checks, so that the meshes of the system cannot hold back the inevitable imprecisions and inaccuracies; not to mention real scams.

The book by Stefano Ossicini allows to reflect on high-profile cases of scientific fraud, but not in order to expose the failures of science or to warn against the supposed authority of the scientific world. It allows us to notice what is changing in the world of research and how the profession of scientist is undergoing rapid changes. In the face of emblematic cases, in some ways paradoxical and sometimes comical, it is possible to distinguish some elements that characterize the role and function of the scientist, now seriously in question.

First of all, we grasp that the process of justification, i.e. the set of methods used by scientists to prove their results, is today increasingly complex and articulated. It is not so easy to produce accounts which allow (for example) to replicate experiments and, as Kuhn (1962) and Feysabend (1975) already stated, you cannot easily distinguish between the context of discovery and justification. Moreover, scientists today meet even more difficulties on how to communicate the context of research where ideas, projects and results were produced.

Another important element concerns the authority of scientific institutions. There are strong beliefs assigning an impartial role to science, with the expectation that scientists' messages do not lose their objective and unambiguous character. This is strongly disputed and probably due to a lack of understanding of the historical processes with which science has evolved. These processes demonstrate how disputes and clashes between different positions have always been one of the characteristic features of scientific activity, especially when scientists face public contexts.

The argumentative study of scientific frauds through the analysis of original documents allows checking the dynamics of scientific activity. Here, the establishment of an inquiry commission, the withdrawal of awards, the firing of scientists (as in the case of the high-temperature su-

perconductivity – p. 205) not only report the weakness of a system that must come to extreme measures to defend itself, but show how scientific certainties are constructed through non-linear paths and contingencies.

The author proposes some interpretations on the *ethos* of scientists citing the well-known contribution of Merton. However, we do not find in the text references to the decisive contributions made by Latour (1999), Barnes (1974) and others who have proposed the need of a new process of self-reflection, given that: “scientists are more like players in an intense, winner take-all competition for scientific prestige and the resources that follow from that prestige” (Goodstein 2002, 31).

As demonstrated by scientific fraud analyses, the scientist is not a disinterested servant of the public good nor his/her activities could be fully transparent. Rather, scientists are restricted by instruments, money and attitudes of their colleagues (Feyerabend 1975). At the same time, the key role of science and scientists in contemporary society need to develop a reflexive attitude towards their own activities, questioning things we have always taken for granted.

References

- Barnes, B. (1974) *Scientific Knowledge and Sociological Theory*, London, Routledge.
- Feyerabend, P.K. (1975) *Against Method. Outline of an Anarchist Theory of Knowledge*, London, New Left Books.
- Goodstein, D. (2002) *Scientific Misconduct*, in “Academe”, (88) 1, pp. 28-31.
- Kuhn, T.S. (1962) *The Structure of Scientific Revolutions*, Chicago, University of Chicago Press.
- Latour, B. (1999) *Politiques de la nature. Comment faire entrer les sciences en démocratie*, Paris, La Découverte; Engl. trad. *Politics of Nature: How to Bring the Sciences Into Democracy*, Cambridge, Harvard University Press, 2004.

* * *

Cristina Zucchermaglio, Francesca Alby, Marilena Fatigante and Marzia Saglietti

Fare ricerca situata in psicologia sociale [Performing Situated Research in Social Psychology]

Bologna, il Mulino, 2013, pp. 152

Barbara Pentimalli Sapienza University of Rome