## **GUEST EDITOR'S NOTE**

## Shozo Motoyama (1940-2021), several traditions

First, I would like to thank Marcos Cueto, science editor of *História*, *Ciências*, *Saúde – Manguinhos*, for granting me the space of the Editor's Note to honor the science historian Shozo Motoyama, who passed away on January 26, 2021. I invite readers to remember his important work in this tribute in the form of a brief obituary.

Shozo Motoyama (1940-2021) was a forceful defender of the history of science in Brazil. His recent passing is an opportunity to describe his constant commitment to strengthening the history of science as a field of research and of the production of knowledge on Brazil

The son of Japanese immigrants, Shozo Motoyama started his undergraduate degree in physics in 1964 at the University of São Paulo (USP), during a difficult period, including a military coup, and heated debates. It was also a period of transformations in Brazilian higher education, such as that due to the university reform. The creation of the national assessment system of the Brazilian Federal Agency for the Support and Evaluation of Graduate Education (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) led to reforms in existing university degrees. At the same time, there were intense discussions at USP on the establishment of institutes and the breaking up of what was then the School of Philosophy, Sciences and Languages, which housed the degrees in physics, chemistry, biology, mathematics, and psychology, together with the humanities, language and education degrees. Before the School was reorganized, at the request of Dean Eurípedes Simões de Paula, Shozo Motoyama and Maria Amélia Mascarenhas Dantes – both physicists, who had graduated in 1967 and 1964, respectively – were hired to teach courses on the history of science in the History Department, in the Science subsection, in the area of the History of Ancient and Medieval Civilization.

After the school was split up in 1968, with the establishment of the different institutes, departments and new schools, both needed to decide between positions in the Institute of Physics, from which they had come and where they also taught, and the History Department in the new School of Philosophy, Languages and Humanities. Shozo, like Maria Amélia, chose to formally transfer to the History Department, where he completed his doctoral thesis, entitled *Galileo Galilei: a study on the logic of scientific development*, and, together with others, established the Center for the History of Science and Technology. He defended his dissertation in the Postgraduate Program in Social History in 1971. A post-doctoral thesis at USP and post-doctorate research in cosmic ray laboratories in Japan – the University of Tokyo and Waseda University – completed his interdisciplinary training.

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The entirety of these experiences allow us to recognize, in the writings of Professor Shozo Motoyama, his various books and articles, the link between the socio-political concepts related to overcoming Brazilian underdevelopment, especially in the context of the 1960s and 1970s, in which Brazil sought, through economic planning, international cooperation and incentives for science and technology, to increase the number of jobs, expand the country's production capacity and, thus, improve the quality of life in Brazil. This overall panorama, together with his participation in a formal academic universe that was also changing, indicates a university experience marked by these two foci: thinking about the role of science and technology given the socio-political situation of Brazil and contributing by participating in the institutional academic environment.

If, as stated by Ludwik Fleck (2010, p.81-82), "the process of knowledge is not the individual process of a theoretical 'consciousness in itself,' it is the result of a social activity, since the respective state of knowledge exceeds the limits given to an individual," Shozo added to his individual, intellectual production another important activity for the collective structuring of the field of the history of Brazilian science. In this sense, Shozo Motoyama's work was decisive in the field of historical research: he was one of the founders of the Brazilian Society for the History of Science (Sociedade Brasileira de História da Ciência, SBHC), in 1983, and was the main moderator and secretary of the society during its early years. He was also involved in the foundation of the *Revista Brasileira de História da Ciência* (Brazilian Journal on the History of Science) in 1985, as well as the first *Bulletin of the SBHC*, which began circulating earlier, in October 1984, and ceased in 1985 when the journal began to be published.

In the first issue of the SBHC journal, then, as today, it was necessary to state that "Science and technology play important roles in the development process. This statement would even be banal if it were not for the traps of underdevelopment, translated into a technocratic vision of the subject" (Motoyama, 1985, p.41). In his view, overcoming Brazil's structural deficiencies depended on new circumstances:

neither science nor technology are harmoniously integrated into Brazilian social, economic and cultural institutions. From these disharmonies, resulting from the mechanisms inherent in underdevelopment, come the current distortions and deviations. Opportunistic and distorted ideas, such as entrepreneurial management and the immediate profitability of research, are clear examples of this. Distrust of the objectivity of scientific results, which do not always support the ideas of those in power, is another manifestation (Motoyama, 1985, p.47-48).

The history of science in Brazil, and its historiography, currently involve differing debates, which are sometimes very divergent. However, when we look at the history of this production, from the perception of the intertwining of private convictions with collective causes, Professor Shozo Motoyama's publications and actions take on a valuable meaning. Personally, I remember his efforts to continue to assist the SBHC in recent years when, for example, he sought to raise institutional and financial support to hold a national seminar that returned to São Paulo many years after his term of office in the organization. And also the many graduate students he advised and the outstanding former students now working in a variety of institutions. These are individual achievements that only add to

the characteristics that help us understand the formative universe of a scientific field, and that influence and are imprinted on later generations.

Shozo Motoyama was also faithful to his roots, working intensely on Brazil/Japan relations as a member of academic centers and as the director of the Japanese Immigration Historical Museum, writing books on the history of these themes, and as the author and editor of books on the history of science in Brazil. All of these things demonstrate his dedication to the cause of Brazilian public universities.

## **REFERENCES**

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